FORCIBLE ENTRY TECHNIQUES AND TIPS

Duckbill Lock Breaker – By: Andrew Brassard

Nowadays firefighters tend to become over reliant on saws during forcible entry operations and often forget some of the most basic of fireground tools. The Duckbill Lock Breaker is one such a tool that has become a forgotten tool that tends to sit in a compartment on the truck. But what about the times when, the saw does not start? Or you have to change the blade? Or you have to remove locks inside of a building where the saw will be choked out by the smoke? The duckbill is a tremendous secondary tool for these situations.

The Duckbill Lock Breaker works by driving the lock shackle off the body of the lock. The lock breaker will remove an American 700 Series Lock with no problem, in fact there are very few locks that can not be defeated by the lock breaker. One lock the can withstand the forces that can be applied with the lock breaker is the disc type lock. If a disc type lock is present a different forcible entry method should be utilized.

The Duckbill Lock Breaker is a single functioning 

tool, meaning it's only function is to force entry into padlocks.

The duckbill is made of soft metal, usually brass. The reason for making it out of soft metal is so that as it is driven down in between the padlock body and the shackle the lock will "bite" into the soft metal of the wedge and hold it's position until it is struck again. Every time the lock breaker is struck it is driven down a little further into the lock, this places more and more pressure on the lock until it finally fails. If the wedge was made out of a hardened metal it would simply bounce out every time it was struck.

To use the Duckbill Lock Breaker, simply place the wedge into the lock. This is where mistakes get made! The only way the duckbill will work is with the top edge of the wedge on the shackle and the bottom edge of the duckbill on the body of the lock, do not put the duckbill into the lock with the top and bottom rails on both side of the shackle! Once the lock breaker is in place use the 8 lbs forcible entry axe or a 12 lbs Maul to drive the duckbill into the lock, continue driving it in until the lock fails. It is that simple!


So dust off the duckbill lock breaker, dig it out from the compartment, or buy one to include to your forcible entry arsenal. It is a great tool that can prove to be extremely valuable on the fireground.

Forcible Entry – The Bam Bam Tool – By: Paul Hoekema

Comments (0)

There are numerous ways to manipulate an American Series 2000 type lock to force entry (hockey puck locks with the key way on the rim of the lock not the face). You can cut the lock ¾ opposite of the keyway,

you can cut the rail above and below the lock and bend the rail out of the way, or you can use a pipe wrench and twist the lock off (if it doesn't have a guard) just to name a few. What happens if you're on an engine and you don't have all the tools that the truck carries to force these locks? A simple solution to your problem is the Bam Bam tool. The Bam Bam tool doesn't take up much space and allows you to start forcible entry on American Series 2000 type locks until the truck arrives. The Bam Bam tool utilizes a hardened screw to screw into the key way of the lock and a handle that slides along the shaft of the tool. It is important to make sure that the screw is hardened. If it isn't then the screw may not screw into the lock cylinder, or when you go to force the cylinder the threads of the screw may strip causing the screw to come out of the cylinder without forcing the lock.

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Tool Modifications 2.0 – The 8 Pound Force Axe – By: Shane Klug

Comments (4)

February 2011, I transferred to a ladder company, my first time being assigned to a truck. Detroit ladder trucks typically have 6-pound pick head axes and 8-pound sledge hammers on them. I tried both of them on the roof, and my tool of choice became the 6-pound pick head axe. I managed to get my hands on an 8-pound pick head axe and gave that a try. While the extra weight was great for smashing through roofs, the balance was VERY nose heavy, which made it harder to control and also very uncomfortable to carry. Over the summer I was able to attend the Brotherhood Instructors Forcible Entry Ops class held in Independence Twp Michigan, where I used an 8-pound flathead axe, specifically the fire hooks unlimited 8-pound force axe. I really liked the way the axe was balanced. It was easy to control when swinging (in the forcible entry class) and seemed easy to carry. Sometime after the class I purchased my own to use at work. I decided to make some modifications, but with a twist, compared to what I had seen in the Brotherhood Instructor class.

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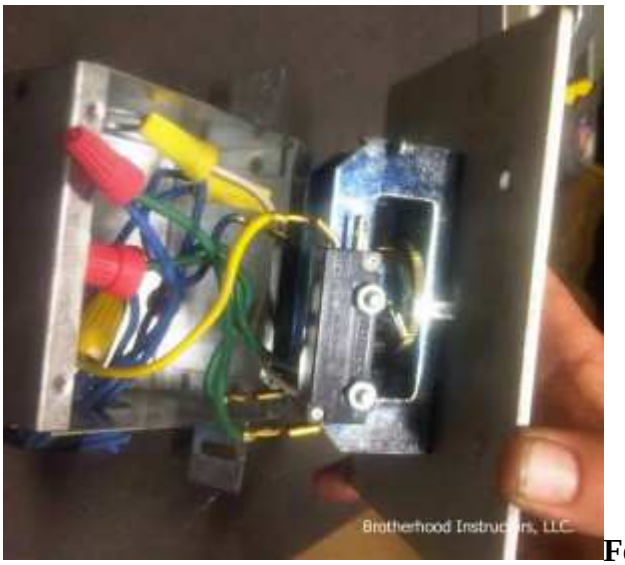
All in all, this axe is fantastic for forcible entry and makes a great tool for vertical ventilation. With the addition of the over strike protection, hopefully the tool will have a long service life opening roofs!

ELECTRIC Roll Up Gates – By: Andrew Brassard

Comments (0)

Not all forcible entry has to be forcible, in some cases a little knowledge and some finesse will get the job done quicker than some more traditional methods.

One such instance is Electric Roll Up Doors and Gates. With a little bit of knowledge and a screwdriver entry into these gates can be very fast with very little force. Electric Roll up Gates are most commonly found in my area on loading docks, garbage rooms, and on the occasional roll up gate. These electric door openers are usually found mounted around 4' off the ground directly beside the door that it opens. There is a key way on the control panel. This key way controls the door going up and down. The key way is often a standard mortise lock cylinder, on the back side of the cylinder. A large pivoting arm is bolted to the key way. When the key is inserted and turned the pivoting arm will twist and hit a limiter switch to either roll the door up or down.



Forcing entry

Forcing entry into the door usually does not require very much force at all, the only tool that you need is a screwdriver in most cases. The first thing you want to do is undo the screws in the four corners of the face plate. I have been told by friends that they have encountered security screws in these from time to time, I have never encountered these security screws. Most of the time standard Philips, Robertson, or Slot headed screws hold the face plate on. Once the screws have been removed the face plate will need to be pried off with a halligan or Rex Tool. The reason for this is that the pivoting arm on the back side of the cylinder hits small tabs on the edges of the electrical box. The tabs are why it says on the front of the lock face that you must have the key in order to open the lock, when the key is inserted into the key way and it is turned the pivoting arm turns and is able to fit past the tabs on the electrical box. To pry the face plate off is not difficult, these tabs on the electrical box are light gauge galvanized metal that will bend quite easily with a little pressure with a prying tool.

Operating the gate

Once the face plate has been removed and pried out you can operate the gate. Directly behind the pivoting arm is a limiting switch with a simple button to operate the gate up and down, there is

one button on each side of the lock cylinder. You can simply use your finger (or a pencil if it makes you feel more comfortable) to push the button and activate the door. If you look at the face plate you may be able to tell what side the limiter switch is for "Up" and what one is for "Down" by the words on both sides of the lock cylinder. If no words indicating what side is "Up" are present simply try pushing one side, if it does not work it means that it is the other side. Keep in mind that you are dealing with live electrical wires so extreme caution must be taken not to touch any wires, if you use the proper techniques and give any electrical component the respect it deserves than that should not be a problem.

Also remember to take a thorough look at the gate and properly size it up. If there are additional locks on the door such as traditional pin, hasp, and padlock assemblies, then these locks must be removed before this entry method can be performed.

In some instances these gates are also locked from the inside or the electrical switch no longer works, in these instances the gate or door will have to be cut with a power saw.

Also be sure to check with your departmental SOP's and SOG's before performing this entry method, some departments have policies against members touching an electrical equipment such as this.

This is an extremely quick and effective method for forcing entry and it causes very little damage. The best way to prepare for these types of forcible entry situations is to pay a visit to the company in your city or town that install these electric gate openers, ask them to run you through the most common types that they install in your area.

Till next time, stay safe!

development• Tagged: training

Slide Bolt Forcible Entry

Comments (0)

Check out this info sheet for some forcible entry tips when dealing with slide bolts. Feel free to print it out and post it in the firehouse.

Slide Bolts – Interior

Posted by ccollieron February 2, 2012 • Filed under: firefighter-safety-health, firefighting-operations, Forcible Entry, Ladder Company Ops, RIT or FAST Operations, Training, training-development• Tagged: training

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You might like:

- Brotherhood Instructors › Log In
- Slide Bolt Forcible Entry
- Firefighters and the Risk of Asbestos Exposure – Mark Hall, Guest Blogger
- Come Along – By: Mike Tesarski

Posted by ccollieron January 10, 2012 • Filed under: Engine Company Ops, fire-rescue-topics, firefighter-safety-health, firefighting-operations, Forcible Entry, Ladder Company Ops, RIT or FAST Operations, special-operations, Training, training-development, videos

Forcing Doors In Zero Visibility – By: Andrew Brassard

Comments (3)

Anyone who has ever forced a challenging door in zero visibility knows it can be one of the most difficult forcible entry challenges a crew will ever face, for those of you that have not… This challenge still awaits you.

Weather it is an apartment door on the fire floor of a garden apartment, the illegal basement apartment door in a private dwelling, or the door in a SRO on the floor above the fire the potential to need to force some tough door under arduous conditions is always present. The fact is that we as a fire service typically don't get much practice or direction on forcible entry techniques under favorable conditions let alone under zero or diminished visibility conditions. In this blog we are going to look at several different techniques for forcing entry under zero visibility conditions.

Size Up
Since we are unable to see size up is going to be tougher and normal and is going to be accomplished primarily by feel, both with your hands and the way the tool reacts on the door.

The first step is to feel the door with a gloved hand for any primary and secondary locks, bolt patterns, heat, etc. This will help establish a game plan of attack on the door. Remember you want to start with the highest lock first and work your way down so any heat or smoke behind the door will vent up and away from you.

After a rapid and thorough size up is complete you can begin forcing the door. You are going to GAP, SET, FORCE just like any other forcible entry operation, the only real difference comes from the setting the tool and more specifically the hitting techniques. We are going to look at 3 different hitting techniques that you can utilize to help you drive the halligan into the SET position.

Double Tap Method
The double tap is more than just Rule 2 in Zombieland, it is a great method for forcing doors in smoky conditions. The double tap method works well in limited visibility situations but it allows a little to much margin of error for zero visibility operations to be an effective option. To perform this technique the axe firefighter lines up the axe with the halligan, he then taps the halligan lightly followed up right after by a more powerful hit. This small tap does a couple of things for both the firefighter holding the halligan and the firefighter hitting. First, it provides a small "practice" swing for the axe firefighter allowing him to build some muscle memory. Second, it gives warning to the firefighter on the halligan not to move because a more powerful hit is coming. Some firefighters like to use the double tap method all the time while forcing doors regardless of the conditions, it really comes down to preference.

Squared Off Shoulder
Most firefighters I talk to about the topic of zero visibility forcible entry say that they square the shoulders on their halligan forks off so that it will provide a striking surface without having the possibility of missing and striking the firefighter who is holding the halligan. This modification is not new to the fire service and I see firefighters modifying their tools like this all over North America, the problem is that if you are going to modify you halligan like this and then not practice the technique often and in realistic conditions then you might as well not even bother

performing the modification in the first place. It can be challenging to perform this method and can take a tremendous amount of practice and patience. After the shoulders have been squared off the firefighter with the halligan can place the forks in between the door and the frame, with both hands on the back of the halligan the axe can be placed on the halligan shaft and slide it down to make contact with the squared off shoulder. Ensure that you keep a open palm grip on the back of halligan, if you have a firm grip on the adz or pike and the axe is brought back to far the blade of the axe could severely injury a finger… So keep a open palm grip. I like to keep the squared off shoulders for tight spaces or narrow hallways where you cannot stand behind the halligan to hit it.

One Handed Method

This technique in my opinion is the best method for forcing entry in zero visibility. The halligan firefighter takes their normal stance and hand position on the halligan with the exception of their hand closest to the adz, slide the hand closet to the adz more towards the middle of the halligan. The axe firefighter is going to take a kneeling position behind the halligan firefighter, the bottom hand on the axe is taken off and placed onto the halligan directly behind the adz. This hand is placed on the halligan to provide a point of reference for each swing of the axe. Remember to keep a loose grip on the halligan, your mission is not to impede or steer the halligan but to simple provide that point of reference. The next thing the axe firefighter can do to make life easier for them is to place the butt-end of the axe between their knees, this with help there swings tremendously by making the axe into a large pendulum. This pendulum action will help you deliver even and steady hits on target each time. Sometime with higher locks the firefighter will have to stand to swing the axe, the same steps are repeated with the exception of placing the axe between their knees.

Depth

How do you know when the halligan is in the set position? When you can see, we know that you want to drive it in until the crotch of the forks is level with the door stop but when we can't see we have to perform this by feel. An easy way to tell is by placing your thumb on the shoulder of the halligan then place three fingers along the side of the forks, the finger furthest away from your thumb should be level with the door stop. Slide your top finger forward and feel for the halligans orientation to the door stop. Not having the halligan set deep enough before prying is one of the biggest problems I see with zero visibility forcible entry, if the halligan is not driven in far enough it may pop out when it is pushed to the door.

The key to being able to force doors effectively in zero visibility and challenging conditions is to prepare for them through aggressive and realistic training. I recently talked to a close friend from a extremely busy urban department that just experienced a close call at a fire, one of the major problems that they experienced on the fireground was a delay of getting water on the fire due to a drawn out forcible entry operation. Crews were faced with a very difficult door in fairly horrendous smoke and heat conditions. After the fire crews talked about how they had never really been shown how to perform forcible entry operations under such strenuous and difficult conditions, the problem is that lots of firefighters tend to feel they don't need this type of training because they have never needed to force a real tough door under these conditions before. I use the analogy of RIT training, you only ever have to use it once on the fireground to make the training worth while.

I often get asked about injury while performing this type of training. I taught a recruit class for my department recently and I had the 10 recruits force hundreds of doors in zero visibility and in live fire conditions and never once did we even hurt anyones feelings. You need to ask yourself "what is the potential for a fireground injury if we DON'T do this training!"

Till next time stay safe!

Posted by ccollieron December 12, 2011 • Filed under: Building Alteration-Renovation, fire-rescue-topics, firefighter-safety-health, firefighting-operations, Forcible Entry, Ladder Company Ops, RIT or FAST Operations, special-operations, technology-communications-ems-topics, Training, training-development, training-fire-rescue-topics• Tagged: tra

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You might like:

- Covered Skylights – By: Chris Collier
- Pressure Reducing Valves – By: Chris Collier
- Modular Cribbing – By: Mike Tesarski
- Another Rex Tool Modification – By: Andrew Brassard

Posted by ccollieron November 17, 2011 • Filed under: fire-rescue-topics, firefighter-safety-health, firefighting-operations, Forcible Entry, Ladder Company Ops, RIT or FAST Operations, Roof Ops, special-operations, training-development, training-fire-rescue-topics, Ventilation• Tagged: training

Through the Lock – Pivoting Deadbolt & Hookbolt

Comments (0)

Through the lock forcible entry is a quick and easy method of gaining entry into doors locked with pivoting deadbolts and pivoting hookbolts. This skill is easier than many believe. Click on this through the lock info sheet to download a PDF version. Feel free to use it, print it, and share it with your crews.

Posted by ccollieron November 8, 2011 • Filed under: fire-rescue-topics, firefighter-safety-health, firefighting-operations, Forcible Entry, Ladder Company Ops, RIT or FAST Operations, special-operations, training-development, training-fire-rescue-topics• Tagged: training

Coordinated Ventilation – Part II by Nate DeMarse

Comments (0)

I stumbled upon a couple videos that drive home points made in the earlier Coordinated Ventilation post. These videos clearly show answers to previously asked questions, and bring up some new discussion tips as well. This is precisely how we should be training at drills and training burns. I don't know where this department is, but they are a class act in training!

Video #1 – The OV Position:

In the first video, we see an Outside Ventilation (OV) firefighter in the correct position to horizontally vent the building opposite the attack line's advance. Note that at the very beginning of the video, the Nozzle Team is advancing the hose line THROUGH THE FRONT DOOR and to the seat of the fire. The door is forced, and they are moving in when the windows are taken.

The firefighter is off to one side of the window, and takes the window located furthest from him first. This assures that he will be able to vent both windows without delay. If the window closest to the firefighter is vented first, and fire vents from the opening the second (furthest window) may have to be abandoned. This is especially true if operating on a portable ladder or fire escape.

Video #2 – Points & Pointers:

I am not certain, but I think the video below is another angle of the same video above (a very rare occurance in our profession). If it is not the same fire, we are going to use it like it is for the purposes of driving home a point.

As I stated in the comments in Part I, "We should also wait if the line is delayed in getting into position, charged and READY TO MAKE THE PUSH on the fire. There is a vast difference in a line being there, a line being charged, and all of the members masked up and ready to push in." This video starts with a charged attack line, but the door hasn't been forced. If the OV takes the windows prematurely, this fire will continue to spread and grow as the line is not ready to advance. After entry is gained, you can hear the officer telling the OV to "take that glass".

Entering the Building Side-Note: At the :35 second mark, you will see the camera move to the front stoop of the house. Note the visibility at the floor level! You can see nearly ALL THE WAY THROUGH THE HOUSE. Yet nearly every single firefighter that entered the building entered either standing or slight crouched with their head in the smoke, unable to see ANYTHING! ***I will reiterate at this point that I am not beating up on this department, THIS HAPPENS EVERYWHERE!!***

Take a second after the door is forced to put your face piece directly on the floor and look *UNDER* the smoke. This requires you to get on your knees to accomplish. The nice thing about taking a look at the floor level is that you have to physically, consciously make a decision to stand-up to enter after you look.

Here are a few other benefits that stem from taking a few seconds to get low and take a look:

- You allow the heat and super-heated gases that have built up in the sealed building a few seconds to "blow" and push over your head. This in turn will cause the smoke to lift off of the floor, and allow for the following:
    - You will be able to see a victim lying on the floor 10 feet or further inside the doorway, at that point you can say you conducted a rescue instead of tripping over someone and pretending that you rescued them! The Medal Ceremony will sound supurb, but you will know the truth!
    - You will be able to get a room, floor or apartment layout.
    - You will be able to see the glow of the fire on the floor, or the fire itself. You will know that it is on the right side of the hall, three doorways down.
    - You wlll see the large hole in the floor five feet inside the house and not fall into the basement and promptly call a "Mayday" within seconds of entering the building.

You will know all of this information at the front door, without walking *(not searching)* blindly. Then, because you are already on your knees conducting this vital size-up skill, you will enter the building safely on your knees, crawling towards your objective(s). When we couple the skills listed in this side-note with the OV performing those tasks in the correct position and the correct time, you will have the opportunity to gather vital information before entering.

THESE TASKS ALLOW US TO BE AGGRESSIVE AND SAFE!
(and yes, those words can be used together)!

Forcible Entry Side-Note: The Forcible Entry team did a good job on the door. If you look closely, on the fourth swing the Striking FF nearly misses high with the axe. With hand placement so close to the axe-head, just a little more of a miss could have caused a crush injury. Believe it or not, in our travels this is the most common cause of injury in forcible entry (almost always resulting in at least one broken finger). To remedy that concern, This video (one of our first created nearly 2 years ago) shows safe striking techniques. Additionally, Brotherhood Instructors, LLC axes now have our company markings (colored electrical tape) 6"-7" below the head of the axe. Any firefighter using our axes know that if they place their top hand where the tape is, their hands are in the safe zone. Again, this is a very common injury and very rarely do we get a chance to catch forcible entry tools and members practicing their craft.

I think this fire department is doing a great job in getting their training done as we operate. Far too may training burns just walk members through the motions, leaving them with a false sense of security of what a real fire will be like (i.e: setting themselves up for failure). This department has their members on the radio, and conducting coordinated ventilation and fire attack. These videos left some open some great discussion points using realistic training and errors that occur on ***EVERY*** fireground!

Feel free to post comments, questions or concerns. We are all here to learn so let the learning commence!

Respectfully,
Nate DeMarse
Co-Owner, Brotherhood Instructors, LLC.

Posted by Nate DeMarseon November 2, 2011 • Filed under: Attack Line, Email Drill Questions, Engine Company Ops, firefighter-safety-health, firefighting-operations, fires, Forcible Entry, Ladder Company Ops, Search, training-development, training-fire-rescue-topics, Ventilation, videos

Duckbill Lock Breaker – By: Andrew Brassard

Comments (3)

 Nowadays firefighters tend to become over reliant on saws during forcible entry operations and often forget some of the most basic of fireground tools. The Duckbill Lock Breaker is one such a tool that has become a forgotten tool that tends to sit in a compartment on the truck. But what about the times when, the saw does not start? Or you have to change the blade? Or you have to remove locks inside of a building where the saw will be choked out by the smoke? The duckbill is a tremendous secondary tool for these situations.

The Duckbill Lock Breaker works by driving the lock shackle off the body of the lock. The lock breaker will remove an American 700 Series Lock with no problem, in fact there are very few locks that can not be defeated by the lock breaker. One lock the can withstand the forces that can be applied with the lock breaker is the disc type lock. If a disc type lock is present a different forcible entry method should be utilized.

The Duckbill Lock Breaker is a single functioning 

tool, meaning it's only function is to force entry into padlocks.

The duckbill is made of soft metal, usually brass. The reason for making it out of soft metal is so that as it is driven down in between the padlock body and the shackle the lock will "bite" into the soft metal of the wedge and hold it's position until it is struck again. Every time the lock breaker is struck it is driven down a little further into the lock, this places more and more pressure on the lock until it finally fails. If the wedge was made out of a hardened metal it would simply bounce out every time it was struck.

To use the Duckbill Lock Breaker, simply place the wedge into the lock. This is where mistakes get made! The only way the duckbill will work is with the top edge of the wedge on the shackle and the bottom edge of the duckbill on the body of the lock, do not put the duckbill into the lock with the top and bottom rails on both side of the shackle! Once the lock breaker is in place use the 8 lbs forcible entry axe or a 12 lbs Maul to drive the duckbill into the lock, continue driving it in until the lock fails. It is that simple!


So dust off the duckbill lock breaker, dig it out from the compartment, or buy one to include to your forcible entry arsenal. It is a great tool that can prove to be extremely valuable on the fireground.

You might like:

- Coordinated Ventilation
- The In-Line Pressure Gauge – By: Chris Collier
- Never Forget

Recommended by

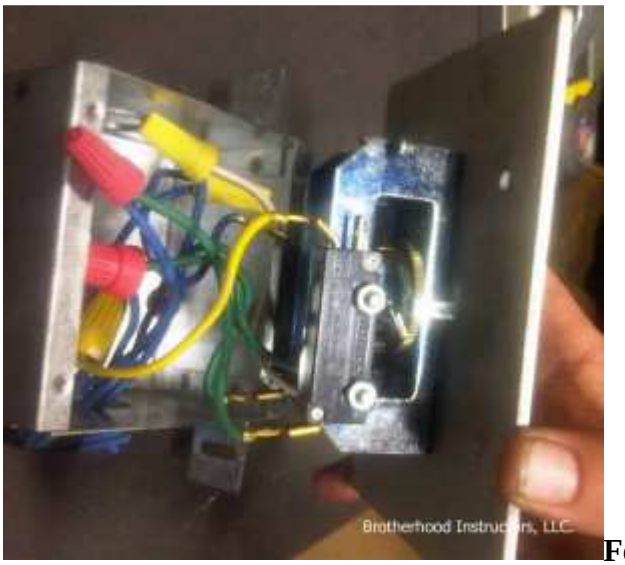
Posted by ccollieron October 31, 2011 • Filed under: fire-rescue-topics, firefighter-safety-health, firefighting-operations, Forcible Entry, Ladder Company Ops, RIT or FAST Operations, special-operations, training-development, training-fire-rescue-topics• Tagged: training

Electric Roll Up Gates – By: Andrew Brassard

No comments

Not all forcible entry has to be forcible, in some cases a little knowledge and some finesse will get the job done quicker than some more traditional methods.

One such instance is Electric Roll Up Doors and Gates. With a little bit of knowledge and a screwdriver entry into these gates can be very fast with very little force. Electric Roll up Gates are most commonly found in my area on loading docks, garbage rooms, and on the occasional roll up gate. These electric door openers are usually found mounted around 4' off the ground directly beside the door that it opens. There is a key way on the control panel. This key way controls the door going up and down. The key way is often a standard mortise lock cylinder, on the back side of the cylinder. A large pivoting arm is bolted to the key way. When the key is inserted and turned the pivoting arm will twist and hit a limiter switch to either roll the door up or down.



Forcing entry

Forcing entry into the door usually does not require very much force at all, the only tool that you need is a screwdriver in most cases. The first thing you want to do is undo the screws in the four corners of the face plate. I have been told by friends that they have encountered security screws

in these from time to time, I have never encountered these security screws. Most of the time standard Philips, Robertson, or Slot headed screws hold the face plate on. Once the screws have been removed the face plate will need to be pried off with a halligan or Rex Tool. The reason for this is that the pivoting arm on the back side of the cylinder hits small tabs on the edges of the electrical box. The tabs are why it says on the front of the lock face that you must have the key in order to open the lock, when the key is inserted into the key way and it is turned the pivoting arm turns and is able to fit past the tabs on the electrical box. To pry the face plate off is not difficult, these tabs on the electrical box are light gauge galvanized metal that will bend quite easily with a little pressure with a prying tool.

Operating the gate

Once the face plate has been removed and pried out you can operate the gate. Directly behind the pivoting arm is a limiting switch with a simple button to operate the gate up and down, there is one button on each side of the lock cylinder. You can simply use your finger (or a pencil if it makes you feel more comfortable) to push the button and activate the door. If you look at the face plate you may be able to tell what side the limiter switch is for "Up" and what one is for "Down" by the words on both sides of the lock cylinder. If no words indicating what side is "Up" are present simply try pushing one side, if it does not work it means that it is the other side. Keep in mind that you are dealing with live electrical wires so extreme caution must be taken not to touch any wires, if you use the proper techniques and give any electrical component the respect it deserves than that should not be a problem.

Also remember to take a thorough look at the gate and properly size it up. If there are additional locks on the door such as traditional pin, hasp, and padlock assemblies, then these locks must be removed before this entry method can be performed.

In some instances these gates are also locked from the inside or the electrical switch no longer works, in these instances the gate or door will have to be cut with a power saw.

Also be sure to check with your departmental SOP's and SOG's before performing this entry method, some departments have policies against members touching an electrical equipment such as this.

This is an extremely quick and effective method for forcing entry and it causes very little damage. The best way to prepare for these types of forcible entry situations is to pay a visit to the company in your city or town that install these electric gate openers, ask them to run you through the most common types that they install in your area.

Till next time, stay safe!

You might like:

- Bevel to the… door? jamb?
- Why Search That Building – By: Scott Brown

Recommended by

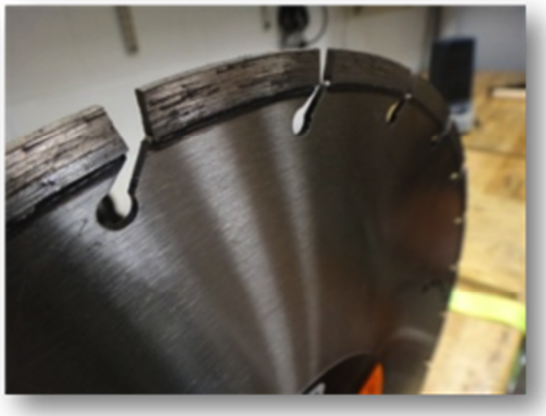
Posted by ccollieron September 30, 2011 • Filed under: Building Alteration-Renovation, fire-rescue-topics, firefighter-safety-health, firefighting-operations, Forcible Entry, Ladder Company Ops, RIT or FAST Operations, special-operations, training-development, training-fire-rescue-topics• Tagged: training

Changing Saw Blades – Diamonds are a Firemen's best friend too – By Grant Light

No comments

Over the past few years there have been some big changes in the type of circular saw blades used by fire departments across the country. In the past almost all of the metal and concrete cutting was accomplished with fiber wheels made of a sacrificial material such as aluminum oxide or silicon carbide. The biggest problem with these blades was that they got smaller as you cut, causing you to change blades during a rescue and at times not allowing you the depth of cut

needed to get the job done. The potential for blades to fly apart during operations was also a big safety issue. You had one blade for metal, one for concrete and at times one for stone. Just that fact alone required a quick decision about the work to be done and in some instances quick blade changes were required before cutting could begin.



Just like everything else in the fire service, saw blades have changed dramatically as new technologies have moved from the construction industry to the rescue services. Diamonds are where that technology has taken us. Many different types of diamond blades are available but we will look at two, Segmented and Vacuum Braised. Segmented blades have a diamond impregnated segment attached to a steel wheel. They were originally designed for cutting concrete with imbedded rebar. They moved to the fire service through US&R teams and are used by many companies to cut metal during forcible entry operations.

The newest additions to diamond technology are the Vacuum Braised blades. They have very high quality diamonds attached directly to the steel wheel. This removes any chance of a diamond segment coming off the wheel and becoming a projectile during operations. These blades can cut an extremely wide range of products such as Hardened locks & shackles, hockey puck locks, security gates, re-bar, chain-link fence, stucco, concrete, block, brick, stone, asphalt, wood, drywall, car doors, ductile iron, cast iron, angle iron, black iron, schedule 40 &80 steel pipe, plastic pipe, 2x4s and plywood. These blades will do all this without reducing the depth of cut and outlasting fiber wheels 100:1 or more. During training at a scrap yard we cut through a fiberglass roof on a conversion van, which was backed up by 4

layers of OSB plywood and then turned and cut the class 3-trailer hitch off the rear of the vehicle. We were using a Desert Diamond vacuum braised blade and it didn't skip a beat. The ability to grab a circular saw and cut just about anything you encounter is a welcome change from the blades we used just a few years ago. These new blades have a higher upfront cost but their ability to cut a wide range of materials, remain a constant diameter and outlast any forcible entry cutting scenario you might encounter make them a smart choice as you move forward into

the future of circular saw blades.

Posted by ccollieron August 25, 2011 • Filed under: fire-rescue-topics, firefighter-safety-health, firefighting-operations, Forcible Entry, Ladder Company Ops, Ladders, rescues, RIT or FAST Operations, Roof Ops, Search, special-operations, training-development, training-fire-rescue-topics, Ventilation• Tagged: training

Hit, Hit, Hit Part 2 – By: Andrew Brassard

No comments

In the last article we talked about ensuring that the striking firefighter has their top hand at least 6" down from the head of the axe. This is to ensure that any missed strikes don't crush the striking firefighters fingers.

Now we are going to talk about where to place your bottom hand and how to position your body for optimal striking during conventional forcible entry operations.

Just like the placement of your top hand, your bottom hand placement can be critical to a smooth forcible entry operation. For some reason, lots of firefighters want to choke their bottom hand up to around the middle of the axe. This grip can lead to problems during forcible entry operations. What tends to happen when using this type of grip is that as the striking firefighter swings the axe, the butt end of the handle digs into the firefighter holding the halligans leg. The momentum of the axe being swung usually doesn't stop once the butt end of the axe handle bumps the firefighters leg. The momentum tends to carry the axe through the swing but drastically off target. This obviously can lead to missed hits and the potential of injuring a member. Instead, place your bottom hand down at the bottom of the axe just above the fawns foot. This will allow you to be more aware of where the butt end of the axe handle is.

Don't be a Fool…. Cross your Tools

Another very common striking mistake is not crossing your tools. The optimal striking position for the axe is to have it crossing the adz of the halligan and not in line with it. The reason for

crossing the tools is that it increases your striking surface to allow for small inaccuracies. With the axe in line with the adz it leaves very little margin for error for the striking firefighter, if he is off the mark by only 1" this could cause a glancing hit on the adz and cause the halligan firefighter to be struck. If the axe and the adz of halligan are crossed it will increase your margin of error by giving you 2" up and down and 3" left to right leeway in your swing.

Keep your Eye on the Ball

When I was a young kid my father was teaching me how to catch a baseball and the first thing he said was "keep your eye on the ball", this principle applies the same to forcing a door. You should always try to make yourself eye level with the adz, this will make your swing much more accurate. Depending on the location of the lock being forced, you may have to take a knee, crouch, or you may be standing straight up, but for the majority of locks that are located in the middle of the door the striking firefighter should take position on their knees.

These small tips will help you be more proficient during you forcible entry operations.

Until next time, stay safe.

Posted by ccollieron August 22, 2011 • Filed under: fire-rescue-topics, firefighter-safety-health, firefighting-operations, Forcible Entry, Ladder Company Ops, RIT or FAST Operations, Search, special-operations, training-development, training-fire-rescue-topics, Ventilation• Tagged: training

Hit, Hit, Hit – By: Andrew Brassard

1 comment

I have been teaching forcible entry for almost 10 years, in that time I have seen a few injuries. It sometimes comes with the territory: bumps, bruises, and the odd black finger nail have happened when both members of the forcible entry team are not on the same page. One of the simplest mistakes that I have seen firefighters make that leads to injuries is holding the axe too high on the shaft. A lot of firefighters are thought to hold the shaft of the axe directly below the head. In my opinion this is an incorrect grip.

The reason that this grip is not favorable is because if the striking firefighter is off the mark with the swing by only a few inches the can crush their fingers between the shaft of the axe and the halligan adz. I have seen this on several occasions and a couple of times it has led to a black finger nail or a broken digit. This is a serious problem not only because of a member getting injured but on the fire ground the forcible entry operation is halted which could cause significant delays in entry, water on the fire, ventilation, or commencement of search and rescue operations.

To avoid this, ensure that your members keep their top hand at least 6" below the head of the axe. Lots of companies, to ensure that there members do not forget this, place there company identification colors or number at least 6" down from the axe head, this will be a subtle reminder to keep your hand down and it will also build company pride and ensure no other company walks away with your tools.

Posted by ccollieron August 21, 2011 • Filed under: fire-rescue-topics, firefighter-safety-health, Forcible Entry, Ladder Company Ops, RIT or FAST Operations, Search, special-operations, training-development, training-fire-rescue-topics• Tagged: training

Cutting the Locks

9 comments

Brotherhood Instructors believes in having multiple plans in mind for any forcible entry situation. A back-up plan for forcing an outward opening door can be cutting the locks. We prefer to gap the door away from the frame and cut the throw of the lock as

opposed to cutting the door, known as the "bird beak cut". The bird beak cut seldom works since it is very 

difficult to cut completely through the door due to the door frame getting in the way.

If you decide to cut the locks, gap the door away from the jamb using the halligan or axe. Start the saw blade spinning at a low RPM to make a groove in the bolt of the lock and then throttle to full RPM to complete the cut. This is an especially helpful technique when dealing with foot bolts. Having the power saw set up in the outboard position will allow the saw to better cut the foot bolts. Click here for our previous blog on foot bolts. Be sure when cutting the bolt of any lock to cut as close to the door as possible. This will ensure that the lock can not re-latch once the tool holding the gap has been removed.

Posted by ccollieron July 29, 2011 • Filed under: Building Alteration-Renovation, fire-rescue-topics, firefighter-safety-health, firefighting-operations, Forcible Entry, Ladder Company Ops, RIT or FAST Operations, Search, training-development, training-fire-rescue-topics, Ventilation• Tagged: training

Brotherhood Instructors class in Wildwood NJ

No comments

Brotherhood Instructors, LLC. will be presenting our 8-hour hands-on "Beyond the Academy: Engine & Ladder Company Operations" class on Thursday September 15, 2011. This course is hosted by the Cape May County Fire Chiefs Assn. – Click here for registration information! Sign up now, don't get left out!

Click here to see pictures from last years class!

Beyond the Academy: Engine & Ladder Company Operations consists of parts of our Beyond the Academy: Engine Company Operations & Beyond the Academy: Ladder Company Operations classes. Check out these videos for a quick overview of the course material.

2012-04-21 – Sergeant Bluff, IA – BtA Machinery Rescue – Flier & Registration Form

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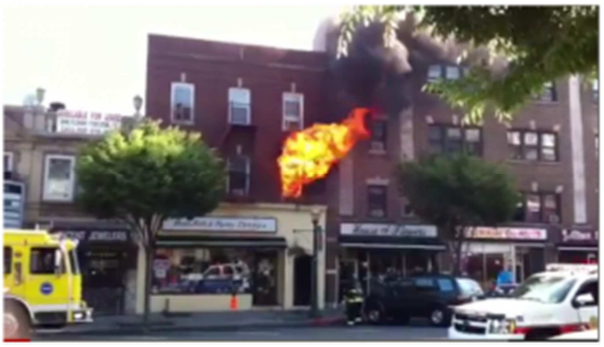
Course Catalog – Email Version

Posted by ccollieron July 25, 2011 • Filed under: Announcements-News, Attack Line, Brotherhood Topics, Class Photos, Engine Company Ops, fire-rescue-topics, firefighter-safety-health, firefighting-operations, Forcible Entry, Ladder Company Ops, Ladders, Roof Ops, Search, special-operations, Stretching, training-development, training-fire-rescue-topics, Ventilation, videos, Water Supply• Tagged: training

Tactical Discussion: Apartment Fire w/ Critical Decisions by: Nate DeMarse

8 comments



We first saw this video on Backstep Firefighter. An excellent video surfaced this week that addresses some very critical decisions that must be made in seconds at this early arriving apartment fire in downtown Mamaroneck, New York. I want to preface this discussion by saying that the Fire Department in Mamaroneck did an OUTSTANDING job in getting several things accomplished simultaneously with very limited manpower. They were confronted with a very complex situation, including a complex laddering problem that they overcame without hesitation.

It appears that the first due engine has arrived to a heavy fire condition in at least one room on the second floor of a three story apartments over stores "downtown-type" building that is common across the entire North American region. In reality, this fire could have happened in nearly ANY TOWN in North America. So since it COULD HAPPEN in your town, here are a few questions to discuss the incident.

There is a visible victim at the top floor window in obvious distress. As we say at every Brotherhood Instructors, LLC course, I am going to step out of my "FDNY Manpower Fantasy World" and attempt to stir a discussion that applies to the other 95% of the firefighting world. You are arriving with an "now-standard" engine staffed with THREE (including the boss). If you have a total of four, you are extremely lucky, and feel free to answer accordingly. The next due engine and/or truck is 4-5 minutes out. How and when are we addressing the following concerns from the video:

1) Do we stretch the line to confine/extinguish the fire first or do we go for the ladder rescue? Why? What are the pros and cons of each?

2) Can you split your company to get both accomplished at once? If so how? What are the implications?

3) What sized portable ladder (if it was available on your engine) would you use to reach the 3rd floor sill?

4) What are other options to the portable ladder in the front?

5) What size attack line are you pulling to attack this second floor fire?

6) What are the forcible entry concerns at this fire? Type of door, locks, etc…?

Please copy and paste the questions into your reply below, and answer using your name & department. Keep in mind that we have a lot of young firefighters on this blog that read our posts to learn, so if you have something throw it down even if you think it is very basic. To the young guys: DON'T BE AFRAID TO ASK QUESTIONS!

Now take a look at the photos below (bing.com, birds-eye-view) for some added size-up discussion. Unless you were intimately familiar with this building during inspections, EMS runs, water leaks, etc… this building can cause you some complex problems.

1) The fire is located on the 2nd floor, but the 3rd floor is only about 1/2 or 3/4 the depth of the building. Does this now become a top floor fire? How are you getting to the lower level (2nd floor roof) in the rear? How would you communicate this?

As a Roof Firefighter, in my opinion your game plan has now changed. I would be expecting to go up there and force a skylight, scuttle and/or bulkhead and do a perimeter survey. This won't be the case at this job. This is a perfect scenario to drive the point home of crawling or probing with a tool in front of you in a limited visibility condition. If you do not in this case, you can take a 1 story fall to the rear roof, rendering you injured or worse.

2) Note the potential VES opportunity that may be available on the Exposure 2(B) roof. It appears from the overview photo that the window in the A-B (1-2) corner may lead to the same room that the victim is trapped. There are also similar VES opportunities in the rear (2nd floor roof) if needed.

Feel free to add further questions or stir discussion. Remember, we strictly moderate our blog discussions. Keep it professional and to sign your posts. NO UNSIGNED POSTS or posts that simply bash the department (which would be very hard in this case) will be allowed. Stay safe!

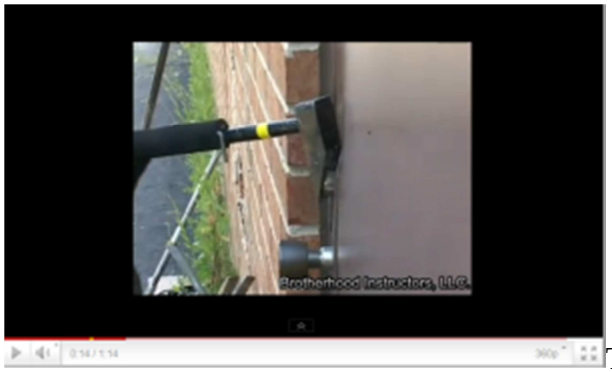
Posted by Nate DeMarseon July 14, 2011 • Filed under: Attack Line, command-leadership, Engine Company Ops, fire-rescue-topics, firefighter-safety-health, firefighting-operations, fires, Forcible Entry, Ladder Company Ops, Ladders, rescues, Roof Ops, Search, Stretching, training-development, training-fire-rescue-topics, videos

Pulling Mortise Lock Cylinders

No comments

Mortise locks are commonly found in commercial and residential buildings. Many mortise locks are installed with a trim plate on the door that has predrilled holes for the lock cylinder and door knob. Keep in mind that these are trim plates, not cylinder guards. These trim plates are hollow and can easily be dented in to allow the lock pulling tool a better bite on the cylinder.

After verifying that the door is in fact locked, dent the cylinder guard in with a tool to expose the sides of the cylinder. Once this has been done, set the lock puller onto the cylinder and give it a few hits to set it in place. Now pull the cylinder. With this type of lock it is sometimes helpful to rock the lock pulling tool back and forth to loosen the cylinder up. After the cylinder has been removed, you can proceed with your through the lock operation.



This video demonstrates rocking the tool from side to side to assist in removing the cylinder. Be sure to always have your irons available in case the through the lock operation fails as in this video.

Posted by ccollieron June 18, 2011 • Filed under: fire-rescue-topics, firefighter-safety-health, firefighting-operations, Forcible Entry, Ladder Company Ops, special-operations, training-development, training-fire-rescue-topics, Uncategorized• Tagged: training

Why Search That Building – By: Scott Brown

3 comments

We respond to building fires daily in the fire service and the assignment of primary search has taken a back seat. Primary search is a critical benchmark and essential task to be completed. This task should be simultaneously completed with line placement and proper ventilation! Remember that line placement and primary search save lives; isn't that why we are here? It is not justifiable to state that either is more or less important on the fire ground. Manpower now a days is difficult to find, but is it? We are expected now to do more with less with all of the emphasis on EMS. Only we can make this change, by us stepping up and making a stand for what is right for our safety and the communities' safety. You have to get certain duties completed on the fire ground, but more importantly they must be completed in a timely manner. Waiting to be assigned or not starting a primary search will hinder the true operations and meaning of the duty at hand. If this is how you operate, then maybe we should revise the terminology to body recovery search.

Where do we start and what do we look for? First thing first; SIZE-UP! You can not have the same search thought process for a single family dwelling as you do a 200X200 commercial building!! Your size-up will tell you a lot of information on what is going on inside the building, and give you indicators on where you need to be first to make most of your time. Size-up for a primary search is essential and needs to be completed on the transmission of the alarm. Building construction, we need to search according to the building type. The days of fire school searching, hand on ankle, and always doing a right hand should be gone. We are not going to complete any kind of search in a timely manner. Line placement, with out a line placed and into operations we will not be as effective doing a primary search. Remember, the truck company is only as aggressive as the engine company. Fire conditions, this will tell us how far we can go with out putting ourselves into unnecessary harm. Remember, there is no reason to search a room that is on fire. If we can't take the heat with all of our PPE, then what chance do they have? So take your risk benefit and weigh it out.

What if every one is reported "out"; well how sure are you? Maybe a neighbor attempted to go inside and look for their neighbor thinking that they are still inside. Yes, that has happened, and can easily happen to us right now today. Is the structure clear until we clear it? It would be heart wrenching to know a victim possibly had a chance, but we decided not to commit or worse not complete this task until after the fire is knocked down. Remember, your size-up will give you good indicators for savable victims. Gaining all of the essential information will dictate how advance you will commit for savable victims.

What do we look for once inside? YOUR NEXT EXIT!! This is for you and your members. We spoke about the size-up on the exterior, but don't forget about your interior size-up. Size-up everything you do, building lay-out, smoke condition, heat condition and listen to the radio for other benchmarks. These items make or break your commitment to the interior. This is where we see a lot of firefighters get into urgent and/or mayday situations.

The other reason that we search is to find the fire, if you have done this there are things that need to be completed. First attempt to check the fire, by closing the door, maybe hit it with the water can if it is a must. Remember though, it is not there for that reason. Then, get on the radio and call the engine's officer and tell them where the fire is. You can relay, how far of a stretch, up / down stairs, which side the structure. Make the line's job a little easier; they will make your job easier. The engine should be searching the fire room or rooms. You can also secure the utilities if you happen to come across them.

Primary search should have a minimum of one firefighter and one officer. But, this can be building dependant and life hazard dependant. Maybe we need to send the entire company inside to get the job done? All to be decided on your size-up, as you arrive on the scene. Tools are essential and should be mandatory that all personal have the basics. I will start off with the irons; we need to gain entry for us and the line. Water can, this is not to be cowboys and put the fire out, but is 2.5 gallons of water for our safety. You will be amazed what a water-can will do. Yes, this is heavy 25-30 lbs, but the value out weighs the true weight. Remember, that you do not need to carry the water can, when you are completing the search, but you can drag it. 6' Hook, this can provide an excellent extension of your arm for searching. The hook can also assist in providing relief to companies trying to make that final push down the hallway and are being hindered by heat. Thermal Imaging Camera, this has many options, look for victims, check fire conditions, navigation, structural conditions, and accountability of crew. Remember that the TIC has faults and is man-made and will fail. The TIC also has many false positives, and you still must be aware of your surrounding the old fashion way. Some additional tools to consider for large square footage buildings, but can be used in any type of building. Rope bag, my area runs 200ft of search rope. This is due to our normal first due area, and yours should reflect the same. Hydra – ram or Bunny tool can be used if forcing a large amount of doors, remember your basic forcible entry skills. Yes this is a lot of equipment to carry, but remember if you get where you are going and there is no need to utilize the hydra-ram or rope bag; then place that tool in a safe-refuge. In all these tools are just the basics and give you good start. I have assumed that PPE , radio, flashlight(s), door chocks are already in place with you.


Starting your search, use the irons (if needed) to make entry into the most appropriate door to begin your search and for line placement. Sow down for just a few seconds, let the building breathe. This could show what the conditions are inside! Before you enter the building / door bend over and place your face on the ground and look in, you might get a full view of the layout of the room. You might find a victim, and be able to go right to them. Begin your search using the left or right hand method, but there is no reason to search directly behind each other. Spread out, but staying within voice range, spread your body out. Remember, we are not looking for pennies, we are looking for bodies. There is no reason to search the top of a dresser, or behind a TV. Where are we going to find victims, in bed, closets (kids) and the path of an exit way. Yes, there will always be exceptions to the rule, but remember PRIMARY SEARCH is to be quick. Check for bunk beds, remember to look around, is there toys? Maybe you are in a kids' room. A nice bench mark on the fire ground is 4-5 minutes into the search. What is your status, are you completed? Are you delayed and command needs to get more search companies?

Primary search needs to be a quick and thorough. This assignment should be automatic, and companies on the first alarm should know that they are assigned to do this, so they are prepared with the most important tool, their brain. Bench mark at the 5 minute mark, most residential searches can be completed in this time. You can do this with aggressive hands-on training, and knowledge. Take your tools with you every time, if you do this, when the real work comes in, it will be second nature to carry everything. Also take care of your tools, clean them, and maintain them. All this can be done at truck check, at the start of your shift morning or night. If you don't do a search in a timely manner find out why, is it manpower, lack of training or some other issue. Many of these items can be addressed with a little bit of research. If you are not beginning primary searches upon arrival and you are waiting 20-25 minutes to do so, it is not a primary search. You are expected by your tax-payer to perform these functions, don't let them down. Because you don't work for a "Big city", is no excuse.

Posted by ccollieron June 15, 2011 • Filed under: Attack Line, Engine Company Ops, fire-rescue-topics, firefighter-safety-health, firefighting-operations, Forcible Entry, Ladder Company Ops, Search, Stretching, training-development, training-fire-rescue-topics, Ventilation• Tagged: training

Bevel to the… door? jamb?

3 comments

The debate among firefighters over the correct way to set the halligan is as common as the age old smooth-bore vs. fog nozzle debate. Both techniques, much like the nozzles, have their time and place. Setting the halligan with the bevel of the fork towards the door is the correct and most efficient technique in most cases. The pictures below speak for themselves and illustrate why having the bevel towards the door is advantageous. It's simple, more spread and a better chance of forcing the door without having to employ additional steps and techniques.

3 inches of spread can be achieved when the halligan is set with the bevel of the fork towards the door and the tool is pushed flush to the door.

2.25 inches of spread can be achieved when the halligan is set with the bevel of the fork towards the jamb.

So why do some firefighters choose to set the tool with the bevel towards the jamb? The biggest reasons are lack of training and because it is easier. There is no doubt that the tool will set easier with the bevel facing the jamb. The easiest way to do something is usually not the best. It takes more training and practice to be able to "steer" the forks between the door and the jamb with the bevel towards the door. When the fork is set with the bevel towards the jamb less spread cab be achieved for two reasons. First the natural curve of the fork provided additional spread when used with the bevel towards the jamb. Second, the halligan can not be pushed flush with the door in this orientation due to the adz coming in contact with the door.

As stated above, using the halligan with the bevel towards the jamb does have its place – actually two places. The first instance that may necessitate this orientation of the tool is an extremely tight door. If the door is too tight to set the tool with the bevel towards the door, flip the tool over and get back to work. The second instance is an odd hallway configuration. If the adz of the halligan is obstructed by a wall, railing, or some other hindrance the tool can be flipped over to bypass the obstruction.

Only proper practice will improve technique and effectiveness. Practicing incorrectly doesn't help and often instills false hope and a false sense of security in tactics that will not work in the real world. When practicing forcible entry techniques, practice with the fork both ways while keeping in mind that the bevel should be towards the door most of the time.

Posted by ccollieron June 8, 2011 • Filed under: fire-rescue-topics, firefighter-safety-health, firefighting-operations, fires, Forcible Entry, Ladder Company Ops, RIT or FAST Operations, training-development, training-fire-rescue-topics, Ventilation• Tagged: training

“Chalk Talk” Forcible Entry Size-up – By: Andrew Brassard

2 comments

Growing up I played lacrosse, not the typical hockey that most Canadian kids played. I was fortunate enough to play at a very high level and had the privilege of playing for some great coaches. They taught me not only about the game of lacrosse but great lessons about life that I carried over into the fire service. I had one coach that always said “you can’t learn this game in a book; you have to get out on the floor and play the game”. I could not agree more, to truly learn this job aggressive and realistic training along with experience is required. That being said my

coach would also say “you want to be great at this game, be a student of the game”, I would see my Coach constantly looking at plays, statistics, equipment, etc. and he was a true student of the game and one of the best players ever to play box lacrosse. The point is that you need the knowledge and the understanding of what you’re doing to go along with your hands on training. We would practice some days until we would literally be throwing up on the floor, we would also spend some days in the class room in front of the chalk board going over plays. This was just as important to the development as us as lacrosse players and a team as going out and throwing the ball around the floor. We are going to look at a quick drill that you can do at your firehouse, this type of drill we call “chalk talk”.

Chalk talk drills are those types of drills that are great for rainy days, these types of drills are good because they often get great discussions going and it allows some of the senior members in the company to pass along their experiences and knowledge to the younger guys. Some of the best training that I have ever done has been sitting at the kitchen table, around the tailboard of the rig, or sitting in front of a white board talking shop with a warm cup of coffee and the company of some great firemen. Not all training has to be blood, sweat, and tears, here is a good “rainy day” forcible entry drill that you can do with your crew.

Forcible Entry Size up Drill

A hard thing to practice and drill on is forcible entry size up. One thing I use to do was go out and take pictures of doors in our area, we would put them into a PowerPoint and then talk about methods for forcing entry into these buildings. It was great training and great discussions with guys. We would talk about the different locks that they were dealing with and the methods and tools that they would use for getting in. Great debates, discussions, and arguments would steam from the slideshows. The problem with this method was that it was time consuming to go out gather the photos and then put the PowerPoint together, the training had great value it was just not something that could be done at the drop of a hat if the crew says "let's do some training". Also it does not take long for the guys to get tired of looking at and talking about the same doors over and over again.

To try to add some variety to the training and be able to put the training on I set out to make a series of props that would allow me to do quick, realistic, and optionless forcible entry size up training. I wanted to build a series of magnetic locks that could be stuck onto any regular metal door in the firehouse, out doing building inspections, etc. These locks would look exactly (or as close to it as possible) like their real lock counterparts. I took the basic type locks that me and the crews in my fire department would encounter during a forcible entry operation, these locks included:

- Key in the Knob Locks 

- Tubular Deadbolts
- Rim Locks
- Rim Cylinder Guards
- Carriage Bolts (drop bars, slide bolts, etc.)

After I narrowed down the most common type locks that I wanted to simulate I made a trip to a local machining shop and had them mill out exact likenesses of a key in the knob lock and a couple of tubular deadbolts, because of the weight associated with making these locks out of metal PVC was used instead. On the backside of the locks a counter sunk hole was drilled and then a heavy duty magnet was secured into place using epoxy. To make the cylinder guards, 10 gauge metal plates were cut to the size of a standard cylinder guard. After the cylinder guards were cut ¼ inch carriage bolt heads were welded on the corners and then magnetic stripping was added to the backside of the guards. Finally, ¼ inch carriage bolts were taken and the threaded rod was cut off the back leaving just the heads, a hole was counter sunk into the back of the carriage bolt head and a magnate was held in place with epoxy. Having these magnet props allows you to gather the crew around any metal door in the firehouse and set up any forcible entry scenario your imagination can dream up. These drills at my firehouse have been invaluable; the guys at the station love it and get very engaged in the discussion about tactics and forcible entry size up.

The total cost of the magnet props was around $200, but if you are fairly handy or know someone who can use a machining lathe you could probably get them made for a lot less money.

This will be the first article in a series of articles that will give you great training ideas that you can do at your firehouse. If you want to train you can train.

Posted by ccollieron May 31, 2011 • Filed under: Building Alteration-Renovation, fire-rescue-topics, firefighter-safety-health, firefighting-operations, Forcible Entry, Ladder Company Ops, RIT or FAST Operations, training-development, training-fire-rescue-topics• Tagged: training

"Slipping Through the Cracks" – By: Josh Materi

No comments

 Does this look familiar? Have you been to a fire where companies failed to remove bars off the windows? I am sure by now we all understand how important this is to the safety of our members operating inside, much less the occupants that are cut off by fire. So what's the problem?

Is it a system or operational problem?

How strong are your fireground SOP's, do they cover this important fireground task?

Does your Training Division and Company Officers address these challenges?

STANDARD OPERATING PROCEDURES

Without strong operational standard operating procedures (SOPs) how do we ensure critical tasks do not get overlooked? SOPs function effectively because units are assigned specific tasks based on the occupancy and response order. An example of a department's SOPs states that one of the responsibilities of Truck Company members assigned to position #4, Outside Vent firefighter (OV) is to remove bars off of the windows, this will ensure that this critical task will not get overlooked. This also gives ownership of the important task to these specific members. Communicating expectations will motivate the members to focus their training on their roles on the fireground. If this member is unable to remove the bars for some reason it is his/her responsibility to communicate this to command.

TRAINING

Are the members of your department confident in their ability to successfully remove window bars in an efficient manner? Or, is this an  issue that tends to slip through the cracks? This is a relatively easy task that is often overlooked when planning company drills. Take the time to develop props that will reflect the challenges you will face in your district. ***Realistic challenges on the training ground will build confidence on the fireground, a confident firefighter is an aggressive firefighter and the fireground needs aggressive actions.***

 In the photo to the left you see a member standing next to a window on floor 1 at the rear of a multiple-dwelling apartment building. The window bars are standing proud of the wall and are connected on two sides; they are also out of reach without a ground ladder. This window will be attacked differently than a window that is recessed into brick and mortar connected on four sides. The member going to the rear of this structure should have a metal saw, halligan bar, 6'Hook, and 24' extension ladder. Without the ground ladder this member would have a difficult time addressing the window bars, not to mention reaching the floor above for ventilation and rescue. When providing horizontal ventilation, resist the urge to take the glass prior to removing the bars. Operating the metal saw in smoke may choke out the saw and will obscure your visibility unnecessarily making the removal more challenging and may be delayed.

Failure to plan is planning to fail…

 This is a great company drill; grab a hook, halligan bar, metal saw and walk around your district and discuss with the crew how you would attack different challenges. Discuss multiple techniques; have a plan A, B, and C, make sure to include conventional techniques. Never solely rely on one technique, especially when it requires the use of a saw. On a side note, this is a great time to reinforce why we must run the saws at the start of every shift.

When you get back to the firehouse bring out the new window prop you built on your days off and let the crew cut re-bar and flat stock in various positions both on and off a ground ladder. This gives the crew a chance to handle the saw other than on the morning checks or on the fireground, for most of our members this is the only occasions we operate the metal saws. Encourage your members to test some of the theories they discussed on the pre-fire walk. Every company has that “idea guy”. Give that member an opportunity to test some of those good ideas.

In this job the devil is certainly in the details. Discussing the plan with your members, laying out the expectations and giving them the  opportunity to train repeatedly on what they are expected to accomplish is absolutely imperative for operating at a high level on the fireground. Having a plan on who will be responsible for removal of the bars and repetitive task level training on the plan pays off. It pays off for the citizens that we are sworn to protect and it will pay off for our members.

Here is a great public service announcement from Miami Dade Fire Rescue that illustrates the importance of being prepared for the worst.

http://www.youtube.com/watch?v=XEoYt-4QqBI

Posted by ccollieron May 24, 2011 • Filed under: Building Alteration-Renovation, fire-rescue-topics, firefighter-safety-health, firefighting-operations, Forcible Entry, Ladder Company Ops, RIT or FAST Operations, special-operations, training-development, training-fire-rescue-topics, Ventilation• Tagged: training

History of Lock Pulling Tools

2 comments

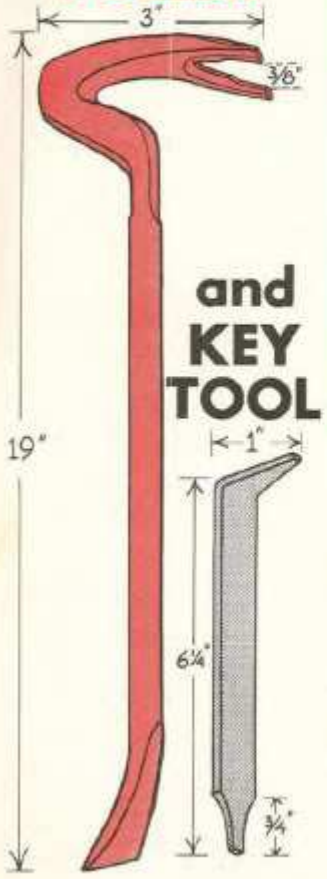
Here is a great article by Nate Jamison from Midwest Firefighter about the history of lock pulling tools. There are a few variations of these stories out there and I'm sure each has its own unique blend of history, urban legend, and firehouse rumor. Thanks for letting us share your work Nate.

Sunila Tool

Invented by Captain Kauko E. Sunila (FDNY Engine 84) who is also accredited as the first person to start pulling lock cylinders to go through-the-lock. This tool started out as a modified pinch bar purchased at a local hardware store. The hook end was somewhat flattened and it's claw end was sharpened. It was later manufactured by Bridgeport Tool Company (Bridgeport was stamped on the shaft). It was officially introduced as a cylinder lock puller in the "Autumn" 1961 WNYF.

Additional Information; Brotherhood Instructors Post: Through the Lock- The Sunillla Tool

LOCK PULLER and KEY TOOL



1. Place hook end of Lock Puller, at forty-five degree angle, directly above ring.
2. Use light blows of axe to drive tool behind ring and face of cylinder.
3. Lift up and pry cylinder from door.

One of the newest tools to be introduced into the Fire Department is the cylinder Lock Puller. As can be seen from the illustration, it is an adaptation of the ordinary pinch bar with the hook end somewhat flattened, and it's claw widened and sharpened.

As it's name implies, it is used for pulling or forcing locks: not for all locks, but for that type of lock called the cylinder lock, which is generally found in apartment and tenement houses throughout the city. A different and sturdier type of cylinder lock is also found in commercial occupancies and in certain residential areas with a high incidence of burglary.

With the Lock Puller, a door can be opened in a matter of seconds and with a minimum of damage, as opposed to the greater time and damage incurred by the use of force on the door itself.

By KAUKO E. SUNILA
Captain, Eng. Co. 84

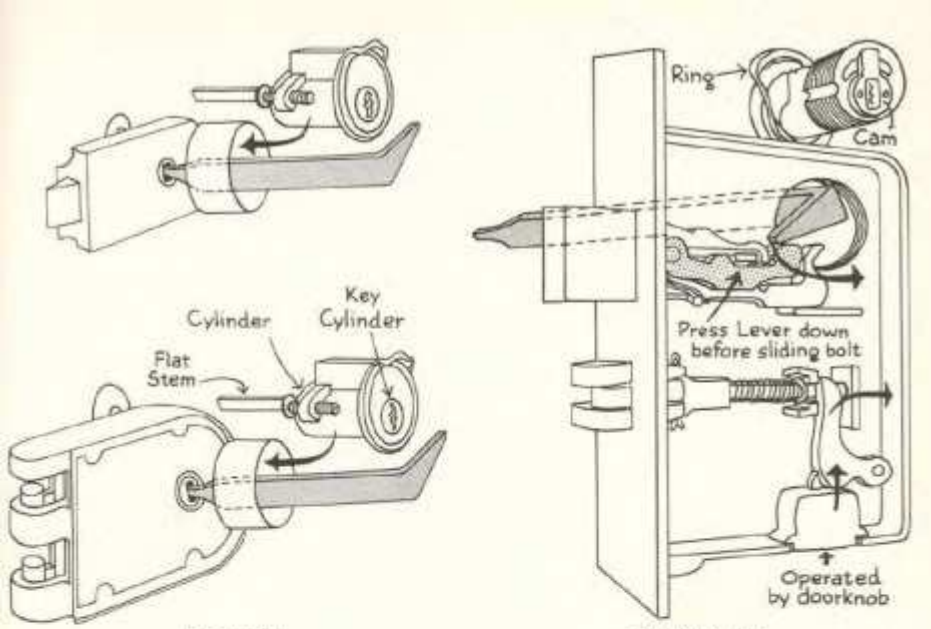
OPERATION

The *Lock Puller* requires little force, and accomplishes a fast, neat job of forcible entry. It is always used in conjunction with a regulation flat head axe, *Lockbreaker* or *Halligan Tool*, and a "Key Tool" which has a straight end and a bent end. (See illustration.)

In forcing entry the hook end of the *Lock Puller* is placed directly above the ring, with the tool held at an angle of about 45 degrees. *Light blows* with the axe are used to drive the tool behind the ring and the face of the cylinder. Lifting up the straight end of the *Lock Puller* pries the cylinder from the door. (See illustration.)

By inserting the straight end (or bent end) of the *Key Tool* through the hole in the door and into the hub of the lock and turning, the door can be opened. If for any reason this fails, insert the straight end of the *Lock Puller* through the hole, and drive the lock off the door with an axe.

Care must be used when driving the claw end of the *Lock Puller* behind the ring, since the claw, which is sharpened



THE RIM LOCK

The most common type lock, such as the Yale, Segal, etc., which are screwed to the inside face of the door near the edge. They are found on doors to apartments, private homes, stores, garages, and many other occupancies.

THE MORTISE LOCK

The type which is recessed in the edge of the door and which very often operates in conjunction with the door knob. Not so common as the Rim Lock, it is found in the same occupancies. It is also used in glass doors.

to a fine edge, might be damaged by heavy blows.

Occasionally cheap locks are found that are made of *white metal*. The ring and face of such locks break off easily when an attempt is made to pull the lock. In this event drive the lock off the door by placing the straight end of the lock puller against the face of the cylinder and with an axe drive the cylinder and lock off the door.

The *Lock Puller* was designed for speed of operations and for minimum damage. But as all Fire Department tools it has its place in the scheme of things.

Where apartment doors are weak and equipped with strong locks, it may be better to knock out a panel and reach inside to open the lock. Where the door is stronger and equipped with a Fox Lock, and covered by plates and angles, it may be easier to open it from the hinge side. Experience and study will provide the good judgment required for rapid determination of the best method for opening a door.

One last word: before beginning operations, try the door knob. After all, the door may not be locked.

All the locks have basic similarities, plus some individual characteristics, as follows:

THE KEY CYLINDER: That part of the cylinder which rotates when a key is inserted. At the rear of the key cylinder is either a stem (flat or square) or a cam.

THE FLAT STEM: A flat metal stem (1/16" x ¼") which connects to the key cylinder and fits into the hub of a Rim Lock and operates the Rim Lock when the key is turned.

THE SQUARE STEM: A ⅜" square metal stem which connects to the key cylinder and fits into the hub of a Fox Lock and operates the Fox Lock when the key is turned.

THE CAM: A flat piece of metal (¾" long) which is fastened at a right angle to the rear of a key cylinder. When the key is turned, the cam strikes and operates a lever in a Mortise Lock causing the lock to open.

THE LEVER: The lever in a Mortise Lock that is operated by a cam.

THE RING: A circular finishing piece of metal which surrounds what is seen of the cylinder from outside the door.

THE STEEL PLATE: A steel plate used to cover the cylinder of Fox Double Bar Locks, and frequently with Fox Vertical Bar Locks. The steel plate is bolted to the door with four ¼" carriage bolts, and is intended to prevent the cylinder from being pulled out.

W. N. Y. F. • 3

Officer's Tool (A/O Tool)

Taking this "A" style teeth and applying it to other fire service tools original inventor was Captain Bob Farrell (FDNY Ladder 31). As a firefighter and friend of Sunila (Sunila Tool) and McLaughlin (K Tool), Bob took his Ladder company's FDNY owned Halligan and cut an "A" tool into the adz. His Captain was not impressed with this modification. Since the bar was FDNY property and not the company's the Captain required him to replace the bar at his own expense. Bob traveled to Chief Hugh Halligan's home in the Bronx where he sold him the bar at a discounted rate. Bob returned to his Captain with the new bar. Bob asked that since he replaced

the bar with the new one, he'd like the one he cut the "A" tool into. The Captain simply told him "NO" and placed the new bar along side of the old one.

Now there are numerous "A" style tools on the market. They came after the K-Tool but the idea did not. No matter what tools they are machined into, they work basically the same. Here are some examples;

(Office's Tool/A-Tool Kit)

(Mini Pro-Bar/Lil Pro Bar)

Bob Farrell, now owner of Fire Hooks Unlimited, Captain Farrell's tenure at 82/31 was considered the "The War Years" (60's-70's) and was arguably the busiest firehouse in the world. In 1966 Captain Farrell was awarded FDNY's highest medal for bravery – the James Gordon Bennett medal. Throughout his career, Bobs regard for his men's safety carried over into the private sector designing and manufacturing fire hooks and fire tools. For nearly three decades, Bob has set the standard for excellence throughout the US in producing high quality products including the Pro-Bar, NY Roof Hook and Hydra Ram.

 (Farrell giving out the “Silver Bullet” award in the 1972 documentary, Man Alive: The Bronx is Burning)

 (Farrell resetting an alarm box in the 1972 documentary, Man Alive: The Bronx is Burning)

(Farrell swinging away in the 1972 documentary, Man Alive: The Bronx is Burning)

K-Tool

The K-Tool (and its associated parts) was the first tool available to firefighters that was commercially machined to pull lock cylinders. Invented and patented by Lieutenant William McLaughlin (FDNY). McLaughlin was also a registered locksmith and a mathematical genius. His first K-Tool was made from a block of heavy duty steel.

Bill McLaughlin worked in the South Bronx in 19 Truck. He became the 3rd, 2nd, and 1st Fire Commissioner in the FDNY.

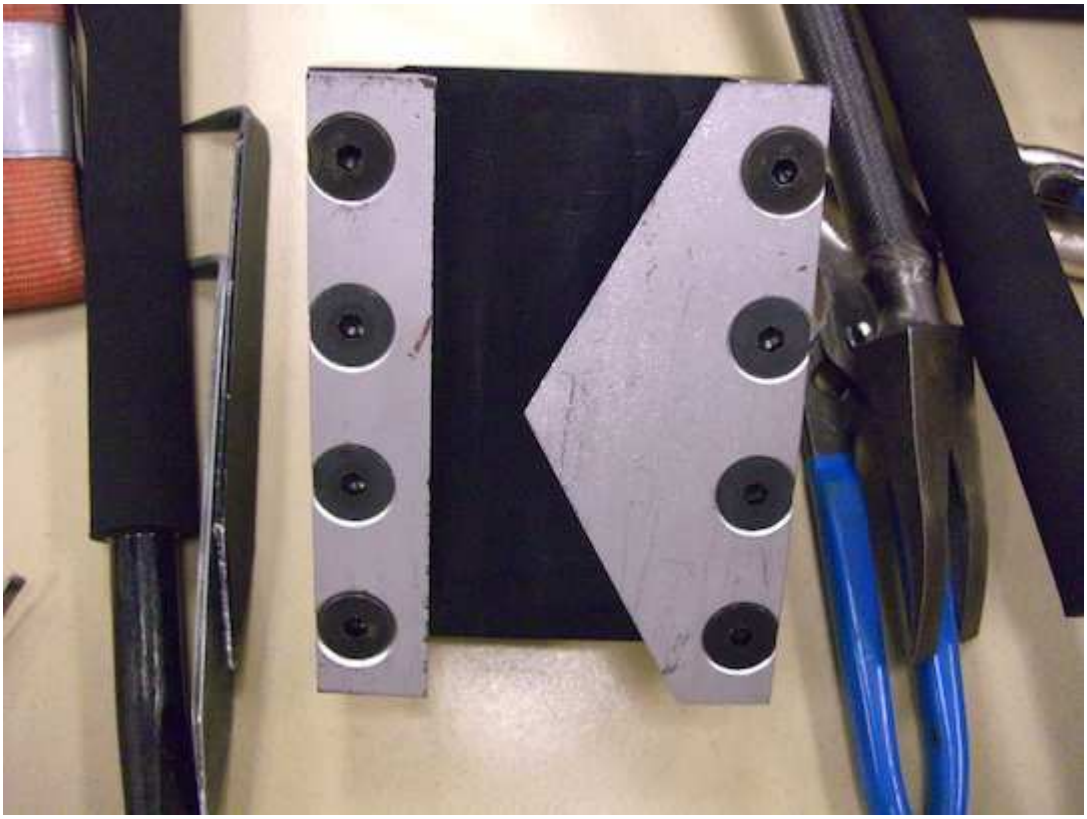
Another version of the K-Tool was made available by Ziamatic. This version was noticeable by the shape of the K. One side of the K was a little bigger than the other. They were sued and lost because of the patent on the original K-Tool.

McLaughlin is retired and living in Florida. Fire Hooks Unlimited still sells his tools. The K-Tool comes in a leather pouch with the 5/32” square key (used for the Horizontal Double Brace/Double Bar, Fox Lock), key tool, and shove knife.The K-Tool is currently the most popular lock puller sold today.

Note: William McLaughlin was a co-inventor of the Pro-Bar in the 1960′s.

R-Tool

The R-Tool was designed years later to pull all types of lock cylinders too large of the K-Tool unit, such as locks that extend out from the door and 1-inch round are easily pulled with the R-Tool.



Rex Tool


(Captain Robert Morris)

Captain Robert “Rex” Morris of Res1cue, FDNY is accredited with the invention of this U-shaped lock puller. He came to Bob Farrell (Fire Hooks Unlimited) in the 1990‘s with a version and after making some modifications it was named the Rex tool. The name Rex is of Latin origin and means King.

This king of lock pullers with the U shaped teeth and head style can pull all of the locks that the K-Tool, R-Tool, and A Tool can pull, combined.

The Rex tool comes with a 5/32” square key (used for the Horizontal Double Brace/Double Bar, Fox Lock), Shove Knife, and a Kerry Key. The Kerry key is a smaller version of the Key tool and is named after Bob Farrell’s daughter.


(Captain Morris’s Rex Tool, Andy Fredericks Training Days 2011)

Morris Tool (Lil Rex)

 (Andrew Brassard)

Firefighter Andrew Brassard of Milton, Canada Fire Department (Co-owner of Brotherhood Instructors, LLC) was trying to think of a better way to make sure that he always had a through the lock tool with him when they ran short on the truck. The idea struck him one night to cross the K tool with the Rex tool.

The one problem with the Rex Tool was that on very short staffed departments (much like his own department) there simply are not enough hands to carry the Rex Tool. This would leave the tool on the truck a lot of the time while the firefighter (or firefighters… if they were lucky) assigned forcible entry would typically carry the irons and a saw.

So Brassard went to their fire hall and cut the handle off a standard Rex Tool and welded a bracket for the adz of the halligan to fit into (much like the one on the K Tool).

After trying the tool for several months and pulling lots of cylinders, he started to think that he may be on to something. He went to the FDIC and took Captain Robert Morris's forcible entry class. He was rotating through the different stations of the class when he noticed almost the exact same modification on a Rex Tool on the table. He asked Captain Morris about the tool and he told him that he had been using it for a couple of years. Andrew was beaten by the "King".

Captain Morris's Rex Tool modification was slightly different from his own. Instead of making the bracket for the adz he welded a small piece of pipe onto the top of the tool. This would allow the user to put the pike of the halligan through the pipe and pry the cylinder out of the door.

Bob Farrell, Fire Hooks Unlimited sells the "Morris" tool as the Lil-Rex.

(The "Morris" Tool as shown by Andrew Brassard)

(The Lil-Rex by Fire Hooks Unlimited)

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Comments (2)

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You might like:

Bevel to the… door? jamb?

Comments (3)

The debate among firefighters over the correct way to set the halligan is as common as the age old smooth-bore vs. fog nozzle debate. Both techniques, much like the nozzles, have their time

and place. Setting the halligan with the bevel of the fork towards the door is the correct and most efficient technique in most cases. The pictures below speak for themselves and illustrate why having the bevel towards the door is advantageous. It's simple, more spread and a better chance of forcing the door without having to employ additional steps and techniques.

3 inches of spread can be achieved when the halligan is set with the bevel of the fork towards the door and the tool is pushed flush to the door.

2.25 inches of spread can be achieved when the halligan is set with the bevel of the fork towards the jamb.

So why do some firefighters choose to set the tool with the bevel towards the jamb? The biggest reasons are lack of training and because it is easier. There is no doubt that the tool will set easier with the bevel facing the jamb. The easiest way to do something is usually not the best. It takes more training and practice to be able to "steer" the forks between the door and the jamb with the bevel towards the door. When the fork is set with the bevel towards the jamb less spread cab be achieved for two reasons. First the natural curve of the fork provided additional spread when used with the bevel towards the jamb. Second, the halligan can not be pushed flush with the door in this orientation due to the adz coming in contact with the door.

As stated above, using the halligan with the bevel towards the jamb does have its place – actually two places. The first instance that may necessitate this orientation of the tool is an extremely

tight door. If the door is too tight to set the tool with the bevel towards the door, flip the tool over and get back to work. The second instance is an odd hallway configuration. If the adz of the halligan is obstructed by a wall, railing, or some other hindrance the tool can be flipped over to bypass the obstruction.

Only proper practice will improve technique and effectiveness. Practicing incorrectly doesn't help and often instills false hope and a false sense of security in tactics that will not work in the real world. When practicing forcible entry techniques, practice with the fork both ways while keeping in mind that the bevel should be towards the door most of the time.

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Posted by ccollieron June 8, 2011 • Filed under: fire-rescue-topics, firefighter-safety-health, firefighting-operations, fires, Forcible Entry, Ladder Company Ops, RIT or FAST Operations, training-development, training-fire-rescue-topics, Ventilation• Tagged: training

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IRONSandLADDERS 4p · *99 weeks ago*

Right on, I always love this debate. I think Brassard said a while back on our blog that this is the truckies version of smooth v.s. fog. What's great about making this an argument is it brings a better understanding of the tool to everyone. It seems like we have found the majority of firefighters have not been taught the difference between the two sides of the bevel. As professionals understanding the design of the tool, leverage in general, and knowing when to use what side is appropriate, is our job as tradesman.

Reply

+2 Vote up Vote down

IRONSandLADDERS 4p · *99 weeks ago*

I guess the one thing I would add is another time where bevel to the jamb is a good choice would be one person operations. I know everywhere may not use that tactic but it is reality many places. Striking a Halligan that you are also guiding should almost always be done bevel to the jamb in my opinion. It is difficult to obtain enough force from a one person strike to set the tool in a time effective manner. Here is one I wrote a while back also with just a little different spin on it if anyone is interested. There are some great comments on the bottom by a few of the Brotherhood Instructors offering up some knowledgeable advice. http://ironsandladders.com/2010/04/05/bevel-to-th...
Great article and reminder. Well done guys.
Ryan Royal
IRONS and LADDERS

Reply

0 Vote up Vote down

J Martin · *98 weeks ago*

Bevel to the door also allows for a more natural striking position (FDNY FE Ref Guide) for the team as the tool will be more perpendicular to the door.

FORCIBLE ENTRY USING A SET OF IRONS

04/01/2005

BY JOHN MILES AND JOHN TOBIN

WITH THE DEVELOPMENT of hydraulic forcible entry tools (e.g., the Rabbit tool), forcible entry using a set of irons (eight- or 10-pound flathead ax and halligan bar) is quickly becoming a lost art. For those departments that do not have a Rabbit tools or for those instances where the hydraulic tool is not available or appropriate, the following is a guide for using a set of irons to force a door.

FORCING DOORS

1. Perform size-up. Check out the situation to determine the best techniques and tools for the job.

• Check the doorknob; confirm it is locked.

• Is the door wood or metal?

• Check location and number of locks.

• How tight is the door? Push on the top or kick the bottom of the door to determine how much play there is, if any, and how many of the locks are engaged.

• Are the hinges visible, indicating the way the door swings?

• Are there unusual characteristics? The presence of carriage bolt heads may mean beefed-up security such as bars or lock mechanisms.

2. Control the door. Maintaining control of the door while forcing entry is important to prevent it from swinging open into the fire area, exposing members to heat and fire. Attach a hose strap or rope on the doorknob to maintain control of the door as it is being forced (photo 1).

1

Click here to enlarge image

3. Shock and gap the door. After placing the hose strap, “shock force” the door to loosen it in the doorjamb. Performing this procedure will make it easier to force the door with the halligan and flathead ax.

2

Click here to enlarge image

• Using the halligan as a battering ram, slam the fork end of the halligan against the door locks (photo 2). Use caution, and remember to hold the shaft of the halligan when striking the door. Placing a hand on the adz end may cause you to jam your wrist while striking the door.

• Place the adz end of the halligan into the jamb to further gap the door (photo 3). Force the pike end of the halligan away from the door to prevent imbedding it in the door.

3

Click here to enlarge image

4. Position of the forcible entry team.

4

Click here to enlarge image

• Initially, the halligan is held with the hand closest to the fork palm-side down and the hand closest to the hook palm-side up (photo 4). Hand position can change once the pushing or prying begins, enabling the firefighter to exert more strength and force into the procedure.

5

Click here to enlarge image

• The firefighter holding the ax should position himself on one knee if possible. This will give him better control and a more accurate swing. Also, if possible, the firefighter should position himself on the opposite side of the firefighter holding the halligan (photo 5).

5. Forcing the door.

6

Click here to enlarge image

• Start with the bevel side of the halligan fork flat against the door, approximately six inches above or below the lock. If the door has two locks, position the halligan between the locks. Angle the halligan s*lightly* up or down. Doing this will make it easier to get your initial purchase. It is slightly easier to drive one side of the fork into the jamb initially than to try to drive both sides of the fork at the same time (photo 6).

• If the door is exceptionally tight, position the bevel side of the halligan away from the door, against the jamb. As the halligan is driven between the door and jamb, start to bend the door away from the jamb (photo 7).

7

Click here to enlarge image

• The firefighter holding the halligan is the only one to give commands. The member holding the halligan will give the command “hit, hit” for each time he wants the partner to swing the ax to drive the halligan into the door. The firefighter swinging the ax must not swing without first receiving an order to do so, and the firefighter holding the halligan must not move the bar after giving the command to hit. The firefighter swinging the ax should use short shoulder blows while swinging the ax and strive to strike the halligan on an angle to the adz to prevent striking the member holding the tool.

• With the halligan slightly angled, drive the halligan into the door. With each strike of the tool, make sure you are driving the halligan *between* the door and the jamb and not *into* the jamb itself. To prevent this, bring the halligan away from the door after each hit. As you continue to drive the halligan between the door and the jamb, start to spread the door. This will give you a wider area to slip the fork deeper into the jamb.

• When forcing a wooden door, you may, after only a couple of hits, have enough spread to open it. Be prepared for a wooden door to splinter, crack, or disintegrate when forcing it open. A metal door will be more difficult. Drive the fork of the halligan between the door and jamb until the space between the forks line up with the doorstop and the tips of the fork are approximately one to two inches past the inside door jamb (photos 8, 9). Some departments mark the fork of the halligan to avoid driving the tool too far into the jamb.

8

Click here to enlarge image

9

Click here to enlarge image

• Apply inward pressure with the halligan to force the door. Having the beveled side of the fork against the door will shorten the distance between the halligan and the door, giving you more leverage.

• If you are not getting the desired leverage with the halligan alone, slide the flathead ax behind the beveled side of the halligan and apply force.

Note: The integrity of the door should be maintained throughout the process. If the integrity is destroyed, you may not be able to isolate the fire should the need arise. ■

Bevel to the Door vs. Bevel to the Jamb

Bevel to the door or bevel to the jamb?.....that is the question. The main intention of this article is to compare the differences in the two ways the fork end of the Halligan can be used on inward swinging doors. Both ways can be used with very effective results, but knowing why we choose to use one way or the other is important. They both have advantages and disadvantages, but as long as we recognize these advantages and use them in conjunction with each other it makes for a great combination. For clarification we refer to the bevel as the outside of the curve, it will be much clearer when looking at the pictures. This comparison applies to Pro Bar Halligans, although some of the info will pertain to other bars, it is written based of the use of the Pro Bars.

After we obtain a proper gap of the door(based on wood or metal jambs) we must move to our fork and choose to either place the bevel to the jamb (as seen below) or bevel to the door. First we will cover bevel to the jamb. Bevel to the jamb allows us a few advantages when setting the tool to the proper depth. As you can see below the angle of the fork wants to naturally guide itself around the door. Because of this angle it leaves us with much less resistence on a metal frame, and it also helps prevent us from sinking the teeth into a wood jamb. While guiding our bar away from the door while it is being struck we keep the fork moving smoothly around the door. Our disadvantages come after we have the tool set and we are ready to force. This will be discussed below. The next two pictures show the fork being set with the **bevel to the jamb.**

Next we have Halligan being set with the bevel towards the door. This is probably the most common way setting a Halligan is taught, which is fine as long as we know the potential problems we have to overcome. You can see the curve of the tool is wanting to guide the forks into the frame. This can cause us to feel more resistence when it is hitting a metal frame, or creates much more of an oppurtunity to drive the forks into the jamb if it is wood. The Halligan firefighter has to pay complete attention to guiding the forks

in to prevent us from hanging up on the frame. Solid pressure on the tool away from the door as it is being driven is a must to allow it to sink easily to the proper depth. This is the disadvantage of setting the tool with the bevel to the door but the advantages come later. The next two pictures show the halligan being set with the **bevel to the door**.

If we haven't lost you to boredom yet, we can now see the remaining advantages and disadvantages. As you see below we are back on the bevel to the jamb. As stated above the bevel to the jamb is easier to set and guide around the door to the proper depth. Where the disadvantage comes in is when we apply the force. The picture below is showing the Halligan applying full force. You can see that the gap it has created is relatively minimal. This is because we are not using the designed leverage point of the Halligan and we have also gone against the design of the forks. This still does not mean this way is wrong because many times this is all the leverage we are going to need, however we need to remember that the Halligan provides more leverage in other ways if it is needed.

The last picture(above) shows us bevel to the door being used. If you scroll back and forth between this picture and the one above it you can see the difference in the gap. We stated earlier that the bevel to the door can be more difficult to set if the door is tight, but as you can see when the bar is set it applies much more leverage. When the bevel is placed to the door it uses the characteristics of the tool to their full potential leverage. The forks grab hold of the backside of the frame and the high point of the bevel is being pushed against the door.

In summary neither way is right or wrong as long as you know why you are placing the bevel the way you choose. Different doors, jambs, and lock setups will call for different ways to put the bevel. A metal frame and metal door that is secured very tightly may call for the bevel to the jamb so that you can set it easier. However if we choose bevel to the jamb and don't get the leverage we need, we can put a chock in the door or an axe and hold the gap we made. We can then pull the Halligan out and reverse the bevel and continue applying force with the bevel to the door.

This can go on and on, but it is only intended to illustrate the major differences in how you place the bevel. We know this is getting technical, but practicing the different ways regularly makes it become second nature on which way to place it. Again this is just another back to the basics post, nothing new, nothing that we invented. Just passing on great technique tips that has been passed on to us. After this long-winded writeup there is really a simple way to sum it all up:

Bevel To the Jamb= **Easier to set**, Less leverage to force

Bevel To The Door= Harder to set, **More leverage to force**

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This entry was posted on 04/05/2010 at 11:29 pm and is filed under 1. Forcible Entry. You can subscribe via RSS 2.0 feed to this post's comments.

Tags: forcible entry, forcing doors, halligan, halligan work, irons

You can comment below, or link to this permanent URL from your own site.

14 Comments on "Bevel to the Door vs. Bevel to the Jamb"

1. **hayden Says:**

   04/06/2010 at 1:27 pm

   Great points. Is that a simulator in the pictures, if so how about an article about it. We just built one and I would like to see some others out there.

   Reply

2. **Jamie Morelock Says:**

04/06/2010 at 6:09 pm

Great write up,too many people believe there is only one way to set the forks…bevel to the door and nothing could be further from the truth. That mentality only limits your forcible entry abilities. One of my first forcible entry instructors was Greg Einsfeld (ret R-3 FDNY). The phylosophy he passed on to me was that uses of the Halligan bar were only limited by your understanding of the tool, the door system and your imagination. He advocated using the bevel towards the jamb on tight doors.

Andrew Brassard and Nate DeMarse from the Brotherhood Instructors, LLC. are some of the best forcible entry instructors teaching today. We at the Brotherhood teach the Gap-Set-Force technique of forcible entry. We teach the firefighter to utilize the adz to gap the door. On some doors this may be all that is required for the door to yield. Once the gap or purchase point is created then it is time to set the forks. I prefer to start with the bevel towards the door if the adz has created sufficent gap, which many times does not even require the forks to be driven in by a striking tool. On other doors, very tight doors where there is little or no gap created I will start with the bevel to the jamb, drive the forks to a depth where they will not slip and then apply force. Sometimes the door will yield but many times will not. At that point, if enough gap was created to insert the adz I will go with that, otherwise I will turn the bar over so that the bevel is to the door and apply force. From this point if the door does not yield I will continue by moving back to the adz or chock up behind the bar's fulcrum to add additional leverage. Being fluid and moving from one technique to the other makes for quick and professional technique. Do not limit your toolbox of techniques, get the tool out and study it and study door systems with the intent of creating a mental preplan of the methods to overcome them. Additionally, the only way to be proficent with the Halligan bar and the techniques for forcing doors only comes with practice and one of the best methods to practice is with a quality and realistic forcible entry simulator, not on the fireground when time is of the essence.

Reply

1.  **IRONSandLADDERS Says:**

04/06/2010 at 6:57 pm

Well put Jamie, I agree with the points that you have made. You and the guys at BI do great work and your input is always welcome here.

Reply

1.  **L Chapel Says:**

   04/07/2010 at 8:37 am

   I and L,

   Would it be possible to post a picture or two of the adz method in achieving a gap as discussed by Morelock?

3.  **Kyle Smith Says:**

   04/06/2010 at 9:20 pm

   Great info both of you guys have. keep up the good work I continue to check your websites on a regular basis for ways to improve my skills.

   Reply

4.  **IRONSandLADDERS Says:**

   04/07/2010 at 2:44 pm

   L Chapel,

   I do have pictures of gapping with the adze, I will get them up soon.

   Reply

5.  **Jamie Morelock Says:**

   04/07/2010 at 3:00 pm

   http://www.facebook.com/home.php?#!/video/video.php?v=99750499697

   Here is a link to our facebook page. In this short video Nate and Curt DeMarse demonstrate the proper technique of Shock-Gap-Set-Force technique on a heavy and tight door. The Shock portion is not required on

every door, but should be considered for heavily secured doors. This door simulator is one of the most realistic out there at this time. Pay close attention on how fast they overcome this door.

Reply

6.  **Andrew Brassard Says:**

04/07/2010 at 4:18 pm

What way the halligan is driven in between the door and the frame is a on going debate in the fire service and it seems to be the "Truckies" version of the smoothbore vs. fog debate. I feel that both ways are correct and that both have their place in your "forcible entry tool box", anyone who says that one way is wrong or that one of the ways in not applicable does not understand the concepts of forcing a door through conventional methods.

For the majority of forcible entry operations I prefer to "SET" the forks with the bevel to the door, this method will require a little more finesse and steering to set the forks. Also when setting the forks with the bevel to the door you may need a firefighter that can swing the tool fairly hard to set the tool on a tough door. For doors that are fairly tight to the frame or doors that may have a very difficult time crushing (steel buck doors have this problem) may require you to flip the tool over and drive the forks in bevel to the jamb. If you have a new firefighter hitting you may want to drive the forks in with the bevel to the jamb due to a easier "SET" coupled with the striking firefighters lack of hitting power this may allow for a smoother operation.

Another time where forcing doors with the bevel to the frame is more applicable of a technique is when you are utilizing the squared off shoulder on the halligan in a zero or limited visibility situation, you simply will not generate the required force to drive the forks in with the bevel to the door on most metal doors.

One last situation where bevel to the frame is a excellent option is where you require a different striking angle due to obstructions or walls that impede the progress of the halligan being pushed to 90 degrees from the door. When setting the forks with the bevel to the door the halligan starts at 45 degrees from the door and as it is driven in between the door it should end up at 90 degrees from the door. If you drive the forks in with the bevel to the frame the halligan should start almost flush with the door and end up at around a 45 to 60 degree angle from the door, this will help is situations where the door being forced is at a dead end hallway and the wall is at a weird angle or you have other obstructions in the way such as railings.

The obvious big advantage to driving the forks in with the bevel to the door is that you will apply the maximum amount of force on the door, but there are times on the fireground where you will have to use the halligan with the bevel to the frame, failure to recognize these situations and the benefits and down falls of setting the tool both ways could lead to a long drawn out forcible entry operation.

Stay Safe

Andrew

Reply

0.  **IRONSandLADDERS Says:**

04/07/2010 at 7:59 pm

Thanks for the input bro, you have a lot of knowledge to share and I appreciate you jumping into the conversation. I am with you on prefering bevel to the door for the leverage and the bite. I definetly like starting with it to the jamb though on the tightly locked ones. Thats a great point about needing a good striker when the bevel is to the door on a secure one. It is an amazing difference how much more force you need, and how much closer attention you have to pay to navigating the Halligan away from the jamb. Thanks

Reply

7.  **Robby O Says:**

04/07/2010 at 4:26 pm

Great stuff….I dont really have a preference….I like to adjust to whatever I am presented with, which I think is the key….dont be married to one way cause every door is different and you have to have alot of techniques to get the job done.

Alot of good Forcible Entry stuff on Fire Engineering featuring John Buckheit. Also Robert Morris from FDNY Rescue 1 does an excellent class.

Reply

8.  **Andrew Brassard Says:**

04/07/2010 at 5:27 pm

Another view of forcing a door by me and Nate.

Reply

9. **Doors (Conventional) « Buff Media Says:**

04/08/2010 at 6:50 pm

[...] BLOG POST: (IronsAndLadders.com) Bevel to the Door vs. Bevel to the Jamb [...]

Reply

10. **TRUCK 4 Says:**

04/12/2010 at 8:33 pm

I would really like to thank everyone from Brotherhood for giving their input and their links to their sites. I agree with Irons and Ladders that starting with the bevel to the jamb definately makes for a smoother start on a tight fitting door. Also as mentioned above, starting with the adz to start the gap may also give you just the space to start bevel to the door. Either way, I have done training with Irons and Ladders and I have found out that there is a healthy balance of brute strength as well and finese with FE tactics. Great pics for everyone, they definately get the GAP portion across and show that you must get a good bite with the forks to make a proper force. Thanks for everyones comments, GREAT STUFF!!

Forcible Entry Tool Modifications – By Andrew Brassard

Comments (4)

Since the existence of the fire service firefighters have been constantly trying to improve themselves and the tools they work with to adapt to the challenges that their communities present. This article is going to cover some of the basic tool modifications that firefighters have been utilizing for years. The majority of these modifications where spawned in smoky hallways and the backsides of taxpayers by members of the FDNY, the author is not taking credit for any of these modifications…… simply passing on the word.

Marrying up your Irons

Many departments use marrying straps to keep the axe and halligan together, some of these straps can be very simple or quite elaborate with built in shoulder straps and other fancy gadgets that all glow in the dark. The problem with these straps is that they usually don't hold the tools together very well or can be very difficult to undo in zero visibility with your firefighting gloves on. A better solution for marrying these tools together is to use a hand file to notch out a very small path for the halligan forks to go, after the notch is created simply place the halligan forks into the notch and then give it a quick hit into the ground setting the halligan onto the axe.

Note: even though the tools are "locked" together you should never fully trust that they will always hold together. Always use proper carrying techniques especially while climbing ladders.

One of the most common questions I get about doing this to your tools is "won't that weaken the integrity of the axe?" The answer is yes it will weaken the integrity of the axe!! But think about it realistically, it would still take thousands and thousands of pounds of force to cause that axe to break and if you pushed the tool to that extreme the handle would break first.

The Sledgehammer Bracket

The sledgehammer is another favorite striking tool of firefighters. The sledgehammer should be at least ten or twelve pounds for effective striking. The biggest problem that the sledgehammer has is that it does not marry very well with the halligan; this is easily corrected by simply welding a bracket onto the top of the sledgehammer for the adz of the halligan to slide through. This will help hold the position of the halligan but will not keep the two from falling apart.

In my own opinion the flatheaded axe is a far more superior tool and gives the user a lot more options when it comes to forcible entry, the sledgehammer is a single functioning tool and can have its limitations in forcible entry. That being said the sledgehammer goes through brick and masonry much better than the 8 pound axe, if your response district has a lot of bricked up vacant buildings or is primarily commercial buildings the halligan sledgehammer combo works nicely.

The biggest thing when it comes to forcing a door is technique, if your technique is lacking, having a bigger and heavier tool is not going to help you get through a door quicker it will probably cause you to hurt yourself or your partner.

Squared off Shoulder

For any firefighter that has ever forced a door in zero visibility they know that it can be a challenging task, one of the best tool modifications I have ever seen is squaring of the shoulder of the halligan. By squaring off the shoulder of the halligan you create a striking surface to dive the halligan in between the door and the jamb in zero visibility without risking striking your partner with the axe or sledgehammer.

Another excellent place where this modification will pay dividends is in very tight or narrow hallways; depending on the swing of the door you may not have enough room to swing your striking tool effectively. For this method to work well place the fork in between the door and the jamb (after gaping the door) and place both hands at the back of the adz and push the tool into the door, slide the striking tool down the shaft of the halligan striking the squared off shoulder. This method works excellent but the technique must be practiced often and under realistic conditions to be effective and efficient on the fireground.

Chain Link

A simple method for ventilating windows in high rise or multiple dwelling is by ventilating the windows from the roof. By welding a chain link on your halligan close to the fork you now have a place that you can attach a carabineer and piece of rope to. After you have attached the rope simply lower the halligan to the window that needs venting, mark the spot on the rope with your hand and haul the rope and halligan back to the roof. After you get the halligan back into your hands you can throw the halligan off the roof, when the rope goes tight the halligan will swing back in towards the building breaking the glass. This is an extremely effective way to ventilate windows at fires in multiple dwellings.

These are a couple of easy modifications that you can do to your tools that will make them more effective on the fireground.

The Wide Adz – By: Andrew Brassard and Kevin Legacy

Comments (1)

Hugh Halligan served the Fire Department of New York from 1916 until 1959. In those years of service, he had developed the most versatile and functional forcible entry tool ever conceived…The Halligan tool.

Although nearly 50 years old and no longer manufactured, the original Halligan tool has changed little in design. Today's Pro Bar design closely models the original design, but does contain some slight improvements. The Halligan family can stand proud of the fact that this tool remains the tool of choice for any fire department that is serious about forcible entry.

Even though the basic design has changed very little over the years, some "in-house" modifications have surfaced in recent history to allow the Halligan to become even more versatile and user friendly. One such improvement is to simply square-off the shoulder of the fork. This allows an axe to be slid down the shaft of the tool and strike the back of the fork in zero or limited visibility environments. Another simple modification involves simply welding a chain link to the fork end. The chain link modification allows a firefighter on a roof of a fire building to ventilate top floor windows by attaching either a rope or a tool to the chain link. The modifications mentioned above are just two examples of how "simple improvements" have kept the Halligan tools innovative and versatile, even fifty years after it was created.

One of the most recent Halligan tool modifications is the "widened-adz". The widened adz is accomplished adding nearly an inch of material to both sides of the adz. As legend has it, this modification evolved in the quarters of FDNY Rescue #2. A firefighter and talented welder, Sam Melisi would use the adz end of old Halligan tools and weld them onto the side of the adz on a new Halligan tool. This clever modification nearly doubled the width of the adz, which allowed the tool to supply a tremendous amount of force and leverage when "gapping" the door.

Not long after Melisi's modification, several versions of the "widened adz" concept were born throughout the FDNY.

After years of forcing countless doors, the Halligan tool's thickness would start to wear down near the chisel end. In some cases the tool would wear so thin, that the weld would either dimple, crack or even break. To defeat the wear issues, Firefighter Kevin LeGacy (FDNY Squad 61) came up with his own solution. Utilizing a MIG welder, Kevin would repeatedly lay down a weld on either side of the Halligan tool's adz until the width of the adz was approximately doubled. After widening, he would smooth out the additional material with a file. A chiseled end is finally added to the adz to finish the job.

The impact of the wide adz is tremendous. On an inward swinging door, by simply placing the adz end between the door and the stop and prying up or down, (depending on which way the door opens) will allow members to defeat most doors in the "gap" stage of our forcible entry procedures.

Posted by ccollieron February 22, 2011 • Filed under: fire-rescue-topics, firefighter-safety-health, firefighting-operations, Forcible Entry, Ladder Company Ops, RIT or FAST Operations, Roof Ops, Search, special-operations, training-development, training-fire-rescue-topics, Ventilation• Tagged: training

Machinery Extrication Tool Kits by Andrew Brassard and Kevin LeGacy

Comments (2)

Machine rescue calls, sometimes referred to as "Man-in-a-Machine" calls are somewhat infrequent. The most common machinery rescue calls involve people trapped in dough mixers, conveyor belts, meat grinders and snow blowers, etc… Although this type of call may be rare,

when they occur they have potential to be very taxing on manpower and resources. Rescue calls such as this will most likely require specialized training and equipment.

Although infrequent, it is important that all firefighters understand that they may be called to one of these incidents at any time. All firefighters should possess some sort of game plan to mitigate a “man in a machine” incident in the quickest and most efficient manner possible. Equally important to the game plan, those firefighters must also possess the proper tools and skill to successfully disentangle a victim from within the given machine. Some fire companies assemble and carry what is affectionately termed as a “Man-in-a-Machine” kit. Typically, these kits are assembled so that commonly used tools are in one location. This assures that the tools are easy to find, and that nothing will be left on the rig when it is needed.

In most cases, three kits that are commonly brought to the scene of a “Man-in-a-Machine” call. Those three kits are: The “man-in-a-machine”, air tool and lock-out/tag-out kits. These kits function very well together, providing a proper amount of redundancy in the event that several of the same types or various sizes of the same tools are needed.

The “Man-in-a-Machine” Kit

The “Man-in-a-Machine” kit is quite simple to assemble. This kit assembles all of the common tools that may be used to extricate a person from machinery. If you are unsure of the types of tools that may be needed, you have a secondary job to accomplish. Stop by your local butcher, baker and print shops and ask them what tools that they use to disassemble and reassemble common components of their machines. Depending on your response area, you may also add lawn-mower shops, small engine shops and factories to your list. Who better to ask of the tool selection than the experts in their respective fields? You may also find a use for this kit at other emergency calls, auto extrications or implements.

Once you have decided on the assortment of tools, the collection may be stored in a Pelican-type case for rapid access and deployment. This case will also double as a impromptu tool staging area since all tools will be present and centralized. It is important to allow a little extra room in your kit to accommodate any extra tools that you may find useful as time passes. Always remain alert of changing or new industry that moves into your area to stay abreast of changing “man-in-a-machine” needs.

Basic components of a typical “Man-in-a-Machine” kit include the following:

-Various sized hacksaws

-Wooden wedges

-Steel wedges

-Cordless Sawzall and batteries

-Tin snips

-Saline solution 

-Liquid soap

-Ball-peen hammer

-Various sizes and types of screw drivers

-Various sizes and types of adjustable and box wrenches

-Ring cutter

-Various sizes and types of pliers, vise grips, channel locks and angled, etc…

-Metal shims

-Various sizes and types of pipe wrenches

Firefighters must also remain cognizant of other tools that may be needed for more complex machinery extrications. You will have to decide which tools are most appropriate for you after reviewing your response area. Those tools may include:

-The irons

-Oxy-acetylene torch (or other available type of torch)

-Medical kits and/or trauma bags

-Extra blankets to cover patient

-Water extinguisher (if sparks are being generated while cutting)

-Pry bars

-Lighting (time of day, visibility conditions, etc…)

-Portable generators

-Hydraulic forcible entry tool

-Hydraulic extrication tools

-Cribbing

Air Tool Kit

Air tools may also be needed at a machinery extrication call. This kit, like the aforementioned kit, stores all of the air tools in one location for easy access and deployment. An air supply will also be needed, but will most likely be too large to fit inside the kit. Air supplies may include a portable air compressor, an air cylinder with regulator and/or an air cart with the appropriate attachment for your tools.

Components of an air tool kit may include:

-An air-powered drill, impact gun, Whizzer saw (die grinder), angle grinder, angle grinder and chisel

-Various sections of air hose

-Air fittings for various types of air lines

-Drill bits

-Screw drivers & bits

-Wrenches

-Air chisel tips and attachments

-Extra grinding and cutting disks

-Air socket set (Metric and Standard)

-Thin metal shims

Air-powered tools are excellent alternatives to cut away machine parts in an effort to free trapped limbs or appendages. If cutting metal is your plan of attack, the patient must be covered with blankets to avoid further injury due to sparks, etc… If you intend to cover the patient with a standard medical blanket, the blanket must be dampened to avoid catching fire from the sparks. Additionally, the metal surface as the cut is performed will conduct heat to the patient. It is imperative that the surface of the metal be kept cool to avoid further

injury. Some air-powered cutting tools may spin

at 10,000-20,000 rpm's, and will heat up metal surfaces very quickly. A pressurized water extinguisher is one way to keep metal surfaces surface cool and it is readily available.

Lock-out/Tag-out Kit

A proper "Lock-out/Tag-out" kit should be present at any machinery extrication. While some departments combined their lock-out/tag-out kit with their man-in-the-machine kit, this is sometimes counter-productive. One reason that you may want to keep this kit separate from other kits is because it is useful at other emergencies. The "Lock-out/Tag-out" kit is useful at elevator rescues and emergencies, electrical emergencies and confined space rescues. It is important to note that before ANY operation begins at a machinery extrication incident, the power must be shut off and all moving parts in a machine or product line must be lock and tagged out of service. If manpower permits, a member of the company that is operating in/on the machine should standby at the location of the shut-off. This will prevent power restoration by an unknowing civilian or firefighter.

A typical "Lock-out/Tag-out" kit may include:

-Padlocks

-Tags (should have FD markings and instructions)

-Chain

-Valve covers

-Ball-valve lock-out covers

-Light switch lock-outs

-Electrical plug lock-outs

-Circuit breaker lock-outs

In this article we have reviewed many different tools and a few options for carrying, transporting and deploying those tools. The use of the "kit-concept" mentioned above will allow you to deploy most of the commonly needed tools for a typical machinery rescue call. Since these machinery extrication calls do not happen frequently, it is important to keep the needed tools together to avoid unprofessional and time-consuming trips to the rig to gather tools.

Machinery extrication may be one of the most challenging types of extrication. The tools and equipment must be reviewed often, and realistic training must be completed on a regular basis. This is the only way to insure and efficient and smooth operation on the rescue ground. Stay tuned for upcoming course announcements which will include "Man-in-the-Machine" training.

Heavy Irons

January 21st, 2008 | Category: Tips

Sometimes the axe and halligan just won't do. The time may come that you need a bigger hammer. One of the issues with carrying a sledge with a halligian is the fact that they don't marry as well as the traditional irons. Here are two similar approaches to fixing the issue. The first one was sent in by Firefighter Angus Burns from Lexington Fire EC-3. The second one was sent in by Driver/Operator Chad Berg from Snohomish County, Washington Ladder Co. 72.

Angus points out that the Lexington creation was a group effort. Firefighter Jack Trautwein wanted the ability to carry the sledge/halligan combo, Angus found the material at a local fire apparatus shop, and Firefighter David Gumm did the machining and welding. This particular method has the added feature that allows the set of "heavy irons" to stand upright without falling over.

Chad took the more familiar approach. He used a more traditional loop welded onto the top of the sledge. He points out he likes to carry the heavy irons when working in concrete tilt up and re-enforced masonry structures that normally offer little flex when forcing. The heavier sledge allows for a bigger punch when setting the halligan. Since the welder was already out and warmed up, they added a little company pride to the tool.

It should go without saying, but we'll say it anyway. Be careful to watch the temperature of the sledge head while making these modifications, you could weaken the epoxy bonding the handle and head, and we would not want to be around the first time you figure it out. Check out the Tips from the Bucket Page for additional photos on this, and many other great tips.

39 comments

39 Comments so far

1. B January 21st, 2008 9:55 am

   Great idea. One of the truck companys around me has made some of these "modifications". They have some very medieval looking equipment, but it works and sometimes better than the original. Carrying a sledge around like this could help you get into things you wouldn't normally get into. Other than the added weight, it would be great to have. Make up a carrying strap and you could take it anywhere. Great idea once again!

2. Chris - Concord Engine 1 January 21st, 2008 11:16 am

We've got a similar set-up on our engine and truck… Both companies carry a 12 lb. sledge with a halligan block welded on for the tough jobs, and the tower also runs with an 8 lb short-handled sledge married to the halligan as their primary set of irons. I've got a buddy who is a top-notch machinist who made the blocks for us and he really did a nice job. They are "streamlined" to prevent them becoming hung up inside a block or sheetrock wall and probably add about 3/4 lb. to the weight of the tool, which just equals more driving force!

We've found this to be alot more efficient with a 3-member company. One FF can effectively position the halligan and strike it himself with the short sledge with alot more force than he could develop with a long-handled axe. The only disadgantage we've encountered in forcible entry is not being able to use the axe head as a wedge to hold a gap while repositioning the fork or adz of the halligan, but a standard door wedge does the same job.

Of course the axes are available too if the member desires to carry one, but we haven't found much in the residential or commercial worlds that will stand up to a few shots from the sledge-o-matic!

Be safe Brothers!
Chris

3. Chris - Concord Engine 1 January 21st, 2008 11:20 am

P.S. – To give credit where due, I think this idea was originated, or at least popularized, by FDNY Lt. Mike Ciampo, who teaches Truck Co. back to basics across the country… Check out his stuff in Fire Engineering & on their website if you've never heard of him. He's even been known to post on here occasionally.

Be safe Brothers.

4. mike Walker January 21st, 2008 11:42 am

Whoever's idea it is, it's a great idea. I'm doing it! Thanks for sharing the pics.

5. Jon January 21st, 2008 11:59 am

Its the only way to go! Axe's are for nancy's that cant handle the extra weight!

6. B January 21st, 2008 1:00 pm

That's right!

7. T2 January 21st, 2008 5:40 pm

Another option for the sledge that I carry as well as others in my department is a maul. It gives you the wedge if needed and the weight and large striking surface of a sledge. It also has the bridge across the top to marry it with a halligan.

8. Evan Swartz January 21st, 2008 10:06 pm

   Goes back to the old saying "bigger is better", and in the truck company we are bigger then the engines and better!

9. canman January 21st, 2008 10:08 pm

   Hey there brothers,

   Just would like to know if anyone is using a 16lb sledge or is the 12lb enough for the job. Thinking about stepping up.

   stay safe

10. acklan January 22nd, 2008 6:42 am

    canman, this may be what you want…

    http://www.baileysonline.com/itemdetail.asp?item=15780

11. MJB January 22nd, 2008 9:56 am

    I saw that method for the first time over 10 years ago in Brooklyn.

12. Ray January 22nd, 2008 11:00 am

    this is great stuff guys. I went to a fire on our marine unit the other day. The fire was reportedly on a Coast Guard cutter. I went to the tool locker and grabbed a halligan and a 12 lb sledge. I thought;"gee , i wish these were easier to carry!"

13. canman January 22nd, 2008 11:04 am

    acklan

    Thanks looks a little better then a reg. splitting maul. May have to give it a try.

14. JJ January 22nd, 2008 3:04 pm

    Great idea, I'm with T2. On our Ladder, the primary set is the maul and halligan, you can notch the halligan forks and the maul will slide on in.

15. James Kiser January 22nd, 2008 3:59 pm

    We use this on our truck in DC. It works very well. We cut the handle down to the size of the bar when married. And also because the hallways are not that big in apartment buildings you can get a better swing.

16. MJB January 22nd, 2008 8:36 pm

    Another simular old method used here is to weld a piece of pipe on the underside of the maul,then the pike end can then be inserted into it for easy carrying. I would point out though, many FDNY companies do not carry the maul….In my experience in a Brooklyn Truck Company, with alot of secure doors in the area,the extra few pounds with the maul will not make or break your ability to force a door….proper technique….knowing what you are doing,with an 8 lbs. flathead axe (which the Halligan was built to be used with) will usually suffice.

17. B. Bradley January 23rd, 2008 10:20 am

    We run something like this on my dept. i think we bought the sledge from a company that welds on a bracket that tapers down on the ends so it wont get hung up on stuff as easily in walls and what not..works great!

18. Jon January 23rd, 2008 2:31 pm

    I personally have to say I like the axe. As stated above its more technique than weight. If you cant get the force behind an axe to hit in a halligan into even the tightest of jambs I think its time for you to move on. Your Irons man should be able to position the Halligan properly to have you drive it in. The axe is lighter and better to chock doors with if needed. If its really tight and you need to work your way down from the top or up from the bottom the axe can be used to hold your purchase in the door while the Maul cannot be used for this technique. Plus in smokey conditions the axe offers a lot more surface area to strike the halligan with while the Maul does not. Just my opinion but everyone had their own Method. And do the guy who stated putting a strap on the married tools…COME ON…Do you really need a strap? Carry them Like a Man….

19. CFD-Roughneck January 23rd, 2008 3:05 pm

    Personally, I agree with the guys who prefer using an Axe. A good 8lb axe is going to be a lot easier to work with in forcing a door. And if you have an issue forcing the door with the axe and the halligan, and you KNOW what you are doing and doing it properly, than it's time to move on, either to a rabbit tool or another means of entry. Some might think mauls or sledges are better because they are heavier, some might even say axes are for "Nancy's", but when it comes to forcing a door, it's not about the weight your using to hit the halligan, it's about the technique. Instead of spending the time to "marry" the sledge to the halligan, take that extra time to perfect your forcing technique with an axe.

    One other thing I wanted to throw in that gets under my skin is the habit of using an axe or any other tool as your door chock. Personally I don't think you should be doing this. You never know when you might need that tool, and if it's chocking a door open, and your a couple rooms in, your screwed. If your worried about being able to keep the doors chocked open, carry more door chocks or use some furniture from the room, not your tools. Especially if your on a truck company, those tools are your lifeline like the hoseline is the lifeline of the engine company.

20. Champ January 23rd, 2008 3:42 pm

Hey Chris….thanks for the plug but I didn't come up with the original idea on this but I do pass it on to guys who prefer the maul. A lot of companies liked to carry the maul when they were faced with cinder/concrete blocked up vacant buildings.

One construction comment: before you weld the cap onto the top of the maul, you may want to grind down some of the side of the maul, so the halligan sits more flush when they are married together.

Also while at my old hometown department, I showed Scott Fisher this and before I knew it his mind was working. He took square stock (1"x 1") and welded it to the top of the head that is flat. At the ends he grinded them down so they sit flush with the end of the sledge. It almost looks like an axe or larger wedge at the ends. Then he connected them with another piece of steel to form the bracket. The best thing about the renovation was that when the maul is swung downward, it only uses a 1/4 of its face when it strikes an object at this angle. With the new bracket it makes the head now act like an axe and gives more area to the striking surface.
I'll email a photo of this renovation to the web site for all to look at.

21. acklan January 23rd, 2008 5:52 pm

    I guess I fall into the “Nancy” category. I have been carrying the TNT tool since it was the Colorado tool (God only knows how many years back that has been)some wheres in the early 90’s or late 80’s. I perfer the weight of it over the standard axe. I am on my 3rd tool. The last one was lost in a building collaspe about a year ago.
    The hook on the TNT cradles the fork of a Halligan very well. 6 1\2 lb, 35” model.
    I make 28 year on feb 1. It is the best general use tool I have ever owned. Hopefully it will be the last one I have to buy.

22. Brass January 24th, 2008 7:38 pm

    I do not want to hijack this thread but as long as we are talking about tool modifications, how about one of are FDNY brothers posting a pic (or email me) of the extra wide adz that a lot of Bronx companies are using now. I would like to see some pics and get the particulars.
    Thanks,
    Brass
    forcethedoor@hotmail.com

23. canman January 24th, 2008 8:36 pm

    Brass

    Hey there man check out Kentland33.com. Go under about us and hit the tool history. They are calling it the Melisi Bar. Hope that helps you out.

24. Chris - Concord Engine 1 January 24th, 2008 10:04 pm

    Brass –

    Took me a minute to find it, but I knew I'd seen a thread on the modified adz somewhere before… Here's a link to the nycfire.net forums, and links to a couple pics.

    http://nycfire.net/forums/index.php?topic=25.0

    http://www.nycfire.net/gallery1/FDNY06-58/MG_3104

    http://www.nycfire.net/gallery1/FDNY07-03/MG_5701?full=1

    Basically, they just build up the width of the first 1 1/2 to 2 inches of the adz to provide additional leverage when gapping the door. I've seen tools with one or both sides widened, adding between 3/4 and 2 inches to the total width of the tip of the adz. I'm sure some of the FDNY brothers could provide more details, but it's my understanding that the idea is to give the roof man a better shot at popping the bulkhead door without assistance.

    Be safe Brothers.
    Chris

25. Nate DeMarse January 25th, 2008 1:15 pm

    Yeah, those photos should do the trick when discussing the "widening" of the adze.

    In MG_5701, that Halligan is the one their "irons" firefighter carries. Kevin (the guy holding it in the photo) is the one that does all of the modifications in their firehouse. This one in my opinion is the nicest variation because it is squared off a bit more and you can get a wider gap and in many cases force the door using the adze end only.

    In MG_3104, that is what their "Roof" or "Saw" firefighter carries. That was an early modification and the the Halligan in MG_5701 is the newer version. While the one in 3104 still works great, it tends to slip out of the door jamb easier when forcing doors.

    How about that photographer? Pretty good huh?

26. Brass January 25th, 2008 11:44 pm

    Thanks for the info, much appreciated!
    And ya the photos are pretty good!! LOL
    Thanks Brothers,
    Brass

27. Jimm January 28th, 2008 6:47 am

We added the pictures Champ sent in about the heavy irons he was describing. Look back at his comment on January 23rd. -Jimm-

28. greg wyant January 29th, 2008 6:09 pm

    One do the departments in my area has started useing a 12 lb wood splitting mall with the halligan. They say it woorks great on the door or the roof. They said they saw the idea on a fire engineering video .

    STAY SAFE BROTHERS

29. Jack February 1st, 2008 12:41 am

    12 LB is no joke! We use a 8lb splitting maul for our second set of Irons on our truck and it has worked well for rear commercials and even taken to the roof on occasion. Some guys even prefer this to the axe when riding Irons also, since it seems to focus the striking point….nice to have that additional option.

    Hey CHAMP, better get the probie to put those tools on the wheel!! They're hurting my eyes!

    Stay safe all!

30. HooknLadda14 February 1st, 2008 3:42 pm

    The weight of a maul or sledge can present with a false sense of security. One aspect that has not been brought up in this thread is the hardness factor between a maul/sledge and a flathead axe. The maul/sledge is as hard or harder than a halligan. I know you're thinking (like any fireman does) harder must be better. The truth of it is that being as hard as the halligan makes it easier for the blow to glance off of the striking surface of the halligan. The axe is softer than the halligan's striking point making each blow a more effective transfer of energy. This is the same principal that works when being hit in the chest by a baseball versus a softball. The softball actually does more damage because as it strikes another surface it almost pauses for a fraction of a second longer and has that much more time to transfer the force. Additionally the axe's metal will conform more than the maul/sledge if you hit slightly off center or on an angle. I'd heard this all before but it was talked about again this past weekend by Capt Morris of FDNY R1 at a training seminar. Just my 2 cents . . .

31. Scott February 1st, 2008 3:58 pm

    We used the same set up. It was a maul and haligan pair together. We used papertape to set the maul on the adze end and used a marrying strap to hold the handles together as a traditional married set. Using the tape allowed for faster seperation and no modifications to the maul. Use of a maul as part of a married set is almost essential. Go big!
    Don't leave it at the front door after you force it, take it with you!

32. Rick February 15th, 2008 10:18 am

I encourage my guys to take the maul and halligan when we are going to commercial structures or structures we know have heavy metal doors for security reasons. I do however have always fought a double edge sword. I like having the 8lb flathead axe to wedge under a door while searching a room in a PD or MD. I like the modifications on the maul.

Stay safe Brothers

33. acklan February 28th, 2008 2:43 pm

    For those of you who do not weld or just do not want the fuss to create one of these beauties. FireHooksUnlimited now offers a factory version.

    http://www.firehooksunlimited.net/adzmaul.html

34. S. Roth February 28th, 2008 10:05 pm

    I know that down in MD, Kentland Co. 33 has a similar model. They refer to it as the Melisi Bar. However, as a modification, the Adz end of the halligan bar is the entire length, not just the first several inches.

35. acklan February 29th, 2008 12:43 am

    I just realized what you were referring to. I was pointing out the strap welded to the top of the sledge hammer or splitting maul, to craddle the adz of the Halligan

36. Bull March 1st, 2008 2:11 am

    Acklan

    You mentioned above that you carry the TNT tool. I got a hold of one to try out from a local dealer and was impressed. Have you used the 8 lb? Or a longer handle? Plus, will the head of the tool along with the hook end take shine if polished? Or does the tool require paint. I have tried contacting the manuf. of the tool with some of these questions but have not heard back. If you have the answers, it would be appreciated. -Bull.

37. acklan March 1st, 2008 4:17 am

    Hey Bull.
    I have been using the 6 lb 35” version since the late 80’s. No I have not used the longer version, or the more recent 8 lb model.
    No, the head will not shine. I use bed liner to keep the metal maintained. I use the 20oz spray on cans from AutoZone. I fine it hold up better than anything else, but power coating. I use Plasti Dip to coat the handle. It is a paint on rubber.
    I have a 30” ProBar Halligan that I carry also. I slide the fork of the Halligan over the hook on the TNT and bind them with a double loop bungie cord. Slip one loop over the adz and pull the second loop till the first loop hooks over the pick. Make the second loop large enough to be pulled with a gloves hand. This double to cord open a door. Simply slip each loop over the door knobs and the door cannot be closed. I’ll try to post

some pictures.
Good luck with the factory. I bought mine at http://www.eDarley.com
This pair make quite a beast but it is well worth the extra weight.
It almost 30 years these are the best hand tools I have used. Like them so much I actually bough my own, and like I stated it the other post I am on my third TNT Tool.
If you have more question feel free to email me at acklan@acklan.com

38. Rick March 1st, 2008 4:01 pm

We made a set of extrication irons using the TNT tool. Works much better than normal flathead to set pins of rescue struts.

Elevator Key Ring

September 23rd, 2012 | Category: Tips

Assistant Chief Michael Wolfschmidt from Surf City (NJ) sent in these photos of a simple modification they have made to their elevator key ring. Simply adding snap rings to attach each key to the main ring allows for easy removal. It is much easier to manipulate the lock with the single key than the entire ring. Unfortunately the one downfall to this modification is that it defeats the purpose of having all of the keys attached directly to the ring: It's easier to misplace an individual key.

Another idea is to make a smaller ring with just one or two keys for the most common elevator doors found in your first due. The smaller ring will be used most of the time, and is much easier to work with without having to remove keys. It is also a good idea to make two set of the smaller rings with identical keys. (Obviously the one in the picture below is missing a key, but you get the idea.) This approach allows for the truck crew to split up and approach the top of the elevator car (to secure the power) and the actual elevator door (to facilitate the rescue) simultaneously. These simple tricks speed up the rescue, and make our job much easier.

3 comments

3 Comments so far

1. Res2cueRVA September 24th, 2012 5:09 pm

Force Bag

June 24th, 2012 | Category: Outside Functions, Tips

Dave Weinman from Frederick County (MD) sent in this photo and description of their "force bag." The bag becomes a one stop shop for both destructive combat forcible entry operations and routine through the lock and non-emergency entry operations. They routinely grab the force bag and the irons (they use the popular 8lb force axe and a tuned up pro bar) or a rotary saw, resulting in very few doors that they are not able to defeat.

The kit consists of a Hydra-Ram and its standard bag with the pictured tools added to perform a number of different operations. In addition to the Hydra-Ram and mallet, (which may or may not be necessary when carrying the irons) they have included the following tools: a modified channel lock tool with key tools in the handles for the removal of rim locks, a K tool in case the rim lock needs some extra encouragement, an additional key tool to take care of the stem hole or recessed latch like those found on Adams Rite commercial locks. For less fortified doors they have also included: a bucket handle tool for the opening of double glass doors with push bar openers, and a shove knife for making quick work of unsecured knob locks. A vice grip with chain is also included for lock cutting operations, or door control. The bag is finished out with wood wedges for capturing progress during one man forcible entry or for securing open a forced door.

The bag is fairly comprehensive and addresses the common forcible entry needs they have identified in their first due area. The strapped carry bag slung over the shoulder allows the member assigned to FE to carry the irons in one hand while maintaining.

27 comments

27 Comments so far

1. DMAN72 June 24th, 2012 9:56 am

   I got a fever. And the only prescription is MORE WEDGES.

2. David June 24th, 2012 2:38 pm

   Don't forget the "R" Tool this will take locks that the "K" won't.

3. Dan June 24th, 2012 10:41 pm

   Could you expand on how you use the bucket handle? I think I can envision it but not sure

4. Dave From Frederick June 25th, 2012 9:40 am

   Dan,

   See Fire Engineering's article, this should clear up the ole' bucket handle trick. A paint roller is sturdier and will work better but for the sake of compactness, the bucket handle will usually do the trick.

   http://www.fireengineering.com/articles/print/volume-161/issue-4/features/tips-for-improving-effectiveness-in-forcible-entry.html

   Stay Low

5. RSFDNY June 25th, 2012 11:56 am

   I see a length of Chain on the Vice Grips. We made a change to our set up of this tool. Instead of a chain we secured a 25 foot lenght of rope to the end. We left the vice grip attached to the door handle of the fire apartment after we forced the door and would toss the rope down the hallway against the wall in the direction of the exit stairwell. It allowed the engine and the truck to exit the apartment if conditions deteriorated and we could pull the door closed from a distance and not be taking a beating. This works especially well during wind driven fire evolutions. If you arent familiar with wind driven fires please educate yourself as they can effect PD's as well as MD's. At the end of the piece of rope I wrapped a large of ball of tape so as to find it easier. You can also use the 6 foot hook to pull a door closed from a distance. Cheers.

MVA Tool Kit

May 18th, 2012 | Category: Pockets, Tips

Mike Terzo Jr. from Rush (NY) sent in this kit of tools he deploys at motor vehicle accidents. The kit includes the following: seatbelt cutter, window punch, duct tape, Ajax strip and peek tool, vice grip adjustable wrench, yellow disposal blanket, length of webbing with carabineer and a 5/16 wrench. The tools are used primarily to disconnect the battery, cut seatbelts, break windows, check under the interior trim for possible air bags or high voltage power, door control, and patient protection.

The purpose of carrying all of the tools in one bag is to ensure that each of these tools is available at every auto accident. The benefit of having all of the commonly used tools in one place allows quick access when the kit is placed on the hood or roof of the vehicle. An additional benefit is that it allows firefighters to carry less equipment in their own pockets. These kits can be made on the cheap, and can be customized based on individual preferences.

Framing Square Foricble Entry

August 31st, 2006 | Category: Tips

Our latest Tips from the Bucket comes from our brothers of Miami Dade Fire Rescue. This is an innovative way to force entry on a metal door while retaining the ability to secure the door after operations are complete. -Jimm-

8 comments

8 Comments so far

1. Darrell August 31st, 2006 7:34 pm

Gents,

This particular maneuver is one of my favorites – "The old infamous Framing Square". I can remember the first time my buddy from Chicago taught me how to utilize this particular technique. If my memory serves me appropriately, I thought he was just conducting some of that notorious firefighter humor. I thought, "How on this earth am I going to open a metal – clad door with a Framing Square?" So, I sat there a few minutes; pondered inquisitively, and audaciously attempted to deify the laws of Physics. After a few, yet comical performances, my friend finally realized that I would never make it as a Magician on the Las Vegas Strip.

So, he went back to the truck, grabbed "Old Painless" out of the compartment, and started it right up. Then, he proceeded to the door with a smile of infancy, revved up the saw, and kerfed right through the door. Seconds later, he retracted the blade from the door, turned the saw off, and placed it on the ground. As he reached for his bag of magic tricks and briefly pilfers through it. He pulls out this unique Framing square with an innovative tack – welded tiny chain attached to it and says, "The greatest forcible entry tools are infrequently exposed". Next, he slid the framing square through the kerf cut, while grasping the tiny chain, and let it drop down over the panic bar. And in one swift reverse motion – the door was opened! During that particular moment, I knew that he enjoyed his job entirely too much…then again… why shouldn't he?

Now, the moral I concluded from that interesting day was a valuable lesson about learning from a veteran who has been where I am going – An escapade in sharing the knowledge with the future of those too follow. Therefore, take the time to observe and obtain all that you possibly can from those who graciously share their abundance of experience with you for your personal benefit. And don't neglect the unity of tradition.

God Bless

2. C. Naff August 31st, 2006 9:53 pm

Nice, I would never had thought of that idea. Good thinking guys. Keep up the good work with the website, it's always on my daily vist list.

3. Billy Owens January 9th, 2007 11:18 am

call me silly, call me a relic, or call me whatever you want by why not try a traditional set of irons, [an 8 lbs ax and a well dressed halligan]? "your tools to carry today are a saw, framing square, and a 24" level just to make sure your cuts are staright." some how that doesn't seem to make much sense.

Gap the door with the fork end. once this is done set the tool by driving the adz around the door being careful not to split the door on its seam. next force the door by pulling sharpley out on the halligan making sure you keep control of said door.

if this method fails to work [rarely if ever doesn't happen] and you have to use a saw you have a few other options. You can either cut the hinges, [make take some time and may not be 100% effective] or cut a small triangle above the panic bar and you can reach in with the adz of your halligan or hand if conditions permit and operate the panic hardware. if nothing else in this case you will have a usefull tool in your hand as opposed to a framing square.

just some ramblings.

billy owens

the "tricks of the trade" seem like a good idea but if you know the trade you don't have to worry about the tricks.

4. DCFD January 17th, 2007 7:57 am

While this is an innovative and "neat" idea, lets think about it for a minute before we get out our saw & framing square.

First, use of this technique requires the assumption that the locking mechanism is controlled by a panic bar. If this is known from previous experience with the building or pre-planning, fantastic. If not, alot of time could be wasted to then encounter a drop bar, fox-lock, multi-lock, police-lock, or any other mechanism.

Second, a panic bar controls a LATCH. Not a dead-bolt. There may be a single latch at the side (opposite the hinge), as in the illustration above. Or there may be a latch at top and bottom. While the top/bottom latch will be a bit more of a pain, these LATCHES have throws that are almost always less 3/4" (usually 1/2"). Not much leverage required to overcome this…

What I am getting at is which would be faster? Cutting a whole through this metal door (which is not as easy as it may look) or using proper outward door technique with a halligan and axe?

In addition, if our cut is improperly placed using this technique, we could cut or damage the panic bar and render the technique useless.

I've seen this article pop-up in a few places and my concern is that a FF would use it "because I saw it in a article somwhere" and without appropriate understanding of the lock mechanism, door size-up, and potentially faster and more effective techniques.

I would keep this technique in my folder of tricks, but it woudn't be my first to be used…

5. Fireman2094 January 20th, 2007 1:15 pm

   If we don't have a framing square handy, a Boston will do the same trick. Stay Safe Brothers!

6. Fireman2094 January 20th, 2007 1:16 pm

   Ooops! That's Boston Rake

7. seagravetruck January 24th, 2007 11:49 pm

   Great idea just put two framing squares on our tower. Great website

8. AFD0609 April 12th, 2007 8:21 pm

   You can also do the same thing with the older bar style panic hardware in a wooden door if you have a chainsaw. make your cut down the middle, lock your blade, and use the blade to open the panic bar. it saves a little bit of time not worrying about getting the square. this all demends on the type of door and a knowledge of the locking system.

   It seems silly to dismiss this technique as a waste of time or inferior. Sure, we will have our set of irons when we approach the door, and yes, we could just cut the hinges if we had the saw handy. The point of this is to be able to secure and lock the door when you go in service. This is just being offered as another tool to put in your tool box. There are always options, we need to keep that in mind.

Dipped Irons

April 06th, 2008 | Category: Tips

Scotty Shelton, Chief of Training for Baton Rouge Fire sent in this tip he spotted out on the training ground. The tip is actually credited to Captain John Braud of Engine 6. He used 3/16 cord and tool dip to create a non-slip grip surface on his set of irons. It's cheap, easy, and makes the tools readily identifiable. The set of irons are held together with a bungee cord that can also be used to hold back screen and storm doors. Check out the Tips from the Bucket Page for other great tips.

46 comments

46 Comments so far

1. acklan April 6th, 2008 12:57 pm

   Thanks Scottie.

2. Chris April 6th, 2008 1:24 pm

   exactly what kind of cord was used?

3. ... April 6th, 2008 1:36 pm

   Chris, It is showing here that some sort of cord was used but oxygen tubing works great also.

4. Steve April 6th, 2008 1:54 pm

I like to use regular house wiring and strip it down to to a single strand…then wrap it with hockey stick tap…I like the dip idea but not sure how accessable it is…

On a different note… I am looking for an "Iowa American" made 8lb axe…I know they either went out of business or arent making them anymore….if you can help a Brother out let me know….

5. acklan April 6th, 2008 4:04 pm

The rope was purchased a Home Depot and is 3/16" poly. It looks like repelling rope, about $4 for 50'.
Lay a base coat of Plasti Dip (also available at Home Depot)on the handle and make the first wrap while still tacky (within 5 minutes of application). Make 2 coats of Dip and let set. Make 7 wraps as a "sacrifice wrap" then candy stripe with in 2" of the fork and make 7 wraps for another "sacrifice wrap". This was done without cutting the rope, but it is not essential to keep it is one piece.
Then make 4 coats of Dip. One can will be more than enough. When you cut the coating during Ops, just apply patch coats to repair. If the "sacrifice wraps" become damaged just cut them out and replace them. No need to re-wrap the entire tool. That is the point of the "sacrifice wrap".

6. E-32Lt April 7th, 2008 1:17 am

We use hockey stick tape here as well…it's nice and tacky. We use regular twine to wrap the tool with. Under the same principle as acklan wrote, wrap a few pieces of tape around the tool to create the tacky base and then have at it.

I like the bungee cord idea to hold the tools together. Hadn't thought of that one.

Stay safe out there.

7. acklan April 7th, 2008 2:06 am

The bungee cord also doubles to chock open a door. Hook it over both knobs and it won't close.

8. Tillerman18 April 7th, 2008 7:47 am

Phone cord works great it is already coiled and holds up well on the tool.

9. Nick April 8th, 2008 9:18 pm

The Plasti Dip is a great idea but how does it do in heat?

10. acklan April 8th, 2008 10:18 pm

So far so good. It has not blistered to date.

11. Loosecannon April 8th, 2008 11:19 pm

Coupla years ago some guys from the Harrisburg, PA area had used the "Rhino-Lining" polyurethane rubber on their halligans as grip aids.

We use the cord and tape because it's easy and available. I usually super glue the loose end down. I even put a little friction tape on the "pry end" of our NY roof hooks to give you that little extra grip when you're really reaching out or probing in the vent hole.

Still, its' great to see everyone coming up with ideas to make the job better!

12. Jon April 8th, 2008 11:21 pm

    You guys should get a real axe! You are not joining the two like they should be. That whole in the axe is for the adz end!

13. acklan April 9th, 2008 12:48 am

    Been carrying that axe (one of three) for going on 20 years and I can assure you that is not what that "Hole" is there for. To each his own. I prefer it as pictured.
    The last one had a gas shut off milled into the head near the blade. I just have not got around to that yet.
    By the way the TNT is a 6 1\2lb, 35" model, and the Halligan is a 30" cast ProBar.

14. Dave April 9th, 2008 1:38 am

    The "whole" is actually a "handle" for that tool to be used when pulling. If you look at the photo you'll see the fork is somewhat married to the pike (lack of better word)portion of the TNT. I'm thinking if you place the adz end into the hole (handle), the two won't marry very well at all. Both ends of the halligan would have to be secured since now the fork end isn't married to the pike portion….everyone follow me (I doubt it..lol). The way acklan has it setup I'm thinking would work the best…you could still use the handle to carry the two.
    Most importantly it works for acklan (the user)……there isn't a "wrong way" here….depends on who's carrying the tools.

15. Jon April 9th, 2008 1:39 am

    Try it, you'll like it! Unless you have small hands, then trying to grab it will be difficult. Still looks more professional than the strip of bungee cord.

16. Dave April 9th, 2008 1:45 am

    except when you go looking for a bungie cord to chock open a door….lol

17. Jon April 9th, 2008 8:47 am

    Thats what Nails and chocks are for. They dont melt!

18. acklan April 9th, 2008 12:23 pm

    The fork of the halligan slips over the hook of the TNT tool. I could have used a commerical nylon and velco strap. I just opted for a strap that had dual purpose rather than just marry the tools.
    I do not carry it by the "D" handle on the TNT, I carry it mid-shaft by the TNT tool.
    I have never seen a bundee cord melt while chocking a door.

19. Goody April 9th, 2008 8:12 pm

    We use hockey tape and automotive wire on our hooks and halligans, works great! Never thought about the Plasti-Dip, that would probably work even better! Does anyone here grind the fork end of their halligan's? We carry the 30" probars, if you grind the ridge down to make less of an angle it is easier when forcing doors. Just some food for thought.

    Everyone has personnal preferences, I like the 6' Hook and Halligan, it takes a little getting used to when carrying it but you're never without two of the most useful tools on the fire ground. I've even been known to carry the hook/halligan and flathead axe……

    As always, excellent site and excellent information!

    Goody
    WCFD

20. acklan April 9th, 2008 8:52 pm

    I think a 6' hook is a great idea too. I just got one of the Deputy Chief to order a 6' New York Roof hook for my Engine. I expect one of my privates to carry it.
    While the hook on the TNT is marginal by most standard the trade off makes this the best pair for me.
    We usually hit the door with a 4' hook, 30" ProBar, 36" probar and a TNT. For the main types of fires we make this seems to be the best combo on initial attack.
    I have a 17" O-tool ordered. I will enjoy putting it through it's paces.

21. JJTruck1 April 10th, 2008 2:36 pm

    We use parachute cord and wrap it with black hockey tape, but acklan how did you apply the dip to the halligan? I know it comes in a spray or dip, and I would love to borrow your idea and try it on my halligan. Thanks and great idea.

22. acklan April 10th, 2008 4:33 pm

    I used 1" paint brushes. Apply a coat to the tool prior to making the first wrap and leave a small gap(Width of a business card) between each wrap, so the dip can get between them.
    1 coat on the tool handle, 2 coats to the base wrap and 4 coats after the "sacrifice wraps" to top it off.
    Start with a knot through the fork to hold the cord till you finish and hang a Vise Grip at the other end to hold tension while the dip sets. I did not let it dry between application, just get tacky.

23. Truck7jake April 11th, 2008 4:19 pm

    You can also wrap the handle of your HOOK, SLEDGE, ETC. with nasal cannula tubing up the handle at an angle and then cross it the opposite direction back down to where you started if you dont have rope to use. Then wrap with hockey stick tape. THIS IS ABOUT AS CLOSE TO EMS AS I EVER WANT TO GET!!!!!!

24. Paul J DeBartolomeo April 15th, 2008 8:25 pm

    Why not just cover your halligans in stick em if they are slipping out of your hands so much. I personally have never really had a problem with slippage but to each his own. We manicure our tools quite extensively in NY and that coating along the shaft or hockey tape would negate our using the shaft to slide the axe along to set the tool in lights out conditions.

25. acklan April 16th, 2008 7:53 pm

    "We manicure our tools quite extensively in NY…"
    Paul could you elaborate on what you do to "manicure" the tool?
    Where I work we do not make near the volume of fires that FDNY does, but I can say wrapping the handle has never been an issue with me. I am just curious.

26. Madison Eng. 4 April 18th, 2008 8:32 pm

    We have done this to our pike poles, makes pulling ceiling, etc. far less fatiguing on hands and forearms. One problem that you may encounter with wrapping the Haligan is that you can no longer rest the axe head on the shaft to drive the fork. Enjoy the website. Great learning tool for rooks to graybeards.

27. Sean Thorton April 19th, 2008 11:39 pm

    I'm with Paul on this one. I find absolutely no need to have tape or anything on the Pro-Bar. Over the years I have used one I can truely say that it has been a better advantage having the ability to have a totally smooth handle surface than a taped one. When you are forcing doors you are holding on to the furthest part of the tool or the pike, not the center. Are we taping tools to be able to carry them easier?

    There have been COUNTLESS times that when using a baseball bat swing I slid my hand down the tool for added force while striking. This can't be done with the tape.

    The tape also gets in the way when you are overhauling plaster lathe. You should be able to pierce the tool through the lathe and into the bay and then pull down unobstructed. The taped handle does not allow this to be done as easily. This technique also is good for breeching.

    As mentioned by Paul it is a huge advantage to square off the fork end to permit the sliding of the axe along the shaft (don't get excited….I did say shaft) in lights out conditions and in close hallways. If taped, this cannot be done.

    The taped handle is hard to maintain, and looks like shite after a job…..Halligans should be SPOTLESS!

Tape or dip on Hooks – ABSOLUTELY A GREAT IDEA. Tape or dip on Halligan – NO GOOD… LETS STOP THIS TREND.

Of course this is all my 2 cents, take it with a grain of salt and stay safe!

28. acklan April 20th, 2008 2:28 am

Well Sean this is your opinion, and I respect it but I too have been doing this for many years and find the tape\dip an advantage. While sliding the axe\maul down the shaft is a good technique it is not the only option. If you like your tool untaped or undipped that is your option, but it does not mean it is the only way it has to be done.
As far as maintaining the tape or dip it is not any harder than keeping you axes sharp, knick free, and painted.
As far as stopping the trend I could make a strong argument that grinding the fork near the shaft weakens the tool and should not be done. Especially with tools that have a welded or pinned forks instead of one piece drop forged. That would be my opinion. Why someone preps their tool is their business and as long as it works for them and is not unsafe it should not matter to the rest of us why they do.
That is my 2¢

29. Vin April 21st, 2008 7:26 pm

Cool to see how those two fit together…

30. Paul J DeBartolomeo May 15th, 2008 10:14 pm

Acklan, just curious as to what other options you have used to set the forks of a halligan in lights out conditions other than sliding the axe on the shaft and stricking a squared off shoulder. Please elaborate as to these other options and how they work. Oh and just for the record tools that are welded or that have pinned forks are not really halligans, pro bars are halligans, and the forks are not grinded they are filed down to allow for easier entry into extremaly tight metal doors. I have never encountered a weakened tool using this technique of manicuring

31. Dave May 16th, 2008 9:22 am

Paul….far be it for a ff from way up north to give a FDNY brother a history lesson on the Halligan versus the Pro Bar or nitpick about details….but check page 20 and 21 of the FDNY Forcible Entry Guide.
Stay safe.

32. Evan Swartz May 16th, 2008 5:57 pm

Its really a preference thing. We should not argue who is right and who is wrong. Everyone has a different opinion on what works and what does not. It comes down to doing what YOU and YOUR department like, not what someone 500 miles away in a completely different fire district likes. Thats all I'm saying, engine guys argue not truckies.

33. acklan May 17th, 2008 12:48 pm

> [quote]Acklan, just curious as to what other options you have used to set the forks of a halligan in lights out conditions other than sliding the axe on the shaft and stricking a squared off shoulder. Please elaborate as to these other options and how they work. [/quote]
>
> Prior to reading about "squaring off the shoulder" in the forums I never heard of such a modification. To tell the truth I never need such "manicuring" to my bar. I always used it as designed and never needed to "manicure" the fork or pedicure the adz.
>
> [quote]Oh and just for the record tools that are welded or that have pinned forks are not really halligans, pro bars are halligans, and the forks are not grinded they are filed down to allow for easier entry into extremaly tight metal doors. I have never encountered a weakened tool using this technique of manicuring[/quote]
>
> What are they really called? "Almost a halligan?", "Sorta like a halligan?", or how about "You wish you were a halligan?" Smug goes both ways Paul.
> I do not think I said (wrote) anything about grinding the tips of the forks. I only responded to the "squaring off the shoulder". Do you file the "squared off shoulder" onto your halligan?
> To be honest I have not heard of a halligan failing from the "shoulders squared off", but again we do not modify our tools in such fashion.
> If you wish to be condescending and dismissive I can play that too. I have directly answered the question asked without trying to demean others while they make their point.
> You find manicuring your tool works, then great. In 28 years of fire fighting, the last 10 as a company office, I have not had a problem that would warrant "squaring the shoulders" of my halligan. What I have works as designed. The FDNY fire fighter who invented the tool, in my opinion, struck perfection and other than a thicker shaft and a not slip grip I like it as is.
> By the way did the inventer call it a ProBar? What did he call his invention?

34. Paul J DeBartolomeo May 18th, 2008 6:10 pm

> Dave the halligan used exclusively in the FDNY is the Pro Bar by Fire hooks unlimited.

35. Paul J DeBartolomeo May 18th, 2008 6:18 pm

> Acklan Im not being condecending just curious, you state that squaring off the shoulders is not the only option to set the tool when you cant see in a heavy smoke condition. I'd like to know what other options you suggest. Yes we do file down the shoulders of the halligan. We modify our tools to adapt to the challenging forcible entry situations we face everday. Perhaps you have not encountered such challenges in your 28 years.

36. acklan May 18th, 2008 9:43 pm

Like I posted I have found that using it as designed, by setting the forks by striking the end, has always worked for me. Maybe I have just not been in as a demanding environment as you, but either from ambient light or having enough liteboxs on scene we (meaning my crew) have aways managed to use the tool with effect.
Not challenged? Gee thanks. I guess you are right, my career pales in comparison to the big departments, but I am happy with it.
By the way what do they call the tools that look like a halligan, but are welded or pinned? Are they not a halligan?

37. Paul J DeBartolomeo May 19th, 2008 7:57 pm

The tools that are welded or pinned may be called halligans by those who manufacture them, I believe some are commercially known as hooligan bars. But anyone who has forced a door with a Pro Bar type halligan will tell you its the way to go. Every aspect of the "fake" halligan is contrary to the art of forcible entry. The shaft is too thick, the pike is too fat and the forks are way too thick. As far as the the other subject goes, thats great that the ambient light & the light boxes have worked for you, but operating on the floor above the fire, with a heavy smoke condition & a well fortified tenament door proves to be very challenging. I have had to resort to sliding the ax down the shaft on numerous ocasions to set the forks in this situation, & we all had our personal lights on, they did nothing for us. Its like forcing a door with your eyes closed, try it in training one day and you will know what Im talking about.

38. Dave May 20th, 2008 7:13 pm

Paul, I was referring to the FDNY Forcible Entry Guide because it outlines the issues with the original Halligan tool and (as a result) the development of the Pro Bar. Saying a tool which has pins and forks which are too thick aren't Halligans is like saying the Pro Bar IS a Halligan…..that was my point. The original Halligan had a "blunt fork and short narrow adz"…..something like thos "fake" halligans out there.
Stay safe.

39. PJ Johnson May 21st, 2008 9:22 am

I can honestly see there is some argument over wrapping the halligan and hooks. Most of the argument comes with sliding the striking tool along the shaft of the halligan in a confined or zero visibility situation. DeBart, I know you and Eddie were curious why we do it and we discussed it for a bit and just wanted to add to the discussion so others may decide what is best for them.
Here in coastal Maine, my department requires us to mount tools outside of the cab. Even with restraint devices, there is an effort made to reduce the potential projectiles inside the rig. It was a fight just to get the can mounted inside to protect it from freezing! That is the policy, so we live with it.
Since our tools are mounted outside of the compartments for easier access. The other component is coastal living. In general, year round everything from rain, fog, snow, ice, even a sea breeze keeps everything damp and wet making things a little slick. The tools always ice up in winter. We wrap our tools to compensate for those issues.
The only things that is a little different is we wrap the tools with heading twine(for repairing fishing nets and lobster gear)which has little smaller diameter thread. We don't wrap the entire shaft of the tool. Just enough

for better grip closer to the adze/pike.
It is a compromise, yet we collectively make that choice from past experiences and feel the benefits outweigh the associated drawbacks of doing so.
Great to read the comments and re access how we operate. Makes for great drills and conversation.
Stay Safe!

40. Paul J DeBartolomeo May 21st, 2008 12:03 pm

Dave,
I am not aware of the reference guide that you speak of, is this an official publication of the department? My reference guide is experience, and the training I recieved from some of the best in the business. Im not saying that to be condesending,but I can speak from experience that several of the "halligans" currently available pale in comparison to the Pro Bar when it comes to forcible entry. Ive done side by side comparisons and can honestly say there is a huge difference. If the "fake" halligans were any good we would be using them.

41. Dave May 21st, 2008 1:35 pm

Paul….you make some very good points. In all honesty my comments were bordering on the petty side…..long week.
The guide can be found here:
http://www.firefactory.com/FE.pdf
It's a goldmine of info for a newbie like myself.

Take care.

42. PJS May 21st, 2008 4:42 pm

That PDF file should be placed next to all your bibles! Thats all you need to know. Know it, learn it, read it, live it! I work in the same area Paul works in and we can force up to 5 doors a tour! This is no bull. Not all of these doors are forced at fires (water leaks, stuck elevators etc) We're fourtunate to get real world experience. And we have forcible entry simulators in the firehouse basements. All we can do is pass on what we learn in the feild. Its just that you have guys on these sites re-inventing the wheel. Guys that work in places that don't do a whole hell of alot. Sometimes you have to get on these sites to set things right for the younger members. What ever I pass on I've done for real not just regergitated from a class I took. Good luck!

43. dadman May 22nd, 2008 6:31 pm

Any other guides available somewhere at http://www.firefactory.com ?
Thanks for the forcible entry guide link.

Great info here about the simple irons!
We bought a few Pro-Bar halligans awhile back. Also have a couple pinned ones.
The bars are naked right now. Planning on the wrap or dip and comparing it to a bare bar.

44. E32-Lt May 23rd, 2008 12:15 am

I think if you're worried about the bungee cord melting at the door, you might have a bigger problem than the bungee cord itself…

45. Bull August 9th, 2008 7:20 pm

…..On a lighter note (Some of ya'll need to hug it out). I Demo'ed a TNT tool. Granted it is not a "real" axe, or a "real" hook it is the closest thing to an all around tool that I know of. I took it to a few courses which provided ample use breaching, breaking, and even a few things that the sales rep might not have wanted me to do. But, where I am from I am having to use my own dollars to purchase such a tool so I need to be sure it is up to the job. I have one on order now, the 8 1/2 pound, 35 inch. The only thing I did not like about the tool was the fiberglas handle started to splinter a bit, so I will be wrapping the handle with something, either dip or tape. I am new to the dip thing. Is it clear? How was the tool labeled?

Deceiving Building Features

August 26th, 2006 | Category: Building Construction

It is becoming more and more popular for developers to attempt constucting their buildings to look different from all the others. Unfortunately, when this happens it sometimes has a negative impact on Fire Department operations in the structure. These aesthetically pleasing features sometimes only "look" like they would have a significant impact on our operations, when in fact some of them are easily bypassed or removed. Our own Darrell Coates recently found some of these features on a structure in his first due and took these photos. -Jimm-

Please check out the supplemental Deceiving Building Features page for more pictures and descriptions.

1 comment

1 Comment so far

1. Dave August 30th, 2006 2:59 pm

Good stuff!! This all goes back to knowing your area and the particular nuances about different buildings in your first due. Whether it is how the building is constructed, protection systems in big buildings, or just plain oddities about an old or new building, everyone should know. While it is great to go out and learn about your area, keep in mind the other shifts. While you are out, take pictures. When you get back, email or pass on the info to other company officers on your shift and other shifts. That way everyone will know and have the opportunity to go out and check for themselves. Keep up the good work.

Interesting Door

November 06th, 2009 | Category: Outside Functions

Lt. Tim Moody from Marion County (FL) Engine 11 sent in this door he and the crew found during some pre-planning. From the outside the door doesn't look like anything special, but if that was the case it wouldn't have ended up here. Click here to find out the details.

15 comments

15 Comments so far

1. David in Bradenton November 6th, 2009 1:03 pm

   The swing of the screen door should tip you that there MAY be something not normal.

2. Drew November 6th, 2009 1:36 pm

   Donkey Kick! -First DK!

3. Truck8CS November 6th, 2009 2:31 pm

   If it's in an area prone to crime, and all you have showing is a key in the knob lock that should be your first tip. Just expect additional security. Outwards swinging doors usually present the obvious carriage bolt heads for drop bar mounts. However inwards swinging doors almost never show obvious signs of a drop bar. They have to be mounted on the wall or frame.

4. Truck8CS November 6th, 2009 2:33 pm

   Also, I have to say business owners sure are creative, the more they get broken into the more creative they get. Nice find guys.

5. DMAN72 November 6th, 2009 2:38 pm

   David, great thought! Drew, great example of where a wrong placed kick could put you in a donkey cast! As I tell Grasshopper, dont just go driving the tool through the door. If you gap the door with the halligan and the door doesnt give at all, probably something wrong. I'll be first to say doggy door, cuz' that's what everyone will say. But if you don't have a saw'r, you may have to find another way in. That is always an acceptable option. That's answer to drop bars. Also, not sure what's behind that metal, but I could f@#k that up pretty quick with an ax. Through the other side and you got a door (if there's no block). Sorry, just trying to think outside the saw box.

6. DMAN72 November 6th, 2009 2:39 pm

   The metal siding that is.

7. orangehelmet4 November 7th, 2009 8:56 pm

   huh, isnt that something!

8. Clayton November 8th, 2009 7:51 pm

   After looking at the pics for a few seconds it looks like the door is commonly pushed inward with a hip or hand and rubbed clean on the right side. This may help us figure out whats going on behind the door and tip us off to the hinged side. Although at 03:00 with smoke blowing around us it may be a wee bit harder to see.

9. dbt61911 November 8th, 2009 8:55 pm

   Great idea noticing the wear marks on the door! Something so common. Great clue

10. Ryan November 9th, 2009 10:26 am

    I think a good shock loading could tell you alot about this door. Good find!

11. Gragen November 9th, 2009 3:18 pm

    Tim,

    Good find…Where is this place at?

12. Capt. Newman November 9th, 2009 8:02 pm

Great post Lt.

13. Murph November 9th, 2009 8:45 pm

Wow,,this kind of stuff is the reason I visit this site. Great post, and great ideas to get around it. It seems we are always learning on here. And that's a great thing.

14. Capt Rob November 11th, 2009 12:50 pm

Looking at the wear on the door is good, also check the ground,and tread plate for wear, to see which side they enter on.

Basement Security

October 27th, 2009 | Category: Inside Functions, Outside Functions

Robbie Marsh from Montgomery County (MD) Takoma Park Station 2 sent in another interesting basement find. From the outside this part of the basement appears to have a typical basement style window. The window toward the A/B corner appears to have a common galvanized tub that surrounds the window since the ground is built up near that window. This situation is extremely common and not much of an issue.

However, the issue becomes apparent from the inside. The window is secured by a 2×4 frame, a welded metal frame, and a piece of scrap sheet metal. The 2×4 frame was secured directly into the block and the metal frame was secured to the 2×4's. This assembly could more than likely be pried from the wall without too much of an issue. The sheet metal may be a bit more difficult, it was welded on top to a piece of pipe and secured directly into the sill at the bottom. This type of homebrew situation is certainly not impossible to defeat, but it may slow us down just enough to cause a problem. As we have seen through so many previous examples, some building owners go to great efforts to keep people out and never think of us during their "brainstorming" efforts. They get creative with their installations which just means we need to get even more creative with our methods to defeat them.

13 comments

13 Comments so far

1. Villanio October 27th, 2009 10:55 am

   Good work young Marsh. Folks, this post is from one of the younger members at Takoma Park, and is a true reflection of the amount of preplanning and drilling the members of that company do. I have never been detailed into Eng2inE and not either gone to work or gotten on the street to stretch hose or walk buildings. Good Job Brother, way to represent.

2. Brickcity1306 October 27th, 2009 11:54 am

Nice catch the kicker is that is an EGRESS WINDOW, LOL ya know to get out in case of fire!!! Unbelievable, is that area used for storage or is it a life safety area? Not that it matters, that has to be against some kind of code…

3. Robbie Marsh October 27th, 2009 12:34 pm

   This room is used for a boiler room. Size is approx 15 x 10. The best part was that they went through all this trouble to "fortify" the window but the door was left unlocked. The room also had several breakers in it and the building had several other "home made" security devices on it but we could not gain access to those apartments to check it out.

4. Adam Neff October 27th, 2009 2:27 pm

   I like the gas meter inside the building, thats uncommon in our area. Question about the window, could you tell it was like that fromt he outside or was it found during a walk thru.

5. DMAN72 October 27th, 2009 2:46 pm

   http://www.youtube.com/watch?v=U3AMuA2A4nw

6. Robbie Marsh October 27th, 2009 3:35 pm

   No you can not tell it is like that. Just like to open doors and see whats in them and thats what I found. The sheet metal blocks any view into the window and is not recognizable from the outside

7. proB-4-life October 27th, 2009 10:48 pm

   It's funny how we constantly run into new things. I am still a new guy in my crew(just under 8 yrs.) but never cease to be amazed at the weird stuff we find. On a routine inspection, we found a smallish solid masonry-constructed commercial occp. with the electric meter inside. The elecric meter was in a small closet with a locked door, separate from the main breaker. Now that should be easy to find in smoke charged situations. Maybe I can get back there and post a pic. Anyways, good find, keep up the good work.

8. Lad288 October 27th, 2009 11:43 pm

   DMAN72 – Before I opened that up I knew what that was going to be!!

9. DMAN72 October 28th, 2009 1:05 pm

   It was a different one than before, but Im out! You can only find so many of those on youtube.

10. Lad288 October 30th, 2009 4:55 am

    DMAN – This one is an instructional video.

    http://www.youtube.com/watch?v=hxlpxmxIeFg&feature=player_embedded

11. DMAN72 October 30th, 2009 10:35 am

    Lad,that is awesome! It should be noted that you must be careful with swinging your arms in that manner with a tool in your hand. It's just unsafe. I hate to see people have to explain how they bludgeoned a fellow firefighter with a tool while donkey kicking a door to this mysterious "jury" that everyone always talks about.

12. PFD023 October 31st, 2009 10:25 am

    ya but can she do it with both feet at the same time…..

13. Tim Delehanty November 19th, 2009 10:15 am

    Let me guess. 6801 Red top rd off of East West hgwy. Those people have always been creative with their basements. When i ran at 44 back in the 70's we were always finding modifications like this. GOOD LOOKING OUT.

Supplemental Locks

January 07th, 2011 | Category: Outside Functions

Supplemental locks should be expected to be found on the rear door of almost every commercial occupancy. The truck crew or team assigned to the rear of a commercial occupancy should show up prepared with the proper **TRAINING**, tools and equipment to be able to defeat any supplemental locks they may encounter. While the *proper* set of irons is almost unstoppable in the hands of a well trained crew, sometimes the rear door still presents us with some additional challenges that may require some additional tools (like the heavy irons or rotary saw.)

We always advocate the ***Identify and Visualize*** mentality when forcing the door. First you must attempt to identify what (if any) supplemental locks exist, and when forcing the door you must visualize (by sight and in your mind) what your are trying to accomplish with your tools in order to defeat the door. An unprepared crew can easily be identified on the fireground as the ones just beating on the door with no rhyme or reason. The end result is almost always a heavily damaged, undefeated door with the worn out crew standing beside it wondering what went wrong.

Aaron Anderson and Jarred Hackler from Hastings (NE) sent in these photos of a homemade supplemental lock they recently found on the rear door of a commercial occupancy.

From the outside all that is noticeable is a small piece of metal in the middle of the door. This should alert us to the presence a supplemental lock, but more importantly, it should tell us that it's probably a homemade lock. Just by looking at the outside, what is your plan to defeat it?

As you can see from the inside the lock is a simple but effective pivoting cross bar. The bar swivels into the two cuts made into the door jamb. Now that you've seen the inside, what is your plan to defeat it?

Now take closer look at the outside…

If you look close at the scratches on the door you can see that the small piece of metal outside the door actually rotates when the interior bar is pivoted. Simply rotating this piece counterclockwise from horizontal to vertical should disengage the interior bar from the door jamb and the supplemental lock is out of the

equation. If not, a simple plunge cut with the rotary saw at a 45 degree angle to the middle of the outside metal plate will cut the bolt connecting the inside and outside pieces together, and also defeat the lock.

Sometimes we just need to take the extra second or two and figure out the lock before we start forcing it. Once we get engaged in the force, we tend to stop thinking about alternatives, and get tunnel vision. However, we are trained professionals and cannot allow this to happen!

So get out and learn your area and more importantly, train with the tools.. Slow down, ***Identify and Visualize***, and you'll be much more successful in forcible entry.

20 comments

20 Comments so far

1. FitSsikS January 7th, 2011 12:00 pm

   Hehe…I'd like to think that the supplemental lock (bar) rotates independantly on the center pivot otherwise it's a pretty useless lock.

   Not only that….Merry Christmas and Happy New Year to everyone.

2. Ryan January 7th, 2011 12:06 pm

   I doubt it. Otherwise there probably wouldnt be those scratches in the door. I was thinking it would be just as easy to knock the head off, and punch it through with the pick. It would simply just fall away and the problem is solved.

3. FitSsikS January 7th, 2011 5:34 pm

   I figure the scratches are from guys spinning the flat stock just hoping that it's welded in place to the interior mechanism. It's also my guess that there is a "stop" welded on the bolt on the inside to stop outward (pulling) pressure from biting on the bar and therefore "gripping" it.

   But that's just if I made it….

4. DMAN72 January 7th, 2011 11:15 pm

   Ryan, the bar would still be set in the jamb, so taking out the bolt probably wouldnt solve the problem. Unless you're seeing something Im not? Not being a smart ass, we found a similar security device on a door in my first due area  (sorry had to.) It was sort of the same deal where there was a bolt in the middle of the door that didnt belong. I vote for a doggy door cut with a big ass saw'r.

5. nsbmedic January 7th, 2011 11:31 pm

DMAN, the bar would still be set in the jamb but if we knock the bolt loose the door would swing out away from the bar.

6. fyrfytr998 January 8th, 2011 12:24 am

   I was thinking doggy door cut as well.

7. DMAN72 January 8th, 2011 11:29 am

   Ohhhhhhhhhhhhhhhhhhhhhhhhhhhhhh!!!!!!!!!! Sorry, Im an idiot!!! I never even thought about that. Thanks, man! Not to go off on rant, but that's why I always tell people "That's why we work in pairs." Because one might see something the other one doesnt.

8. Ryan January 8th, 2011 6:50 pm

   Lol…it's okay DMAN. It looks like a wooden jamb though, no matter what, I think this looks like an easily defeatable device.

9. LAD288 January 11th, 2011 3:45 pm

   http://www.youtube.com/watch?v=YB-fyQkb9OA

   'Nuff said!

10. BIGGY D January 12th, 2011 8:00 pm

    i have a question . i watched video on here a while back that showed how to trip a panic bar from the outside of a metal door…all they did was cut a hole with a rotary say and stick a thin object in and trip the bar … couold the same thing be used here just lift instead of pull… please let me know … god bless and stay safe

11. BIGGY D January 12th, 2011 8:01 pm

    AND WHEN I SAID HOLE I MEANT SLIT … MY BAD

12. LAD288 January 12th, 2011 10:00 pm

    Giggity….

13. dave January 13th, 2011 8:21 am

    It's a $0.99 lock on an outward opening door. Use irons and force it. The inside bar looks like flat 3-4" bar stock. It will flex/bent enough to open the door, at least enough to drop a wedge in. Nothing fancy, just use what you have. If it turns out to be something stronger, attack the hinges.

14. Ryan January 13th, 2011 12:50 pm

Yeah, and, it looks like it might be a painted wood jamb anyhow.

15. nick January 13th, 2011 8:44 pm

    It looks like there is some rust on the jamb indicating its metal.

16. Nate999 January 14th, 2011 12:43 am

    Manufatrued metal building, most likely metal jamb. I'd go with the irons and conventional first. If not working, attack that cover plate and see what you've got.

    Then again, who can argue with a well-placed DK? No one, not even Chuck Norris.

17. Ryan January 16th, 2011 1:06 am

    I figured the rust was possibly just runoff from the hinge. I'm probably wrong though. I thought the toolboard on the left was a plywood wall.

18. mike January 16th, 2011 2:21 am

    holmatro and crank it open.

19. RHTA January 17th, 2011 11:22 am

    Donkey kick? On an outward swinging door?

    In my opinion, Conventional irons would work or rotary saw the carrige bolt head and then the deadbolt. Though slightly different looking, this is just a different type of drop bar security system.

    Nice post Aaron and Jared!

Many Bars, One Pin

May 03rd, 2011 | Category: Outside Functions

A friend from North Carolina sent in these photos of an interesting find. At first glance, someone with tunnel vision would focus on the bars, and start cutting. But this one is so much easier than that. Look at the track on top, and the guides down below. Hopefully you already keyed in on those. Take a closer look. The lower right hand corner shows the simple solution to this one.

A single pin and padlock is all that hold this in the closed and locked position. A simple cut with the bolt cutters, or a single cut with the rotary saw and you're in business. Actually, if none of those tools are handy, placing the fork of the halligan between the building and the bar assembly and prying to the left would separate the hasp assembly from the bars. One the lock is defeated, the entire assembly slides out of the way. As always slow down and identify what is actually securing whatever is standing in your way. We need to always work smarter not harder on the fireground.

10 comments

10 Comments so far

1. LAD288 May 3rd, 2011 3:03 pm

   D.K.

2. Geoff Leavens May 3rd, 2011 10:00 pm

   Or a 1/2 socket set, or a pair of plyers and the same result. A little time consuming, but easy. Great post!

3. Ambient_Skater May 4th, 2011 2:54 am

   Well that was easy.

4. DMAN72 May 4th, 2011 9:59 am

   Battery and salsa. I saw them do it on Mythbusters.

5. Geroge Forman May 4th, 2011 7:10 pm

   That is interesting to see the bars able to slide out of their location. I wonder if that is like that by design, or just the easy way to secure them in place. Those windows dont look like they open, so I dont see why the bars would need to slide out in a non-emergency situation.

6. bulldawg2299 May 4th, 2011 8:11 pm

   DMan Good one

7. JohnnyOV May 5th, 2011 10:18 am

   Those bars need to be removed in case of an emergency situation. Just because there is not one occurring when you arrive on scene, does not justify the immediate bar removal. Why waste precious time removing the bars when our brothers are trapped inside? The OV should have it done upon arrival.

8. JohnnyOV May 5th, 2011 10:21 am

   sorry, it should read like this: "Just because there is not an emergency occurring when you arrive on scene, does not justify the placement of bar removal to a secondary or tertiary function."

   Call for the extra truck if you are unsure, and get those bars off ASAP!

9. Dan May 5th, 2011 11:51 am

   Geroge, guess its supposed to be George, but w/e. Come to the city one time… You have to lock up everything from people getting IN to your place before worrying about them getting out in the event of an emergency. Those bars are to prevent grab and go robberies, quick night time jobs. No scumbag wants to fool with that when the next shopping center over doesn't have bars to slow him down.

10. Firetruckin May 5th, 2011 11:06 pm

    I am welder/fabricator by trade, volly FF by choice. Those have to the be the cheesest window bars I have ever seen. The 3 black bottom brackets are nothing more than 1/8" mild steel plate. Which a good smack with a sledge would bend them down and out of place. Then you could swing the bars up if you couldn't get them to slide to the side. I really can't tell by the pictures, but since the hasp is bolted on vs welded, I want to say the bars maybe aluminum. If thats the case you could take a pair of bolt cutters to the bars since its soft aluminum. Also the roller track that the whole thing is hanging from is 12 gauge steel. One could pry

around each hanger to get the wheel assemble to pop out of the track and the whole gate would come off. I am surpized that there isn't a hockey puck style master lock on those bars as they are the hardest locks to defeat.

Valuable Time

March 04th, 2011 | Category: Outside Functions

Flip Fierro from City of Raleigh (NC) Ladder 1 sent in a door he found that proves a very valuable forcible entry lesson. Forcing the door may be much simpler than you think. At first glance this door appears that it has two drop bars installed, as indicated by the carriage bolt heads. But as you can see from the photo below, the supplemental drop bar has been removed.

If you look close the photo below you can even see that the door has a significant bow in it where the drop bars used to be in place. This should be a good clue that the door needs to be further evaluated prior to selecting a forcible entry technique. Simply "gapping" the door with the irons (near the suspected supplemental lock) would verify whether or not the bars are installed. It would only take a second. Valuable time could certainly be lost trying to defeat a supplemental lock that in not in service.

11 comments

11 Comments so far

1. Chad March 5th, 2011 1:50 pm

   We use a steel rod that has been bent in a modified 'L' shape. Punching a quick hole just below the level of the door handle, towards the middle (using a pick head or haligan) gives you enough of an access point to push the steel rod through. The modified L allows you to manipulate it to the point that you can use it to push the panic hardware, opening the door. The entire process takes less than 30 seconds. I will try to send pictures of the steel…

2. Chris March 5th, 2011 4:01 pm

   Hey Chad, make us a video…

3. RSFDNY March 5th, 2011 8:48 pm

   Many Commercial Occupancy FE examples here on this site. One thing I always tried to do with my new guys and students was incorporate another piece of the puzzle of what is going on while this door is being forced. As Chad mentioned above "it takes 30 seconds." Well, from experience that is good and bad. Good, because we wont burn a lot of energy and time on getting her opened up. Bad, becasue of the Backdrafting possibility. Timing is everything. Venting for fire in a taxpayer or commercial occupancy requires some patience and allowing the vertical (roof) opening to get going and let all that shyte go up and away. For those takign thigns from heere and passing them on, draw the picture thier heads as to what else is going on at the incident.

   Stay Safe.

4. Chad March 5th, 2011 9:38 pm

   Make a video? Geez. I am doing good to get the email sent on the first try. I can't even find where to send the picture of the tool!!!

5. FitSsikS March 6th, 2011 10:01 am

   Chad, sounds like a variation of the "carpenter's square" method.

   The same yet different.

6. smoke showing 93 March 7th, 2011 12:19 am

man when its two oclock in the moring and its dark and all how am i going to know that this door is in front of me. i am going to cut the dog crap out of it. second what is this thing you can a taxpayer?

7. FitSsikS March 7th, 2011 4:06 pm

   Taxpayer:

   The definition varies a bit, depending on where you are from.

   In my neighbourhood it's generally a commercial building with apartments over top.

   The rent fromt he apartments helps with the taxes associated with owning a building/business.

   In other cities it may be just a cheaply contructed building that was thrown up on the cheap so that when it was rented the $ could pay the land tax for the land/property owner.

8. ef March 9th, 2011 10:51 am

   I believe that videos of what Chad was describing can be found here:

   http://www.fireengineering.com/index/articles/display/5082213097/articles/fire-engineering/truck/2011/03/hittle-tools.html?=new

   One of the videos even shows the firefighter poking a hole with the haligan as was described by Chad.

9. Chad March 9th, 2011 11:25 pm

   Yes, ef, great find on those videos. That is exactly what I was referring to. Especially the fourth video. A quick hole made by a pick head gives you all the access you need.

10. Nate999 March 11th, 2011 10:59 pm

    I like the J-tool idea more for non-emergent alarms and well-being checks. For fires, I think it's def something to have in the ol' noggin' and practical for most of the doors in the videos (where you're pretty certain of the locks you're up against), but I'd tend to go with the irons. For the door mentioned in Jimm's post, you're not gonna know if the drop bars are in place or not until after you've tried to force it. With the irons, you're already one step ahead over the J-tool if the bars are in. If they're not, the irons will get this door just as quick. Still a good link with the article and vids, though.

11. TRUCK 4 March 13th, 2011 12:54 pm

    I would agree with Nate999 that conventional FE with the irons is the best way to go, for fires obviously. Most likely, during the process of gapping this door the slam latch on the mortise lock will fail. If you get through and feel resistance, then your going to know your drop bars are in place. If thats the case, I would then attack the carrage bolts by driving them through using the pike to make a hole then the adz to drive

them the rest of the way. Maybe a little extra work but there is no need to carry the framing square or a modified piece of metal. If you have to resort to driving through the door to activate the panic hardware on the other side, drive the pike through, then the adz to gap and open it up a bit, then push the fork end through and use your probar to activate the panic hardware.

Sorry for the long rant, just my thoughts.

Drilled Mullion

May 11th, 2011 | Category: Outside Functions

Jerry Smith from Baltimore City Truck 15 sent in these photos of homemade supplemental lock. While the crew of Truck 15 was out doing some area familiarization they ran across this double door set-up at a local school. From the outside, the presence of a supplemental lock is obvious due to the tell-tale carriage bolts. But not so fast, take notice that there are only one set of carriage bolts per door, this should make you suspect something beyond a typical drop bar set-up. A quick peek in the window should also allow you to rule out a drop bar. However, the steel mesh on the windows and the set back of the lock from the windows, the likelihood of being able to inspect the lock from the outside in minimal. After asking some questions, and

taking a peek inside, they determined the lock was home-brewed by the school's building maintenance shop. As you can see in the pictures below there are two metal angles that insert into slots that are bolted on the door. The angles are secured in place by a pin that goes through a hole drilled in the mullion between the doors, and finally secured with a padlock. Forcing the door via traditional methods is certainly achievable, but may prove to be troublesome. A sideways V cut around the carriage bolts would certainly make quick work of the lock. This would allow the lock to remain in place, and the door to open freely.

8 comments

8 Comments so far

1. rangerbob May 13th, 2011 9:42 am

   While an interesting lock I doubt that it would hold up to a proper attack from the irons. The angle iron is simply not that strong.

2. firefighter_632 May 13th, 2011 1:57 pm

   With the address over the doorway I would likely say that this is a front entrance. With that being said I seriously doubt that this lock could or should pass inspection. The presence of this device needs to be sent over to the folks in code enforcement.

3. wondering May 14th, 2011 2:54 am

   Id just cut the heads off the bolts from the outside and allow the door to seperate from the lock setup. Like cutting a drop bar on other doors.

MVA Kit

March 19th, 2013 | Category: Special Ops

Washington D.C. Truck Company 12 sent in this photo of their window/motor vehicle accident kit. Their particular kit includes the ''Big Easy Kit'' for opening a locked car (child locked in), padded board splints, c-collars, head blocks, Dewalt corded sawzall with spare blades, hand saw, foam blankets for covering patients, various hand tools such as screwdrivers, wrenches, socket sets, pry bar, utility knives, pliers, slip joint pliers, trauma shears, seat belt cutter, mini hot stick duct tape, medical tape, and a kit of padded splinting devices.

MVA kits are a handy way to have all of the random small items needed during an extrication. We have all had to get the job done without some of these simple tools, but having them in an easy accessible place makes a difference. Having all of the commonly used items pre designated, and prepackaged makes the job much easier.

It's in the Bag

April 06th, 2009 | Category: Special Ops

In a post a few weeks ago titled "Set It Don't Forget It" there seemed to be some misunderstandings on the capabilities of lift bags that we felt should be cleared up. We apologize in advance for the heavy use of math that is contained in this post.

Click Here for the supplemental page containing the information.

32 comments

32 Comments so far

1. 7ftHook April 6th, 2009 4:54 pm

   Nice job.

2. FFGoodnight April 6th, 2009 6:47 pm

   Alright! More math equations to memorize! Im still getting used to those darn hydraulics equations….lol. Anyhow, this is another great tool to keep under that leather lid. Ive had this explained to me before, but this post actually answered the how and why. Not just another instructor saying "Thats just how these things work." Good job.

3. L2944 April 6th, 2009 9:44 pm

   Thank you for taking the time to explain this, very informative. Ill keep this in mind.

4. Woody47 April 6th, 2009 10:01 pm

   This is awesome! It's amazing how a detail like the rated capacity to the actual can be so far apart. I mean there was over 80% loss in effective lifting capacity. That's something that could really have you scratching your head on scene. Thanks for keeping us informed!

5. towers do it better April 6th, 2009 11:17 pm

   Always learning something new….

6. Drew Smith April 7th, 2009 12:42 am

   I've always used the rule of thumb that an air bag will only lift 30%-50% of its rated capacity at maximum height. I also don't rely on a bag lifting any where near its maximum rated height for the same reasons it will not lift its max rated wt more than an inch.

   Not to plu a product, but most air bags are square or slight rectangle. Paratech Maxiforce bags come in a 17X35 size that is essentially two parallel bags. This bag has less crowning by its nature but also takes up cabinet space.

   Great topic.

7. BFD732 April 7th, 2009 2:02 pm

   Great info. !!! The best description I've seen that explains why you have max. capacity for the first inch of lift only. We always stack two bags to get the most lift possible out of our fist lift.

8. Patrick April 7th, 2009 2:25 pm

   Good Stuff. Just posted a copy at the station. Thanks.

9. firemedic033 April 7th, 2009 4:02 pm

   as long as 1+1=2 i think i get it..
   this is the easiest explanation i have ever heard.
   thanks guys
   mike

10. DMAN72 April 7th, 2009 6:47 pm

    Really!!! Jeez guys! Thank you, Jimm. I agree completely. (NOTE: This is a comment about the last post, however Jimm apparently closed out the comment section. Remember a good truckie always finds a way in!)PS Please dont ban me! 

11. Jon April 7th, 2009 8:41 pm

    I wrote the max lift for 1" on the bags in a white paint pen. I always teach the FNG's that the regulator should be set at 135 and the bags will blow off at 118psi. Also as it has been said before, when you are finished remember to back the regulator spring out so you do not destroy it.

12. LT62A April 7th, 2009 9:39 pm

Jeez Jimm, you're a nerd!! No surprise to me that this info is given. Working with Jimm for a while, this topic is something we talked and trained about when showing new guys the air bags.

13. Steve April 7th, 2009 11:48 pm

    Could you crib the bag as you go to keep the bag close to what is being lifted? There by only lifting say 1" to 3"s at a time. That way you keep the a good surface under the cribing and object being lifted.

14. Chris April 8th, 2009 1:02 am

    Very helpfull , thanks guys!!

15. brickcity1306 April 8th, 2009 4:48 am

    Nice job Jimm, I have been teaching heavy lifting and moving for a while and airbags are always the sticking point in the class.. Fill the void, cover the sharps, lift a inch crib a inch and like you said When in doubt use a bigger bag.

16. Egan April 8th, 2009 7:49 am

    Math? Thank you for the warning on the main page… that would have hurt without the warning.

    I like writing it on the bag with a white paint pen. That helps to prevent math errors at 3 AM.

    Stay safe.
    ~Egan

17. CFD HOOK April 8th, 2009 8:25 am

    ummmmmmmmmmm carry the 2. OK great article thanks. We also have it wrote on bags in white so we know at a glance.

18. Dave From Sac April 8th, 2009 1:44 pm

    This is important information and anyone who thinks otherwise should reconsider their career. Knowing and undersanding basic stuff like frictions loss and airbag operations is what seperates firefighters from the public. Any blo-joe can stick a bag and lift, but a true firefighter understands the concept behind his actions. Good info!!

19. Nate999 April 8th, 2009 4:56 pm

    Steve,

    You could crib under the bag as you go, but just make sure your cribbing is capable of supporting the load your lifting.

I also like the white paint pen idea. We currently have plywood base pads cut to the size of the individual bags with the info. written on them. It doesn't wear off, but also doesn't help if someone grabs the wrong pad.

Anyone else ever wonder why the Paratech didn't just round up the pressure to 120 psi?

20. MetroLT April 8th, 2009 5:33 pm

    I guess knuckleheads will be knuckleheads. I can't imagine anybody lifting an object 8" with a lift bag without cribbing at much smaller increments.

    Nice explanation though with adequate visual aids (pictures for the knuckleheads).

21. Jimm April 8th, 2009 5:49 pm

    Nate999, Ok now the real geek in me comes out… The 118psi pressure is due to the conversion from bar to psi. Remember, Paratech is a European company, and the bags were designed over there… The actual operating pressure in the bag is 8bar, or roughly 118psi (give or take.) That still doesn't explain not rounding up, but at least we know where the 118 came from. Who would have thought that I could have possible added more math to this post? -Jimm-

22. Nate999 April 8th, 2009 8:08 pm

    Thanks, Jimm. I knew there had to be a reason. Those crazy Europeans, how dare they not comform to our system of measurements. Instead they one-up us by making everything divisible by ten…I guess they don't like rounding either.

23. Egan April 8th, 2009 11:49 pm

    Jimm,

    Thanks, I knew something was missing from this post.. MORE MATH was the answer.

    On a serious note, thank you for this information and the webpage. Keep it up.

    Stay safe.
    ~Egan

24. Dave April 9th, 2009 12:27 pm

    Parateck has information on their web page for height vs. weight in charts that can be placed on the rig or in the case where you keep the regulators. NO MATH at 3 am! Knowing the principles behind the charts is a good idea.

25. Carl April 9th, 2009 12:30 pm

More math, remember that when lifting an object (such as a trailer from an 18 wheeler) that you are not lifting the whole trailer. If the trailer weighs 10,000 lbs and you are lifting the front you can calculate the weight as being around 5000 lbs. You should still go with the biggest bag you have but this can help when you must use bags at two different locations and you have limited bags. Just a little more info.

26. James April 9th, 2009 1:46 pm

    Another thing to keep in mind . . . when you stack bags (one on top of the other) to minimize the pillow effect your lifting capacity is limited by the smaller bag. For example if you put a 15 ton bag on top of a 30 ton bag your lifting capacity is 15 tons. However, if you put a 15 ton bag immediately adjacent (end to end) to a 30 ton bag you have a lifting capacity of 45 tons. Just some more food for thought . . .

27. paul April 11th, 2009 11:04 am

    Great info for the airbags. Well laid out and easy to understand. As a rule of thumb I was always taught that the bag can lift its rated capacity 1 inch, and half the rated capacity the entire lift height. For example a 20ton bag can lift 10tons 11 inches. The math in your example does not support this. I am guessing that when under load of an object the surface area is in greater contact due to the weight of the load. Is this an accurate assumption.

28. Evan Swartz April 12th, 2009 5:02 pm

    And this is why I LOVE this website!!

29. Hook April 14th, 2009 9:04 am

    this website put out by army corps of engineers has some great material for air bag in all applications plus structural collapse info. AND YOU CAN PRINT IT FOR FREE. Has pocket guides sold on other sites for up to $20.

    http://www.disasterengineer.org/Library/tabid/57/Default.aspx

    this is the page with all the pocket guides. Be safe brothers.

30. MG3610 April 28th, 2009 8:55 am

    Another important factor is that the true capacity of the lift bag is governed by the surface area of the object that is being lifted. If the bag is 15” x 15” and the object is 7” wide and 3 ft long, the surface area of the object that is in contact with the bag will be 7” x about 14”(subtracting the 1” edge around the bag, as previously mentioned). This is the limiting factor in the lift capacity because this is the dimension of the load that is in contact with the bag. Multiplying this surface by the bag pressure will determine the approximate total lift capacity.

    In summary, you can place a 73 ton bag (146,000 Lb capacity) under a load, but if the load only contacts 100 square inches of the bag, the capacity of the bag is limited to about 11,800 Lbs. It doesn’t matter what

bag you place under that 100 square inch area (lets call it a 10×10 plate), the capacity of any bag will be 11,800. The only difference as you increase the size of the bag under that same object is the height at which the bags will lift the object. Bigger bag = more lift, same capacity.

The advantage of using the bigger bag whenever possible is greater lifting height. Stick with the rule of always using the biggest bag that will fit into the space every time for the best results.

When using a rectangular bag, always use it with the load across the widest dimension of the bag, maximizing the bag contact with the load.

You can use a square bag diagonally to maximize its surface contact with an object that is long and narrow, such as an axle or I-Beam.

Using bags in side by side adds capacity to a load, as long as they are inflated as equally as possible. In theory, if you place 4 73 ton bags next to each other on a load that has full surface contact with each bag, the capacity of the lift is about 292 tons (at about 1-2 inches of height).

All figures are based on a Paratech system operating at 118 PSI. Hope this helps a bit.

31. ski July 12th, 2009 12:27 pm

Nobody like doing all the math. For a nice general rule of thumb without the complicated numbers just multiply the area of the bag (length x width) times 100. Nice round number and helps you choose a bigger bag faster if it's close to maximum load.

32. firewallaby October 5th, 2009 8:55 pm

The Paratech website has a link to download the manual for Paratech bags — http://www.paratech.us/#/downloads/
On page 14 of the pdf, there is a chart with max.height vs load. Kind of small and hard to read, but you could blow it up on a photocopier. Note that the grid on the graph is in metric (but there is in./tons on the scale). I made some photocopies and put them in our airbag box in a plastic sleeve for easy reference.

Rung Plate

November 26th, 2012 | Category: Outside Functions, Tips, Videos

Tillerman Eric Wheaton from Winter Park Truck 61 sent in his "twist" on carrying a hook and ladder. This particular method allows the hook to not only remain in place on the fly section as it is extended, but also allows for the hook to remain in place if the ladder is rolled into a new position along the building. Rolling the ladder like shown in the video is an extremely fast way to move a ladder from one window to another when performing a VES operation.

In this method the hook is simply “hooked” onto the rung plate of the fly section on the inside of the beam. Eric has determined that hooking onto the 3rd rung plate from the tip seems to be the best location to ensure the hook remains in place while rolling the ladder. This method has been tested with a variety of different styles of hooks, and seems to work just as well regardless of hook preference.

Adding a small zip tie to the bottom of the hook may be an option to further secure it to the ladder if so desired. The idea behind the zip tie over a velcro or snapping strap is that a small zip tie will simply break away when the hook is tugged when being placed in operation. Another nice feature about this method of carrying a hook is that depending on the orientation of the ladder compartment on the rig, the hook may be able to remain stored in place all of the time since the hook rides on the inside of the beam against the rungs.

14 comments

14 Comments so far

1. tooltime November 26th, 2012 9:56 am

I like the idea of having a tool attached to the ladder there but not a fan of it just resting there without a strap. We are going to give it a try with a velcro strap at the top, you have to grap the tool there anyways. I also would not climb a ladder on concrete without a butt man, I have seen to many of them slip and slide down the wall. Dont get me wrong im all for aggresive work on the fire scene just make sure we remain as safe as possible doing so.

2. DownLow November 26th, 2012 3:09 pm

   Looks like a good idea, I like the concept. Agree 100% with the safety talk in the above comment.

3. DMAN72 November 26th, 2012 4:46 pm

   Safety schmafety. And I can't come up with a good latex glove comment.

4. LayN-N November 27th, 2012 10:54 pm

   D@mn the Velcro and zip ties, lash it on with a latex glove! How'd I do "DMan"?!?!

5. DMAN72 November 28th, 2012 1:59 pm

   Well played!

6. gmac December 1st, 2012 10:15 am

   how about a strap made out of a latex glove applied with a donkey kick??

7. bulldawg2299 December 1st, 2012 8:13 pm

   would this also work for a jet axe? or a leaf blower?

8. DMAN72 December 1st, 2012 11:33 pm

   On the 12th day of Christmas VES gave to me:
   12 arguments
   11 window bars
   10 trucks a tillin'
   9 broken windows
   8 roofs a ventin'
   7 yards of webbin'
   6 meters pullin'
   Fiiiiiiiiiiiiiiiiivvvvvvvvvvveeee donkeeeeeeyyyyyy kiiiiiiiiiicks
   4 flashlights
   3 cut off saws
   2 back up plans

> And an engine guy to make fun of
> (You know you all sang that)

9. gmac December 2nd, 2012 11:00 am

> I am actually laughing out loud right now, and I didn't sing it at first, but I am now…….now that's funny!

10. DMAN72 December 2nd, 2012 4:03 pm

> On the 12th day of Christmas VES gave to me:
> 12 arguments
> 11 window bars
> 10 trucks a tillin'
> 9 broken windows
> 8 roofs a ventin'
> 7 yards of webbin'
> 6 meters pullin'
> Fiiiiiiiiiiiiiiiiivvvvvvvvvvveeee donkeeeeeeyyyyyy kiiiiiiiiiicks
> 4 flashlights
> 3 cut off saws
> 2 latex gloves
> And an engine guy to make fun of
> (You know you all sang that)

11. Nate999 December 3rd, 2012 11:20 am

> A timeless holiday classic! Nothing better than standing around the freshly-cut vent hole with a mug of egg nog and singing our favorite carol…

12. tooltime December 4th, 2012 8:39 am

> I heard DMAN72 likes checking out "VENT HOLES". hahaha

13. Muchmore February 8th, 2013 7:29 am

> The easiest way to do it is to use a 1.00$ clamp that you get from home depot and clamp the hook onto the ladder. Its easy and efficient as well as safe. The clamps can also be used as door chalks as well.

Residential Shutters

August 05th, 2012 | Category: Inside Functions, Outside Functions

Rex Orcutt from East Pierce Fire and Rescue in Pierce County (WA) sent in these photos of something they recently ran into at a residential fire. The house was equipped with metal rolling shutters. Prior to entering the structure, the shutters were in the open position. While operating inside, the crew heard a loud bang, and the window went dark. The shutters had automatically lowered themselves into the closed position. Some quick work with the rotary saw took care of the issue. After the fire they started to determine how the shutters operated.

As you can see from the photo below, the shutters are operated from the inside by a hand crank mechanism that is attached to the shutters by a nylon strap. The heat from the fire melted the strap causing the shutters to lower into position.

When the shutters are stored in the open position, they maintain a low profile, and can easily go unnoticed prior to making entry.

Obviously having the shutters close during our operations can cause a number of issues. Having a crew ready to defeat them once the lower may be a viable option, but is far from ideal. Preventing them from lowering in the first place is key to making this a successful operation. One simple solution could be a simple pair of vise grips secured to the track from the outside to prevent the shutter from being able to lower.

6 comments

6 Comments so far

1. Fire Dog August 8th, 2012 3:34 pm

   Thanks Rex and the East Pierce FD for sharing the info. While I have not seen this setup on the "Best Coast" I mean the East Coast …..yet.
   I am sure that its only a matter of time.
   Those shutters certainly can and will make a bad situation worse!!
   Know your buildings! And how they are trying to hurt and kill firemen!

2. me August 14th, 2012 12:16 pm

   These are NOT uncommon. There are also some styles that operate from an outside fusible link.
   Be careful.

3. ltfd seattle August 14th, 2012 4:59 pm

   These rolling shutters, or security blinds, are common in Europe. I have always been surprised that we don't see more of them here.

   Here is a link that covers installations, strength issues, residential/commercial uses, etc. I just "googled" for european window shutters: http://www.enviroblind.com/

4. Tim August 15th, 2012 9:25 am

   Thanks for the heads up. If I had these shutters in my first due I would head to Harbor Freight and buy about a dozen sets of cheap vise grips to use on each set of shutters.

   For the guys who have these shutters in thier area, do you guys know if you can simply lift the shutters to open them? I am sure shutters with a more positive operating system would be difficult to overcome the opening/closing mechanism. I am not too familar with the residential version and didn't know how easy they were to force without a saw.

5. John August 17th, 2012 10:01 am

   We have plenty of these on the Texas coast. We actually started carrying the rods used to operated the blinds from the exterior on our trucks.

6. Rich Jurkowski October 4th, 2012 9:28 am

   These are very common in SW FL for hurricane protection and seasonal residents who drop them in the off season. Recently had a residential worker where my crew enacted some progressive RIT and was able to pry the whole assembly off the outside walls with the pry end of a 6' roofmans hook. This would work where the entire assembly is mounted from the outside and below the soffit. We were able to provide egress and vent for the inside crews fairly quickly. One of the few times where most everything went as planned…or maybe the installer used too short a Tapcon!

Interior Security Bars

June 07th, 2012 | Category: Outside Functions

Captain Rick Cravero from Tamarac (FL) sent in these photos of security bars on the inside of windows from a local neighborhood. When the windows are shut, the bars appear to look more like french window panes instead of security bars. One thing that may give it away is that in this particular case, is that not many jalousie windows had french panes.

These particular bars are simply held in place by some self-tapping screws into the original window frame. These bars may slow us down a little, but shouldn't be much of a match to a determined firefighter. Depending on how the window frame is secured (how many screws were used), pulling on the bars may remove the entire window frame. If the window frame is well secured, then inserting either the fork or the adz of the halligan in between the window frame and the security bar assembly to separate the bars from the window frame would speed up the removal. Once the frame of the bar assembly is weakened and separated from the frame in a few places, the entire bar assembly should be able to be "hinged" away from the window opening. The rotary saw always remains an option, but believe it or not, the hand tools may end up being quicker.

The main thing to consider when faced with bars is to remove them early! Waiting until conditions deteriorate, or worse, when a fellow firefighter needs to bail out is not what we should be doing. Trying to minimize damage to the structure by waiting to remove them may actually cause more damage in the end. Simply open it up, and get the job done!

11 comments

11 Comments so far

1. Vinc June 21st, 2012 5:38 pm

where can a get ones that Rick Cravero submitted? I live in Tamarac also.

2. Jim July 22nd, 2012 6:00 pm

Just a thought, how about borrowing an idea from the other guys that specialize in forcible entry on "hardened" structures, the cops/SWAT. I was watching something on TV, and they were tweaking a grab with attached to chain, that was attached to a barred window, to a vehicle (or several for multiple windows) and removed simultaneously to gain entry. Could something like this aid in the speedy removal of fortified windows for our purposes also, coincidental venting issues aside? Perhaps attached to a supervisors SUV or a rigs hook and either pulled directly or attached to a come-along?

Regards, Jim

Regards, Jim

3. PolarFire July 24th, 2012 9:52 am

Speaking from the flip-side of my life story coin, that's a problematic thing to say the least. I was a demolitions and breaching instructor in the 75th Ranger Regiment and generally speaking, the people I was tasked with introducing myself to were significantly less happy to see me than a drug dealer who just had a SWAT truck screech to a stop in front of his house. Bars were something we had to contend with, as well as reinforced walls, etc. Breaching a fortification is a complicated thing, and that's what bars are.. a fortification of a property.

While winching off a rescue winch, come-along, or chaining off to Apparatus of whatever sort seems like it would be a quicker thing to do… Visualize a fireground scene.

We set up so our largest piece of apparatus can access at least 2 sides of the building (Truck) and 20 feet or less in front of it we've got another large piece of apparatus (Engine). Your SOP/SOG may vary, but the unignorable fact is we have big trucks parked right in front of what we need to breach, and we can't move them (outriggers, pump, fire suppression, bla bla. Not moving once positioned!)

That means that using a command vehicle to try to do the drive and yank is a no-go due to hoselines, apparatus, and general fireground activities that commonly occur regardless of the scene.

Couple that with most SUV's being sold today and used as CV's not having a whole lot of OEM recovery points built in, and the ones that are stock are typically an afterthought. Dragging something off the building would work well with chain and an actual Apparatus, but that is a problem because of the >50 feet of the A side of the building we've got blocked with effectively immobilized apparatus. While aftermarket solutions (Warn/Buckstop/Ranch Hand) provide good sturdy recovery points and/or winch mounting, you still have the issue with actual access TO the building… and most departments at best put a Setina or the like push bumper on the front… which isn't designed to be pulled from. I'm sure we'd all like to explain how we ripped the front of a CV off to whomever we report to.

That means now, your only real option to do a winch or come-along bar removal evolution is to have a "Rescue Engine" like the one I work on, which has side reciever points for use with a portable winch. While

it's becoming more common for this to be a feature built into newer apparatus, this also means the only side that you can be able to do this "breaching evolution" is on the A side of the building.

With a full 6 man crew on an Engine or Truck? 2 in 2 out Engineer on the pump and Officer as initial IC… nothing says the 2 out can't be tasked to something, you just want them to be able to drop what they're doing to be able to help the 2 in, if necessary. One FF grabs the winch, one grabs the chains. Toss the winch in the receiver, flip to free spool. Chain man takes the hook and goes to the window and chains and hooks up. Winch man's plugging in the winch to the apparatus, remote to the winch, and eyes on the chain man. Thumbs up, Chain man clear, winch man engages the spool and winches away. It could be done very quickly if identified on arrival.

The problem we'd run into is that most fortifications like window bars, additional locks, etc… are on the BCD sides of a building because those have more limited visibility and therefore are more of a target for entry by a thief. Exactly where we can't use our winch plans.

Could you use "The Stick"? If you have a platform with points you could attach to and a good bucket load? Acknowledging that most residential properties end up having issues getting the aerial into action due to power lines, maybe. Big things would be pre-hooking a "droop chain" to the bucket, positioning it over where you wanted to breach, and going slow with noone IN the bucket since it's going to jump and wobble once the bars come out… then you have a pendulum of steel bars swinging around. The more I think about even trying that, the more my Chief's voice in the back of my head is saying "I will murder you if you even try it" so we'll just say "Bad Idea".

My personal belief is that we're doing this as quickly and safely as possible by using the K12 or other hand tools to conduct the removal of the bars. One tool that might prove to be a smidge quicker would be E-Draulic cutters, or even manual hydraulic cutters, since you could generally be able to pinch and take 2+ bars out at the same time in the event you encountered the same design as what's in the pictures. Wider bars, you'd have to go one at a time… but if you DO have the manpower, there's nothing I see WRONG with one FF taking one side with a K12 and the other being taken by a FF with E-draulics, provided you do it carefully and with competent trained personnel.

One last thought is something I'm honestly not completely knowledgeable about, and that would be the structural integrity component of a window frame. One method that MAY be quicker would simply be to conduct a plunge followed by crosscut below the windowsill, then complete the box, with a chainsaw. Windows that are taken out are commonly "turned into doorways" by cutting the sill and wall down to the floor, but I know that most windows are framed on the sides with structural members, if not reinforced to take the loading from the "structural gap".

I know I can cut wood quicker than steel though, then all it takes is having a strap tied off to the top to yank and pull it out of your "new bay window" and you'd have a great egress point from the structure, plus horizontal ventilation.

SWAT has the advantages of being able to pre-plan a single operation with significantly less "hip pocket adaptation" than what We as Firefighters can rely on. SWAT also has significantly more manpower and can dedicate specific personnel to one single task (breach that window then shoot anything coming out) than we can. They don't have the issues with physical access to even the A side, because they can roll up with their SWAT vehicle straight to the front door, dismount from the sides, hook up then slam the truck into reverse… and chances are, it's at least a K2500 suburban, if not an armored vehicle designed to be able to do that sort of thing. They have advantages for that type of situation that we don't, and generally speaking they WANT the bars to stay on, for the simple fact that they WANT the building to constrain and contain. They're only concerned with making access quickly and at one point for the most part due to safety with fields of fire for both themselves and the public.

Stay safe.

4. DMAN72 July 24th, 2012 10:27 am

   ^^^^^^Longest ves.com comment of all time!^^^^

5. PolarFire July 25th, 2012 6:34 pm

   Well, we can either have a discussion, or snarky donkey kick comments.

   I'd rather have a discussion and learn from it, myself.

6. DMAN72 July 26th, 2012 9:04 am

   How 'bout a snarky discussion?

7. Jim July 29th, 2012 2:58 pm

   Polar Fire;

   Thank you for your service, and thank you for the education. Talking out of my ass as usual, but I never heard anyone speaking of "tactical" entry techniques, and how the fire service might be able to add something to our bag of tricks, in the same discussion. Thought there might be something useful.

   Regards, Jim

8. PolarFire July 30th, 2012 6:22 am

   Not a problem. Being honest, I don't think you were talking out of your ass in the least.

   War-gaming the best methods to defeat these obstacles is paramount to getting them out of our way in the most efficient, expedient, and safe manner. Even if it's a rare thing to encounter in our respective areas of response, having done so means that we have a tool in the mental toolbox to address a specific situation if it happens to come up.

Window bars are unheard of in my response area, other than on pawn shops or other commercial occupancies. That's where doing a chain-and-yank might prove to be a much quicker method of removing them, since you typically have at least 3 sides access (in my area). Now your next obstacle is convincing your Chief you aren't going to trash his CV doing it…

Another thing to consider is how some bars are installed. These interior-ish bars are basically for show more than for any real use, as seen with the screw attachment. While cutting them may seem like the right thing, it looks like you could probably knock them in or out of the way with some good swings with a sledge, flathead, or even a halligan.

Now think about the exterior bars which are more common. Sometimes the bars mounting is reinforced with steel strap around the sides of the windows, which interfaces with the bolts through the wall. A valid concern might be that while cutting the exterior bars is slower, if you went for a chain-and-yank on ones like that… you might take out more than you bargained for. Weakened structure due to the fire, you straight rip out an entire window with a shock load to the structure to boot. Would you want to have a 1 or 2 story building chasing you in reverse (never mind any interior crews demise)? Not saying it WOULD happen… but there's enough LODD's across the board from not planning for what COULD happen.

9. Jim July 31st, 2012 6:49 pm

Sir;

Thanks for the follow up. I appreciate your taking the time.
I know nothing about tactical entry thought or techniques, was just wondering if any would be worth adding to our repertoire. Again much appreciated.

Regrades, Jim

10. jim August 27th, 2012 12:30 am

We get ropes into doing community pr garbage and they use us so people will open the door. One city hall dweller went around telling people to get these inside the window bars. When I asked her why and pointed out the various problems that these bars suggest she seemed dumbfounded.

11. Captain W. McAllister, MDFR April 4th, 2013 9:47 am

We have encountered these more than a few times. The fastest way through these, whether set in CBS or in wood frame, is 1. take the glass and don't worry about the frame at first, 2. locate the pins or screws securing it to the structure, 3. straddle the security bar closest to each pin with the forks of the halligan, 4. strike several times (perpendicular force always wins), 5. repeat until all pins or screws are defeated (usually 2-4 points of attachment). NOTE: In CBS, they usually are not attached at the top…they are set in with pins that slide into pre-drilled holes. If you don't take steps to secure the bars, they may wind up falling clear and in…on top of a victim.

Four Cut Roll Up

April 14th, 2012 | Category: Outside Functions

Chris Johnson from Concord (NH) sent in this writeup on using the four cut method for opening roll up doors. There are a number of different methods that can be utilized to defeat roll up doors, and each have there pros and cons. This particular method creates a large opening while maintaining the ability to control the door. Click here to see the full write up on this technique. We made the write-up into a downloadable pdf so you can print it out for a kitchen table discussion, or for some OJT (On the John Training.)

6 comments

6 Comments so far

1. Nick April 17th, 2012 11:00 pm

   I think there is a old video on the site for cutting roll up doors.

2. chris April 20th, 2012 4:31 pm

   Jet axe

3. Joe Horton April 22nd, 2012 3:03 pm

   Good stuff, always nice to see others that have used this stuff post it up!Stay safe everyone, Lt.Horton. E40A- Largo Fire Rescue, Florida

4. RSFDNY April 23rd, 2012 7:01 pm

Couple of things on Roll Up Gates.

A) Never assume occupnts are nonexistent when these are down. had a few incidents with shop owners inside with gates down.

B) If you are going to go after the lock vs. the gate itself, Don't forget to pull the pins after cutting. Young eager lads immediately start tugging on the gate without pulling the pins.

C) Have another FF keep a foot on the bottom piece of angel iron so as to keep the tension off the gate. Once you start cutting the gate will rack to the weak side and make it more difficult to cut as well allow the gate to rise as you want it to after the cuts are completed.

D) Metal cutting blades are meant to be operated at a slow RPM when making the initial cut. Once you have a groove deep enough or you've plunged through the gate metal, then brignup the saw RPMS and move balanced and gently. If you get aggressive with these blades, they will shatter and the pieces are hot and unforgiving.

E)If there are gates on the exposures(at working fires) cut those as well. You already have the saw running and you are there. Start it…..Finish It.

F) Having a handline in place prior to beginning ANY Forcible Entry cut is a good idea. In taxpayer occupancies, the potential for Backdraft is greatest. The gates may the only thing preventing the draft from occurring.

Keep drilling on the basics fellas. Too many brothers dying at "routine" fires and incidents.

Cheers.

5. Mike D May 2nd, 2012 2:35 pm

This is a great example of how to apply common sense to improve techniques already widely used! Great idea and I'll definitely use this.

At my dept we go (using your picture) in this order – 4, 1, 2, 3. We have to leave a gap (not intersect) between cuts 4 and 1 or the door will come down on you while cutting 2, 3. Then we cut the small space between 4 and 1 to finish the cut at the end.

This is a much more efficient way to accomplish the same cut and eliminates the falling door risk.

Great work!

Door Hardening

March 27th, 2012 | Category: Outside Functions

Jason Dauta from St. Petersburg (FL) sent in these photos of a door-hardening product that is available at most home improvement stores. The product is a simple set of stamped steel plates secured with long screws. The kit involves three main components: door shields, jamb shields, and hinge shields. Each of these components is intended to help prevent the wood from splitting in the area of the door and jamb it is protecting. These devices are cheap (less than $75 for the set) and easy to install, so they may become more commonly found. These shields will keep the wood of the jamb from splitting from a kick-in style of forcible entry, but will pose minimal problems to a well-placed set of irons. The wood jamb, and wood door will still crush and deform as expected during the force. Simply *Identify and Visualize*, and these doors shields will be of little consequence.

The photo below shows the door shield installed. It goes over the latch faceplate and is also attached with long screws. Notice in the picture that the door is actually already split due to poor installation of the device.

The photo below shows the jamb shield installed. It replaces the normal strike plate and is attached with longer screws. It disperses the force and is intended to be more difficult to defeat than a traditional strike plate.

The photo below shows the hinge shield installed, it goes over the existing hinges.

4 comments

4 Comments so far

1. LAD288 March 28th, 2012 10:10 am

   "These shields will keep the wood of the jamb from splitting from a kick-in style of forcible entry…"

   Wonder how it hold up against the Donkey Kick.

2. PolarFire March 28th, 2012 11:54 pm

   Mule, Donkey, flying dutchman kick, whatever… More than anything those kits are to reinforce an already damaged door from previous entry… Usually the "flavor and taste" of the house will let you know if those kits may be installed, plus they're easy to see. These door reinforcements are smaller than what Lowes/Home Depo typically offer, but still would be visible under good conditions and offer tactile response under smoke conditions.

3. Ken Scofield April 21st, 2012 7:02 pm

Doesn't look like these would prevent anyone from pulling the lock cylinder and tripping the lock with a tool.

4. ummm.. February 23rd, 2013 11:06 am

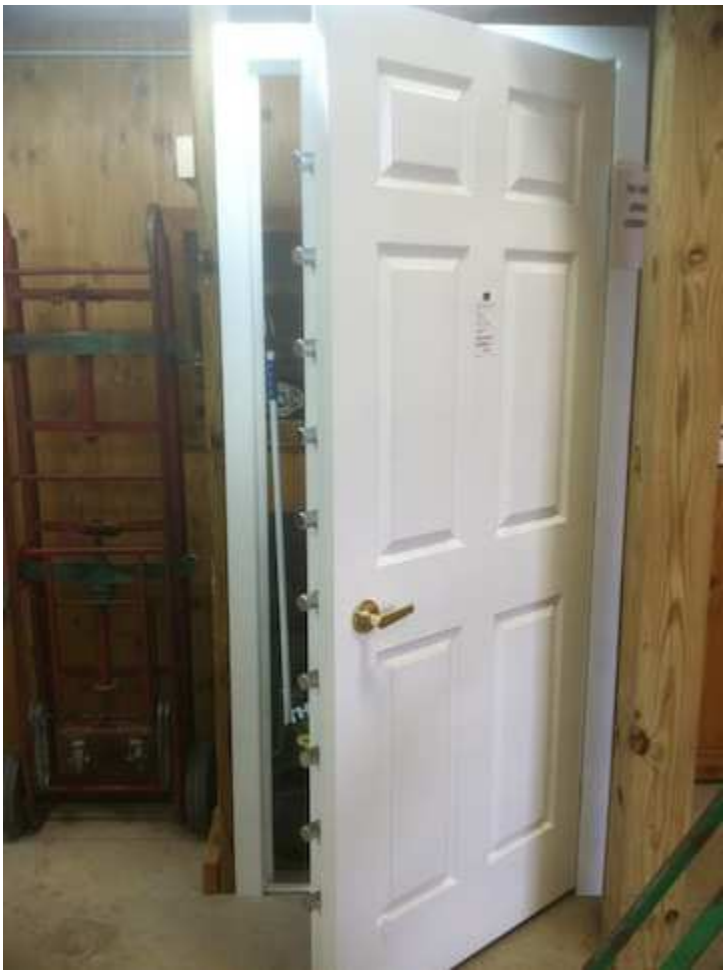
Pssst…

The two holes (oblong) over the hinge itself are not for decoration; you are supposed to remove the screws from the hinge and screw through the reinforcement with the provided 3" screws. Also, if you have security hinges, you will need to modify the plate (drill a hole) to allow for the security protrusion / pin / etc. to make proper contact.

Better Find Another Way

February 10th, 2012 | Category: Outside Functions

Jason Hardin from Charlotte (NC) Ladder 26 send in these photos of a door he found while at a local hunting store. From the outside the door is made to look like an ordinary residential door. Once opened, it becomes quite apparent that this is not a normal door, its a safe door! The door is called a Pro Steel Ultra Security Door, and is made by the same company that makes Browning gun safes.



From the outside the only obvious indication of this being a non traditional door is the absence of hinges. Once opened you can see that this door is designed not to be forced open. The door is opened by an electric keypad that can be mounted up to 7 feet away.

Trying to defeat this door would more than likely prove to be waste of time on the fireground. Finding another less protected opening may be the best option. Another door, a window, or maybe even a wall breach may be less time consuming depending on the building construction. One of the most important things to keep in mind when faced with this door would be identifying it early, before precious time is wasted trying to defeat it.

20 comments

20 Comments so far

1. phyrman21 February 11th, 2012 12:43 pm

Of course the best option would be to identify it early. You mention doing so by noticing the lack of hinges, however, this is not a tell-all sign that this door is so difficult. My question to the commentors is this: in all practicality how do we know this door is going to kick our butt? We know the mentality of firemen, that once we start it becomes a challenge we do not like to back down from…

The other question I have is where would we see this door? Its a safe right? So we need to be keenly aware of building construction and the placement of this safe in respect to the rest of the buildings make up.

Also, without having personally seen this type of door, I would imagine that though it looks like a regular door, it has be more securely built in order to house such serious locking mechanisms, and perhaps that would be more evident with a quick puncture attempt using an axe?

Thoughts guys?

2. EAC February 11th, 2012 2:21 pm

In respect to the placement of the door as phyrman21 stated. I think it would most likely be placed on a small room or an office that is used as a "safe room". Maybe someone has a large art or gun collection. If so, it would fit right in the expected building layout and floor plan.

3. DMAN72 February 11th, 2012 6:22 pm

We gonna need a bigger donkey.

4. FitSsikS February 11th, 2012 6:29 pm

They don't seem to come with a matching steel box….err vault.

So it's just a great door surrounded by umm….wood and drywall.

Zzzzzz.

5. Bones82 February 12th, 2012 12:12 am

Holy Underwear Batman! Did you try knocking first? My mom says manners take you anywhere.

6. PTFD167 February 12th, 2012 10:45 am

I have to laugh because as said before the door is impossible to defeat but it looks like plywood around it. If i'm not mistaken i do beleive that on this site there was an article on these doors in a residential use. It goes to show that make things criminal proof and they will make a better criminal.

7. DMAN72 February 12th, 2012 12:56 pm

I believe the point of the post is that you may find this door on something else. i.e. Block building, steel building, etc. etc. Looking at this, obviously it's not going to be hard to defeat THIS set up. Anyone who's been in the fire service for more than 11 minutes knows you're going to attack the weakest part. The moral of the story is, you may run in to this in a more secure set up, then what? MAN!!! When does MLB start up?

Hinge Distraction

December 02nd, 2011 | Category: Outside Functions

Peter Lee from Maplewood (NJ) sent in these photos of a door they ran into while out conducting some district familiarization.

This style of supplemental lock is becoming increasingly poplar for rear door protection on commercial occupancies. There are a number of different manufacturers that are producing this style lock. From the outside it is obvious that this door not only has a locking mechanism on the handle side, but also some hinge side protection. Another important observation is that it appears that all of the supplemental locks are inline with the handle, none high, none low.


PUSH DOWN TO OPEN

The purpose of the hinge side protection is to keep the uneducated burglar from opening the door from the hinge side, not the educated firefighter. Even though for the outside it looks less substantial, the hinge side is definitely the slower option on forcing this door. Traditional forcible entry technique on the lock side of the door with a property placed halligan is more than likely the quickest and most effective way to force this door.

We have shown doors like this in the past, they are not nearly as intimidating as they look. Be sure to use the website's search function over in the right sidebar to find some similar doors, or click on the category labeled "outside functions." The purpose of studying different style doors is so we can better identify and visualize what we are facing when confronted with challenges on the fire ground.

Hittn' the Pipe

November 22nd, 2011 | Category: Outside Functions

Captain TJ Underwood from Goldsboro (NC) Fire Department sent in these photos of a recent find on a company inspection. This supplemental lock was found on a department store located in a strip mall. Apparently the store had recently been broken into, so the store owners had a local door company fabricate and install this lock. As you can see from the photo below, the locking mechanism is simply made from galvanized pipe and is designed to pivot into place. Fortunately the presence of the supplemental lock is obvious from the outside due to the visible carriage bolts. Simply cutting into the carriage bolts will defeat the lock, allowing the door to be opened with a simple traditional force to bypass the Mickey Mouse in-handle lock. Plunging the saw straight into the door in an attempt to defeat the supplemental lock will prove to be ineffective due to the distance between the bar and the door, and the limited depth of the blade.

11 comments

11 Comments so far

1. LAD288 November 30th, 2011 5:40 pm

   Perhaps a trusty old doggie door cut….

2. fellowfirefighter December 3rd, 2011 12:27 am

   I am gald you were able to share this since you didn't share it with you own fellow firefighters. I am gald I look at the web-site to see this. It would be nice if this info was shared with you department first

3. Joe Horton December 3rd, 2011 11:07 am

   Ahhhh, the good ole communication breakdown, happens in every dept. Great info, thank you.

4. LAD288 December 4th, 2011 6:35 pm

   wow…..

5. DMAN72 December 5th, 2011 8:55 pm

   I'm gald, too.

6. Nate999 December 8th, 2011 3:25 pm

   Hopefully fellowfirefighter shared it, instead of just being gald

7. DMAN72 December 9th, 2011 8:16 am

   The other day, I saw a gald eagle.

8. LAD288 December 13th, 2011 11:33 am

   hahahahahahaha

9. Knight136 January 16th, 2012 10:02 am

   Reading these comments makes my gald bladder hurt.

10. DMAN72 January 16th, 2012 4:30 pm

    So…who's it gonna be next weekend, New England or Galdimore?

11. truckFOOL March 1st, 2012 9:49 pm

    placing your pick end of your halligan above and/or below each carriage bolt and burying the tool at the four bolt locations will weaken the extra device enough to allow conventional forcible entry of an outward swinging door to be performed. stay safe RFB

Window Cages

September 22nd, 2011 | Category: Inside Functions, Outside Functions

Joe Barr from Pine Hill (NJ) sent in these photos of something they ran into on a recent run. The cages are not visible at all from the outside due to the window covering and the setback of the jamb. They are starting

to notice these more throughout the area. The resident claimed that she is supposed to open the cages for the fire department if there were ever a fire. Some of the cages are locked by a master lock, and this one, blocked from opening by furniture. This makes opening them not a quick and easy task for the resident to accomplish. Whenever we are operating in a structure with blocked egress windows like this, some immediate attention should be given to their removal. Leaving something like this in place while crews are operating inside could put us behind the call if we needed to remove a victim, or even worse, one of us. Fortunately, these can be removed easily from the inside with a set of irons, the trick is identifying them, and prioritizing their removal.

7 comments

7 Comments so far

1. DMAN72 September 23rd, 2011 10:28 am

   Is that the same resident that is supposed to wake everyone up if there's a fire when there's no smoke detectors because she'll smell the smoke and wake up.

2. DMAN72 September 23rd, 2011 10:28 am

   …question mark

3. Nick September 23rd, 2011 11:31 pm

   Wow! I never new interior burgular bars could be so beautiful, are they trying to keep people in or out.

4. Mark September 25th, 2011 6:32 pm

   Go ahead, ask away…..

5. FitSsikS September 25th, 2011 6:33 pm

   Sorry Dman, couldn't help m'sef.

6. RSFDNY September 28th, 2011 11:28 am

   Many Firemen look at this security device from the wrong side. Most will look at confronting this device when entering from the window. In reality you are in a safe position if trying to force your way IN from the exterior because you can always withdraw if the entry becomes untenable. My greater concern is if one of us is searchign this room on the fire floor or the floor above and conditions deteriorate to the point that you have to bail out. This becomes a Forcible EXIT issue and becoming trapped increases greatly.

Many techniques to use with regard to removing or opening them…including the ever loved "donkey kick" which mind you can only be performed from the exterior as this gate swings inward.

Be mindful of the security devices in your response area that will prevent YOU from getting OUT as opposed to in. These will kill us more often than not.
Stay Safe fellas

7. Dan September 28th, 2011 1:19 pm

After looking at this, most city guys would scratch their heads when they pulled up on this for a call. Here's why, most likely what tripped Joe or the guys to take a closer look… They are in the city, who in their right mind would leave the windows open with no exterior burglar bars on the first floor? You're just asking to be robbed, hence the interior burglar cage comes into play, sparing the residents from a home invasion or robbery.

We almost come to expect a security device on first floor windows and doors in the city, so when nothing is evident from the outside, further investigation is normally warranted to find out how they keep the bad guys out, just so we can remove it before it becomes a hazard for us.

Slide-in Supplemental Lock

August 11th, 2011 | Category: Outside Functions

Firefighter Dan Rinaldi from Providence (RI) Fire Department sent in pictures of a door from a triple deck structure. The door leads into a convenience store on the first floor. Apparently the store has had numerous break ins. As a result, the store owner did some homebrew modifications to the door. The existing door has been skinned both inside and out with 1/8” steel. The steel covers the entire door and is secured with multiple carriage bolts. The 1/8” steel would make gapping the door a bit more challenging than a traditional metal door. The door is still in a wood frame, so use of hydra ram will just destroy the stop. On the inside, you can see that the two supplemental bars slide in from the side instead of dropping in from the top. Of course since this is an inward swinging door, the supplemental bar brackets attach to the building, not the door leaving the telltale carriage bolts alerting us to its presence.

Interestingly, if you look at the first picture you can see a piece of plywood to the left of the door. This plywood is covering the hole that was apparently made during the most recent break in, that prompted the upgrade shown here. The thieves knocked a hole into the wall, and were able to real the single drop bar that had previously secured the door. This is apparently why the new supplemental lock was intentionally made with two slide-in bars, versus the single drop bar.

17 comments

17 Comments so far

1. DMAN72 August 12th, 2011 11:28 am

   I can't see it real well…What is the door frame? Im assuming steel, but can't tell with the paint?

2. Nick August 12th, 2011 10:29 pm

   DMAN, the post says the door frame is wood.

3. Dave August 14th, 2011 10:20 am

Metal door….Metal saw….

4. DMAN72 August 14th, 2011 8:51 pm

   Im an idiot.

5. DMAN72 August 15th, 2011 12:13 pm

   How 'bout splitting the jamb on both sides with the pike of the halligan?

6. DMAN72 August 15th, 2011 12:14 pm

   ….with a baseball swing like with HUD windows?

7. Nick August 15th, 2011 10:59 pm

   My first thought would be to use the saw, but I think taking the door to the right and breaching the wall could be faster.

8. wrhardy82@gmail.com August 17th, 2011 6:40 am

   Jet Axe….

9. Nate999 August 17th, 2011 6:56 am

   I'm not sure about the baseball swing working, just because the pic seems to show the brackets on the wall studs and not the jamb. That being said, it's gonna be my first tactic when I see that wood jamb.

   When that doesn't work, I'm voting DK or Jet Axe.

10. DMAN72 August 17th, 2011 11:28 am

    Yeah, now that I looked again, you're right. You're also right, I would donkey kick the shit outta that. As usual, I'm going with my eff that saw theory. I know it's the easiest probably, but anyone can say saw. What's your back up plan?

11. Nate999 August 17th, 2011 12:52 pm

    When the baseball swing and a quick shot at conventional fails, my backup would be to peek through the door to the left and see if it leads in (I'm guessing not, though as this is a mixed occupancy). I'd also like to give myself the benefit of the doubt and say I'd notice the plywood square on the left, and could maybe get a view of what I'm up against. Wall breach and saw both sound good, but are often harder in reality, especially when you can't tell what's on the other side.

12. Dave August 17th, 2011 10:22 pm

Aerial or ground ladder to a window.

13. Dave August 17th, 2011 10:24 pm

    Floor above or below….hole in the floor…folding ladder.

14. Dave August 17th, 2011 10:27 pm

    Why do we need to get in there anyway?

15. DMAN72 August 18th, 2011 1:28 pm

    Marty, you're not thinking 4th dimensionally.

16. DMAN72 August 19th, 2011 11:11 am

    I think using the ads end of the haligan to pry against the frame and the door would breat those 2x's if you attatcked each one individually.

17. John Wright October 2nd, 2012 11:41 pm

    Back-up plan: The barricade ought to be a stern message to intruders that the owner has done as much as he can, and it is reasonable to expect that the increased breaching difficulty will cause the intruder to make a lot of noise in the process. If the owner is hearing impaired some kind of loud proximity alarm near the door is needed. In states like Texas, Oklahoma and Arkansas (but not New York State) there is the option of greeting the eager visitor with something like a .357 magnum when the door yields… Oh yes, the owner should also have enough illumination to see what he or she is dealing with, and of course, the choice to shoot or not is entirely personal. But it is known that intruders who are willing to break into an occupied home or business (perhaps someone working after hours) are among the most dangerous criminals.

Apartment Bars

June 02nd, 2011 | Category: Outside Functions

Jerry Smith from Baltimore City (MD) Truck 15 sent in these photos of some easily to defeat window bars. Jerry and the crew of Truck 15 A Shift were out performing some building inspections and found these bars on a local apartment building. Taking the time to learn about this style of window bars ahead of time can save a significant amount of time on the fireground. Check out the supplemental page with detailed pictures and information on how to defeat these bars.

16 comments

16 Comments so far

1. LAD288 June 2nd, 2011 11:22 am

   Wow…. No comments the Donkey Kicks yet??

2. Ryan June 2nd, 2011 12:58 pm

   Gotta be careful donkey kicking those off could land on a victim inside. I'm going to suggest jet axe.

3. LAD288 June 2nd, 2011 3:35 pm

   You could use a ground ladder and get above them and Horse Stomp them straight down… That way, no risk to the victims inside!!

4. Ryan June 2nd, 2011 11:10 pm

   Very, very true.

5. Roger June 5th, 2011 10:31 pm

   Good stuff, I'll be on the lookout for any of these in our area and be sure to pass on the knowledge.

6. rafael June 6th, 2011 11:54 am

are those tubes and bars hollow? They appear to be so. Could they be smashed/cut easily? anyone?

7. Jerry Smith June 6th, 2011 11:04 pm

   Rafael,
   The metal bars were hollow and made of a light gauge steel. Cutting these bars would not be an issue. I also think prying could be an effective means to force the lock, such as using the haligan bar. Smashing the bars to deform the locking mechanism or the internal catch (which is grabbed by the locking mechanism) to free it I think would work but probably not as efficient.

   I think from the pictures we can see a lot of areas to attack these bars but you can never go wrong with going right to the saw and making the cut.

8. Dan June 7th, 2011 1:03 pm

   Jerry, great find. I like your last statement in the post more though…
   "you can never go wrong with going right to the saw and making the cut." Absolutely agree.

9. SVEN FROM SVEEDEN June 7th, 2011 3:31 pm

   ahh in sveeden we have deeess

10. DMAN72 June 10th, 2011 11:39 am

    Im gonna do the firemen thing and not think about it and just hope they come off when they have too.

11. riley June 11th, 2011 9:48 am

    "Im gonna do the firemen thing and not think about it and just hope they come off when they have too."

    Spoken like a true 'A' shifter.

12. Nick June 11th, 2011 10:16 pm

    On the department I work for we equip every Truck and Engine with air chisel's. Out of pure curosity, I was wondering if a lot of other department's use them and how they feel about them being used to force entry.

13. riley June 14th, 2011 9:42 am

    BTW…As an ex-A shifter I can say that. So there.

14. Bart June 14th, 2011 12:39 pm

    Nick: I think air chisels are good for opening up sheet metal or other thin metals, but their use on the fire ground is limited. I feel a good circular saw will do all a chisel will and much more. Engines/trucks are

already packed to the hilt with gear, so being able to maximize your space by having a circular saw on board will do more good than an air chisel…in my world at least…

15. Nate999 June 14th, 2011 9:31 pm

In a class today, we were going through burglar bar evolutions, and one of the instructors mentioned a dept. he knew of that utilized air chisel setups quite efficiently for shearing burglar bar anchors, due to the many housing projects they had. Maybe not ideal for every jurisdiction, but I can definitely see how it could be applicable.

Window Bars

Jerry Smith from Baltimore City (MD) Truck 15 sent in these photos of some easily to defeat window bars. Jerry and the crew of Truck 15 A-Shift were out performing some building inspections and found these bars on a local apartment building. Taking the time to learn about this style of window bars ahead of time can save a significant amount of time on the fireground.

On closer inspection, you can see that the bars are designed to swing open.

This style of window bars is designed to allow the occupant to release the locking mechanism and open the bars from the inside of the structure. The photo below shows the occupant release mechanism. As you can see from the photo, there is a protective sleeve around the mechanism to make it more difficult to "reach in" from the outside and release the bars. *(As a side note, the protective sleeve appears to be improperly installed, it might make more sense to have the opening on the side away from the window?)*

The photos below show the location of the relase mechanism in relation to the window, and the release mechanism with the protective sleeve removed.

As you can see from the close-up of the locking assembly below, it can easily be defeated with the irons from the outside. Placement of the halligan's adz in-between the actual bar assembly and the locking mechanism is easily accomplished. Once the adz is in position, an upward or downward prying motion will

separate the bars from the lock, allowing the bars to be swung out of the way. Another option besides the halligan, is the hydra-ram. Placing the jaws of the hydra-ram in-between the lock and bars, will also make quick work of it. It is important to point out that there is only one lock for each window, making it a one step operation for each window.

This style of window bars will most commonly be found on residential structures (single or multi-family.)Taking the time to ***Identify and Visualize*** how the bars are assembled and installed is essential to our success on the fireground. There is no reason to take out the rotary saw on this one… A simple (well placed) prying motion with the halligan will totally defeat the assembly in one step.

Hot Lock

May 20th, 2011 | Category: Inside Functions, Outside Functions, Tips

Mike Gurr from Pompano Beach (FL) sent in these pictures that were passed on from the off-going crew. The photos were taken by M. Callahan on a typical power line down call. On arrival, the crew encountered a downed power line onto a chain link fence. The crew decided to use the TIC to determine what was going on with the fence. as you can see from below, the fence was approximately 300 degrees, and clearly shows up on the TIC. Even more interesting, the power line was actually found to be touching the fence approximately 200 yards away from where the picture was taken.

The TIC can be used in much more than fire situations, and power line down calls are no exception. These situations can prove to be an excellent training opportunity for everyone on the crew. The interesting thing about this particular training opportunity is that an actual heat source is present. Many times, firehouse TIC training does not involve any heat sources and simply involves finding another member in a darkened room. This is in fact training, but it may be teaching the TIC operator bad habits. In the darkened firehouse room (without fireground heat sources) the person shows up as the heat signature in the room, exactly the opposite of what it would appear in real fireground situations. Everyone who has ever trained with a TIC should already know that, but unfortunately, that sometimes isn't passed n during training.

TIC's are an amazing tool, but its important to remember, just that… It is only a tool. It takes a skilled operator to use it effectively, and like most other tools, can actually be dangerous in the hands of an untrained operator. It is absolutely essential that we all know how to use a TIC, but it is even more essential that we never totally rely on a TIC.

16 comments

16 Comments so far

1. nick May 20th, 2011 5:02 pm

Great job all the way around. Out of the box thinking is what our job is all about. I am taking this one back to my crew and sharing it.

2. J.A.C May 20th, 2011 11:38 pm

   Wow. really intersting to see the potential for serious injury from an energized powerline fence. great information.

3. Matt May 21st, 2011 3:50 am

   Another good electric fence video.
   http://youtu.be/1qkZ3bQF-a0

4. Me May 22nd, 2011 10:04 am

   Is it just the picture, or is that an orange "arc" on the first link of chain on the right side of the lock?

   GREAT call, before someone got hurt.

5. DMAN72 May 23rd, 2011 12:02 pm

   Hey! I sent a post in like that on residential service lines once! Seriously, though, this is one of the best posts ever. People like me that don't know shit about electricity, need to realize that just because it looks safe where you are, doesn't mean there isn't something going on down the street that'll get ya. And I just wanna be the first to mention meter pulling, cuz' y'all know it's coming. All I know is that mama invented electricity. Ben Franklin is the DEVIL!!!!!

6. Del Minnow May 23rd, 2011 5:00 pm

   We just used the TIC on a recent call. We were dispatched for a car accident with rollover at night. When we got there the pt was long gone. We used the TIC to get a heat signature from the driver seat and determine that the police only needed to find one person. We attempted to use it on the field they took off thru but they had already made a clean getaway.

7. Battalion13Chief May 23rd, 2011 7:43 pm

   Lt. Gurr had just finished smoking a fine cigar and had 5-6 cups of hooch when this call took place…

8. Mike May 23rd, 2011 7:55 pm

   Gotta love the BROTHERS in the Fire Service…

9. LAD288 May 23rd, 2011 9:23 pm

   It's a good thing we don't have electricity in my first due area….

   Another handy use for TICs.. Fuel spills in water. Most of the time the camera show fuel as warm if it is floating.

10. RSFDNY May 25th, 2011 11:01 am

    "It's a good thing we don't have electricity in my first due area…."

    Coffee out nostrils.
    Very good 288.

11. LAD288 May 25th, 2011 8:46 pm

    Sorry about about your coffee!

12. Captain engine 17 June 26th, 2011 2:11 pm

    I just had some TIC training the first part of june. The TIC picture is a good picture. I am trying to not be a spoiler, but I always assume something is powered, just as a safety precaution. I let the the trained power line company's lineman or electricain to deal with electicity. We had trainers from FDNY and Boston fire train us on the new tics we recived. They told us to be carful when using on hot power lines. I am still a rookie as far as TIC training is concerned. Leave the experianced person to the TIC and still assume there is electricity in the line.

13. Skippy June 27th, 2011 4:55 pm

    Good post on other options for a TIC. I'm surprised that no one just unplugged the power line. You could use those nifty gloves that are used to pull meters. Just saying.

14. Tango July 1st, 2011 5:32 pm

    Skippy –
    As a firefighter and licensed electrician I'll tell you that firefighters shouldn't be messing with live wires. The ONLY exception might be when a rescue is required, and I'd suggest the "line drag" technique that uses a long rope before going "hands on" with a live conductor, and only in the very few cases where the victim isn't safer just staying put and waiting for the PoCo.

    Those gloves need to be tested regularly, and the thickness required varies depending on how much voltage is in the wires. Most FD's in our area got out of the practice of pulling meters nearly a dozen years ago.

    Stay safe.

15. Skippy July 4th, 2011 9:36 am

    Tango

    We have long went away from the meter pulling business along with throwing the gloves out into the trash. I was being sarcastic on messing with the power line. Electricity was not my calling and therefor myself and my crew stay away from it as much as possible. The last rescue we had involving energized equipment, we

waited on the power co. to DC the source. We still learned that there is enough static electricity built up to "piss you off" according to the lineman. I have seen another department spray a power line away from a front door with a fog nozzle. Would I try that… nope, just try to find another entrance.
My apologized for not being clear on my sarcasm.
Thanks for the information and stay safe out there brother.

16. Mike October 5th, 2012 8:44 pm

The TIC is a great tool on many levels. I enjoy bringing it in on the smells and bells calls in order to get familiar with it. We did an EMS call the otherday where a lady lost half of her finger in the back yard. The TIC was used to help us find it quicker.

Up Against a Fence

July 19th, 2010 | Category: Inside Functions, Outside Functions

Engineer Brandon Roark from South Bend (IN) sent in these pictures of something they recently ran across at a local strip mall. The business was secured with a chain link fence and rolling gate, inside the store. The fence sat approximately two and a half feet inside the entrance. The fence covered the entire store (all four walls had a fence.) The rear door was also blocked by a fence, but it did not have a gate present. Now this fence would be nothing more than a slight inconvenience to anyone with a tool, but it could certainly catch you by surprise. Simply another reason not to drop your tools at the door.

Since the fence sat 2.5ft inside the front windows, it may initially go unnoticed if the store was charged with smoke. After the door is forced, and the push begins, it would become obvious. It goes to show you that in

these tough economic times business owners may not be securing their occupancies in the more traditional fashions we are used to seeing (these methods may cost them money.) These "non-traditional" homebrew security devices will undoubtedly become a more common item we'll run across. As with every forcible entry situation we are faced with: slow down! *Identify and Visualize* what you are trying to defeat… work smarter not harder.

18 comments

18 Comments so far

1. eac July 19th, 2010 11:05 pm

   How are the post secured to the floor, or are they?

2. squad22 July 20th, 2010 8:44 am

   looks like they are bolted to the floor….
   …work smarter not harder indeed…

3. DMAN72 July 20th, 2010 10:09 am

   This building is not in my area.

4. FitSsikS July 20th, 2010 11:05 am

No worries; all fires in this building should have xlnt visibilty as it is clearly marked "no smoking".

5. Keith101 July 20th, 2010 1:50 pm

   They just put the fence in to keep their guard-dog in. So hang on to those tools to fight off the pissed-off pitbull.

6. Chris July 20th, 2010 6:13 pm

   I think the bigger concern is encountering the fence when trying to escape, not while forcing entry.

7. Chris July 20th, 2010 7:45 pm

   I agree with the last post. Gaining entry is one thing but what if you come across this after your well advanced. If they are using chain link fence to increase perimeter security what are they using inside to protect other areas, like high dollar merchandise or register areas even computers. Keep your guard up.

8. DMAN72 July 20th, 2010 9:33 pm

   I also agree with the first Chris. That is an excellent point! Too many times we focus on just being able to get in.

9. Brandon Roark July 21st, 2010 12:41 pm

   yes the post are bolted to the floor. And the entry was not my biggest concern but rather trying to make a hasty escape through the rear if needed.

   I wasn't allowed to take photos from the inside (the occupants were a little less than accommodating with that request).

   Any other questions let me know. Be safe!

10. RSFDNY July 21st, 2010 5:43 pm

    Many FF's dump their tool compliment with the exception of one tool while fire attack is still being conducted.
    The posts above with regard to "Forcible Exit" are DEAD on. Very close comrade and friend dumped the can and only had his hook when he became trapped on the top floor of a rowframe apartment with fire on 3 sides of him. His words, "If I had the can I could have at least been able to get back to the apartment door and buy myself some more time." He dumpes it once the line was in place. He was forced to jump from the third floor. Thankfully the TL basket was rising to meet him. His hook snapped in the child gates leaving him unarmed in the fight of his life. Keep your tools with you and ALWAYS have another way out from within or off the roof.

11. LAD2 July 22nd, 2010 11:50 am

Will a donkey kick break through chain link fence? Or will we have to resort to the trusty old karate chop (be sure to wear a rubber glove while doing this for protection.)

We have a building in my area that has the same set up. If there is ever an event in the building, one one of the OV's job is to take the glass / door and take the fence. Make it a priority to take that fence if possible.

12. DMAN72 July 22nd, 2010 2:11 pm

OK folks, last time….There is NOTHING a donkey kick can't cure!

Identify the Weak Link

July 05th, 2010 | Category: Outside Functions

Jonathan Richardson from Spring Lake (NC) sent in these photos of a door found while crews were out doing aerial placement training. The door obviously has some homemade additional security, but it's not nearly as formidable as it originally appears. When ever faced with a homemade additional security measures, simply take the time to identify how it is secured. It's important to not only identify what is securing the door, but also to identify the weakest link. Yes, there are four chains with padlocks securing the gate, but in this

particular case, there is a easier option. Look again, those hinges are barely held on. Sure a saw would defeat this without issue, but in this case, a set of irons would also do the trick. Simply attacking the right side hinges (since there are only two) would be the quickest option. Anyone who has trained (or better yet, practiced to perfection) with the irons would be able to pry those hinges off the building in no time.

17 comments

17 Comments so far

1. Jon July 5th, 2010 11:03 am

   just take the forks and twist! or if its a bit sturdier just take the adz and force those mickey mouse screws out of the masonry, voila!

2. DMAN72 July 5th, 2010 11:22 am

   Delta Kilo.

3. brickcity1306 July 5th, 2010 6:27 pm

   donkey kick !!! Haaaaaaaaaaaa

4. brickcity1306 July 5th, 2010 6:30 pm

   But on a serious note,, partner saw to the single hinge side and swing it open or pray DEMAN is on the job it is way too friggan hot to do any thing more work then what is needed stay safe brothers ….

5. Ryan July 6th, 2010 11:03 am

   I would just use a saw and cut the single hinge then swing the whole mess out of the way…chances are, if this building is secured in that manner, the whole neighborhood is and the partner saw is a first grab tool for the OVM.

   But yes, a Donkey kick could work just as well…lol.

6. Mansfield July 6th, 2010 5:48 pm

   Why would you donkey kick an outward swinging door or gate? Any door that is fortified and especially heavilly fortified……. use your tools. That is why we carry them.

7. firemanz July 6th, 2010 8:05 pm

   excellent point mansfield. This is why I carry webbing. Tie one end to the grate and tie the other to my ankle then do a reverse donkey kick and pull the whole thing off of the wall.

8. acklan July 7th, 2010 8:52 am

   Mansfield you are right. Donkey kick would only give you a sore leg. Break out the JET AXE!!
   The outside door does not seem it would be much of a problem. It appears to be overlapping with a couple of light chains holding it closed. Bolt cutters would work, if an abrasive saw is not handy.
   The bigger question would be what type of door is behind the "security gate"? That maybe more problematic.

9. DMAN72 July 7th, 2010 11:22 am

   There is NOTHING a donkey kick can defeat! NOTHING!

10. layn_n July 7th, 2010 6:27 pm

    Hey firemanz, dont forget it will take an extra second or two to remove the webbing from the nitrile ems glove. this shouldnt matter though because while your fumbling with that, the other engine co can be pulling the meter. Hey mansfield, welcome to the site. With all due respect, its obvious that your new. The "Donkey Kick" is a running joke that is the cure all to ANYTHING!

11. 19Piper July 8th, 2010 2:08 pm

    DMAN and brickcity – y'all should start a band and call it "Donkey Kick Murphys." You guys are a riot. Thanks for the great site and constant educational updates – this has got to be the best site on the web to promote being masters of our craft. Stay safe.

12. DMAN72 July 8th, 2010 5:40 pm

    What does a guy have to do to be taken seriously on this site???

13. DontBeThatGuy July 8th, 2010 8:50 pm

    i once saw two of my friends stand back to back and donkey kick each other…both were immediately vaporized and it created a tear in the fabric of time….never….EVER…underestimate the power of a donkey kick. Or the smarts it takes to realize a joke in a post.

14. johnvbfd July 8th, 2010 9:05 pm

    DontBe…
    You lie.

    Chuck Norris is the only one with the ability to change the space time continuium. He has no friends. Only people he hasn't killed yet.

    Though we all know, a Chuck Norris Roundhouse kick would shatter this puny attempt at securing the building.

15. Keith102 July 9th, 2010 12:52 pm

    But it would also shatter the building!

16. brickcity1306 July 10th, 2010 8:30 pm

    Dman,, I think we are screwed in being taken serious but that is ok right!!!

    19piper, I would never EVER try to compete with the drop kick Murphy's they friggan rock all day!!!!!! Come join Fighting 45,, I have a show every Monday night and guest appearances when the tones drop … Dman hit me back with the NJ thing we have a bar that has a order of two lbs of wings and the beer is very cold

17. TRTFF July 20th, 2010 12:48 am

    Prior to prying, strike the heads of the bolts first. It loosens, or completely destroys, the bite the lag shields have in the masonry. Did this once and the whole window grate nearly fell on me without even prying.

Interior Security Bars

June 16th, 2010 | Category: Inside Functions, Outside Functions

We have shown interior security bars on the site before, but these are a bit different, they are actually being installed during the initial construction of the building. These bars were found and sent in by the crew of DCFD Engine Co. 27 (Firefighter J. Stapleton, Firefighter A. Pumilia, Technician D. Mungo and Lt. K. Kline.) Interior security bars pose an interesting hazard to our operations. It's worth mentioning that the ones shown here may not actually be noticeable from the outside. They are set far enough inside the window that window blinds would obscure them. So it's possible that the inside team may be the first to discover them. The issue with this particular instillation is that the window needs to be taken out before the bars can be attacked and removed. These bars don't look to be too substantial, but they need to be discovered, and removed early in the operation.

*The picture below has a piece of plywood being held behind the bars to show contrast for the photo.

17 comments

17 Comments so far

1. Donovan June 16th, 2010 1:27 pm

   In my area we have seen these during construction to prevent the tools and supplies from disappearing. Then they are removed before construction finishes.

2. Eric June 16th, 2010 5:56 pm

   I agree. I bet the come out before the rock goes in. Other wise it would be a nightmare for the construction crew to case the window, and to remove them, the home owner would have to take out the rock.

3. FitSsikS June 16th, 2010 7:43 pm

   I agree, they'll be gone when the work is done.
   Not too tough looking though, probably keep the local kids out and that's about it.
   I guess it also allows for some ventilation during contruction without relying on flimsy screens for security.

4. bulldawg June 16th, 2010 11:20 pm

there's something else you can learn from the picture, The piece of lumber being held up to show contrast looks like an "I joist" probably a piece of scrap left over from the construction….the floor wont last long if the place goes up!

5. FitSsikS June 17th, 2010 9:28 am

….2×4 exterior walls and vinyl siding.
Why bar the windows when you can walk through the walls?

I assume it's a bungalow or better yet an addition.

6. DMAN72 June 17th, 2010 10:07 am

I caught that too, bulldawg! I think everyone agrees, it won't take much to defeat this. THE POINT is…you have to know that they're there. Especially during a RIT activation you don't need anything that's gonna slow you down. During a FF emergency is not the time to play catch-up. So "RIT" team members, when you size a building up, actually get up and LOOK at stuff. Anyone can dress up in a RIT costume. OK, Im gonna say it…I would just donkey kick the bars outta the way.

7. RSFDNY June 17th, 2010 10:32 am

In your response area where security devices are in place such as above on first floor windows another option for us is to use the power saw and make verticle cuts through the bottom of the window frame down about 24 inches on both sides. Then making two horizontal plunge cuts 3/4 of the way down between your two verticle cuts. Then giving a good tug on it you create a "doorway" beneath the window. This can be added to RIT drills on vacant or acquired structures.

In addition. Standing on the exterior of these while firefighters are trapped on the inside you must do something to help the brother trying to save his own life. Consider stretching the booster line as it take minimal manpower to do so. Alert EVERYONE operating that you are going to use the line to push the fire back off the trapped member from the exterior. Everyoen MUST know this is happening and interior firefighters must retreat to a safe area so as not to be over run by fire being pushed on top of them. Opening the line over the trapped members head will reduce the punishment he is taking inside and reduce the possibility of flashover from occuring.

This is a desperate measure operation in order to preserve the brothers life and should only be done during a desperate situation.
RS FDNY

8. E1N1G June 17th, 2010 4:12 pm

As FitSsikS said they do not look that tough and if sheet rock is put over them or they are installed after the sheet rock is on, a solid hit with a bar or flat head on all four corners should be enough to pry them from the

frame. Love thinking outside the box, taking the wall is a great idea,but maybe with a couple solid hits the job can be accomplished and faster at that.

9. A Kid June 17th, 2010 11:02 pm

   What are some thoughts on taking windows in order to remove these during fire opps? I understand that we would want to remove these for the guys inside, but in regards to "drawning" the fire to other locations ect?

10. dave June 18th, 2010 7:22 am

    Tools queation- We're looking at these toothed diamond saw blades for mixed cuts (UTSAR). A carbide toothed blade won't cut the bars, an abrasive blade just makes a lot of smoke cutting the wood/plastic. This is pretty flimsy construction, nothing a little applied force wouldn't overcome, but we have a lot of commercial/industrial properties to consider. Hard to justify the $$$ but will if there is a better way.
    K-12 is not the first tool off the truck, but we know where it is and how to use it.
    tried the donkey-kick, not NFPA approved!

11. Gilly June 18th, 2010 8:56 am

    Dave, check out the Power Twister Blade. We use them on on are saws on are rescues. Will cut Concret (dry) steel, all metals, plastic and its ok in wood. We have recently donr a some testing against other blades and the Twister blew them away.

12. Tool Time June 18th, 2010 10:03 am

    This is most likely a home owner special the tarp covered yard debris in the rear gives it away. Most likely a garage with upstairs adult play room someone is building at there current home.

13. brickcity1306 June 18th, 2010 5:56 pm

    There is something I have always wanted to try in an instance like this, when "softening the structure" is ordered take a saw and run down both verticals about 2" from the window and run to the floor. Then run across the bottom cut to cut finish at the top 1" above the window. I am told this will keep structural integrity and makes a big ass opening.. Any one try this in a light construction in real conditions?? I have done it at the drill ground and went easy..

14. RSFDNY June 19th, 2010 12:33 pm

    Brick;
    Read my post brother. As you said, "went easy." I have my guys make these doors out of windows as a pro-active move at difficult fires. Never had any lightweight building affected when doing this. Keep in mind that lightweight constructed occupancies also limit our interior fucntion time dramatically. Hence why this evolution may want to be considered early on in the fire as it will provide means of egress prior to the shit hitting the fan.

15. brickcity1306 June 20th, 2010 6:52 am

    RSFDNY that move I have done,, Just walk out of a ranch style house and not realize it was a window 5 min ago..

    I was more referring to taking the whole mess out in one big chunk of crap,, Remember compliancy kills yea it is a light construction and a piece of crap but our bread and butter light construction kills more of us every year than any other structure we encounter..

    Stay safe

16. Matt Thomson June 26th, 2010 10:40 pm

    Ran into these at a fire last shift except instead of being bolted into the frame the bars ran through the framing.

    2 Story mixed use, nightclub on the first floor, apartment under renovation on the second, balloon frame construction. Fire in the kitchen in the first floor rear. Smoke showing from windows and eaves on arrival.

    Windows on the A and B sides had bars on the inside.
    No doors or windows on C or D. Not many fire codes being followed in this joint.

    Managed to get the first set of bars with the halligan due to rotted wood. Spent some time with the halligan on the second set and finally went back for the diamond blade saw. Kudos to my partner for telling me when I'd been beat and encouraging me to go get it.

    Bars were small diameter but framed into the structure horizontally at two points on each side. I cut both points on one side and bent the whole set of bars out of the way enough to make a good exit point.

    Beacause I had to take the window first in order to get the bars, I was also working in the smoke and heat. Fortunately, the saw wasn't affected.

    Lesson learned, if the first trick doesn't work quickly, try something else!

17. brickcity1306 June 27th, 2010 5:00 pm

    Matt,, this quote "Lesson learned, if the first trick doesn't work quickly, try something else!" is something lost in our service. I try and drive this message it into my recruits every day, it is simple If it is not working have a plan B through Z.. I have seen so many times in rescue be it Fire fighting, vehicle, trench, or any other discipline we do, they have something stuck in there figgan head and are going to make it work come hell or high water. I have a timer in my head, if there is no progress In a amount of time that I like it is time to switch or have a fresh set of fire fighters move in..

Vent Grills

May 05th, 2010 | Category: Building Construction

We have shown many photos in the past of deceptive buildings. We truly believe they all hold a valuable teaching point regardless if they are located in your area or not. The idea is to spark your curiosity to evaluate all of the buildings in your response area. Perhaps more importantly when evaluating buildings and building construction, you should always suspect that what you are looking at my not be the case. Engineer Steven Negedly from Orlando Engine 9 sent in some more photos that prove this point. These pictures are taken at the headquarters building for a local mass-transit bus company. The business type alone should have you on the look-out for something out of the ordinary, and the vent grills in place of some of the windows should be the dead giveaway. Well the backside of that "structure" reveals the truth, it's simply a facade that contains the fuel tanks (biodiesel, diesel, and gasoline.) Keep your eyes open, know your area, and always expect the unexpected.

Basement Access

February 01st, 2010 | Category: Building Construction, Inside Functions, Outside Functions

Timothy Papp from New Haven (CT) Fire Dept sent in these photos of something he found while replacing some decking at a friend's house. The house has the bilco basement doors completely covered by the deck. Fortunately the deck had an access panel built into it, but this may not have been noticeable on the initial 360 of the structure. If this was the only basement entry point, this could certainly lead to a delay in access during operations. Of if crews were making a push from the inside, this secondary means of egress may

even be known about. Another thing to consider is that these doors would only be able to be opened from the outside. When performing your 360, make sure your are not only looking at what the building is telling you, but you should also take notice of what the building is not telling you.

22 comments

22 Comments so far

1. bob February 1st, 2010 4:45 pm

   that is interesting

2. bulldawg2299 February 1st, 2010 7:17 pm

   Picture that at three in the morning, with a foot of snow on top of it..

3. Matthew Saylor February 2nd, 2010 12:31 am

   Just had the same thing in Baltimore City a few weeks ago. Squad 40's first due area for a Working basement fire. Home had nice glass block for windows in basement under the deck that presented a real challenge. About a 24" clearance under the deck to lay sideways and sledge hammer through the glass block for ventilation

4. Goody February 2nd, 2010 3:10 pm

   Man, this would definately be an interesting event in case of a floor collapse w/ff's going down into the basement. Once you found the door… if you found the door. You would still have to worry about the BBQ tongs on the other side. With no latch or handle visible from top side, I could predict that this entrance would more than likely not be found very easily and hopefully the egress from within would be possible. Good find, you always learn a lot about building construction during demo, solid work.

5. mike February 2nd, 2010 7:29 pm

   Not a bad idea by the home owner covers the doors quite well, bad for firefighters, a good size up is not going to let you see that at 3 am. I could walk around that deck 3 time and not see it.

6. Jack February 2nd, 2010 11:20 pm

   We have one of these on my house. We put it in before I became a fireman! The best way to open it, with what you have in your gear, is a screwdriver.

7. LAD288 February 3rd, 2010 7:10 pm

   I hate to see how they hid the electric meter.

8. Goody February 3rd, 2010 8:24 pm

   You didnt notice the power drop to the dog dish?

9. Firefighter4 February 4th, 2010 1:29 am

   so how would one open it without destroying it?

10. LAD288 February 4th, 2010 4:37 am

    I think the easiest and least destructive method for gaining access is to drop a few Centaur Stomps. That should do the trick!

    On a more serious note. I think if you are in a situation where you need to open that bulkhead for egress or rescue, and you could actually find it, destroying it would be your last concern. But it appears a few passes with a saarr should take care of the floor joists. After that (hopefully) it should open like a regular bulkhead door.

11. Firefighter4 February 4th, 2010 12:53 pm

    I am fully aware that if it a dire emergency that you shouldn't worry about destroying the opening to get access to the door. But what if you end up there on a medic call and the only way to get the person out is out that door. Because it seems to me that you will not be able to open it up from the inside

12. Keith102 February 4th, 2010 1:54 pm

    If that is the only way out, then I don't see anyway that you can access it without destroying it. Just make straight cuts with the saw and make it look pretty.

13. LAD288 February 4th, 2010 5:58 pm

    I agree with Keith. If it is the only way out. You have to do, what you have to do to get the patient out.

14. TJ February 4th, 2010 7:28 pm

    Guys I'm from the midwest and don't think I've ever seen this in our basements. What are bilco doors? Does anyone have a better picture of what they look like?

15. Metro FF February 4th, 2010 7:43 pm

    Google, "bilco doors". Click on images at the top and you will see what they are. It's just a basement access door with a poured concrete "well" leading to a basement door. I guess you could frame up a "well" but not sure it would make any sense. But who knows what people do in the rural parts. I grew up in the northeast and they are pretty common there. Not sure exactly what areas of the country they are prevalent but I can say I haven't seen any in Florida.

16. Nate999 February 5th, 2010 9:05 am

    If you're there on a medical call and can't open it from the inside, send someone to the outside to at least see why. If it's got an access panel like this one, take it out and open the door. One could also ask the occupant as well.

17. nh20 February 8th, 2010 10:42 am

    The section above the door is framed independently of the main part of the deck. The section is dropped into place inside the box around the Bilco. Here in the Northeast, this is not that uncommon. Some designs incorporate hinges, while others are like this, a drop in. You must pry the section up until it clears the main decking and drag it to the side. It will come out as one unit, decking and joists. Just keep in mind the weight of the section. Even a small section framed with 2×6 or 2×4 framing and 5/4" decking will be heavy, and may require a couple of people to remove. Check for flush-mount hardware, like tie-down loops used as handles to aid in the removal. Most of these are built so that the homeowner will be able to remove them alone.

18. CT Drake February 15th, 2010 8:02 pm

    A friend of mine has a 100+ year-old house with the back porch decking covering the Bilco. This is the only access to the basement, which contains all of the utilities. My own house has the original opening for the Bilco door, but it was removed years ago and an enclosed back porch was added. However, this still makes for a head-knocker if you're not careful. Watch out for these as the only means of access/egress in old houses…

19. CFR33 March 20th, 2010 11:33 am

    I know this house. The pannel has lift tabs installed on the top. Yes it would be hard to see in the 360 but with the lifting rings installed on the floor it would trigger me to look when I was walking on the deck. Now In this area of the country snow could cover it if the home owner didnt clear the whole deck. In the mid-atlantic to the northeast basments with bilco doors are the norm. Not many older homes that dont have a basemnt. In my area I know plenty of basements that are still dirt.

20. bfny December 12th, 2010 2:22 am

    nice work but this won't pass any local code standards in the world and is extremely dangerous. there is a reason why bilco doors are build with a certain slope – it is so that snow can't pile up but more importantly you can't rest (or leave) anything on top of it to hinder access from the inside.. to the person who said you can just 'ask the patient' – what if the patient is having a heart attack and they're unconsious? seconds are a matter of life and death.. the only solution that might work is by building an 'elevated table' like structure on top of the bilco door so that there is no obstruction with opening the door .. the bottom line – you lose all the space that the door takes up (open & closed) ..

21. Nate999 December 12th, 2010 3:07 pm

bfny,

I agree that this is dangerous and can be missed, I was just conveying that I don't think the medical call scenario holds water. Not trying to talk EMS, but if the patient is that dire, and chances are and you need to get them out the Bilcos (as opposed to the way that you came in), I'm guessing your stretcher isn't already on the backside of the house. Kind of makes the "seconds count" argument moot. If the only occupant of the house is unconscious, I'm taking the sure route and going back out the way we came in, especially if they locked the Bilcos outside.

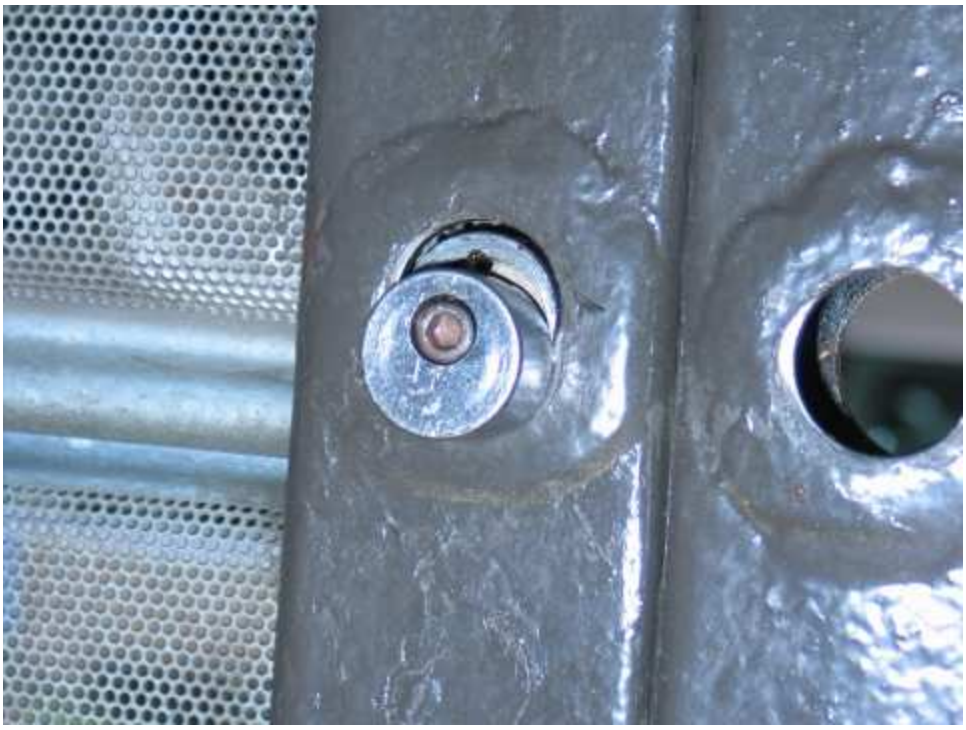
Rollup Pin Lock

June 08th, 2010 | Category: Outside Functions

Lieutenant Brian Dalrymple from Richmond (VA) sent in these pictures of a different roll-up gate lock then we have shown here in the past. This particular lock is a pin style lock that goes through an opening in the channel and "cams" into the locked position. As you can tell from the photos below once the lock is "cammed" into place it prevents the roll-up gate from opening. There are a number of methods that would defeat this locking mechanism. Upon closer inspection, it was determined that those methods won;t work on this particular lock. Another option may be to attack the exposed cam by inserting the rotary saw in between the gate and the channel at a 45 degree angle.

The photo above shows what the lock looks like removed from the gate. The face of the lock is about 2” in diameter and the overall length is about 4” long. When the is gate closed, the lock is inserted through the channel, the key is then turned ½ turn. Turning the key causes the last ¾” of the lock to “cam out” thereby locking itself in place.

The photo below shows the back of the lock. You can see once the cam is is the lock position, it holds the lock mechanism in place.



7 comments

7 Comments so far

1. Andrew Brassard June 8th, 2010 10:17 pm

This lock is called a Medeco Gate Lock, it is a very expensive ($400 to $600) and it is a very formidable lock. I disagree that a 45 degree angle cut on the gate rail will work to get this lock out. This lock has a pivoting cam on the end of the lock bolt, this bolt passes through the front and back rail that prevent this lock from being pulled out once the rail has been cut. Some methods of forcible entry that I would utilize for forcing entry into these type of locks is:

1) A Rex Tool can be used to pull the lock out of the rail, now this method would not work in gate lock shown in the photo due to a thin piece of pipe being welded onto the rail to prevent the lock being pulled. But for a lock that does not have a guard, through the lock works real nice on these.

2) A forcible entry saw can be used to plunge cut through the gate and into the back of the lock cutting the cam of the back of the bolt. This is a very reliable method and works great on locks with guards.

3) Cut the gate! If the lock can't be forced or the gate has been distorted due to fire conditions then cutting the gate is going to be your primary attack method.

Great pictures thanks for posting.

Thanks,

Andrew

2. Nate999 June 8th, 2010 11:12 pm

While cutting the rail may not work as mentioned, I think that the plunge cut BETWEEN the front rail and gate would work. with the bolt cut, you should just be able to pop the lock right out.

Andrew, on this lock, does the rex tool just separate the lock body fron the cam (no key tool needed)? I'm not familiar with these locks…the only Medecos common in my area are elevator controls or Knox Boxes (and they're expensive, too).

3. B. Dalrymple June 9th, 2010 7:55 am

Andrew,

You're right that the "bending the rail outward" method will not work with this particular lock. There were a couple of other photos that I sent in that didn't get posted. This lock has to travel through three holes before the cam is engaged. First, the hole on the front side of the channel rail, then through the gate itself and then again through the backside of the channel rail. Once through all three holes, the key is turned and the cam engaged. If cuts were made above and below the lock as in previous posts, it would be next to impossible to bend the rail outward since the lock would be anchored on the backside channel rail also.

4. jimm June 9th, 2010 9:18 am

Guys, I made the correction to the post and added the additional picture. My apologies for the misunderstanding.

Brass, your right on with those three options… In that order. Start with simplest and quickest and go from there. -Jimm-

5. Chris S June 9th, 2010 10:40 am

Andrew,

Just curious about how you can expect the lock itself to react to being pulled with the Rex Tool. Are you hoping to break an internal component of the lock and have the cam shear off the back?

6. Andrew Brassard June 10th, 2010 8:22 pm

Sorry for my delayed response……

The Rex Tool pulls these locks out fairly effectively. Basically what happens is the bolt passes through three pieces of thin gage metal as pointed out before (the outer rail of the track, the gate, and the back rail of the track), the cam then pivots into the locking position. If you look at the 4th picture you can see that a grade 8 bolt holds the cam in place, there is very little chance of you breaking this bolt (at least I have never seen or heard of this happening). What ends up happening is that once the Rex Tool has been driven down into place and the force is applied the lock is pulled through the opening bending the rail and door on it's way through. Is this an easy operation? no…… but you can put a little muscle into it and you can get it. The fact that this lock is so well built helps in it's removal, the lock puller can get a real nice bit onto the lock and you don't have to worry too much about the lock breaking during through the lock operation.

Using the saw to plunge cut between the front rail and the gate is an option, but you must be careful when performing this operation and some times because of the way the saw is set up this type of cut might be tougher than it looks. The belt drive may hinder you getting a real flush cut when cutting the left handed rail and the body and handle of the saw may impede your cut on the right handed side, this is why (in my opinion) the 45 degree angle cut is preferred. With this type of cut you have to look at how the lock and more the rail are installed, if you look at the photos that where provided the picture shows a center rail that is usually found in-between two gates on a large store front or one large section of gates over multiple stores. On these center rails that are not mounted to the wall a plunge cut would work because the back part of the lock with the cam could be pushed through the back of the gate freeing up the gate. But on gates that are mounted onto the wall there is usually not enough room to push the pin through before it hits the wall. So it is an effective method if utilized in the right circumstances but I like to stick to the 3 methods discussed in my first post.

Good posts guys! Keep them coming.

Stay Safe Brothers

Residential Security Door

May 25th, 2010 | Category: Outside Functions, Videos

Lieutenant Nate Quartier from Ormond Beach (FL) Engine 94 sent in these photos of something the crew was discussing around the firehouse. One of the brothers, Jim Peter was telling the crew about a new residential security door he saw at the local home improvement store. So after a short discussion, the crew loaded up and headed to the store for some impromptu in-service training. (Which is a great idea, an amazing amount of training opportunities await us there.) At first glance the door appears to look like any other residential door, but the price tag alone should let you know it has something a little extra. (Of course the price won't be known when we come across it on a structure.) The door is an outward swinging door with an extra lip over the jamb to cover the traditional gap, and the hinges are more substantial, more like hinges found on some commercial doors. Upon closer inspection, it becomes obvious what sets this door apart from the others. It basically has six deadbolts (4 in the middle, and one top and one bottom) that are all controlled by a single lock mechanism.

Below is a video for the product. Don’t mind the fact that it is a promotional video, it still has some good information about the construction of the door. We certainly question their forcible entry demonstration, but it seems that through-the-lock would be the simplest way to go on this one. Speaking of their forcible entry techniques… That is why it is important to train, study different doors, and lock mechanisms, and to identify and visualize when forcing a door. No one who ever wears our uniform should look that ridiculous when faced with a challenging door.

http://www.vententersearch.com/videos/flv/mastersecuritydoor.flv45 comments

45 Comments so far

1. BenT May 25th, 2010 10:03 am

   The door they are testing and beating on has 8 bolts. Look when he opens the door right around the 3 min. mark

2. brickcity1306 May 25th, 2010 10:13 am

LoL sick door let it burn

3. Nate DeMarse May 25th, 2010 10:24 am

While very formidable, I think a set of irons and two members that understand basic forcible entry concepts can and will defeat this door.

You will most likely have to set the forks 6" above or below each bolt or set of bolts, but in a few minutes, with proper technique and practice, you would defeat this door.

Most of the shots with the sledge-hammers in the video are completely dispersed across the door, and almost no force is applied to the lock.

I believe this is the door that was designed to withstand the forces applied by the Hydra-Ram.

Although formidable, I don't think the door is unbeatable.

4. acklan May 25th, 2010 11:22 am

Break out the K-12 and be done with it.

5. MFD Roof May 25th, 2010 11:24 am

Tough door-Would definitely like to see a video of a well trained crew defeating this door with various methods(Irons,battering ram,saw).

6. DMAN72 May 25th, 2010 1:14 pm

Im voting for through the lock on this one. Im guessing it's just a rim cylinder that operates those bolts. People underestimate the speed and effectiveness of through the lock. Or, of course, a donkey kick. On a separate note, how come every time people do toughness tests, they shoot the thing? Bullets aren't that strong?

7. Ryan R. May 25th, 2010 4:12 pm

Great post and find, It was hard to tell in the quality of this video but I think they were going crazy with sledge hammers beating on an OUTWARD swinging door. Might as well be the guy that trys to kick the outward swinging door down.

I have to agree with Nate and Jimm on this one, hard door or not, use solid proven tactics and act like we have been there before. Plan A, B and so on.

Nate, you know anything about the lock cylinders they use on these setups? Typical mounting bolts that you would find on a tubular deadbolt or rim lock?

8. eac May 25th, 2010 4:25 pm

   Some of the doors they showed had bolts spaced out well along the edge of the door. Assuming that the door is installed in a metal jamb, then I do not think that it worth the effort of traditional tools. Also it looks a if they are out swinging doors. If you have to navigate around the flange, you may not have room to manipulate the irons (in a hallway or a narrow entrance). Leaving through the lock, a circular saw or some other access point.

9. Nate DeMarse May 25th, 2010 5:43 pm

   I don't know much about the lock cylinders. I'll see what I can dig up from my sources.

   To me, if the door is set in a metal jamb and metal frame, and the door itself is metal…that makes me want to attack with the irons even more. Navigating around the flange or angle-iron is not a problem with a little practice.

   I am staying away from the power saw approach until I verify that my efforts on the irons are of no use. I know in at least some of these doors, the actual locking mechanism is made of boron. Cutting boron with a power saw is going to be a lot longer of an operation than most may think (and that is just one bolt). Some of these doors had EIGHT! Cutting the door is also not a viable (timely) option in my opinion either.

   I am game for giving through the lock a shot if the cylinders allow for it.

   Again, just my opinions on my game-plan. I don't think anyone is right or wrong here.

10. sixtruck May 25th, 2010 9:21 pm

    WOW! definitely an impressive door. Now if anyone can get one of these to put it through its paces fire dept. style, please video it and post it back on this or all other sites.

11. David May 25th, 2010 11:58 pm

    I am thinking breaching the wall beside the door. Reach through the hole and flip the deadbolt. I am willing to bet that it does not have a keyed deadbolt on the interior side. Provided it is not a masonary wall, it should be fairly easy. Espically if you have chain saw or cutters edge saw

12. tp May 26th, 2010 12:13 am

    Nobody in my district could even afford this door…especially in this economy.

13. Tower5 May 26th, 2010 5:16 am

    What about a length wise cut with a Demo Saw? The construction did look any heavier than a normal steel door.

14. Lance C. Peeples May 26th, 2010 9:06 am

This appears to be a variation of the mul-t-lock. One important thing to note is the swing of the door. If it swings inward (as most residential doors do) a Rabbit tool can be used on the side bolts and upper bolts. When these are defeated a sledge hammer can be used to defeat the lower bolt. Pulling the cylinder may not work if the bottom bolt is designed to disengage from the cylinder (I don't know if it is or not on this particular door) or if there is a guilletine shutter that drops over the operating mechanism. If the door opens outward the best tactic would probably be to use the saw to cut an opening in the door then reach in and operate the thumb turn…providing that a key is not also required from the inside of course. This would also possibliy work on an inside swinging door. Just my two cents. Stay safe Brothers.

15. Lance C. Peeples May 26th, 2010 9:08 am

    I agree that going through the wall and operating the thumb screw may also be a viable approach in some circumstances.

16. 19 Piper May 26th, 2010 2:30 pm

    Great post. It's a toughie. But a Super-Donkey Kick would do it, maybe a Super-Duper-Donkey Kick would be necessary if it had the extra deadbolts….

17. Marques Bush May 26th, 2010 3:44 pm

    I could not tell or did not hear if they said the door was in cased all the way around. From the video they had it set up as an outward swing door, so it brought to my mind of attacking the hinges. I would love as I'm sure everyone else would to have a shot at one of these doors.

18. dave May 27th, 2010 7:13 am

    Lock mechanism is not a point of attack, it is integral to the lockset. This is a tough door, well though out. Once we open it, it will never close again- the need for destruction is certain. I vote K-12. Or let D-man donkey-kick it.
    Note: they didn't show the 5 security studs on the hinge side. Cutting the hinges gets you zilch.
    If you could spread the entire frame a couple inches(!) the door might open. Tough to do if the installation was done right.
    Just cut it. Or force another door. Or make your own.
    No sympathy for the owner. If they can afford this, they have plenty of money.

19. RSFDNY May 27th, 2010 11:01 am

    Drug dens are fortified with a number of imporovised security devices. Money spent to protect their investment. TO the opposite end of the spectrum Safe Rooms are popular amongst the rich and paranoid. Never rule out finding these inside the occupancy of the well off. I agree with Nate's take on how to gain entry. Old me says Irons…New me says Thru-The-Lock.
    Suprised a fireman did not invent this door. Thanks for sharing.

20. firefigher_632 May 27th, 2010 12:35 pm

From what the video and the photo show the door is sold as a completed assembly that is anchored into a wall. The likelyhood of prying both sides of the door to get past the bolts is very low. I don't know the composition of the bolts but if they thought it out as they did with the rest of the door then cutting may take awhile if it is possible. I think that through the lock may be the best option provided they did not fortify that too. I wonder if the extrication spreader would work.
The best way in might be to breech the wall next to it and open the door from the inside.
This would likely be the place that is completely sealed up to save energy but won't be sprinklered as it is too expensive!!!
Excellent post, thanks.

21. me May 27th, 2010 3:05 pm

Fire conditions……try before pry, then find another door/window. If none make one.
If grandma has fallen and can't get up, maybe then we can take our time and get throught this door. It is not impossible but not easy either.
Most (residential) security is often heaviest at the most seen door/entryway.
Sometimes we can put down our biceps and pick up our brains.

22. Hardy May 27th, 2010 4:25 pm

Pretty tuff door, but I'm with "me", Try before you pry. If that don't work, I'm finding another entrance, either a door or window. Depending on conditions of course.

23. firefigher_632 May 27th, 2010 7:59 pm

I wonder if anyone has any drawings on how the door locks are laid out?

24. Nate999 May 27th, 2010 9:13 pm

Below is a link to the manufacturer's specs that shows three decent pictures of the lock mechanism and how it's connected to the top/bottom bolts.

http://www.mastersecuritydoors.com/includes/pages/pdf/pdfhires/MSD_Spec_EX4_ID_Outswing.pdf

We're gonna try to get back to the store next shift to check it out a little closer and ask a few more questions. There didn't appear to be any visible mounting screws on the inside deadbolt knob, as you'd find with a common tubular one.

While I'm a fan of the irons, it'd take more time/effort than it's probably worth. Even if you work around the door lip, the frame assembly seemed really solid. Other than going through the lock (sadly, we don't have a lot of experience with that here) or loking for another entrance, we were tossing around the idea of making a vertical cut down the entire height of the door, approx. 8" in from the lock side. Then, you could just use the irons like a normal outward door. Any thoughts?

25. Davud May 27th, 2010 11:40 pm

The vertical cut the entire side of the door might work. provided that you cut so that the bolts on the top and bottom of the door are on the lock side of the cut.
as for thru the lock i am not all that experienced in this. however it looks from the video that the key has to be turned mutliple times. That leads me to believe that this is not a normal mortise lock. So i am wondering if the normal sweep between 5-7 or 10-2 would work to flip the locking mechanism. Plus i would be interested to know if the locking cylinder has been fortified in some way to prevent it from being pulled.

26. truckie942 May 28th, 2010 2:21 am

    Im gonna go check one of these doors out and see for myself. One thing that I havent seen anyone address is that this door will be installed in wood framed ajmb in most residences, so that will be a weak point! I'd first try the irons, if that didnt work Id get the Circ saw and Bird beak cut around the locks and door knob to weaken the door. I need to see this door in person and get some pics.

    And I agree with most of the posts, hitting an outward swinging door with a sledge hammer accomplishes nothing!

27. Jay May 28th, 2010 10:54 am

    We have these doors (maybe a different manufacturer) in an apartment complex in the county. We blew the seals on a hydra-ram trying to force the door. The crew ended up breaching the sheetrock wall on the the side of the lock and reaching in to open the door. Not sure if they attacked the door conventional

    You might not like our solution to the problem. We have a Knox Box on the front of the building. Three sets of keys are placed in it and it gets us into every door in the building.

    We have a locksmith who has a door on display in his store, I will see what I can get out of him.

28. BShiftTiger May 28th, 2010 4:12 pm

    I say go through the glass sliding door around the C side…

29. acklan May 28th, 2010 10:25 pm

    JetAxe!!!

30. Texas FF May 29th, 2010 4:01 pm

    If you check their wesite http://www.mastersecuritydoors.com under products there is a PDF for every style door that shows how the door is made

31. Black Hat FF May 29th, 2010 8:10 pm

    Hey, I've been reading these articles for a while and I've never felt like I've had anything to contribute…

I want to apologize for using the E-word here, but I'm a volunteer in a combination department, so I never know what piece of apparatus I'm going to climb onto.

My first due Engine, carries brand-in-specific hydraulic spreaders and cutters. I'm sure bringing the jaws up to a burning building would raise some eyebrows, but with a solid purchase point could you perform a large scale door-pop? Something's going to give, and it's much beefier than a hydra/ram and/or Rabbit Tool, right?

32. Lance C. Peeples May 29th, 2010 9:42 pm

After reviewing the manufacturer's specs my previous comments about this being a variation on the Mul-t-lock are not exactly correct, i.e. the lower and upper bolts of this door project into the side frame and not the upper frame and floor as in the Mul-t-lock. I believe that conventional forcible entry starting at the top bolt and working your way down will ultimately be successful given enough time and muscle. The rabbit tool should be successful despite the anecdotal failure of the seals as reported above. Backup plans include breaching the wall to operate the operating mechanism (or alternatively cutting a triangle opening in the door and operating the mechanism). As a last resort cutting a door withing a door or breaching the wall as a means of entry might be alternatives.

33. Doodle May 30th, 2010 1:06 am

Looks like we might have to remove the house from the door, may be a different way of approaching it…just may be quicker.

34. firefigher_632 May 30th, 2010 10:16 am

I have looked up CISA who makes the lock. This lock is set up as a complete unit when it is sold to the door maker. It looks like the only active bolts may be on the latch side with pins on the hinge side. The locking system was originally designed for high security uses such as court houses and detention centers. Many if not all the models utilize a special key which requires more than one complete turn to operate.
It looks like it may be possible to cut the door just inside of the hinges to defeat the hinges and pins. It does appear that the through the lock tactic will not work as there are several linked connectors which would prevent the bolts from being retracted without special tools.

35. BRTboss May 30th, 2010 10:40 am

@ Black Hat FF I think if you were able to get a good, solid purchase point, then it may work. Somethings to consider are; Available time for such undertaking, The operating PSI of the particular tool, experience of the tool operator. If this technique does work, then chances are that the door will no longer be usable. I think the best way to attack this would be try before you pry, then move on to another entry point.

36. Lance C. Peeples May 30th, 2010 11:02 am

It might not be possible to move onto another entry point (save for a wall breach). If the occupant went to this much trouble it is likely that other openings are high security as well. Also, this may be found as the only door into a high rise apartment with no other access or perhaps a "safe room".

37. jp May 31st, 2010 10:00 pm

    this is stupid. break a window and enter. dumb door idea

38. jerm169 May 31st, 2010 11:46 pm

    We have some of these locks in the Brighton Beach area of Brooklyn, they are very popular with our Russian friends. You have to force the door conventionally and then after getting enough of a purchase you inert the halligan and place the adz on the jam. This has given us enough force to bend some of the locks and pull them out of the jamb. It is a tough lock to force, but I am thinking on this door, the fact that it is so formidable might make it a good door to pry against.

39. Junior June 2nd, 2010 6:35 pm

    Not sure if anyone has suggested this yet…

    In the "Tips from the Bucket" section, there shows a entry technique known as the "Doggy Door Cut". I think this cut would be a great way to get this door open. When you cut below all the locking mechanisms you make one door into two parts. The lower section of the door is going to be a million times easier to open with conventional forcible entry techniques than the top will, considering you now only have to deal with 1 dead bolt on the bottom as opposed to the 5 you have to deal with on the top half of the door.

40. truckiebro June 7th, 2010 2:07 am

    Go for the window instead…very tough door…

41. Kevin June 12th, 2010 1:08 am

    Facebook this one guys! And the Mayday prop. Even knowing that drop is coming would be special.

42. RFDtruck June 15th, 2010 5:46 pm

    Why would a K-12 with a good blade be the bad choice here? Not talking about those girlie composite blades, but a good diamond crusted blade. Seems simple that a nice "V" cut above the latch extending down to the bottom on jamb side would swing the down out or in. If it still won't budge then look for the top mount and bottom mount latches. not that experienced just shooting an idea out there.

43. GabeT August 1st, 2010 2:31 pm

I think the main thing to take away from this is that it is an outward swinging door. Very uncommon in residential construction and def not up to code. Find an easier way in. Why was time here when there are much easier faster ways to get in.

Would You Expect It?

March 30th, 2010 | Category: Outside Functions

Over the years we have shown numerous interesting homemade supplemental security devices, but most of them are found on commercial structures. Would you have ever have expected to find them in a residential structure? We sure hope so. You shouldn't be surprised to find them on any type of structure. Deputy Chief Jon Starling from Sterling VFC (Loudoun County,VA) sent in these photos of a find at a residential structure. This door was found in the basement and provides access directly to the outside of the structure (with four steps up to grade level.)

The wooden L brackets are secured into the doorframe with two lag bolts on each side. The drop bar itself is a 2×4 that extends past the door on each side. The door is a one hour fire rated metal clad door. The walls surrounding the doorframe are concrete up to the 3 foot level and 2×4 framing (blanket insulation, sheathing and vinyl siding) above. There is no visual indication from the outside of the presence of the bar. This is common when a drop bar is utilized with an inward swinging door, since the brackets are mounted to the doorframe.

With a little determination, this can easy be defeated but may certainly be unexpected. Sounding the door should alert you to some sort of supplemental lock at that level. While are not trying to say you need to

know everything about every single structure in your area, we are saying you need to keep your eye out for as much as you can. Always expect the unexpected.

26 comments

26 Comments so far

1. Mick March 30th, 2010 6:39 pm

   Everyone wants a little extra security now days!

2. Michael March 30th, 2010 6:52 pm

   Ideas for forcing this door?

3. MPH March 30th, 2010 7:37 pm

   Use a saw, treating it like a plywood covered door/window. Or force the wooden frame around he door. These metal doors set in a wooden frame in a masonry wall can often be "hammered" inward with a maul.

4. riley March 30th, 2010 9:36 pm

   About 9 months ago we were on an EMS run when we noticed the back door of the residence with pretty much the same set up. It was a wooden exterior door and frame set in a block wall. Not a huge deal, just a minor setback. Start with the irons, and have a saw handy.

5. DMAN72 March 30th, 2010 9:42 pm

   We ran in to this very thing on a fire call several months ago. I tried to force the door(a basement door) conventionally. I told my captain "Something's up" to which he replied "Give me that f@#king thing" (the halligan). He then said "It won't open." Luckily it was a panel door and I just broke out a panel. This being an aluminum door, I would determine where the door was being held and split the wooden door frame with the pike of the halligan, thus weakening the bolts, then donkey kick the emm effer open.

6. MFD Roof March 30th, 2010 10:09 pm

   For guys that work in the "core" areas of major cities this type of security bar is pretty much expected for all doors.On this particular set-up the bar is set higher than most of the ones I've seen which actually makes this a little easier when used for a metal clad insulated type door ,as it allows you to more easily bend the door inward,then reach up with an axe or halligan handle and dislodge the bar. My choices in order of preference to defeat this would be.
   1.Saw
   2.A couple of good mule kicks which will bend door inward reach up with handle of axe and dislodge bar
   3.Chop through with axe(we use 8# pick heads) at the level of the bar.The first 1 or 2 strikes will get you through the door the next couple will split the 2X4

4.If you have a 1 or 2 man battering ram it will make short work of this,just use it at the level of the bar.
5.If none of these work find a VERY large ill-tempered recently divorced truck guy and hurl insults at him until he charges,step away at the last second and …..problem solved.

5. A VERY large Truck man with a bad attitude and a square head

7. 13 Truck March 31st, 2010 8:00 am

MFD, I think #5 is my favorite.

8. riley March 31st, 2010 8:58 am

We had a #5 once. When he got really mad it would scare the number 2 out of you!!

9. MFD Roof March 31st, 2010 10:40 am

Maybe I should have put #5 as option #1 what with the added entertainment value and all. Oh and just ignore the 2nd #5 it was going to be edited out but there is no edit function so it was accidentally included.

10. RR E8T March 31st, 2010 3:16 pm

DMAN hit it on the head with weakening the jamb. Those lag bolts are only as strong as the material they are mounted in. When you locate the resistence baseball swing the pike as deep into the jamb as you can. Push down on the bar using the adze to leverage the door. Even if this doesnt get you all the way through you now have split that pine and weakened the jamb so much that moving back to conventional forcible entry should finish the door off. A good placed pike into the jamb with some prying will weaken the frame much faster than battering the door over and over. Just my opinion.
We have found some residentials just recently that are using 1 1/2 thick rebar in the way of the old police locks. They make a homemade mount on the locked side of the door and then bore out a hole in the floor a few feet back letting them place the bar in both mounts.

11. MFD Roof March 31st, 2010 4:05 pm

I agree that the halligan is the best all-around tool for forcible entry,but that does not make it the BEST for each individual situation.Some people use the halligan for every situation but many times it is a compromise over a better tool.It is in essence a prying tool and I feel that in this situation an impact tool will be much quicker.This door will not have to be battered repeatedly if it is recognized for what it is quickly enough.These types of doors are easily bent inwards and you should then be able to pop the bar up and off.I'd say the methods I reference will get you entry in 15 secs or less.

12. RR E8T March 31st, 2010 8:01 pm

MFD
I agree with you, not the best for every situation. Anytime we think "one way is the only way" for FE we are hurting ourselves. I am going to to stick to the Halligan on this one as my first choice only because I am

comfortable in how effectivly you can weaken the mounting on this drop bar. However I would love to hear your attack in a little more depth. Are you saying you would batter the door above the resistence that you identify? I agree these doors bend fairly easily, but enough to get your hand in and pull the bar out quickly? I am not convinced that in a relativly weak drop bar setup we are going to see the door bend in significantly before the mounts fail. Anyways, I am not trying to call a bluff, I am truly just wanting to learn a bit about the way you approach this one. Thats the greatest thing about forcible entry, there are many effective ways to attack a door.

13. MFD Roof March 31st, 2010 9:54 pm

    No, totally cool with halligan if that's what you are comfortable with and you have a clear plan of attack.Just that i've had success with almost this exact set-up in the 4 ways I described(haven't tried baiting a truck guy into charging yet).BATTERING RAM-if you attack at the level of the drop bar something will give either the mounts or the drop bar itself will cave.AXE-, determine level of the bar chop at level of the bar once door is penetrated(blade will penetrate pretty much every swing)hit at the same spot you penetrated and the drop bar will split apart in a couple swings ,if it does not(maybe it's made of a hard wood instead of a standard 2×4) try swinging with pick end which will split and weaken it then follow up with blade end.MULE KICK-kick just below lock level, lock should pop in 1 or 2 kicks,then kick just below that and door should begin to bend inward you need just enough to get your hand in while holding axe ,then slide axe(blade side toward door) up the door until it contacts drop bar.You can either give axe a quick thrust here or gently lift bar off the mount.This takes little practice because you are doing it blind but it does work.sometimes the drop bar is a bit lower and you can just reach in with your hand and pop the bar,when I use this method I will slide the blade of my axe up between the door jamb and the door and twist it which gives me the needed clearance to squeeze my arm through.——I don't know how clear I made any of this and i'd provide more detail, but my peasized over-taxed truck brain already has smoke coming out of it and I have this strange metallic taste in my mouth ,so i'll quit while i'm ahead.Regards

14. dave April 1st, 2010 7:14 am

    Time is the critical variable. How fast do you need to get in… You play the percentages.
    Sledge hammer works great on fixed wood or lightweight steel. Back the door with 3/4 plywood and it becomes almost useless, behaves like a trampoline unless direct hits on locks.
    I use 8# axe + 30" Halligan- and a partner who should be looking at what's happening to the door.
    99% of doors will open with a little properly applied force.
    That last percent take work. Hinges are the second easy point of attack. If it doesn't open, maybe it's easier to find another entrance, leave the door to the next crew. Haven't met a door yet that could defeat a Partner saw.

15. Capt. Mike April 1st, 2010 7:42 am

    This will sound crazy, but I have the same set up in my house. When I moved in I found it on the charlie side door. The prior owner had issues of the mental type, so added this device. The 2×4 holder is steel, bolted with four bolts and two large screws to the frame of the door. It is at an angle and the 2×4 just slides

right in. I Don't use it but to show folks that come over for a laugh. I call it my "South Carolina Dead Bolt" Sometimes you don't have to travel far to learn.

16. Jon Starling April 1st, 2010 8:24 am

    One item my crew pointed out when we found it was the height of the bar. If you were in high heat or very smokey conditions and crawling you may not notice it while feeling for the doorknob. As you can see from the picture it is very high on the door. This could be quite a surprise for any crew who had to find an alternate egress if trapped in the basement. It would also delay RIT personnel from entering.

    We discussed the importance of checking all doors (interior and exterior, high and low) for supplemental locking devices and removing/unlocking them as soon as possible during fireground operations.

17. GaryLane April 1st, 2010 9:33 am

    Gotta love it! Not extremely common in my district, but still a great "getcha thinkin'" find. I really like the Halligan and think that proper technique + proper force + proper brain engaged = success MOST of the time…. but to quote one of my shift mates (Big Daddy from Cincinnati)…"garble,garble,garble….get the chainsaw…". Always be thinking and dont get tunnel vision….

18. acklan April 1st, 2010 10:38 am

    What!? No one suggested the "JET AXE"? Shaped charges are fun and real crowd pleaser.

19. dano3rescue April 2nd, 2010 4:11 pm

    If you remove the brick mold on the hinge side of the jamb, the hinges will be exposed. Then insert your halligan between the door and jamb above the hinge and rotate down removing the hinge from the jamb, repeat 2 more times and swing door out. The hinge screws only go into the jamb maybe a ¼ inch and usually give fairly easy.

20. acklan April 2nd, 2010 4:53 pm

    If you know this is a common problem in your area just plunge cut with the K12 or ventsaw and be done with it. After all this is a truckie site and someone should be coming off the truck with the saw, right?

21. MFD Roof April 2nd, 2010 10:28 pm

    acklan – The saw has been mentioned a number of times(at least once by me) and I think most would agree that is the 1st and best choice.But I think looking at alternatives is important because not everybody runs the same i.e. Some depts may not use saws for forced entry or have it set up for another purpose,maybe it's being used elsewhere or just maybe it doesn't start.

22. acklan April 3rd, 2010 9:24 am

MFD – Understood, and you are right.

23. Towmader April 3rd, 2010 7:01 pm

    Surprised no one mentioned using a Hydra-Ram yet.

24. RR E8T April 6th, 2010 12:42 am

    Hydra rams are not very productive on wood frames/wood jambs. The wooden stop will fail long before this drop bar setup. The stronger the material and the tougher the door is where the hydra ram works the best.

25. Capt 1-1 April 10th, 2010 1:41 pm

    I have this in my first in area. while on a med aid which we went to a number of times over the pass year. We all notice we always enter from the carport and we (crew) never seen the front door. Till one day I asked, and what a good thing I did cause if we would have had a fire there we would have been in trouble cause all doors leading out side have 2 sets of the South Carolina Dead Bolts. If we have to make access we have to either enter throu a window to open an door or make our own. Lets just hope we never have to do it cause it will be a tough fire to access and preform rescues and rit team. So they are all over the place. Stay safe, God Bless

26. FF Shelley April 12th, 2010 1:44 am

    I have also encountered one of these on a door to an apartment while searching the building for the source of a gas leak. The brackets in the one I came across was not as "heavy duty" as the one showed in the picture above so we were able to force the door using a halligan as a battering ram.

Hinges or Welds?

January 08th, 2008 | Category: Outside Functions

Firefighter Christopher Dyer from Ocala Fire Rescue sent in this forcible entry photo. Obviously this business owner does not want this door used. When faced with this interesting find, work smarter not harder. As we advocate in all forcible entry situations… Identify and visualize. Identify what is holding the door, and visualize how you are going to place and work the tool to defeat it.

So we ask the question, Hinges or welds? The hinges may be the easier way into the door. However, that method alone isn't going to open the door. After cutting the hinges the door will still need to be forced open (from the hinge side) with a halligan and some muscle. However, depending on the depth of the welds, the welds may cut quicker. One thought about going for the welds it that you maintain the ability to control the door. Either way it's another out of the ordinary forcible entry problem you may be faced with on your very next run.

26 comments

26 Comments so far

1. Jeff January 8th, 2008 9:32 am

   I would go for the hinges and the bolts holding the closure hardware above, assuming there is standard panic hardware or a regular handle inside you beat the locking mechanism with with minimal effort.

2. Brian January 8th, 2008 9:46 am

I might give the welded side a couple of test taps witha maul to see if the welds may not be as big an obstacle as they first seem. After that I don't think you'd be wrong going for either method (cut hinges or welds). This looks like an exterior exit so I'm not overly concerned with maintaining the doors integrity as with a door in the interior. Either way I'm hoping that the door actually leads to somewhere. If the business owner welded it shut there could be any number of things blocking the door from the inside.
Great stuff.

3. N/A January 8th, 2008 10:05 am

   I have to agree with Brian here. What is behind that door? If the owner doesn't want anyone utilizing it then he would just be using that whole wall as just that, a wall. But in gaining entry I would say to go for the welds. Seeing how many welds there are makes me think that cutting the hinges would do no good being that you have all the welds to deal with also. Even after you get through that, who knows what he has on the other side preventing access.

4. Jeff January 8th, 2008 10:44 am

   Assuming there is nothing behind the door other than the locking mechanism as you mentioned the door would swing out as you pry with the haligan most likely breaking those welds or better yet acting as a hinge.

5. N/A January 8th, 2008 10:58 am

   Again depending upon the integrity of those welds.

6. Patrick January 8th, 2008 1:30 pm

   I would say that a "doggie-door" cut (as discussed here before) with a run of the blade just inside the welds to open the door up quickly. You can than access the building with a line/team and than a 10lbs maul can take care of the welds from the inside after whatever locking mechanism has been disabled. However before opening the door up completly I would probably take a kerf cut at the point of the "7" made by the modified "doggie-door" cut and take a quick look to see what I'm dealing with on the other side. another option is just make an inspection hole right off the bat and see if this is even a viable entry means before even starting the saw or using anymore muscle on this FE.

7. DMAN72 January 8th, 2008 1:36 pm

   I WOULD USE THE BUILDING CODE TO PROVE THIS IS A FIRE EXIT AND MAKE HIM FIX THE DOOR AND APPLY THE PROPER PANIC HARDWARE. AGAIN, THIS CALLS FOR SPECULATION BUT THIS WOULD BE WORKING SMARTEST. EXCELLENT USE OF PREPLANNING TO IDENTIFY THE PROBLEM IN THE FIRST PLACE. TWO THUMBS UP FOR THE SUBMITTER OF THIS.

8. Egan January 8th, 2008 4:46 pm

   Another great example of why we need to get out and look at our first due areas. Finding this door on a fire call creates more questions and not the time to get the answers. If you find this ahead of time, you can see

if the door leads to anything or if its more of a wall inside then anything else. If it should be a door, then you get your code enforecment folks to get the owner to comply with code.

Good find.

Stay safe.

9. facetothefloor January 8th, 2008 5:15 pm

   If door is welded as shown, odds are it is either covered or blocked with "Things" inside. If you really need to open the rear, don;t eliminate the option of leaving the door and using the K-12 with cement blade or using the maul to go through the block wall itself. It it was never backfilled with cement or rebarred, ths could prove an easier way in.

   And start high and work your way down.
   Otherwise the rising smoke can be extremely punishing as you break through.
   C-4 also works but may be hard to acquire LOL.

10. Jon January 8th, 2008 9:20 pm

    The graffiti should tell all of you its an area of high crime, and that the welds are there as a anti-crime device. I would cut the welds with the saw but go all the way through the door from top to bottom. Top to bottom so you arent sucking smoke the whole time. Forget about making a doggie door or any of that stuff, you need a way to vent and give the guys inside a way out if 'it' hits the fan. Same thing with windows, dont just take a pane or a panel, take the whole thing. But, as always with commercial buildings make all attempts to vent vertically before horizontally to prevent a back draft.

11. Ray January 8th, 2008 9:53 pm

    I'd love to see the other side of this door to see what else the owner modified or added. Perhaps he framed right over it, or did some other hack construction modification. But I would definately cut the welds with a K-12 or similiar saw.

12. Patrick January 8th, 2008 11:36 pm

    Jon,

    I'm not sure if you got what I was suggesting with the "doggie-door" cut method, but the idea behind that tactic is to avoid cutting and prying through (if possible) the entire door and all it's locking mechanisms. You make the cut down low to gain access/egress quickly and than open the entire door as needed. The main point is to avoid the standard and added locking mechanisms because most are usually mounted above the midline of the door. Plus from the inside most of these can be disabled with little effort and make the overall goal of opening the entire door easier while giving you access/egress through the "doggie-door" in seconds. When considering this tactic it falls into a "work smarter, not harder" approach, because after you cut the welds you now have to force any locking mechanisms left in the jamb and whatever is NOT in the jamb. Not

saying this is the only way, but it is a fast option and something to keep in mind is that in this type of building we may have to open multiple doors just as secure as this one!

13. Jon January 9th, 2008 8:46 am

    I understood what you meant by that, but when fighting a fire in a commercial building the life hazard is almost always us. Make it a wide open door, not one you will have trouble finding. Why waste the time to cut across then from that cut down, when you can just cut through the whole door top to bottom. The door shows no carriage bolts and if it has a panic bar on the inside, which I doubt, it will pop right off. The slide bolts that are most likely being used will be sheared off provided the company cutting them has a new blade on the saw. I am all for working smarter not harder. I am lucky working in NYC, we have more men (and cry babies) then we know what to do with at a fire.

14. N/A January 9th, 2008 8:57 am

    I actually thought about Jon's idea of just taking the saw and "making a door" out of a "door". It would be quite a bit faster and would not cause as much hassel. Assuming there are no contents behind the door.

15. me January 9th, 2008 11:35 am

    make a door a door, make a window a door. hell, make a wall a door if needed.

16. Lt Robert M January 9th, 2008 10:09 pm

    How about the block wall? Still need the muscle part, yet I agree on the fire prevention part, fix it! You could treat like a roof and cut your hole then make entry, but the number one choice, find another way in!
    Be safe

17. Tom January 11th, 2008 6:26 pm

    I havent had alot of experiance cutting those types of doors but if you were to make a doggie door why not cut an inch to two inches to the left of the welds and force the door that way leaving the welds where they are and having the hinges keep the door up. Crusing this website also gave me several ideas on how to deal with panic hardware such as using the K12 and a framing square, cut a line down the middle and insert the square. Or you can do the irons method and start with the pick then to the adze and then the crowbar part.

18. Joe January 12th, 2008 5:49 pm

    Having welding experience, I would go for the welds. Welds are strong as steel, if not stronger but the welds' penetration is not that deep. Do to the burn patterns left by the welds only one pass was made. It wouldn't take that long to cut through with a K12. It is also obvious that there is no carriage bolts showing, so I'm guessing that the locking mechanism is not that complexed. Probably use a halligan or rabbit tool, at worse make a triangular cut around where the handle is. For the most part we will be practicing property conservation. After the fire, depending on the damage, you can resecure the door. As Jon has stated above

this could be a high crime area and would be good public relations in not causeing more damage than necessary.

19. Jon January 12th, 2008 6:55 pm

    joe, enlighten us on how you would use the rabbit tool to open an outward opening door. It specifically states it is not used for outward opening doors. Perhaps you know something.

20. Dagwood January 12th, 2008 9:09 pm

    Everyone has given great input to this matter, I would really like to know what kind of business is operated and what are the hazards within? Overall bulding construction and any life safety hazards before I worry about dealing with this door let alone placing my crew inside looking for a way out.

    Love the site and have taken away several idea's.

    Be safe all

    Oh yea, I would go for the hinges first.

21. Drew January 12th, 2008 11:25 pm

    No kidding, had to get in there… Deep cut w/ K-12 from top to bottom an inch in from the welds, cuts the door, doesn't F with the frame, destroys the panic hardware.

    Door control is easy, it is an outward swinging door. Don't want it open anymore, shut it and throw something against it.

22. Joe January 13th, 2008 9:21 am

    I apologize jon, I rushed my answer. I had rabbit tool in the back of my mind about seperating the welds and not for opening an outward swing door. If there is slag in the weld, it wouldn't take much to crack the weld. The More slag the weaker the weld. Of course, this is in the absence of a saw. Thank you for bring the error to my attention.

23. cDdyer January 13th, 2008 1:39 pm

    Now that there has been so much chatter generated, I'll fill you in on more of the story… This is a single story commertial something like a Wal Mart and this door had one of many types "interesting locking systems" found through out the rear of the building to keep transient traffic out of their building.

    The other side: Warehouse style verticle storage. Not framed in, or walled off. This one obviously isn't some place we would want to make entry, but for sure a great exit if the Truck is establishing egress around the structure.

Also, credit to Marion County Fire, who we were holding Truck Company Training with when we came across this P.O.S.

24. facetothefloor January 14th, 2008 10:32 am

Looking at photo again. The shade prohibits us from seeing the hinged side of the door. Wonder if this side has welds also. If so, this changes attacking that side first. If anything this should motivate the brothers to mount up and go out looking at their response area.

25. mike Walker January 15th, 2008 10:35 pm

I'm thinkin take the wall. Though it wouldn't take too long to cut through the welds, a good sledge and some good truckies would get an opening faster. Just get an opening for the brothers inside FTM EGH

26. GFY February 26th, 2008 9:26 am

If you cut right down the center of the door, top to bottom, this will 1) cut through the panic hardware and 2) make the door into a french style door and therefeore easier to pry open. Just another idea

Weakest Link

February 08th, 2008 | Category: Outside Functions

Firefighter Oleg Pelekhaty from DC Fire Dept Engine 2 sent in this find he spotted while learning his district. This structure had two ground level windows in an alley, secured with a set of bars bolted into the brick. There is a lot more to these bars then you may expect, Click Here to read what this find was all about.

10 comments

10 Comments so far

1. B February 8th, 2008 8:52 am

   Another "Try befre you pry" case. Just going into somethig like that you assume that it's going to take some work but if you look around and find the ease of access, your in. The only problem I would see is maybe a tripping hazard from the bars laying on the ground. A cone would fix that though. Once again, why it pays off to know your district.

2. Jon February 8th, 2008 9:13 am

   Those will pop right out of that brick with the adz end, hopefully you wont be alone back there. Also don't forget to call for the saw. If its basement or 1st floor rear, I am asking the LCC to bring the Irons saw to the rear. Cutting from the side is much easier than trying to force with the halligan and getting blasted with hot water making a way out for the Brother's inside.

3. Jamie Morelock February 8th, 2008 9:24 am

   These would present some difficulty when trying to vent the window. If they are EEW's just striking them in one place will not clear out enough glass. Also as we have seen with the ladder into the EEW video, sometimes they do not yeild so easily, causing delays. You would need to move your tool, preferably a hook, between each set of bars to clear the window properly. Using a 8 lbs. axe or sledge, strike the connection points of the bars. In old brick like that the anchors almost fall out, they will losen up enough to allow you to pull by hand or pry them easily out with the Halligan. Total removal is quicker with this method than cutting with the irons saw, will make venting much easier and provide egress if needed.

4. The other Sean February 8th, 2008 12:33 pm

   This is another case of being 2 percent smarter then the tools you work with or the door (or in this case window) your forcing open.

5. Jon February 8th, 2008 2:15 pm

   I failed to mention using the Saw for taking the child safety gates, not just for window bars. We have policy in place stating that an additional truck be called in the event of window bars, and if a TL is not originally assigned one would be assigned for bar removal. Most of the ones I have seen are not MIG/TIG welded like this one, nor are they that nice looking.

6. fitssiks February 8th, 2008 7:35 pm

   "nor are they that nice looking."

Yep indeed. I assume that this one was just freshly painted, hence the lack of locks (to assist the painter). If the locks ever were put back in place they may have stood out as an obvious place to 'snip'. Those bolts sure would have been easier to miss.

7. me February 9th, 2008 1:06 am

did you actually say you would put out a cone??? WTF.
and why would you try to take the glass before taking the bars? it is a lot easier to work without all that smoke in yer face. Just a thought.

8. Jon February 9th, 2008 10:41 am

I agree with above…Why are you guys discusing taking the window first. If its already vented thats different but if its venting odds are you have fire pushing out and you are not going to be able to work there anyway. After you take the pins out and fold it down i would work on getting the bottom out. It is just simple laziness to JUST fold it down anfd keep it there. The top is easy to get if you properly size it up as discussed in the article BUT…It needs to be completely cleared. What if a brother has to get out in a hurry? You want NOTHING getting in the way. Once it is GONE then take the class but not untill its gone. Just my opinion

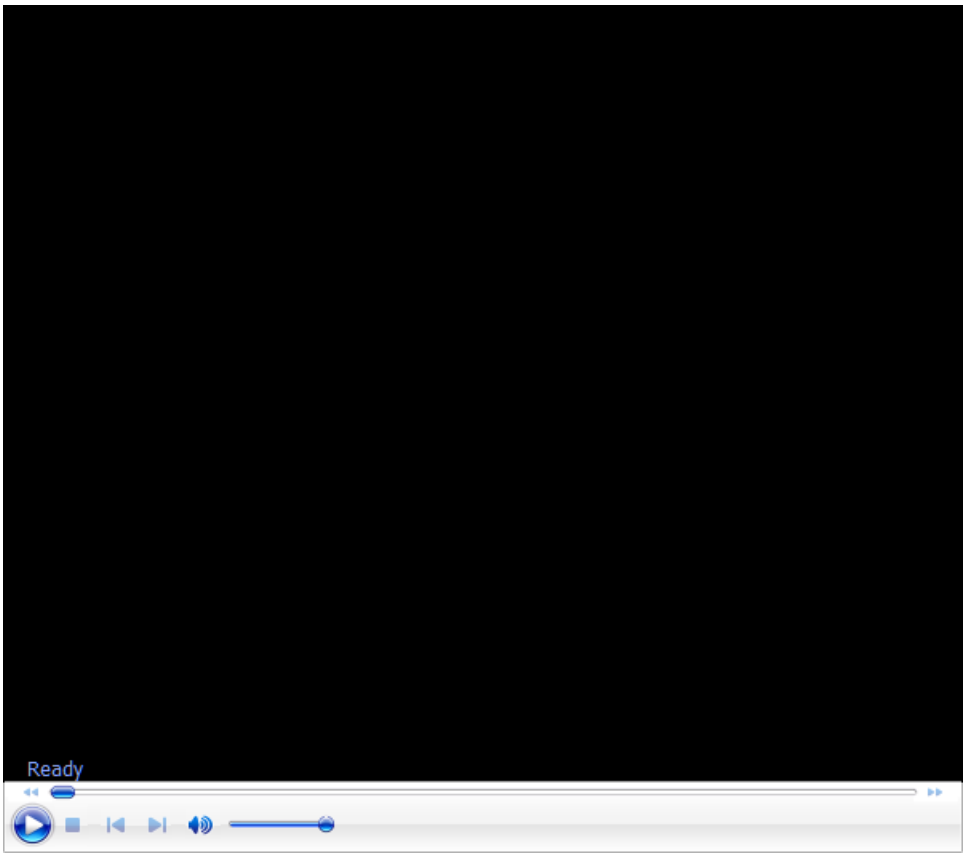
9. Tim February 14th, 2008 11:47 am

There are two schools of thought on taking out the glass on barred windows. The first is to remove the bars first by prying, smashing, cutting or all three if necessary. Then you don't have all of the smoke or heat while you are trying to remove the bars. When the bars are gone you have a nice shot at taking all of the glass and sash. However, you are outside where it's relatively nice. The guys on the inside might want you to take the window right away to get the heat and smoke off of them. This makes it easier to advance the line and search for victims, and it makes it more tenable for anyone still trapped inside. You can make a case for either one. Weigh you choices on the information you have about who's inside and what conditions the building presents.

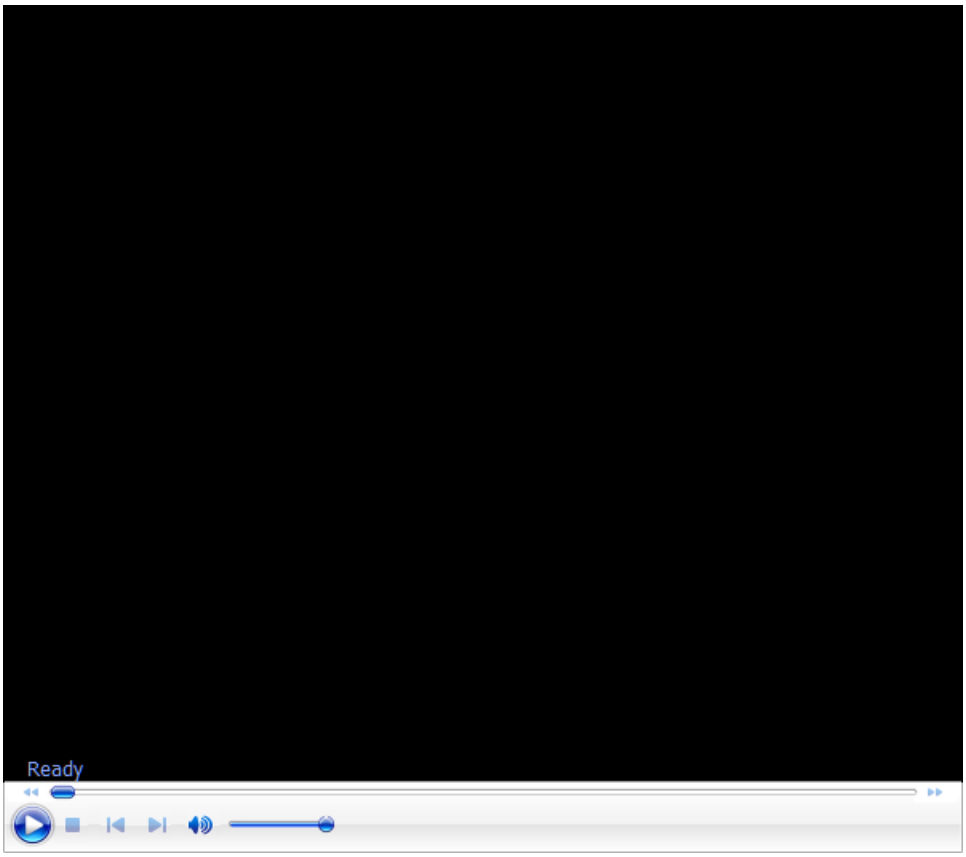
Weakest Link II

February 21st, 2008 | Category: Outside Functions, Videos

Battalion Chief John Riker from Newark Fire Department sent in these videos of the more commonly found weakest link on security bars.



The first video shows that sometimes the halligan is all that you need. Obviously the fact that the security bar assembly is only secured into a wood frame wall makes it a bit easier.



The second video shows the irons being used to defeat a security bar assembly secured on the outside of the window opening in a bock wall.

Be sure to check out the supplemental page with more pictures and step-by-step instructions on this useful and effective method.

20 comments

20 Comments so far

1. Brandan February 21st, 2008 10:52 pm

   Good Video I like the technique. We don't see many security bars out here, only on a few store front and industrial properties, and we had mostly trained to cut them. One little gripe though, I feel that PPE should have been worn even if for no reason other than to set a good example for our newer more impressionable Jakes out there.

2. DMAN72 February 22nd, 2008 10:26 am

   THANKS BRANDAN. I WAS GOING TO SAY THE EXACT SAME THING ABOUT PPE, BUT I DIDN'T WANT TO BE FIRST. REMEMBER PRACTICE LIKE YOU PLAY! GOOD VID THOUGH.

3. E-32Lt February 22nd, 2008 12:48 pm

   I have to agree. Thx for the insight, but wear your gear folks.

4. acklan February 22nd, 2008 4:44 pm

   You are right. It is not practice that makes you perfect, it is perfect practice that make you perfect. Or at least as close to perfect as one can get.

5. Truckee 13 February 23rd, 2008 2:45 pm

   2 things: The walls looked very soft
   Know your territory most of the security bars around here go through the concrete wall and attach to some sort of designed security device. Get the power tools

6. E-10LT February 23rd, 2008 6:43 pm

   good stuff

7. engin18 February 24th, 2008 10:12 pm

   The F/F in the video is HOTT, are all you Newark F/F's that good looking?

8. JQ February 25th, 2008 11:12 pm

   I think that the video is great and it's about time everyone worried about themselves, We are all grown men and women out here if he didnt want to wear PPE then he will figure it out when and if he gets hurt. Great Video and it looked safe to me.

9. Egan February 26th, 2008 12:17 am

   If I was being recorded or filmed I would make sure I was wearing PPE. In today's "you tube" world, liability can be thrown back in your face and some fancy lawyer could get his hands on a film showing you not following your PPE SOP then you may have a little trouble getting workers comp or your departments medical retirement if you got hurt.

   Not to mention how many firefighters watching it immediatley are critics when they see anyone not doing something 100% safe or proper.

   Just food for thought.

   Now, I think it was a great concept and I will discuss them with my crew. The walls did look soft but the concept is solid. It just might take a little more work in the real world. You know how hollywood films can be. (just kidding)

Thanks for submitting them.
Stay safe.

10. mitchs1224 February 26th, 2008 6:50 am

    nice work. great video. GREAT PICS! thanks

11. JC February 26th, 2008 2:22 pm

    Good video, looks like most of our local older houses.
    HEY PPE NAZIS, ENOUGH ALEADY!! If that is the most dangerous thing that guy does all day then I would call it a good day. It is just a demo video, thats all. No fireground pace, nobody hanging out windows, no cats and dogs livin in sin, no live fire, no real danger. It is the senior jakes responsibilty for making it clear to the new guys what is acceptable PPE for them. If they dont know already then you have failed. So take off your pen protectors, put down the microscopes, definitely stop with the fuckin lawyer/lawsuit bullshit and take it for what it is, A DEMO VIDEO! Thank the guy for his time and effort and keep the vagina monologue crap about PPE for when knuckleheads are tossing their helmets from building to building.
    thanks for the video fellas

    there's nothing common about sense

12. squadguy February 26th, 2008 3:54 pm

    I love that guy JC!!!

13. JQ February 27th, 2008 12:37 pm

    Hey JC, Thanks I was saying it outloud but just not typing it in that way. The Guy was doing simple carpentry or tradework. I dont wear PPE when doing Tradework for the mostpart. And by the way If that video is from Newark NJ those guys see alot of work, these guys know when to and not to wear gear. Check them out on YOU TUBE type in (Newark NJ Get IT DONE) great video of them knocking down alot of fire in a little time. Thanks and let me know what you think of the video.

14. brian February 27th, 2008 6:33 pm

    AMEN J.C. PPE Nazis, funny
    Stay safe all

15. G February 28th, 2008 1:24 am

    I think that the video is just another card for the trick bag it was great.(Reguards to PPE) I was just wondering what happened to this job being a dirty, hard nosed job? I 'll tell ya what I think that people have stopped looking on how to improve they just look a new ways to point out flaw or say the obvious. The thought that everyone doesn't want to go home or be as safe as possible is crazy. Those people that worry

about being sued, have forgotten about how this job is still supposed to be a dirty, blue collar job! Maybe they should stay where they probably really want to be,,,, in an office, behind a desk.

16. Battalion 13 Chief March 1st, 2008 2:21 pm

    This is why it is so important to do a walk around of the structure early in the incident. The RIT team should also be doing a walk around in the event that they are utilized as well. Keep up the good work guys. Stay safe…

17. J March 2nd, 2008 11:45 pm

    God Bless you chief, Keep that RIT team busy with size up and making sure egress is clear for the brothers inside. Be ready for the Mayday! ITS OUR JOB!

18. Rescue 8 March 9th, 2008 10:57 pm

    Then I guess someday we will have a LODD and funeral for all of you that are griping about picking fly s@#$ out of pepper in regards to the whole PPE thing. You got it, wear it, and go home with all your fingers and toes. Remember that every lesson we learn has been paid for in blood.

    "Keep'em outta heaven…
    Take'em outta hell."

19. Caddy March 10th, 2008 10:34 pm

    The first video are the bars connected to wood stills very common. The second video are the bars connected to cement blocks covered with stucco, also common. Those walls are not soft its common construction for most older and some new construction in buildings. Just keep this in your mind, this may be quicker when faced with the same construction than getting the saw.

20. Engine14 March 26th, 2008 5:31 pm

    I agree that the first video is wood however the second video may also be stucco over wood as well. You can see wood framing in the second video after the frame is removed. The consideration I have in my district is the type of bars that are used. Many in my district are placed on the house and are actually 4 inches or more off the concrete block. The tool doesn't work too well. I'm gonna try this next day with my crews on an abondoned house but I think the K12 will still work better.

Not the Red Wire

October 13th, 2007 | Category: Outside Functions

If you remember last year we featured an example of someone bypassing an electrical meter. Click here for that post. Samuel Hittle from Wichita Fire recently ran into the same thing. They responded to a cooking fire in a home that "supposedly" did not have power.

The on-scene Safety Officer Capt. Wenzel quickly realized the irony of that statement. He alerted command, and since the circuit at the meter appeared to open, began looking for extension cords from other structures or other signs of the source of the utilities.

A look behind the cover of the meter shows us what's really going on. The bypass wires are the red and black wires ran on the sides. These wires are covered by the front cover of the meter box, making it very difficult to see them with the cover in place. It's also worth mentioning that the occupants had even gone to the trouble of placing the lock out tag back on the assembly, now that's classy!

3 comments

3 Comments so far

1. Denny3992 October 16th, 2007 4:31 pm

   That person must be really crafty…Or had a key..

   That looks like a barrell lock on the top right side and those arnt defeated easily.. they typically put them on rentals and deadbeats homes…

   Stay safe.

   D Beck

2. Jon October 18th, 2007 7:11 pm

   If wasnt for low class, we'd have no class!

3. Tony April 17th, 2008 7:03 pm

Just ran into this at a fire yesterday. The homeowner was an electrician and also a "licensed" marijuana grower in our fair city. He had run his home electrical through the meter, but jumped around the meter to run his growing operation. The PG&E guys were pretty impressed. He had even had the meter inspected and sealed by PG&E.

They don't make 'em like they used to

August 08th, 2007 | Category: Building Construction

As with many building construction components, they just don't make them like they used to. Sometimes this makes our job easier, and sometimes not so much. Here is something that's a little different from years ago. Skylights are made very differently, and are now much stronger. This particular skylight is made with laminated glass. It has two pieces of ¼ glass with a thin layer of some fancy plastic in between them. They claim this glass can support 10,000psi. Under that extreme load the glass will obviously crack, but it will still support the entire 10,000psi. We were unable to test this out for ourselves, but we definitely noticed they are significantly stronger then the old style. It seems that the most efficient way through these types of skylights would be with a rotary saw, clearing it out with a hook is no longer an option.

19 comments

19 Comments so far

1. Ron McCuin August 8th, 2007 1:42 pm

   Dont forget brothers, If your going to a commercial roof such as this, you will probably be taking a carbide tipped blade of some sort. These blades especially the new age widely spaced tips will give you hell trying to cut the laminated glass. Rather than bringing a second saw with a composite blade. Think simple and bring a glassmaster saw from the extrication kit. Any feedback would be greatly appreciated.

2. reese August 8th, 2007 2:10 pm

   Do you think a window punch would break the glass?

3. DTasso August 8th, 2007 3:35 pm

   Nope – it's laminated.

4. Chad August 9th, 2007 1:12 am

   At my station we have found that using the pick end of a pick head axe to make a "starter hole" for the chainsaw has worked awesome. We cut three of the sides and then peel back to keep the large sheets of glass from falling on our brothers below. The man on the saw will get hit with pieces of glass and plastic so make sure they have their mask on. We run stihl ms460 saws with stihl carbide rescue chain.

5. Chad August 9th, 2007 1:28 am

   Sorry had to go on a run… The first time I tried cutting one of the style skylights pictured I didnt make a hole with the axe, and as Ron says above its hell cutting it. Give the starter hole a shot if you get a chance, just make sure when you put the saw in you have the RPM's maxed on the saw and have full PPE on. I like the idea of the glass master. Have you had trouble with any cross members in the skylight or do you have to cut each bay individually?

6. j2brown August 9th, 2007 7:48 am

   I've always joked that we should carry grenades for commercial roof ventilation…

   jeff
   sdg

7. 4 Roof August 9th, 2007 8:33 am

   Would the traditional 'Plan B' tactic of prying, cutting or breaking either part of or the entire assembly up and out be a viable option for these units?

   Be safe.

8. Patrick August 9th, 2007 9:00 am

   I'd agree with the use of a saw. It's a commercial structure so you should be taking a saw to the roof with the proper blade and as for opening these up I would say treat them the same as Hurricane Windows. They may or may not me as strong as Hurricane Windows, but just go for the saw right from the start and don't mess around with prying, chopping, etc. Because keep in mind that takes more time than the saw and that leaves you and your crew on the roof of a commercial structure for longer than you need to be!

9. Windham August 9th, 2007 12:31 pm

   Look at the big picture!! Yes, they keep making glass stonger and stronger. But, in most cases the frame work and structure of the building is the same. Take the frame and all out.

10. jon August 9th, 2007 7:55 pm

    We dont have these NYC, its too expensive. But the last brother has the best point, go for the frame. I was on the roof at a job last week and the scuttle had safety glass, which here in NYC is glass that has wire in it. Well instead of breaking my ass taking the glass I whacked the hell out of the frame and got the glass to fall in that way. The frame is always gonna be weaker if the glass is decent.

11. Jeff August 10th, 2007 8:34 am

Don’t be afraid of a little work! An axe will chop through the laminated glass, so there is no need to bring any special tools with you. If you are staying proficient with your basic hand tools, you should be able to chop out the glass in the same amount of time it would take you to cut it with a saw. If you are looking for a little practice, use the axe to chop through a windshield next time you do extrication training. I also agree with the brother from NY, go for the frame if it is the path of least resistance. A good, quick size up of the opening will help you determine which option is going to work the best.
For anyone who thinks using the axe (or any other hand tools for that matter) is too much work, it’s time to either spend more time in the gym or leave the Truck.

12. Squadguy August 10th, 2007 10:33 am

    Good point at the end Jeff…Be good with the tools that don’t break that easily. i.e Axe, 30” Pro Bar, Steel Roof Hook. Be safe!!!

13. mitchs1224 August 10th, 2007 3:32 pm

    can we find out what buisness this was ?

14. Ron McCuin August 10th, 2007 10:57 pm

    I like the idea of going for the frame, if it is truelly the weakest link. Chad as far as the crossmembers, if it is anything beefy you can just cut the glass on three sides and fold each section in because the glass will hold. As far as truck tools go, Im all for keeping it simple, but I was also taught a long time ago to work smarter not harder. The glassmaster is a simple hand tool specifically designed for cutting class.

15. JWL August 13th, 2007 11:35 am

    That guy looks familiar.

16. Spoon August 14th, 2007 4:42 pm

    Looks like it’s time to bring back the old Jet-Axe! Seriously, how much time are we going to waste fooling around with a ‘high security’ device/door/etc, to ‘save time & effort’, when basic methods will work better & sometimes faster. – Forget the skylight & drop a hole in the roof deck! Keep it real(safe)!

17. Ryan August 14th, 2007 7:30 pm

    Spoon, I agree sometimes basic methods work better, but in this instance (lets take the bottom picture for example)there isn’t really any place to “drop a hole” not to mention there’s a good chance that is a metal q-deck roof with the trusses spanning 3 feet or longer in which case I would not be cutting on a roof of this construction. If you cut on a roof where the trusses are farther than 3 feet apart there is a very good chance you may be falling through. There’s 2 ways to figure out the construction of this roof. What are the 2 ways? The first way is while doing inspections, the other is to do an inspection cut.

18. James August 14th, 2007 9:29 pm

I can assure you that an axe isn't going to do the trick on that stuff. You'll spend more time beating on the glass than you will just cutting it away with a saw. We actually produce our products to withstand hurricane forces. Most of that glass consists of two layers of 3/16 double strength glass with a 1/8 inch PVB plastic sandwiched between them. It withstands repeated cannon blasts of a 9 ft. 2×4 shot from an air cannon at an impact speed equivalent of about 90MPH. It then goes through a series of 9000 cyclical wind tests of positive and negative pressures. That stuff must withstand all of those tests without the plastic interlayer tearing in order to be rated for Inland 1 or Miami Dade County certification. Best way to cut it is with a windshield saw or a K-12 with a masonry blade.

19. Mark Schollmeyer August 24th, 2007 5:31 pm

James seemed to be on track on this one. Impact resistant glass is intended to defeat objects from penetrating as in the small and large missile tests he refers to. An axe WILL get through and WILL exhaust the person performing the task in a hurry. They key is to get on the roof, perform the task, and get the hell back off the roof. An aggressive carbide blade on a rotary saw or chainsaw will do the trick with a starter hole or not. Don't waste your time with a glass master or a reciprocating saw. Another way to defeat these impact resistant panels is to take them at the frame with an 8-10 lb sledge. They will fail. If you need proof I have plenty of windows and can show you at my station or yours.

Positive Lock System

March 01st, 2010 | Category: Outside Functions

Engineer Steven Negedly from Orlando Fire Dept Engine Company 9 sent in these photos of a new locking system he found during a pre-fire plan of a new big box store in his area. This system is called the Positive Lock system. From the outside, the only indication of it presence is the four carriage bolts and the lock cylinder in the middle of the door. Click here to see the supplemental page with the details and more pictures.

18 comments

18 Comments so far

1. firefighter_632 March 1st, 2010 10:11 am

   Interesting, this looks like an updated fox type lock.
   Where do they leave the key and tool? What does the end of the tool look like?

2. Mike March 1st, 2010 11:15 am

   Does anyone know if it uses a Rim or Mortised Cylinder?

   The Best removable cores can also be pulled with a Bam-Bam Tool -then just spin the mechanism with a flat screw driver or key tool.

   Personally – we need anyone to be able to open the door with tools on hand. Not looking around for a special key.

   Great pics – and good info in the write-up though.

3. OnlyHuman March 1st, 2010 6:42 pm

   My experience has shown me that the cylinder resembles a rim except that the stem coming off the cylinder is box shaped as opposed to being that of a flat head screwdriver. The K-Tool comes with "allen" like

key(which ususally gets lost quickly. I believe it is 5/32nds and that fits the fox lock. Maybe the brothers who found this device can take some closer photos and contact the manufacturer for the specs of the inside of the core.

Brothers don't get intimidated by these locks (or any lock for that matter.) Once you remove the cylinder guards you are almost home. Pulling the cylinder with some care so as not to destroy the mechanism is important. Keep posting good info.

RS FDNY

4. mike March 1st, 2010 8:09 pm

hopefully they have that special key in with the other knox box keys.

it may make life easier if not we have our other means to
take care

mike

5. Samuel Hittle - WFD March 1st, 2010 8:21 pm

This looks like a WalMart exit hardware assembly. If you don't have access to the knox or time does not allow there are techniques for engaging the panic bar from the exterior. The saw is always an option too. You can attack the carriage bolts with a similar technique used for drop bars or use the bolts to reference the location of two plunge cuts to overcome the pins that protrude into the jambs.

6. Steven Negedly March 1st, 2010 10:47 pm

This is a Wal-mart rear door. There are three keys in the knox box located directly next to this door. 1 core key, 1 skeleton key, and 1 master to everything in the store once inside. The head of the skeleton key is a triangular box type wrench. Forcing this door during a fire would not be difficult, but opening it the proper way is simpler if you know the system. Just reminds me of an old saying, nothing beats training, except experience. Stay safe and train hard.

7. acklan March 2nd, 2010 12:04 am

Looks like a perfect opportunity to use the "Framing Square" method. The bolt outline the bar perfectly.
I tried the technique on an abandon building and found a cotton hook works just as well, and most pumpers carry five cotton hooks.

8. BigJack March 2nd, 2010 10:41 am

acklan- What the heck is a cotton hook?

9. Nate999 March 2nd, 2010 7:23 pm

Probably a mattress hook or hay hook. D-handle, ~ 10” metal hook attached. Good for dragging a burning mattress to a window or tossing hay bales.

Some pics here: http://www.farmhardware.com/SuperStore/SuperStore-Product.asp?ProductID=5170

10. ves9102 March 3rd, 2010 12:04 am

    thanks for sharing Steve…interesting find

11. acklan March 3rd, 2010 2:05 am

    Sorry. That is just what we have always called them down here.

12. BigJack March 3rd, 2010 10:59 am

    You southern boys carry some strange hooks

13. Dan March 5th, 2010 12:42 pm

    Could you shear the bolt heads off with a halligan and then pound the key cylider in?

14. Truck2mike March 5th, 2010 5:57 pm

    There are other methods to open the door, but as stated, use the Knoxbox next to the door and it takes no time at all. Works well, we have this same style on our Walmart also. It’s all located at the Riser room and FDC hookups at ours.

15. Steven Negedly March 5th, 2010 8:36 pm

    Just some info, a frame square technique might not work unless you know the door. The mechanism is off to one side and is 6” to 8” in from the door. It takes a considerable amount of force to operate the mechanism. Just some food for thought.

16. Tool Time March 14th, 2010 3:31 pm

    Nothing new about this set up Sams club has been using it for years. All keys should be stored within knox box if not the K-12 will make short work of this door.

17. Adam March 20th, 2010 2:56 pm

    If the keys aren’t available or not updated in the knox box, will the k-tool work for pulling the cylinder on this lock?

18. Adam Mason July 5th, 2010 12:25 pm

Its rather odd that you actually pull the core. That tells me that the cylinder is more like a "dummy" and doesn't have a typical rim cylinder tailpiece. Without seeing the working end of the tool, I don't know what it looks like on the inside.

I have installed a similar lock (Securitech Trident, ling below) in Rite Aid and Walgreen stores in New England. They are used on the back doors, which are direct access to the stock room, mechanical areas, sprinkler risers and the second floor. Unfortunately they have all been "exit only" meaning there is no lock cylinder on the outside. The bolts directly engage the frame, which is usually concrete filled. The framing square has the same problems (works hard, push bar set off from the door). If it doesn't work, I'd say cut the hinges, because they are often non-removable pin, and then attack the single bolt on the hinge side. I have yet to see it, but a continuous (sometimes called a "roton" or "piano") hinge would add to the difficulty.

http://www.securitech.com/Trident-lock-Products.html

Size Up Matters

April 30th, 2008 | Category: Building Construction, Inside Functions

We have often said that the "industry" doesn't build buildings to make our job any easier. This one is a perfect example. John Occhipinti from Hempstead Fire (NY) sent in these photos of an interesting structure they found in their area.

A look from the A/D corner reveals nothing of true significance. We would probably call this ordinary construction, and may estimate the building size to be about 60×20. Building size is a good thing to know

for estimating hose (those engine guys always say we forget about them on this site), visualizing search, or a number of other things. But don't stop there; don't forget to perform the ever important 360 of the structure.

A look from the B/C corner may give a different perspective. The building is shaped like a wedge! It's only 6 feet wide on side B. Count the bricks if you doubt our guess. While searching the structure it may be a little confusing or disorienting in this area of the building. What about those crazy locking mechanisms on the doors on side C. Didn't see them? Look again…

That's right, no exits on side C! That could certainly complicate things. Many would have "assumed" the presence of exits on side C. Believe it or not the code doesn't require any to be there. The need for exits is determined on travel distance from the furthest part or the building to the nearest exit. Then the code only requires the doors to be "remote" from each other. They determine remoteness by a mathematical equation calculating ½ or ⅓ the diagonal distance of the structure.

Well that code explanation was probably a little too much detail for this discussion. Bottom line is that the layout of the building could be confusing, and there are no rear exits. Just goes to show you that you have to keep an eye out for this stuff.

13 comments

13 Comments so far

1. Nate DeMarse April 30th, 2008 9:41 am

Great find and great “know-you-building” photo.

Occhipinti has got to be the most interesting name published on the front cover in the history of Fire Engineering

Nate DeMarse

2. Jon April 30th, 2008 10:14 am

Searching for what? Its an appliance store. If you couldnt find the fire in this building you would either be blind or at the wrong address

3. ... April 30th, 2008 11:33 am

Besides the fact that its an appliance store what could possibly be in that small area? It surely isn’t offices. More than likely it would be a storage area or some sort of “unused” space. It looks like the office is out back in the 10×10 shed anyway.

4. brandon April 30th, 2008 9:01 pm

do you think its a type 3?

5. brandon April 30th, 2008 9:02 pm

do you think its a type three building?

6. fitssiks May 1st, 2008 9:12 am

Before “Garden City Appliances” moved in I wouldn’t be suprised if this building was originally home to a company that manufactured door wedges.

http://i39.photobucket.com/albums/e193/funepics/Wedgie.jpg

7. Truckee 13 May 1st, 2008 3:32 pm

Two words “Area Familiarization”. Know Your 1st and 2nd due.

8. Dave May 2nd, 2008 11:52 am

Thats where I’ve seen the name Occhipinti before….thanks Nate! Crap….now I can sleep at night.

9. FirePirate27 May 3rd, 2008 10:26 am

Don’t get in that trap of believing the sign on the door. There could be anything in there. I’ve seen clan labs in buildings that said bakery and sewing sweat shops in the top floor of a carry out! You get the idea. Preplanninng would tell what the load is. We do our own fire inspections on the street so the guys working that district know get to see the buildings inside and out before the tones drop. And remember when driving up on the scene, you want to see at least three sides of the building…

10. Chief49 May 9th, 2008 2:35 pm

    John, do you have any relatives in Jersey? I went to h.s. with an Occhipinti (his name was Joe) and he was always asking me how he could get involved in the fire dept.
    Anyway, I’d bet the crazy shape of that building has something to do with the lot lines. Everyone wants to use all the available space they can. You never know what the codes were when the place was built.

11. fitssiks May 10th, 2008 11:57 am

    Quote Chief49:

    “Anyway, I’d bet the crazy shape of that building has something to do with the lot lines.”

    If you look at my pics you’ll see that it has everything to do with lot lines.

    Clinton street doesn’t run perpendicular to it’s cross streets. This of course causes the corner lots to be wedge shaped.

12. Jarrod May 11th, 2008 1:31 pm

    Hey John. I have family with your last name in long island. My great grandmother is Jenny Ferro, Married to Sam Ferro. Just curious.

13. John May 12th, 2008 4:23 pm

    To Chief49 and Jarrod: Negative on both. No family in NJ and do not know the Ferro’s. The name is actually quite common though it may not seem so. The bldg in the picture is actully in our extreme north end of town. So units approaching will most likely see side B/2 as they approach. But that will not always be the case of course. To Jon and the annonymos from April 30th: the sarcasim is funny but sadly youre missing the point. This irregular shaped bldg can be found in any size and with any type of occupancy. It could throw a FF’s sense of orientation off greatly. Its the concept of sharing with other brothers from across the country of what could be in their district. Thats what makes Vententersearch so helpful.

Would you Like Some Frys with That?

January 25th, 2010 | Category: Outside Functions


ABUS
NOTICE

Lt. Nate Quartier from Ormond Beach (FL) Quint 91 sent in these photos that he and the crew found while out performing company inspections. The owners of this particular business decided that they needed some homemade supplemental security. They took two baskets from the deep fryer, run them thru the handles on the doors, and padlocked them together. They are obvious in the daylight, but would you notice them at night if the occupancy was charged with smoke? It shouldn't slow us down too much, but it may be enough to piss you off and frustrate you. Like we have demonstrated on the site so many times before, you never know what you'll run into out there.

27 comments

27 Comments so far

1. riley January 25th, 2010 2:07 pm

   mmmmmm….french fries.

2. pfd24 January 25th, 2010 2:07 pm

   cant say you would see this everyday.

3. DMAN72 January 25th, 2010 5:54 pm

   A real fireman would use barbeque tongs. This building owner obviously has too much time on his hands.

4. Truck11 January 25th, 2010 6:14 pm

   People will come up with the wierdest things

5. FF_Goodnight January 25th, 2010 6:52 pm

   This is crazy. Just imagine the slip hazzard from the grease drippings on the floor once you forced entry! But at least it would be a convinient place to throw your latex glove into instead of just littering… I would like to see those barbeque tongs in use more DMAN. Jeez some people are creative now a days.

6. LAD288 January 25th, 2010 10:09 pm

   This is not crazy… This is REEEDONCULOUS!!!

7. LAD288 January 25th, 2010 10:11 pm

   Ding fries are done. Ding fries are done.

8. FF_Goodnight January 26th, 2010 12:57 am

   Would you like an apple pie with that?

9. FitSsikS January 26th, 2010 10:28 am

   Clearly the work of some sort of basketcase.

10. PFD023 January 26th, 2010 12:50 pm

    if the photographer would have zoomed back they would have seen the the buckets of grease from the same frier precariously (spelling??) perched above the same door.

11. mike January 26th, 2010 7:34 pm

    I would like the large shake and big burger….no fries??? I see you have no use for the fryer now.
    Can we get that for our fire house then.

12. firefighter_632 January 26th, 2010 8:06 pm

    I think my station would trade the owner a chain for the frier and baskets! At least then they would go to good use.

13. mike January 27th, 2010 1:13 am

    a partner saw will do the job. zip zip its done.

14. David January 27th, 2010 9:16 am

    All I can say is WOW! Can't the buisness propriorter be fined for such and act? What if the building was charged with smoke and personnel entered from the rear of the structure and had to ergress out of the front, Than waht would happen?

15. DMAN72 January 27th, 2010 10:10 am

    They'd get fried!

16. GaryLane January 27th, 2010 11:08 am

    Awesome. Thank you! I actually laughed out loud when I saw the picture! Cant wait 'til a "special" tool is designed for this situation and sold for $200+ dollars! People are too funny….

17. DMAN72 January 27th, 2010 1:15 pm

    Not your first day, eh Gary???!!!

18. C-lingpullr January 27th, 2010 3:48 pm

    CMC Rescue makes a device for just this situation. You have to take a $500 class from them before they allow you to pay $475 for it though…

19. Nate999 January 27th, 2010 5:02 pm

> Much like the Halligan, it'll be derived from a thief's tool…I hear the Hamburglar already has a prototype he's been developing with the Fry Guys.
>
> Seriously though, this place has a somewhat confusing layout, and only limited egress/no windows in the main areas, along with a decent fire load (think flammable nautical-themed decor/furnishings). This door would most likely be the primary access (front bar area), as the main doors are thick, wooden "castle-type" doors with another set of locked doors after the foyer. Fortunately for us (and the Hamburglar) the pivoting deadbolt was left unlocked and we were able to pull the door open just wide enough for some small bolt cutters or definitely the sa'r.

Secure Daycare

Kevin Meyers from Broward County (FL) Fire Rescue sent in these pictures of an interesting daycare facility he recently discovered during an automatic fire alarm response. Operating in this structure could pose some interesting challenges. As you can tell from this series of photos this building was originally a residential structure that has undergone many additions. Most significant, every door and window opening has received some security upgrades.

The front door has a unique system securing it. The locks appear to be slide bolts that appear may be secured from the inside with a padlock. Remember, this type of occupancy is probably more worried about keeping people out while it is open for business, as opposed to other types of businesses. Unlike most other structures, we would likely encounter more "security" problems while operating in this building during normal working hours.

A set of irons should be able to get this opened without a problem. Treat the gate just like a outward swinging door.

It appears that the security screens securing the windows are not extremely substantial and would not be too much of an issue. Some quick work with the halligan, prying the screen from the building, would more than likely take them off in no time. The challenge is the sheer number of secured openings. scroll through all of the pictures again, every window has been secured. the detail below shows that it appears these screens have been homemade out of expanded metal and square tubing.


A
B
C

These security measures can certainly be defeated, but will undoubtedly slow down out efforts. The key to success would be to start softening the structure (in a systematic method) as soon as units begin arriving on scene. As if a working incident in a day care wouldn't have been enough to worry about.

Sliding Fire Door

September 27th, 2009 | Category: Building Construction, Inside Functions

Clayton Moorman & Grant Walker, firefighters from NIST Fire Department in Gaithersburg (MD) sent in these photos of a sliding fire door they found on the NIST campus. Sliding fire doors are much more popular than you may think, the problem is you never realize they are present. Many times when the door is open, it is hidden between two walls. The picture below shows the door (in the open position) on the right side of the opening mostly hidden in the wall. The sliding fire door has a pull handle and is painted the same color as the wall (not the grey door.) Also visible is the angled track above the opening, and the receiving "guide" on the right side of the opening.

The purpose of the door is to provide fire and smoke separation in fire rated walls and corridors (hallways.) These doors reside on an angled track that allows gravity to close the door automatically. The doors are held open either by a fusible link (as shown in the picture below), or electromagnetic fire alarm interface. When heat builds up or the fire alarm activates these doors close pretty quickly, we would say that they slam shut but we're sure someone would correct us on that. These doors are typically quite heavy and take some effort to open back up. Remember they are weighted so gravity closes them…

Obviously the problem is that these doors could close behind us and cut off our primary means of egress. They could also slam shut and kink or possibly even sever the engine company's umbilical cord (hose line) *…Lighten up fellas, just kidding about the umbilical cord thing.* We have plans to shoot some video of one of these doors in operation and will post a follow-up in the somewhat near future.

As with everything else in the fire service there is an NFPA standard (NFPA 80) that covers the installation, inspection, and everything else concerning these doors. So they are definitely allowable by code. One specific purpose these doors are used for is to provide fire separation in openings greater than 8 feet wide. Not the case in this particular installation. Eight feet is the magic number that can no longer be protected by standard set of double swinging fire doors. Fortunately some of the larger sliding doors may actually have a smaller egress door present to allow someone to pass through the larger door once it slides into place. It won't help with the hose line issue, but at least it may allow us to get out easier. However this egress option is not very common.

A quick discussion with the inspectors in your fire prevention bureau may be very helpful in locating these doors in your area. Odds are they know where most of them are. However don't be fooled if they don't know of any off hand, they may still be out there. The inspectors may not originally think much about our concerns in operating in building that contain these doors. Take the time to explain to they why it's important for us to know about them, and you'd be surprised with how quickly they alert you to them in the future.

On a related note, many firefighters know of the import role that the National Institute of Standards & Technology (NIST) has in the fire service. They do an amazing amount of research to make our jobs safer and more efficient. However, most probably didn't know (we didn't) that NIST actually has their own fire department that covers the NIST campus. We thought it was worth mentioning.

18 comments

18 Comments so far

1. DMAN72 September 27th, 2009 7:56 pm

   Delta Oscar November Kilo Echo Yankee Kilo India Charlie Kilo!

2. Drew September 27th, 2009 9:18 pm

   That would be a Bravo India Golf Alpha Sierra Sierra Delta!

3. truckman38 September 28th, 2009 7:58 am

   My full time job is as a jailor, we have three buildings connected by a tunnel. In the tunnel is a similar type door but it drops from the ceiling rather than slides. We have a similar drop down door that is used to turn an unsecure loby into a secure evacuation for inmates.

   This brings me to another point. If in a secure facility (like a jail) there may be doors that need to be shut to keep the evacuation secure, there should be a staff member assigned to help (we have turnout gear and SCBA). If I can I will get some pictures to illustrate the doors we have.

   and if the donkey kick fails go for the C-4!

4. 2DaRoof September 28th, 2009 3:11 pm

   I have seen these doors in the past, but have never had them in operation. I'm guessing a standard set of vice-grips or something similar in the track will be enough to prevent it from closing? Or because of the weight is something more substantial needed?

5. 2DaRoof September 28th, 2009 3:11 pm

   Perhaps beating the track with a sledge so it wedges the wheels will work…just a thought

6. Miller September 28th, 2009 5:37 pm

   …hmmm…this is even legal in jersey?

7. Lad288 September 28th, 2009 6:10 pm

DMAN72, It took me a few times reading your post to figure it out… Well played sir!!

There is a major trauma center just out of my response district that has fire doors that come down from the ceiling. I have offten wondered about them while walking through there. I will try to snap some pictures next time I am up there.

8. Lad288 September 28th, 2009 6:12 pm

   I wonder if a latex glove was wedged in the track,would that stop it from closing??

9. Drew Smith September 29th, 2009 12:37 am

   If the vise-grips were up against the door I would be confident they would hold. If the door could gain momentum before it strikes the vise grips (or any other tool) I would be concerned (and then possibly dead) that the tool would become dislogged.

   The sliders I have seen many times do not have track except up high. Maybe pull a large furniture item into the path?

   I also saw several of these in a nightclub years ago. The wide open area was several storefronts wide with the walls between buildings removed and these doors installed to partition off the joint if it lit up.

   I have also seen these in department stores where you would not notice them unless you looked for them. These were drop-downs versus sliders. The drop ceilind exposed only the slit where the door would drop. In these, there was no way to block them other than pull a large item into the path.

10. Drew Smith September 29th, 2009 12:49 am

    I just googled SLIDING FIRE DOORS and clicked on IMAGES. You'll find dozens of such photos. Also try OVERHEAD FIRE DOORS and ROLLING FIRE DOORS.

11. Lad288 September 29th, 2009 1:05 am

    DREW – Thank you for the google idea. Another great tool is to google stuff like this.

12. A/CM September 29th, 2009 8:15 am

    We have many of these in older Timber Frame buildings. Most of them still exist only in industrial buildings. In most cases while they may be allowable by NFPA 80, the fusible link is not allowed as a hold open device on self-closing, self-latching doors which must either remain closed or release upon smoke detection. We had many places that tried the fusible link as a hold-open for "normal" rated doors but the fusible link was placed near knob height rendering them nearly useless until far too late. As was noted, our people are shown to wedge or otherwise block these open, when necessary as close to the door as possible to eliminate any momentum.

13. DMAN72 September 29th, 2009 2:12 pm

    http://www.youtube.com/watch?v=4E5MRGiBHt8

14. Matthew September 29th, 2009 3:59 pm

    Dammit! After 8 years I get a new computer at work and now I need another new keyboard! That was the funniest GD thing I have seen in a long time!

15. Murph September 29th, 2009 4:08 pm

    I've seen these in some dorm/apartment buildings. I've seen them welded in the open postition sometimes, too. I've also seen doors in an old age home that close the openings around the top of the mezzanine level in the front lobby for smoke control. These are operable by the fd for use of ventilation if needed. They are comparable to roll up garage doors.

16. FF_Goodnight September 29th, 2009 11:50 pm

    well, if you would just have the electricians run some conduit over the doors, that would probbably hold them open long enough to tie off the probie to its fuseable link system to hold it open.

17. Matthew September 30th, 2009 8:10 am

    As a safety to the conduit you could also require instalation of a gas line.

18. Pat February 25th, 2010 10:37 am

    Would not tamper with these doors because they do serve a function in the event of a fire. How ever in a life safty issue where it is better that the doors do not close all you need to do is put a small object such as a screwdriver under the leading edge of the door as these doors roll down hill in order to close, The weight of the door will land on the screwdriver as it comes closer to the floor and will stop it or hold it in place as long as the object you put there "fills the Gap"

Bowstring without an Arch?

August 21st, 2009 | Category: Building Construction

Everyone in the fire service should know and understand the dangers associated with the bowstring truss style of roof construction. Unfortunately the fire service learned this during due to two tragic bowstring truss roof collapse events:

August 2, 1978- Brooklyn (NY) when 6 brothers lost their lives
July 1, 1988- Hackensack (NJ) when 5 brothers lost their lives

It is extremely important to be able to identify when a bowstring truss is present. Hopefully every firefighter should be able to identify a bowstring truss by the tell-tale arched roof. However, in many bowstring truss installations the arch is concealed from street level view by a large parapet wall like shown in our previous posts titled: Opposing Forces and Cover that Bowstring.

Besides the arch, the next most prevalent sign of bowstring is an occupancy that has a large open area, with a limited amount of supporting columns. Some examples include: bowling alleys, supermarkets, and automotive dealers/repair shops. The age of the building may provide another clue: Bowstring trusses were extremely popular prior to 1960's.

The pictures below show a different way of hiding the bowstring and prove that it's just as important to know the other signs of a bowstring truss roof.

As you can see from these photos, the arch of the roof may not be noticeable at all from the outside. Upon observation from the inside, the presence of the bowstring becomes obvious. The bowstring is present, but it has been "built up" into a flat roof. This particular building houses an indoor parking area for a rental car company located near the Los Angeles (CA) airport. Since the occupancy required a large open span, with a minimal amount of columns, the bowstring truss was utilized. Actually, to be more accurate, three bowstring trusses were used to make up each row of a truss. Each bowstring spanned a third of the building's width. The bowstring truss was then built-up to make to roof flat for drainage purposes, totally concealing the arch.

So the most reliable way to tell if a bowstring is present is to make that determination prior to the incident. Like we have preached so many times in the past, get out and pre-plan!

12 comments

12 Comments so far

1. Bearpond 118 August 21st, 2009 4:36 pm

   THis is another example of why our pre-incident plans are so helpful!

2. me August 22nd, 2009 2:58 pm

   i'd hate to be the engineer that "stamped" that

3. Tom Henke August 22nd, 2009 11:36 pm

   I agree that a bowstring truss is dangerous to firefighters and preplans are important and the best way to identify them. It is hard to tell from the photos but that may be a rib arch truss instead of a bowstring. The bottom chord on a bowstring truss is held together with a rod and turn buckle, that when heated expands causing failure and roof collapse. A heavy timber rib arch truss does have the similar arched roof but does not present the same catasrophic failure dangers of a bowstring.

4. Keith Niemann August 23rd, 2009 6:37 pm

   Not that it really makes any differance in your story but another bowstring collapse worth mentioning would be the Yingling Chevrolet bowstring collapse on November 21, 1968 in Wichita Kansas that claimed the life of 4 Wichita firefighters.

5. me August 25th, 2009 11:05 am

   Isnt a rib arch that sandwich Mickey Ds sells every so often?

   Actually we all know what a rib arch is, or atleast have all seen one…or a hundred. Rib arches are very popular for short span bridges. It is almost the opposite of a bowstring truss. It is a common arch with the load supported atop the arch, "ribbing" is using multiple arches in a parallel manner to cut down on

bulk/weight and increase load ratio. If you look at a bridge and it has an arch underneath that has columns rising from the arch up to the road it supports, look closely and you will see multiple arches parallel. (you have a ribbed arch). This system could be considered a ribbed for our practical but not technical purposes.

BOWSTRING. OK this type construction (not the picture)started out as Bowstring Arch, which is as Tom described. Failure of which is CATASTROPHIC. i.e. walls pushing out forcefully and collapsing with large scale, if not total, roof collapse. This method was replaced by the Bowstring (for the concept and previously named arch) Truss. This is a truss design. with vertical and diagonal webbing as part of the integrity. Some west coast fireman wrote greatly about this…shit what was his name??? Any way the failure of bowstring truss is not CATASTROPHIC in the way the bowstring arch is. Mainly because of the truss design and load delivery. But we must realize it is a TRUSS system, and though mainly wood can be metal. As a truss system failure of part can bring failure of adjoining trusses and failure of "system". Here in lies the problem. Bowstring trusses allow GREAT OPEN AREAS. which relates to more stuff coming down at once when something fails. "these ain't on 24 inch centers". And these are mostly unprotected. Remember what that Navy fireman said was so dangerous about building construction? The CONNECTIONS!! It is the large area of collapse and weight of such that makes these collapses SIGNIFICANT.
ALL that said, let us know what we are looking at and how it can work against us. But not get too caught up in "technical shit" that we lose sight of the dangers.

6. DaGonz August 25th, 2009 9:30 pm

   Another reason to get out of the recliners in the day room in the firehouse and do district and building familiarization!

7. Rob August 31st, 2009 5:37 pm

   I believe I have been in this building, I took a double take when I saw this about 9 years ago. If I remember right a block wall is in the middle of this building with two large spaces on both sides. But very deceiving from the outside.

8. craig September 12th, 2009 5:14 pm

   We repair bowstring trusses when they fail or burn. What you are discussing is called the supper structure.

9. Colin Kelley October 4th, 2009 11:43 pm

   Tom is correct. This is not a bowstrung truss assembly. Furthermore, there seems to be a huge misconception with regard to arch roofs. You have roughly three different possibilities with regard to arch roof construction. Bowstring, Ribbed arch timber truss,and Lamella(summerbell) trussless arched roof. Two of the three are extremely strong roof support systems. The other is the notorious "Bowstring Truss" system. There is quite a bit of documented evidence (photos,videos) of fires in the two systems other then bowstrung demonstrating how strong these roof systems are under fire conditions! With regard to the Hackensack LODD, there were quite a bit of circumstance leading upto that great tragedy that noone on the scene of that incident took into account. Dramatic alterations to the bottom chord of the truss. The heavy,

heavy storage in the actual truss space of engine blocks and parts.And lets not forget the general bafoonery that went on between the I.C.,roof team,and interior!Thats right. I said it. The building is your enemy! Know your enemy! Whats going on with the lack of understanding and knowledge of building construction in the fire service today????!!!Get off your ass and put down the Xbox controller! Paycheck firemen is what you are!!!!!

10. Chris Hanna PE April 7th, 2010 1:17 pm

    Both Tom and Colin are incorrect about their assessement of the type of trusses shown in the photos.
    The in-line stud framing between trusses (so that the roof will have one "hump" instead of three) could be what is confusing the issue here, but these are indeed vintage bowstring trusses.
    Incidentally, the steel tension rods that are usually installed on each side of bowstring trusses are typically an afterthought and added years after the original installation. This was done since the allowable tension on wood members was much too liberal during the days these trusses were designed and installed. Later, in the 1980's, extensive testing showed there was a problem. Then, conscientious building owners, engineers designing a problem fix, and change in building occupancy required the addition of post-tensioned elements to the bottom chord of these trusses.
    Chris

11. Ali Jahanfard August 30th, 2010 1:22 am

    Test

12. Mike December 10th, 2011 7:25 pm

    I know this is an old article but I have a question that I've never heard addressed regarding bow string. From what I understood there are the three basic types of arched roof members. The Lamella, Arched Trusses (in all of their varieties from open bar web joist to good old heavy timber arched truss), and the (deadly) bowstring. I was more or less along the understanding of Tom, "Me", and Colin. We all know the name of the game is see it before you have to be in it but is anyone aware of tell tale signs that a roof is bowstring that are visibile from the exterior. I know that jack rafters (the pitched rafters that run perpendicular to the trusses at either end of the building) are less common on bowstring and that on some the ends of the arches with their capped off cable ends are visible. I've also been told I can lower my index of suspicion if I see Air-conditioning (not swamp coolers) on the roof because of the sheer weight increase which we all know is more of a crap shoot because the occupant may not have cared what the building was engineered to handle. Any one else have thoughts or tips? Thanks!

Tool Wrap

January 31st, 2012 | Category: Tips

Tommy Ursetti from Sarasota County (FL) Station 5 sent in this photo of a different method of creating a tool wrap. This wrap simply uses cotton clothes line rope and some half hitches. The wrap is technically called a Chinese staircase, named from the spiral that is formed as the knot is tied. The wrap is started with a clove hitch at one end followed by multiple half hitches pulled tight after each knot. The wrap is finished with a another clove hitch and secured with super glue. One benefit of using this style of wrap is that it tends to be a bit more durable than wraps created with tape. Any small diameter rope works well for this wrap. One potential benefit to consider when using cotton rope is that it actually gets a little tighter when wet. Para-cord (550 cord) also works very well. It tends to create a flatter wrap if the inside stands of the cord are removed prior to wrapping the tool. Its a big pain to remove the strands, but some people prefer the flatter wrap. Tommy mentioned that he actually learned this wrap from Chris Kelly and Lt. Jerry Jensen.

Some people prefer modifying their tools with grips, others do not. There are obvious pros and cons. Whatever your preference is the key to success is to take care of your tools, and train with them regularly.

11 comments

11 Comments so far

1. DMAN72 January 31st, 2012 2:28 pm

   This seems like the perfect place for a tool-wrapping joke, but I think we're all above that……or are we?

2. Matt January 31st, 2012 2:36 pm

Don’t be a fool wrap your tool! We’re not above anything DMAN.

3. Andrew January 31st, 2012 11:28 pm

   I can say from experience, I much prefer a tool with a wrapped handle over one that isn’t. The tool (and the user) can still get the job done, but why not make our job a little bit easier?

4. FitSsikS February 1st, 2012 6:02 pm

   Come on Dman, get a grip on yerself!

   As if!

5. Lt. John Waligora February 2nd, 2012 11:06 am

   Tommy, atta boy for sharing. And CK & Big Daddy, I’ll send up Truck 84’s tools for RE-WRAPS lol. I like that much better then the O2 tubing and hockey stick tape we use on all of our stuff. Good Stuff!!! Be safe brothers!!!

6. Richard Fritz February 11th, 2012 5:30 pm

   The hitch illustrated is the “French Sennet Wrap” The “How to” using wire and Hockey tape is well documented in my book and videos “Tools of the Trade, Firefighting Handtools and their use” pubished by Pennwell pubishing.
   –Rick Fritz

7. Chris Craig February 17th, 2012 12:14 am

   Glad to see my former SCFD brothers contributing, I hope all is well. Big Daddy still passing the craft I see. Things are great in Pierce Co, WA.

8. Foodforthought February 22nd, 2012 9:41 am

   The use of the tool wrap has become more and more prevalent in the fire service as late admirably pushed forward by company pride and wanting to better ourselves as firemen.

   I however think it is important to note with every example of the tool wrap that the wrapping of the Halligan should be avoided at all costs. Wrapping the Halligan prevents the easy slide of a flat head axe down it’s shaft into the taper at the start of the fork. In fact in my experience it becomes impossible to utilize this method.

   Please keep this in mind and discourage wrapping Halligans.

9. DMAN72 February 22nd, 2012 1:01 pm

> Foodforthought,
> In reality, how many times is that even necessary? I'm not trying to argue with you, I'm just saying that it doesn't seem like that's a big enough issue.

10. Nate999 February 22nd, 2012 8:29 pm

> Foodforthought,
>
> While it's not a big enough issue for my dept., I would offer a suggestion for a happy medium. If you find that you use the shaft method (insert joke here), but still want the grip, why not stop the wrap 12" above the forks? You'd still get the benefit of improved grip, along with plenty of space to slide the axe.

11. Richard Fritz February 26th, 2012 5:59 pm

> Wrapping a grip to improve your Halligan should not interfere with its use. If it does, you may be wrapping it wrong. wrapping a Halligan does require frequent wrap changes. The "How to" using wire and Hockey tape is well documented in my book and videos "Tools of the Trade, Firefighting Handtools and their use" published by Pennwell publishing.I agree that it doesn't seem like that's a big issue.

Tips from the Bucket

A place to share various ideas and techniques

Halligan as a step

Click for video

The Halligan Bar serves many purposes on the fire ground. One use outside of the normal forcible entry is use as a step to get us into taller windows such as windows found on many of your older style queens and shotguns. Note on the video it is critical that we clean the entire window frame to lessen the likelihood of being cut upon entry or egress.

Method of carrying Hook and Halligan

Any easy method of carrying a Hook and Halligan in one hand is pictured above. Place the adz of the Halligan over the hook and hold together with one hand. A velcro strap placed tightly around the two tools helps out significantly.

Halligan into roof

The Halligan placed pick end into the roof provides good footing and leverage when working on peaked (or pitched) roofs. Anytime we exceed a pitch greater than 4 / 12 roof ladders are a safer alternative.

Ladder carry with OVM Tools

The Outside Vent Man (OVM) has to carry a bunch of tools one method of making it easier is pictured above. Carry the ladder with a low shoulder carry, place your hook and halligan on the bottom beam of the ladder, and clamp in place with your hand. Not visible is the cut sledge in the belt of the SCBA.

Halligan Saw Holder

After making the cut you need to put the saw down in order to free up your hands to remove the cut section. Burry the pick end of the Halligan into the roof decking with the saw hanging from the adz. Don’t forget saws and equipment should be hung on the unburned side of the roof operations out of your means of egress, but close enough for access.

Webbing Storage


Webbing is an amazing tool for the fireground. Every firefighter should carry at least one 20 foot section. Check out some of the other tips that demonstrate the multiple uses of webbing. A good place to store a loop of webbing is in the removable kneepad in your bunker pants, it's easy to get to and really doesn't get in the way.

Hook& Webbing Step

Your hook can also be converted into a step. This works well for a window that is too tall to reach with the Halligan step. This technique also works well when you have to get over a tall block-wall fence. The key to this technique is to get the hook set firmly into the ground and against the wall before climbing. While climbing, you can then use the top of the hook (as a step) for that little bit of extra leverage you may need to get you up and over. It is very important to stay in-line with the hook. If you kick sideways, the hook will slide. It may work better if the hook is flat against the wall, the hook in the pictures has a large D handle on the bottom so this position worked best. This method takes a lot of practice, and you are almost guaranteed to fall a few times. It's obviously not the preferred method, but it is another tool for the toolbox.

Take your 20 foot loop of webbing and form a girth hitch, or simple loop over the top of your hook. Make a dip in the webbing down to the level you would like the step to be (above left.) Tie a simple overhand knot back up at the tip of the hook and place over the hook (above right.) Take the slack of your webbing and hold in your hand as you scale the wall. This allows you to retrieve your hook with ease.

Hook& Prussik Step

Start off with tying your prussik in a girth hitch over the top of your hook (above left.) Here you can also see the firefighter using the top of the hook as a step. The other method is to tie the prussik loop around the shaft of the hook with a two wrap prussik knot (above right.) This allows you to place your foot in the loop and advance the prussik as high as possible.

Wall Breach/Low Profile Training Prop

A wall breach/low profile training prop can be made quickly with a small amount of lumber. The prop pictured is 4 feet high and 5 feet wide, but any size will do. The two wall sections on the right are placed 16 inches on-center, and the one to the left is 24 inches on-center. A short piece of electrical wire is strung through holes drilled about 16 inches from the bottom. A 4 inch section of 4x4 is nailed to simulate an electrical outlet. We have found that a hurricane strap wrapped around the simulated electrical outlet and stud will prevent the outlet from being broken off. The 16 inch wall section with the electrical outlet obstruction is quite challenging.

Through the Lock Training Prop

The best kind of props are free props! Lieutenant Rich Taylor from Winter Park Truck 61 came up with this great idea.

Find a structure in your area that is being demolished, and cut out a section of the door with the lock mechanisms still intact. (After obtaining the Demolition Company's permission, of course!) This section can be brought back to the firehouse and disassembled. This allows everyone to study the internal workings of different types of locks and mechanisms. In addition everyone can practice with the different key tools normally used in conjunction with the "A" or "K" tools.

The lock section pictured to the left was removed from a commercial door and can be be utilized in the same fashion. This lock is a little bit trickier to manipulate, normally requiring the 90 degree side of the key tool.

Framing Square Forcible Entry

Battalion Chief Tom Cole from Miami Dade Fire Rescue sent in this great forcible entry method. Click on this supplemental page for step by step instructions on how to use a framing square as a forcible entry tool.

Spin Hitch

Firefighter Jeff Spinelli from Winter Park Firehouse 62 came up with this method of using webbing to move a victim. This method is called the Spin Hitch for obvious reasons.

Start off with a loop of webbing and girth hitch it around the victim. (we found that it actually works better

to make the girth on the front instead of on the back like pictured below.) Make two bights out of the webbing and pull those bights around the arms (pictured right.) Like previously mentioned these pictures are basically backward, just picture the victim facing the opposite way. We found that this method works well when moving up stairs, as it lets two firemen stand in front of the victim pulling up and forward. It's hard to describe, and the pictures certainly aren't doing it justice. It's best to go out and give a try.

"Doggy Door" Cut

The photo above pictures the "Doggy Door" cut. Battalion Chief Jeff Pindelski from Downers Grove (IL) Fire Department sent in this idea.. BC Pindelski is also a co-author of the Delmar publication Rapid Intervention Company Operations (RICO.) He pointed out that the hinges remain an option on the outward swinging door, but this too could be very useful method. Once the bottom section is pried open a firefighter could reach or crawl in, and manipulate any security devices on the door. The beauty of this option is that most of the locks added to the door will be located above the midline. This option should make pretty quick work of forcing most doors.

A great place to use the doggy door would be a check cashing store. These stores have some interesting forcible entry and search issues associated with them. Check out the supplemental page for a full description and additional photos.

Halligan Cheater

The Halligan is by far one of the most versatile tools on the fireground. There may be that rare occasion when the standard 30” Halligan just can’t get the job done. Trust me, it’s rare but it could happen. Pictured above is a commercially sold 54” Halligan. Personally I haven’t been faced with a situation that would make me carry it regularly, but it’s nice to know that it’s on the rig.

Another viable option is also pictured above. It involves using two Halligan’s simultaneously. It’s just like adding a cheater bar to the Halligan. When forcing an outward swinging door, place the first Halligan as usual. If more leverage is needed, place another Halligan’s forks into the first Halliagn’s forks. Now two people can easily apply force to the tool set. It’s helpful if one firefighter places a hand over the forks to keep them engaged. When you marry the two Halligan's in the same direction (as in picture above) the opposing pick will interfere with adz being able to “set” into jamb. You need to rotate the second Halligan 180* before marrying them. now the adz can be BURIED (as it should be) with the pick from second tool not getting in the way. It may look ugly but it gets the job done.

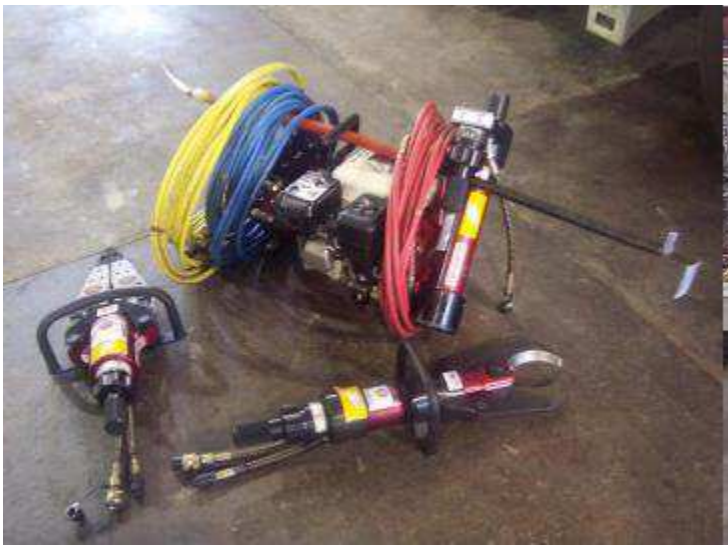
Ballance Point

Here's a real simple and effective time saver. Believe it or not it each ladder has a different balance point. For example, a roof ladder is not balanced exactly in the middle; the hooks add enough weight to affect the balance point. A simple stripe of paint or reflective tape at the balance point eliminates the guess work. Who wants to take the time to count rungs…Just place the mark on your shoulder and the ladder is perfectly balanced every time.

Pictured above is a 14 and a 24 placed next to each other, you can see in the photo that the 14's balance point is closer to the tip due to the weight of the hooks.

Another tip is to use different colored stripes (or combination of stripes) for each unit. It's easier to distinguish which ladder is which when multiple units have thrown ladders.

Two Jakes and the Jaws




Firefighter Matt Scallan from Escambia County Engine 19 sent in an effective way to "work smarter, not harder." He was quick to share the credit with his brothers on Engine 19 "C" watch. He points out this method works well when manpower is be limited, time is of the essence, and of course you have a vehicle beyond the reach of pre-connected hydraulic reels.

Simply place you power unit on the ground and slide the six-foot roof hook through the handle (or frame depending on power unit.) Now you can place your coiled hoses on the hook. Each firefighter grabs a tool in one hand, and the hook in the other. The ram can be can be carried by the way of a sling or can hang from the hook like shown in the photo above.

Fernald Lock Pick

Jeff Janus from Bloomingdale Fire Protection District #1 sent in this tip for “forcing” a door during non-hazard situations. Apparently it’s called the Fernald lock pick, and involves a bleach bottle of all things. It seems to be best suited for doors with a rabbeted jamb, or a stop jab that you don't want to remove. Jeff pointed out that he didn't invent it, otherwise we'd be calling it the Janus Lock Pick. (He didn't say that part, we took creative liberty on that one.)

You’ll need a smoke ejector hanger and an empty bleach bottle.

Place the smoke ejector hanger bar in the door jamb. Either immediately above or below the lock. Extend the hanger, leaving one or two finger widths to the jamb before spreading the hanger. This seems to give it a good amount of spread. Expand the hander just enough to create a small gap between the door and jamb. Grab the empty bleach bottle that is cut into a hook shape. (Leaving the handle attached makes it easier to maneuver.) The bleach bottle is the part actually called the Fernald Lock Pick.

The pick is slid into the door jamb and moved around until it catches the door lock throw. And now you’re in!

Modifying the Irons

Firefighter Matt Scallan from Escambia County Fire and Rescue, and Freighter John Gilkey from Montgomery County Fire/Rescue. They both sent in this tip within a few weeks of each other.

The First part of the tip involves marking the halligan. To remind yourself how far to set the bar, make a mark on the fork and adz of your halligan, 1 ½" (the width of most doors) from the edge. You can make the mark using a file, dye grinder, or Dremel tool. Firefighter Gilkey points out that a little paint gets you "style" points and you're done. Anyone who has forced a number of doors is probably wondering why bother? Any seasoned fireman knows when the tool is set buy sound and feel. We agree, but we would like to have each one of you reflect back on your first few attempts in forcing doors. We're sure each one of use could have used a little "visual" reminder.

Firefighter Scallan also sent in a photo of a modification to the fork end. This works well in narrow hallways where adequate room may not be available to strike the back of the halligan. The tip is to simply file or

grind of the top of the forks to give a striking surface for your axe. Of course this method does not work so well on a fully taped up handle.


Hook & Ladder


Emergency Vehicle Driver Dean Denning from Baltimore City Truck Company #5 sent in this slick method of storing & carrying the OVM tools. He graciously gave credit to Baltimore City Truck Company # 29 for the original idea.

This tip involves attaching 2 tool holders to the bed section of an extension ladder (or any ground ladder for that matter.) He points out that the long bolts were placed through the rungs of the fly section, thus maintaining the ladder's integrity by not drilling into the bed section. So the safety police can stand down… The hook in this case is a "Boston Rake" and the point end is stored in the rung, helping avoid injury.

He points out that by having a hook pre-attached to the ladder the firefighter has a free hand to take another tool. In addition, when the ladder is mounted on the side of the rig (with the tool pre-attached) scratches and gouges are less likely to occur. Since the firefighter can focus on taking the ladder and worry about the tool scratching the rig.

Tabbed Ground Pads

Lt. John Bannon sent in the latest Tip from the Bucket. He credits Walt Caber, President of the Reliance Hook & Ladder Co. 61 for the creation of this tip. They welded tabs on the ground pads (or jack plates depending on where you are from.) The tabs make it much easier to get the pads in the right place. Lt. Bannon pointed out that the pad can be slid on from the opposite direction in situations where the outrigger would have to be right up against an obstruction.

Obviously, any crew worth even being on the truck should be able to throw the pads in the right place every time, but this tip is still quite useful. In a situation when manpower is limited, or if the truck crew breaks into teams prior to the rig getting set up, the "tabbed" pads will make the setup much quicker.

Heavy Irons

Sometimes the axe and halligan just won't do. The time may come that you need a bigger hammer. One of the issues with carrying a sledge with a halligian, is the fact that they don't marry as well as the traditional irons. Here are two similar approaches to fixing the issue. The first one was sent in by Firefighter Angus Burns from Lexington Fire EC-3. The second one was sent in by Driver/Operator Chad Berg from Snohomish County, Washington Ladder Co. 72.

Angus points out that the Lexington creation was a group effort. Firefighter Jack Trautwein wanted the ability to carry the sledge/halligan combo, Angus found the material at a local fire apparatus shop, and Firefighter David Gumm did the machining and welding. This particular method has the added feature that allows the set of "heavy irons" to stand upright without falling over.

Chad took the more familiar approach. He used a more traditional loop welded onto the top of the sledge. He points out he likes to carry the heavy irons when working in concrete tilt up and re-enforced masonry structures that normally offer little flex when forcing. The heavier sledge allows for a bigger punch when setting the halligan. Since the welder was already out and warmed up, they added a little company pride to the tool.

It should go without saying, but we'll say it anyway. Be careful to watch the temperature of the sledge head while making these modifications, you could weaken the epoxy bonding the handle and head, and we would not want to be around the first time you figure it out.

Smoke on a Roll

Here's a quick and cheap way to "smoke up" someone's mask for training. Firefighter Jason Zamarron from Grand Rapids Fire sent in this great idea. He took some Glad Press-N-Seal cut it to size and stuck it on the outside of the mask. As you can see in the second picture it gives a somewhat distorted smoke type of view. If a more obscured view is desired, a second piece can be placed over the first. One great feature about this method is that it can be taken off the mask quickly when a call comes in. This idea works well when the entire room can't be smoked up due to time, logistics, or any other reason.

Dipped Irons

Scotty Shelton, Chief of Training for Baton Rouge Fire sent in this tip he spotted out on the training ground. The tip is actually credited to Captain John Braud of Engine 6. He used 3/16 cord and tool dip to create a non-slip grip surface on his set of irons. It's cheap, easy, and makes the tools readily identifiable. The set of irons are held together with a bungee cord that can also be used to hold back screen and storm doors.

Better Balance Point

Firefighter Eric Bearss from Orlando (FL) Tower 7 sent in this idea for a better balance point. He pointed out that he picked this idea up while assisting Mike Caimpo (FDNY) at the annual Orlando Fire Conference with Champ's Street Smart Ladders Class. Obviously, the main purpose behind the marking is to identify the balance point for each ladder. This larger marking serves multiple other purposes: easy equipment identification, and of course the ever important company pride (take a look at the fireground pics @ the station.) However, the most important aspect of this version of the balance point marking has to do with helping the outside team. In the instances when the outside team may be split up on the fireground, its obvious to the other team member exactly which ladder is yours, and exactly what room you are currently VESing (by leaving your hook on the ladder.) Another benefit of this marking is that if the balance point is painted on the base section, once the stick is thrown, it puts the unit ID right at eye level.

Saw Press

Captain William Foss Golder Ranch (AZ) Fire sent in this idea for a method of carrying the saw to the roof. They were trying to look for ways to save some of the precious floor space in the bucket. They started looking for a way to mount the saw outside of the platform when they were preparing to ventilate. (It is important to point out that the saw is only placed in the press when they arrive on scene and are about to deploy the aerial. During response and other operations, the saw resides in a traditional compartment.) After some research they found something called a "saw press" out of an outdoorsman magazine (could be found in most outdoor sports stores also.) The saw press was originally intended to be used on an ATV to transport a chain saw through rough terrain. They contacted the manufacturer and reviewed all of the specifications on their product, and felt comfortable that it could be adapted to this particular application.

The photo to the left shows the saw mounted in the press, and the photo to the right shows the saw press in place without a saw, this is all that remains on the aerial when the press is not in use. After having it in place for some time, Capt Foss said they a very pleased with the outcome. The saw fits in quickly and is removed quickly even with your structure gloves.

Bar Cover

Firefighter John Gilkey from Montgomery County (MD) Fire, Station 29-A, sent in this tip. The tip is simply to use some old hose as a saw bar cover. A couple of short bolt, washer, nut assemblies, and you're done. Of course a quick stencil and a rattle can finish it off nicely.

The photo on the right shows how the addition of some webbing and a plastic buckle can be used as a retention system. A quick easy way to protect the saw.

RIT Mask

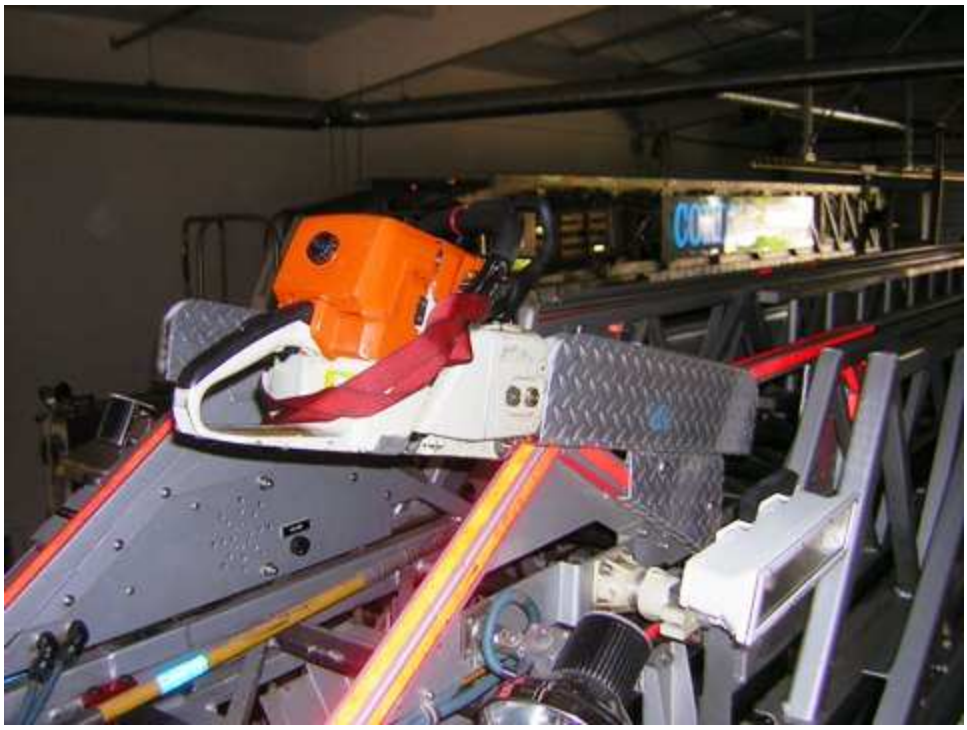
The District of Columbia Fire Department is in the process of training the entire department in Rapid Intervention Team skills. One of the many skills covered is to replace a downed firefighter's damaged or missing SCBA face piece. This somewhat simple skill becomes significantly complicated while wearing gloves in a low-vis environment. Some of the brothers knew there had to be a better way, so they came up with a simple, yet effective, modification to an old face piece. The information for this post was sent in by two individuals: Captain Daniel Troxell from Truck Company 6, and Lieutenant Tony Carroll from Rescue Co. 2.Click here to see the supplemental page with the details of this useful modification.

Twist Lock Higbee

Here is a helpful tip that makes a simple job even easier. Undoubtedly, every one of us has had to try multiple times to hook up a twist lock electrical connection. Common, admit it, not even at 03:30? …Thought so.

Ryan Skabroud from Chippewa (WI) Fire District sent in his rendition of an idea he originally learned from St. Paul Fire. The idea is to simply mark the odd prong on each connection. A few sharpie markers (black and silver) are all you need. Simply connect (but don't twist) the plug and draw your mark on both the male and female ends of the plug. Then when its time to make the connection, just line up the marks, and you'll have success first time, every time.

Aerial Saw Scabbard



Jake Portillo from Corona (CA) Fire Dept. Ladder 3 "B" sent in some photos of a tip without a bucket. Although you cannot really tell from the photo, Ladder 3 is a Tractor Drawn Tiller Aerial, obviously with no bucket. In order to simplify getting saws to the roof, Corona Fire Department created what they call the "Aerial Saw Scabbard". Apparently the name has a funny, easy to remember abbreviation. Jake pointed out that they do not run with the saw in the A.S.S. Upon arrival, the cab fireman hands the saws up to the tillerman for placement in the scabbard. The scabbards do not have any retention straps; the angle of the scabbard keeps the saw in place. The scabbard is a simple bracket made from some diamond plate with a nylon insert to prevent damage. Notice the way the scabbard is mounted, the bolts do not go through the aerial at all. The bolts simply clamp the scabbard to the aerial. Jake also pointed out that they do in fact run with the rubbish hook stored on the aerial as seen in the first picture. The climb to the roof is much easier with two saws, and one hook already at the tip of the ladder, allowing the roof team to make it to the roof quicker, and with the ability to carry additional equipment.

RIT Mask 2

Lieutenant Doug Mullford from Lisle-Woodridge (IL) send in a slight modification to the DCFD RIT mask shown above. They took the piece of hose and placed inside the webbing of the mask. The reasoning was they felt you could get a better grip on the webbing, and better be able to verify when the mask and webbing were properly seated. Lieutenant Mullford also points out that this medication eliminates the need to do any sewing. It's simply another rendition of the outstanding idea originally presented by our DCFD brothers.

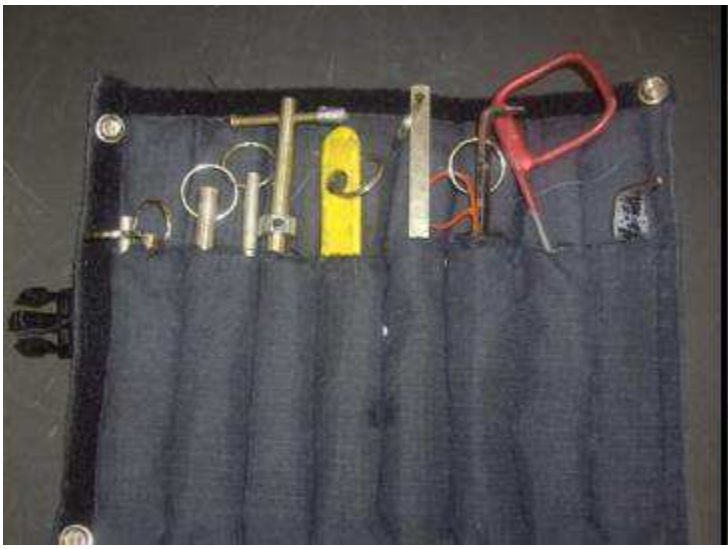
$2 Glove Dryer

Tim Dowd from DCFD Rescue 2 sent in this simple idea to keep your gloves dry. Each one of us has gotten our gloves wet, and come back next tour to a set of gloves that smell so bad you never want to use them again. This idea takes 2 Gatorade bottles and two minutes of time. Simply cut the top and bottom off of the two bottles and cut every other section out on the sides. Slide these into your gloves and place in front of a heater or in you locker until next tour.

DC Hook & Ladder

Joe Brown from DCFD Truck Company 17 sent in this tip that works well for truck companies with side mounted ladders. It involves a webbing tension strap, a bull ring, a worm clamp, duct tape and some super glue (just kidding about the duct tape and super glue.) It's actually a very slick method of mounting a hook to the ladder. It's quick to install and uninstall on the ladder, and more importantly it's very quick to deploy when the hook is needed. Joe and the Truck 17 crew have put a lot of thought into ensuring that this particular set-up improves their fireground efficiency, click here for the details of the set-up.

Elevator Key Organizer



Lt. Ray McCormack from FDNY Ladder 28 sent in this method of organizing the set of elevator keys. Most rigs simply carry the elevator keys exactly how they came from the supplier on a large ring. This large ring may work for keeping the keys together for storage on the rig, but that is about it. Using the keys while they are on the ring is another story.

Ray's method uses a pouch made from an old removable bunker gear knee pad. The Morning Pride knee pads used here already had the ridges (compartments) sewn in them, so a simple cut with a razor knife was all that it took. As you can see a small strap with clip holds the roll together.

Non-Rotating Saws

John Simpson from Osceola County (FL) Truck 72 sent in this tip to use while performing your daily equipment check. Saws have a natural tendency to bounce and rotate when idling on the ground. This is caused by the vibration of the motor. Most saws have a foot stand or plate in-between the blade and motor. In order to keep the saw in one place, simply find a crack in the asphalt or concrete and place the foot stand in the crack. This keeps the saw in one spot when idling during checkout.

As a side note, simply letting the saw run at idle is not a sufficient morning check out. This tip is intended to be used when you are letting the saws idle after they have actually been checked.

Personal Escape Hook

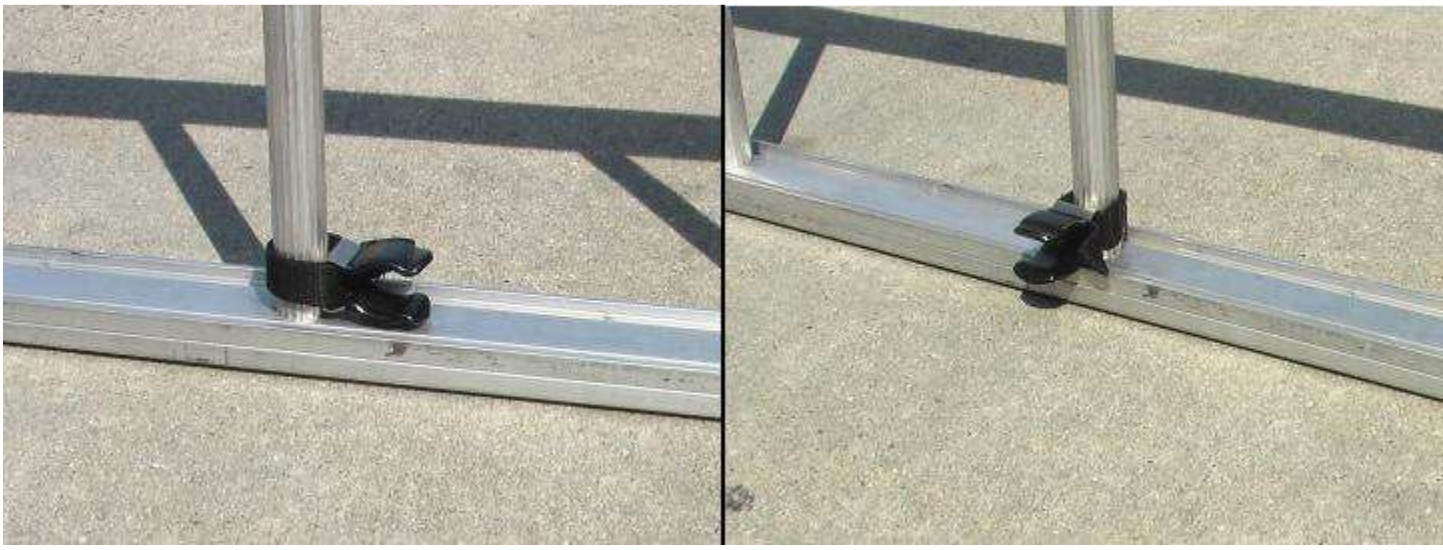
Engineer Jason Simms from Gwinnett County (GA) sent in this tip. He bought a small crow bar at the local home improvement store and cut it off at about 5 inches. He then welded two links of a chain to create an attachment point for personal escape rope. Jason says it works great and is quite a bit cheaper than the commercially sold products. The whole set-up was less than ten bucks. There's nothing like a little firehouse ingenuity to save a few dollars.

Free Hand

Paul Ashton from Winter Park (FL) Truck 61 came up with this tool carrying method. This particular method allows for two tools (halligan and rotary saw) to be carried with only one hand. The halligan is put in place by simply placing the adz on top of the blade guard with the pike along the side of the guard. The handle of the halligan then rests on top of the saw motor housing. The vibration springs on the handle hold enough downward pressure on the halligan to hold it in place. As mentioned earlier this method works well when carrying the saw by hand and will not work with a saw slung over the shoulder. There are many situations when a rotary saw and a halligan are needed together, this method frees up a hand to carry other tools. It may not work with different brands of saws, but works well with the Partner 950/960 series as shown in the photos.

Compartmentalized Ladder

Technician Larry Lippincott from Loudoun County (VA) Tower Ladder 611 sent in this tip that allows for ladders stored in a ladder compartment to be modified to securly hold a hook in place. This solution uses a simple clip and some heavy duty Velcro. The clip is simply attached to the rung using the Velcro.



This allows the clip to swivel out of the way when the ladder is stored and not in use, as shown above left. When needed, the clip can be swiveled into position allowing it to hold the hook securely in place, as shown above right. The clip is secure enough that it holds the tool while throwing the ladder allowing the tool to be released with a good pull. It is worth pointing out that this method utilizes the side of the hook with the 45 degree angle to help keep the hook secured to the rung.

What's in your Pockets

Always an interesting question... Ask any Firefighter what's in the pockets of their gear, and why. Everyone has different ideas, and there is typically an interesting explanation. Email in your ideas, and or pictures an we'll list them here.

Webbing Storage

Webbing is an amazing tool for the fireground. Every firefighter should carry at least one 20 foot section. Check out some of the other tips that demonstrate the multiple uses of webbing. Even though it's not technically in your pocket, a good place to store a loop of webbing is in the removable kneepad in your bunker pants, it's easy to get to and really doesn't get in the way. This idea was first featured in the Tips from the Bucket section.

Modified Channel Lock Pliers

A pair of channel locks are always handy to have. They serve multiple purposes, and are even useful for removing battery cables on vehicles. Simply grab onto the battery connection and twist back and forth, it typically comes off pretty easy.

The pair above have been modified to be used as a key tool. One end was placed on the grinder to be used to manipulate a lock when using the through the lock method of entry. The other end was heated, bent, then ground down to be used as 90 degree lock tool. The webbing pictured is placed over the sharpened ends to prevent self inflicted trauma when stored in your pocket.

Tool Wrap

It's sometimes helpful to bind all of the tools in your pocket together, it keeps them from poking multiple holes in your leg! A Velcro strap wrapped around the tools is a great option, unfortunately I just lost mine so this sorry looking strap will have to do for now. When using a Velcro strap be sure to tape one end to make it easier to open with a gloved hand.

The modified channel lock is shown here with the protective webbing in place. Also pictured is the very handy 5 in 1 screwdriver. It has two different flat tips, two phillips tips, and a hex drive that works when disassembling most air handler units.

Like I said before there is typically a story behind what each person carries. The small white screwdriver pictured is used to reset fire alarm pull stations. I have "heard" that using a knife instead of a screwdriver may be a bad idea, it could lead to attempted finger amputation!

Tool Bag

Firefighter Blakely Vasen from Winter Park Truck 61 uses this handy "tool bag" to confine items placed in his pocket. Tin snips are an extremely beneficial tool to carry, they cut through electrical wire, and other wires that you can get wrapped up in during a fire (ceiling grid suspension wire, HVAC coil wire, etc.) The custom duct tape job is to prevent the tin snips from poking through.

By the way, that is the actual knife that taught me the important lesson to carry the miniature screw driver. Notice Blakely now carries mini screw driver also. Thanks Bro!

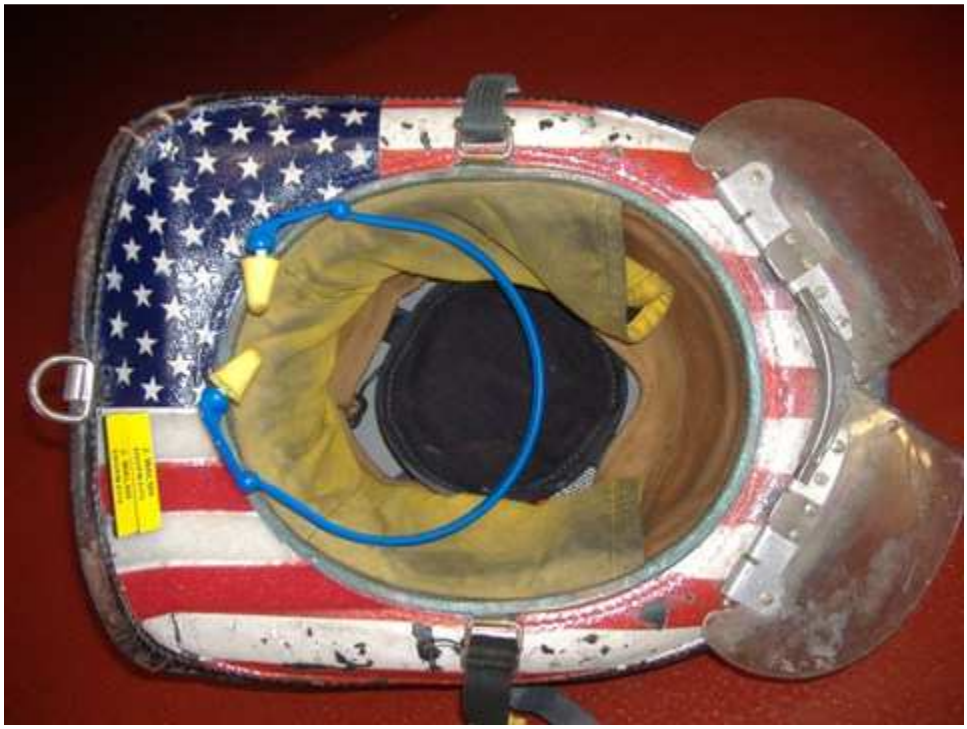
Shove Knife and Elevator Key

Both of these tools are great to have. They are light, take up very little room, and are used frequently.

Tin Snips and Backup Light

As mentioned above, Tin Snips are extremely versatile. The importance of a backup light in your pocket should not be underestimated. The one picture in a Pelican "Little Ed", it seems to work well.

Ear Plugs stored in your Lid



Lieutenant Rich Taylor from Winter Park Truck 61 showed me this great idea. Ear plugs are great to have but frequently get damaged or lost. The plugs pictured above are stored inside my lid in-between the helmet and suspension webbing. They bend pretty easily and stay out of the way.

The idea for the sweet paint job was stolen from Lieutenant Walt Lewis from Orlando Fire Department. Apparently Walt stole it from Joey Alverez from Maplewood (NJ) Fire Dept.

Handy (and cheap!) Door Chock

Jason Jefferies from Charlotte Engine 37 sent in this simple and cheap door chock. He was quick to point out that he didn't invent this himself, but we're giving him credit for it anyway! All you need is a piece of 1" or 2" angle iron and an "S" hook.

Drill a 3/16" in the center of the angle iron and insert one end of the "S" hook. Take a pair of pliers and bend the hook so that it closes (pictured on left.) It's as simple as that!

When you use the door chock, simply hang it on the hinge of the door you need to keep open. The beauty of this type of door chock is that it is out of the way and will not be effected by an advancing hoseline or accidentally kicked out of the way.

I would recommend painting your chocks with fluorescent paint for visibility and identification. I can see in now, someone trashing the door because they were trying to force it closed with the chock in place...

Cherry Bombers

Alright so maybe it's not really in your pockets, but it could be! One of the brothers from Tampa Fire shared this great idea. They are called "Cherry Bombers." They are made from a wood dowel and a bent nail. They can be placed over a door hinge to keep the door open. Cheap and effective!

Originally we weren't sure who came up with this great idea. Thankfully Tony Perez from Tampa fire gave us the heads up on who deserves credit for this one. Wayne Tolzman from Tampa Firehouse 5 is now formally credited as the originator of this "tip." Thanks fellas!

Rescue Shears & Rescue Hammer

Tim Brozoskie from Baltimore City Rescue Co 1, sent in some things we haven't featured yet.

The simple utility knife, always sharp, if it gets dull just change a blade, if you loose it, only $3

Gerber rescue shears, they are spring loaded , so they operate easy in 1 hand. If you get hung up, you can reach behind you and start snipping, they can cut clothing, seatbelts, SCBA harness, rope, household cables, and are excellent for the wire harnesses found on car doors.

"Rescue hammer" unlike spring loaded punches, this always works, has a seatbelt blade, and in a pinch it can smash household glass.

Linesman pliers, work well on suspended ceiling wire.

Is that a Cigar in your Pocket?

Lt. AJ Isaacs from Winter Park Firehouse 61 had a few more.

Cheap throw-down multi tool. (It sucks when you loose a good one.)

Crescent wrench has many different uses including: disconnecting a battery, opening an HVAC, or shutting off a valve.

A center punch. Wrapped with tape for ease of use with a gloved hand, and helps retain it in your pocket.

A yellow crayon. This is good for marking doors during a search. The cigar tube keeps it from getting crushed in your pocket.

It's Cold Out

Hunter McConnel from North Star Fire Department in Interior Alaska sent in this idea. It's not really in his pocket, but we'll consider it good enough for this page. He told us that a lot of the brothers from frigid Alaska do this, and that he didn't "invent it." We'll you know the rules, if your the first to send it to us, you get the credit. He advised that they carry two of almost everything because it is so cold and when you or your buddy forgets your hood you have an extra one right above your head. It's definitely not something that would ever be a problem in Florida, but it sounds good enough to us.

Putty Knife

Here's what Lieutanant Eric Norberg from West Warwick Rhode Island Fire Department carries in his pockets. He points out that it may seem like a lot of extra "stuff" and added weight, but he's willing to carry the extra pound or two to make his job easier.

He uses a home made shove knife, ground down from a putty knife. It has a nice handle and the spring steel it is very flexible. A pair of vise grips that are designed to go around circular objects, like lock cylinders, pipe, etc. A standard credit card for slipping past a knob and key lock on inward swinging doors. A 6 in 1 screw driver, not only does it have large and small slotted and phillips heads, it also has two hex heads that fit most HVAC units or duct work. A rubber door strap, it is a simple piece of inner tube tire with two slots in it to slip over each side of a door handle. It prevents self closing doors from latching behind you. A electrical current tester, just plug it into an outlet or hold it near a suspected live wire to confirm its status. A spanner wrench with multiple uses including, a gas shut off, small pry end, and standard and stortz connections. Lastly, a dental pick for tripping any intricate door latching mechanism, or any other small detailed thing.

Another Door Chock

Lt. Jason Rivera Rescue Co. 1 Stamford, CT Fire Rescue Dept. sent in this variation of the angle iron door chock. Its a piece of angle iron with a nail welded to the inside angle. The nail is then heated up with an oxy/acetylene torch and bent over so it will hang on the doors hinges. They may not be pretty, but they take about 5-10 minutes to make and are a lot cheaper then the store bought brands. If you forget one after a run, no problem just go make another, its also a good training opportunity to use the oxy/acetylene torch.

Nail Wedges

A bunch of readers have sent in the idea of using nails as wedges, but Captain Mike Alsup from Ocala Fire Dept was the first to include a photo. Besides carrying "regular" wedges he carries 8 penny nails in the strap of his helmet. They are lightweight and out of the way. Open the door, place the nail in between the door and the jamb, and "set" them by pulling the door shut just a bit. He also points out that with this size, you can still slam the door shut if things go bad.

Masonry cut nails also work very well. When using this method on a metal door and frame, simply open the door, place the nail in the screw heads of the hinges, and the door closer does the rest.

Which Pocket is it Anyway?

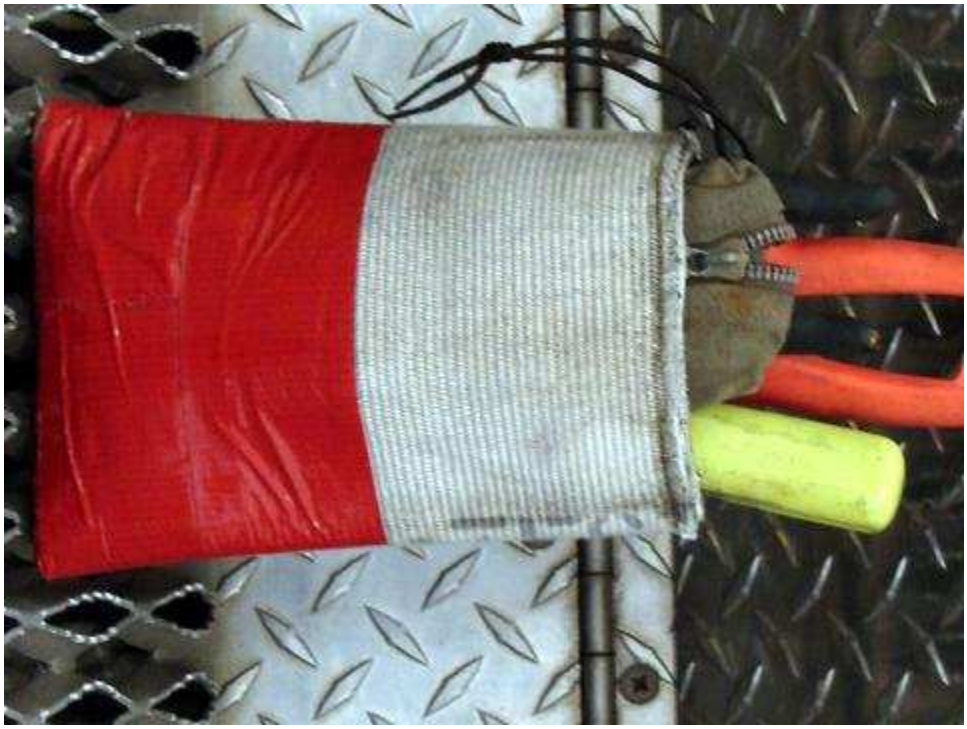
Firefighter Mitch Sanders from Orlando Tower 11 send in a real simple idea about keeping stuff in your pockets...Which pocket is it in? He mentions how it drives him crazy digging thru his pockets looking for that tool that is needed RIGHT NOW! He suggests organizing your pockets like the compartments on the rigs. He has an extrication pocket (valve stem tool, center punch, etc), search pocket (chocks, nails, small search rope, etc) and tool pocket (screwdriver, wire cutters, etc) He points out how we go to great lengths to organize our rigs so that our tools are stored for EFFICIENCY, and why should our personal tool should be any different?

Wedge Storage

Firefighter Ryan Marzheuser from Sycamore Township Ohio sent in this photo of another way to conveniently store a door wedge. Simply drill a hole into wedge and loop an EMS or fire extinguisher tag through the hole. (See, we knew EMS has a its place on a truck company!) This allows this loop to be

clipped onto your bunker coat. You could really use the tag to secure the wedge almost anywhere. Just pull on the wedge to place it in service. The beauty of this method is that it is truly a break away set-up, it will free itself if it gets hung up on anything.

Tool Sleeve



Lt. Tim Biermann from Baltimore City Rescue 1 sent in this great idea to keep your pockets organized. This tool sleeve is fashioned from a scrap piece of 3" supply line and sealed off with some duct tape. He pointed out that it keeps your tools together and upright for easy access and removal. It also prevents your tools from poking through your pockets, and jabbing you in the leg. He also gets credit from being the first person to come up with a good use for hose on a Truck Company... :)

Flashlight Wrap

Lieutenant Walt Lewis from Orlando Fire Sent in this idea of wrapping your backup flashlight. At first glance you may not understand the need for a flashlight wrap, but read on, this one makes perfect sense.

A backup flashlight that is simple to use with a gloved hand is vital on the fireground. An idea he picked up from a previous partner (Eng Mike Horn, may he rest in peace) is to wrap the handle of the flashlight like you would a halligan. One step better, is to have the oxygen tubing end at the push button to activate the light, so that in a hurry, with gloves on, and in the dark, you can find the switch and get your light going.

Lieutenant Lewis sent in some additional thoughts about flashlight use on the fireground. Be sure to check out the supplemental page for additional information.

Pruning Saw

Lt. Pat Gallagher from Martin County Fire has an interesting idea for hurricane windows. He has found that a pruning saw makes quick work on them, and caries a small folding saw in his pocket for that purpose.

He has noticed a significant increase in the popularity of hurricane windows in his coastal area of Florida. For obvious reasons hurricane windows don't break like traditional windows. They are laminated, and designed to remain in place even after taking a significant impact. He has found that using a halligan to create a purchase point and using the saw to be quite effective. Once the purchase is made, the saw can be used to "clear" the window. This method works well if a window needs to be opened in a hurry, without having the proper equipment readily available.

A saw would be the tool of choice if multiple windows need to be opened. Obviously the preferred method would still be to take the entire frame out, and the glass shouldn't be too much of an issue. Another interesting observation about hurricane windows is that they tend to be mounted flush regardless of the type of building construction being used. The old trick of flush mount = wood frame, and recessed (with sill) = block or masonry may not be as much of a tell tale sign as it used to be.

Bungee Cord

Samuel Hittle from Wichita Firehouse 10 sent in an idea that another brother from Wichita shared with him. Firefighter Tom Dent from Firehouse 9 showed him a solution utilizing a bungee cord carried in his pocket, the bungee cord is used to quickly and easily secure these doors. The boys from Firehouse 10 liked the idea so much they attached an 18” bungee to the irons. Having it attached to the irons makes it readily available for any firefighter assigned to the door position. When an attachment point cannot be found on the structure, they simply create a purchase (to hook into) on the structure by driving the halligan into the house or porch wall.

Tool Bag

Lieutenant Brad Dougherty from Navy Region Mid-Atlantic Fire & Emergency Services sent in the latest what's in your pockets. The irony is that his submission is about what's not in his pockets. He took an old army ammo bag and placed some of the items that firefighters typically carry in their pockets. The bag has a large interior compartment which has some organization slots on the inside. It also has exterior compartments for other items. These compartments allow the bag to be organized without being too cluttered. He uses the bag to eliminate the excess weight in his pockets. While responding to an alarm, he reaches into the bag to retrieve what he may need on that particular alarm. He even pointed out that he has taken the whole bag on a few special occasions.

Door Clamps

Sgt. Scott Madden from Loudoun County (VA) sent in an idea he got from one of his brothers at Station 6. The idea is to use a small spring hand clamp to wedge doors open. Scott points out that the clamps work well in a number of different ways, and on various types of doors. The photos below show a few of the many options.

The photo to the left shows the clamp keeping a self-locking door from closing on itself. This would work well if the door needed to be controlled, while preventing it from re-locking. The photo in the middle shows the clamp being used on a hinge to prevent the door from closing. The photo on the right shows the clamp on the door itself (on the hinge side) to keep the door open.

Vise Grip Eye Bolt

Vise grips are a great tool to have in your pocket. There are many great uses for the tool. Firefighter Sam Russell form Capital City (AK) sent in this useful modification to a pair of vise grips. Take a quick trip to the hardware store and find an eye bolt and nut that fit in place of the adjustment screw on the vise grips.

This modification is two fold, first it makes adjusting the vise grips much easier since you have the eye of the bolt to use for leverage when moving the adjustment screw. Second (and more importantly) the eye bolt gives you an attachment point for a carabineer. The attachment point is useful when using carabineer with webbing or rope on the tool to secure a padlock or chain during rotary saw forcible entry.

Flashlight Mount

Jeff Daniels from Goodyear (AZ) Fire sent in a different method of securing a flashlight to your lid. This idea simply takes a thorn resistant bicycle tube and attaches it under the brim of the helmet. The thorn resistant tube is thicker than a standard tube and holds up better to the abuse. The tube expands to fit various size flashlights, and keeps them in place pretty effectively. Some people prefer to have the light mounted under the brim of the helmet to minimize a possible entanglement hazard. As you can see from the close-up picture the tube was secured using the shell retaining screws. Obviously this set-up will not work on all types of helmets, but it is a lightweight, cheap and effective way to secure your light if works on your style lid.

The thorn resistant bicycle tube could be used above the helmet as well. For those who have the large inter-tube that runs all the way around the helmet, the smaller thorn resistant tube could be zip tied to the larger helmet band to achieve similar results. This set-up would allow the allow this style of flashlight to be attached without using a "hard mount" bracket.

Vise Grip Clamp

Vise grips are a versatile tool for a number of different reasons. One of their many uses is to clamp a garage door open. When working in or around a garage it's easy to open and keep open even after utilities have already been secured. From the inside, simply reach up and activate the emergency release mechanism, which frees the door from the automatic door opener (shown in the photo below.) Once the door is open, simply take the vise grips and clamp on the track to prevent to door from closing.

The door is much "safer" once it has been released from the door opener mechanism and clamped open. The automatic garage door opener no longer has an effect on the door. This was one of the speculations in a video we posted a few years ago, that radio interference caused the garage door opener to activate and close the door. (Which would not have happened if utilities were secured.) Another reason why the door is safer is because if heat builds up in the garage around the springs this will not cause the door to close since the track is blocked by the vise grips. (make sure the vise grips are clamped tight) The springs are normally located on the front wall above the door, or along side of the tracks. If heat builds up in this area, it could cause the springs to anneal, lose tension, and lower the door. The weakening of the spring was the other speculation in the video. A simple clamp on the door would prevent either situation from happening and prevents committing more useful tools to be used to prop the door open.

Married Hook Mod

April 13th, 2011 | Category: Tips

Clint Mass from the Red, White, and Blue Fire District (CO) Tower 4 sent in this great tool modification. The idea behind the modification is to allow the hook and halligan to be married together in a solid fashion.

The first part of the modification involves grinding a rounded notch in the 90 degree portion of the hook (pictured below, left.) This allows the pike end of the halligan to sit in the head of the hook in a more secure fashion. The second modification involves welding a chain link in the exact spot where the fork of the halligan lands on the hook (pictured below, right.) The combination of the notch and chain link allow for the tools to remain married, and easy to carry. This married hook and halligan combination is a great combination of tools for outside functions.

The chain link can also be used as an "attachment point" for a personal escape system. As you can see in the photo below, the chain link is actually more of a "keeper" for the carabineer; the actual handle of the hook is handling the load.

A quick each way to modify the tools to make things a bit easier.

30 comments

30 Comments so far

1. bmac23 April 13th, 2011 10:31 pm

   i like

2. RHTA April 13th, 2011 11:06 pm

   great idea

3. RSFDNY April 14th, 2011 8:49 pm

   If it makes it easier to "carry" as a pair, so be it.
   As for the bail out piece welded on, I'll repectfully disagree. If you are pressed to the point of having to bail out of a window, there is no time to be making this connection. You are in survival mode and you will be trying to get out in milli-seconds to save your own ass. You will also be pressed to the floor due to the heat. Remember you are bailing out due to conditions being so bad you can't stay there any longer. I've had to bail out once and get out immediately and it was years before PSS was even a glint in anyones eye. Fortunately for me there was a set back roof only feet below me. I'd rather see that chain link welded to the shaft just above the fork of the halligan for the roof positioned firefighter so he can vent the upper floor windows from a flat roof using a personal utility rope. Just my opinion.

4. cmaas April 14th, 2011 10:34 pm

   RS FDNY,
   I agree with you on the bail out. The main purpose for the welded link is to make a tight fit and to avoid letting the forked end swing freely. I have tried marrying straps, but they are a pain when you are using the tools continuously. Using it for a bail out was an after thought. Just tools for the tool box.

5. JUST A FIREMEN April 15th, 2011 4:41 pm

   Just want to know what is the point of a hook and a bar married together.

6. tooltime April 15th, 2011 4:58 pm

   I think its great the way you are looking for different ways to make things work but I to wonder what good is a Halligan without something to strike it with?

7. RSFDNY April 15th, 2011 7:34 pm

   Tooltime;
   The halligan can be struck with the hook. Easy to show you…hard to explain. I'll try though. Position Adz end so that the edge of it is between the door and the jamb when closed. Holding it in place there now take the bottom of the hook handle and place it between your boot tip and the door. You can now use the handle of the hook to drive in the Adz. Not the easiest or quickest way but it works. Just watch your fingers. Hope that helps. and CMAAS, thanks for your reply.

8. Ken Scofield April 15th, 2011 8:42 pm

   Great idea! Thanks for sharing!

9. LAD288 April 15th, 2011 10:07 pm

   I just use a rubber glove and tie them together.

10. me April 16th, 2011 11:39 am

    JUST A FIREMAN—

    ever heard of "the irons" ??

11. Chris April 16th, 2011 12:50 pm

    Firemen-

    Both tools are typically carried together by the OV man (sorry, Firefighter assigned the Outside Vent position) and are used in conjunction with one another in carrying out his mission of VES. Marrying them just makes life earier, especially when the OV is also leaving the truck with a ground ladder.

12. JUST A FIREMEN April 17th, 2011 4:05 pm

    Hey "me" your f-ing right, when someone ask for a set of irons the first thing i grap is a hook. Chris i have done ves before (OV is just fine) and both does not seem like a good idea to be running around on the fire ground. Ive have been good with either one, but each man is diffrent. RSFDNY that for the info.

13. RSFDNY April 17th, 2011 9:07 pm

    I noticed the notch on the side of the forked end. For those that don't know, it was ground in there by a sharp fireman. It allows you to understand how deep the fork is with relation to the door and jamb. If you look closer, you will see it is the same distance from the tip of the fork as is the crotch of the fork. During FE when that line is at the edge of the door and jamb you should be successfully passed teh frame and in a good position to force the door without losing the tool into the otherside or have it slip out on your side. In a smoke filled hallway it is easier to feel for the notch then to try and see where you are. Good move fellas. Another good idea is to keep a couple of wodden chocks handy and wedge them between the frame and the door as you force so as not to lose ground if the tool slips out of position.

14. JakeMFD April 18th, 2011 6:46 pm

    I can't believe while reading this people would discount what I consider two of the most valuable tools on the fireground a bar and a hook. I'll agree to disagree with the others that don't see the need to marry the two together. I've been doing it for years at my job. There isn't anything the two tools can't do. I do ask though when a single person grabs the irons, who's gonna use which tool? You obviously can't use both at

the same time by yourself. If you can, I would love to meet you. The art of forcible entry is just that, an art. You should know how to force a door by your yourself and look at a two person forcible entry crew as a luxury. Not to mention, after you force open that rear door, you can vent the large bay windows on some houses or sweep the floor inside the door. You never know. Just throwin that out there before people bash the two tools married together. I am all for it!

15. Brian April 19th, 2011 7:24 am

    Excellent idea Brother

16. Brian April 19th, 2011 7:28 am

    Hard to tell in photos because of shadows but looks like the shoulders at fork end are squared off. Another great move.

17. Rob April 19th, 2011 8:20 am

    I've seen this pair combination with the modification above at my last department and my current department. It's a great combination and can easily be carried with a ladder along the beam as well.

18. trk4lfe April 19th, 2011 10:23 am

    Just a fireman,

    Having 2 tools(1 being a hook) during ves is a great idea. When I VES a room I place the hook in the window extended to the floor as a point of reference. That way when you enter the room and start your systematic search you know where you started. And since you brought 2 tools in you now have a tool to clear out other windows in that room or to extend your reach during a search. Not saying that my words are gospel I just wanted to share something that works for me. That is what this job is about. Passing on information that we have to make guys more efficent. Cmaas. Great Job.

19. rangerbob April 19th, 2011 10:43 am

    There is a reason why Hugh Halligan invented both the Halligan Bar and the Halligan Hook.

    Just saying…..

20. Blake April 20th, 2011 5:46 pm

    Everyone brings good points to the table. For those who ask what the point of marrying or carrying two tools is, I hope that is only inexperience speaking. You ALWAYS want to be prepared to operate alone and in that case, have the tools necessary to do multiple jobs. It is critical that you enter every fireground, prepared to rescue yourself or others. It kills me to see firefighters entering a building with a 3ft fiberglass pike or plaster hook. How is that going to save you or a fellow firefighter?

An additional reason for marrying tools is to have a free hand. Climb several flights of stairs with tools in your hands and you'll be glad to have that extra hand to reach out and grab the stair rail. Having a free hand also gives you the ability to catch yourself if you slip, trip, or fall. It beats a face plant anyday.

21. tooltime April 20th, 2011 9:52 pm

    Come on have you guys ever heard of over kill. Dont get me wrong I'm all for having a usable tool for the job at hand but some of you act like pack mules. Please tell me how in the hell you guys carry married tools, large box lights, radio straps, hose packs with extra bottle, pockets full of tools, more lights on helment and your pockets with sprinkler stops, D rings around your ass and a ladder. Sorry Blake with all this shit you dont have a free hand. I'll make 2 trips rather than do a face plant in the back yard at someones house at 2 in the morning.

22. Nick April 20th, 2011 11:59 pm

    I apologize I realize this is totally off topic, but I was wondering if any other Department's out there besides mine uses "John Norman's Firefighting Tactics" for promotional tests.

23. Chris Johnson April 21st, 2011 2:18 pm

    Hey Nick-

    My job uses "selected chapters" from Norman's book for testing. If you're looking for more info you can contact me through http://www.fioanh.org.

    Be safe Brother!
    Chris

24. LAD288 April 21st, 2011 5:30 pm

    I wonder if I could hang a bleach bottle off the chain link welded on to the hook bar….

25. RSFDNY April 21st, 2011 9:31 pm

    rangerbob,

    Chief Halligan saw many tools being used to do the same work. So, he combined a bunch of them and came up with the Halligan Bar. Combo of the Kelly Tool and another.

    There are two different versions of the "Halligan Hook" with emphasis placed on the "butt" end and the "working / hook" end. The butt end has 3 different options. a gas shut off, small fork or a rounded butt end for "breakin' shit" The working was devised with the ability to use the angles of the tool to pry up roofing off the joists or to pull large mouldings off walls when trimming out windows or removing floor mouldings. They both work well and the time and effort that went into them combined a long career of breaking backs and

necks combined with brute strength and stubborn determination along with some "let's stop and think about this for a minute" moments.

26. Nick April 21st, 2011 9:48 pm

    Thanks Chris, I recently took the Lieutenanat's test and was wondering if anyone else out there has experienced the pain of studying material all about New York City firefighting. The FDNY is a great Dept and I would never discredit them for that. I work on a Dept with barely any high rises and lot's of new construction and we study material all about NYC firefighting for tests. I'm sorry for "venting" I just think that the job is a lot different throughout the country and there are a lot of other great department's out there.

27. jrcfdsquad1 April 28th, 2011 11:39 pm

    Boys, let's not bicker… the most important thing about this entire site is SHARING INFORMATION! If it doesn't work for you in your particular department, so be it! That doesn't mean someone else out there can't learn from it! Thanks for the info lads – and don't let these nay-sayers keep you from trying something new and sharing what works with the rest of us!

28. RT158 May 11th, 2011 9:52 pm

    My department has used this same type of set up for approximately three years now. Ours does differ slightly though. We have the same chainlink in place for the forked end of the haligan but, we have a small piece of one inch tubing welded to the handle of the Haligan hook. The tubing is approximately 1 inch thick and 1 inch in diameter. This keeps the tubing the same width as the handle of the hook. It is welded approximately a foot down from the hook end. This allows the hook to be used for typical pushing/pulling operations without interference from the tubing. When the Haligan is married to the hook, the point of the pick slips into the small tubing and keeps them tight together. We usually put a velcro strap around them or a small piece of utility rope girth hitched around them as an extra measure of caution because our set is carried on the outside of the apparatus. I tried to post a picture but had some difficulties. I'll keep trying.

29. JMatffemt17 May 11th, 2011 10:53 pm

    Correct me if i am wrong but that looks like a 6 ft hook. I have a 4 ft hook does anybody feel this application would work for that i work in a very poor older area where a 6 ft hook is never really needed just due to the residential construction that we encounter. thanks for any opinions stay safe out there

Read the Door

March 24th, 2008 | Category: Outside Functions

Engineer George Humphrey from Gary Indiana Fire (Engine 7) sent in these photos of a dollar store in his first due. It's hard to believe that a Dollar Store would go through all of these additional security measures. We'll give you a sneak peak of sides A and C but you'll have to go to the supplemental page to see what we are talking about.


METRO

19 comments

19 Comments so far

1. facetothefloor March 24th, 2008 11:24 am

   It "appears" by the pics posted of the Armador that if you were to shear the bolt heads on the skin just as you would a fox lock, this door security hardware seems like it would fall to the floor.

2. George Humphrey March 24th, 2008 11:41 am

   Yes, you are exactly right (facetothefloor). That is what I teach the guys I work with to do. Otherwise, you are there much longer than you need be. You are also wasting too much energy on the typical forcable entry methods.

3. Steve March 24th, 2008 4:03 pm

   You would think that a nice quiet town like Gary wouldnt need things like this on the doors of their businesses…HA..HA

But seriously,finding things like this in your first due will only lead to safer operations…

George…does Tony B work with you???

4. George Humphrey March 24th, 2008 6:40 pm

Hey Steve, Yeah, Tony and I use to work together on the Squad. He got promoted to Lt. and is now floating. I got promoted to Engineer and was floating but then they stuck me at 7's. I was really embarrassed to print that I was from engine 7 when I wrote this but oh-well, hopefully that will change. I am sure Tony will see this as he is a frequent visitor of the site. Take care stay safe. And if you get a chance, somebody is video taping some of our fires and submitting them on youtube, check em out.

5. Steve March 24th, 2008 7:14 pm

Tony came down to where I live a few years ago and taught a class that some of the guys are still talking about…I have seen some of the Gary fire videos…good stuff…..you get a chance check out Lawrenceburg Fire on youtube…Feb 10 we had a good one…
I ran into a similar incident at a dollar store down here except they didnt have the panic hardware just a bar and two 1" slide bolts with padlocks…

6. Jon March 24th, 2008 7:45 pm

Just call for the saw. Why waste energy on a property that contains Chinese garbage? You will need it for the roll down anyway. One of our Deputy's wrote a great article on a 5th Alarm we had in a dollar store. Bottom line is: Heavy fire load, usually stock to the ceiling. And remember, if its late at night the only life threat is MOST likely US!

Stay Safe!

7. ... March 24th, 2008 8:05 pm

I am going to have to agree with Jon here. Why waste the time when you have a saw sitting on the truck. Besides the fact that we would be saving "junk" which could be replaced with oney out of a pocket. That door is probably the most expensive thing there.

8. George Humphrey March 24th, 2008 9:49 pm

Totally agree on the saw, that's the point I was trying to make when I wrote this. Saw the bolt heads and let the bar drop. Trying to save it is useless. The benefits of having more than one point of attack provides a great advantage.

9. JOHN March 24th, 2008 9:51 pm

SHEARING IS EASY (KINDA REQUIRES TWO PPLE THOUGH.) BUT HOW ARE YOU GUYS PLANNING ON USING THE SAW? 4 KERF CUTS AROUND THE BOLT HEADS? THATS THE MOST I'D DO. IT SHOULD DO THE TRICK.

10. Jon March 24th, 2008 10:00 pm

    Cut the bolt heads, but with the bar extending into the jamb you may be required to cut into the doorsthen cut the bars, hitting the bolt heads will most likely do nothing as the transfer of energy will be dispersed from a lack of a solid point. Perhaps making a dutch door by cutting across would be the good move, then just hit the panic bar. You might not even get that much smoke pushing through cause of that roll down gate.
    It comes down to just remembering all the tools we have available to us and using them to our advantage. Work Smarter, not harder.

11. Patrick March 25th, 2008 8:37 pm

    These are the kind of pics I show to guys and tell them this is why we check and run the saws every shift!

12. HATCH March 26th, 2008 9:14 am

    George

    Do they keep the rollup door in the down position after hours? If so, it looks like this thing would be cookin off pretty good in no time. And I agree with you Patrick! Saws and any other power equipment should be a daily check!

13. layn-n March 26th, 2008 11:43 am

    I'm still learning but couldn't I make one cut with the saw in the middle of the door then use a framing square to trip the panic bar? This is not my idea but one that I picked up here on V.E.S.

14. Brass March 26th, 2008 11:46 am

    Quote:
    "It's hard to believe that a Dollar Store would go through all of these additional security measures."

    You obviously haven't been to Gary!!! lol

    Last year while I was at the FDIC I took a day and went to Gary Squad 2, what a great bunch of guys! I can't remember the name of the guy that showed me around but he was detailed to the squad by himself because the rig was out of service. Gary is one of the roughest places I have ever been (and I have been to a lot of rough places).

    As for the doors, the first door should be fairly easy to open. The roll down gate has a chain hoist next to it with an angle iron housing that is padlocked shut. These are usually locked (in my area) with hockey puck

locks, American 747, or the American 700 series padlocks, the duckbill lock breaker could be used on the American 700 but the saw will work on all of them. Force the padlock off and roll the gate up. After the gate is up use a Rex Tool to pull the cylinder out of the door, once the cylinder has been removed a key tool can be used to unlock the door. If the fire has reached the back of the roll down door then you should cut the door with the saw, the heat from the fire will warp the metal making it difficult to roll the door up. These roll down gates look fairly new so they probably have secured slats stopping you from sliding the slates out, so go with a "door within a door" cut. If you go with the saw for the roll down gate you can use the saw to force the store front doors by gapping the door and cutting the pivoting dead bolt. The door on the right will open right up where as the door on the left will have slide bolts into the floor and top of the frame, once the right door has been forced reach in and unlock the slide bolts to get both doors open.

The rear door is going to be fairly easy as well, cut the exposed carriage bolts on the rear of the door with the saw (45 degree angle to cut the top of the carriage bolts off), and after the panic hardware has been removed pry the door open. Then cut the roll down gate the same as you would cut the front gate. This is a perfect example of why it is so important to get out in your community and be familiar with your buildings.

Just my $0.02
Stay safe Brothers.

15. Brass March 26th, 2008 12:14 pm

Quote:
I'm still learning but couldn't I make one cut with the saw in the middle of the door then use a framing square to trip the panic bar? This is not my idea but one that I picked up here on V.E.S.

I don't think the framing square will work here because it looks like when the gate is rolled down there will not be enough room to fit the framing square between the roll down gate and the panic hardware.

During work hours (while the store is open) the framing square could work because the roll down gate should be up (fire code). To be honest I don't think a framing square would be coming off a truck in my hand, I like to bring tools that work "all the time" and not just "some of the time". Irons, Saw, Roof Hook, and Rex Tool, there shouldn't be anything that you can't get into with those.

We are all still learning!!!

Stay Safe Brothers,
Brass

16. layn-n March 26th, 2008 12:29 pm

Thanx Brass. I didnt think of the space between the roll up and the panic bar. I too am in favor of using tools that work all of the time. However the area that I work for is very liberal and dont like their stuff torn up.

17. Splat March 26th, 2008 1:19 pm

    Checked out the arm-a-dor web site. Both single and double doors are sold all over the world. Sargent and Greenleaf, (Creators), have been around the security world for over 150 years. They sell to companies like: Burger King, KFC, Circuit City and Sam's Club. Not sure if you get the added bonus of a roll up door with the purchase. I haven't seen them in my area, yet! But will pass it on when I do. Thanks. Good Stuff!

18. 2dawgs April 1st, 2008 7:20 pm

    Cant you just slip G-Ron under the door? Ha see ya in Seattle brother. Nice add to the site George

19. Sean April 3rd, 2008 1:54 pm

    Excellent example of knowing the hazards in your district. Saws are the first thing that comes to mind for me with a hazard like this. Great post George from Engine 7.

    Stay Safe

Hittn' the Bottle

April 08th, 2011 | Category: Tips

Firefighter Plunkett, who has sent in a few submissions in the past, sent in this photo of a useful way to store utility rope. This simple, yet effective idea of using a bleach bottle to carry the rope is used heavily by FDNY. It involves 50 to 75ft of 3/8 or similar rope in an empty and thoroughly cleaned bleach bottle. A hole is cut into the bottle with a razor knife in order to insert a weight in the bottom to ensure proper deployment of the rope. A large washer and gorilla glue does the trick. The hole also facilitates the reloading of the rope. A snap link or carabineer finishes of the end of the rope to allow quick attachment of the end of the rope prior to deploying it. Carry the rope up, attach the end, and throw the bottle down. It's a simple, cheap, and effective way to carry and deploy utility rope.

21 comments

21 Comments so far

1. bulldawg2299 April 8th, 2011 4:28 pm

   we don't have bleach in my response area…but great idea

2. CaptHibb April 8th, 2011 10:21 pm

Nice post Plunkett. I wonder if this can be used in other areas of the fire service or DPW arenas. Will drill this weekend on it.

3. Lt Rob April 8th, 2011 10:41 pm

   Cool Idea Fr. Plunkett. My department uses silly rope bags for this. We also have an extensive recycling program. Why spend money on a bag when the bottles are already in the firehouse? Keep up the good ideas, brother!

4. Chris April 9th, 2011 1:53 pm

   And the handle's big enough to pass your waist belt through it for hands-free carrying without extra clips, straps, carabiners and other entanglement potentials.

   Now, if you want to talk about what we really do at work… These also make great toilet brush holders. At least that's how it's always been done it in MY district.

5. DMAN72 April 9th, 2011 6:30 pm

   I like the "FDNY uses it" plug. Now 83,000 firemen are gonna run out and buy one.

6. Pat Russell April 10th, 2011 10:12 am

   We just picked up this trick from a retired FDNY FF a few weeks ago. Great Idea. And affordable to all.

7. ronduh April 10th, 2011 11:39 pm

   there is now a shortage of bleach at local stores, firefighters have bought them out!!

8. Dave April 11th, 2011 7:27 am

   This is an old water rescue trick. Use polypro rope, leave off the weight so they float. Dip into water for throwing weight. Easy to store, very rapid deployment.
   Useful anywhere, in boats, rescue vehicles in areas near water. Cheap and effective. Gives you one good throw.
   In swift water throw just upstream of victim.
   Hadn't considered it for other utility ropes, good idea.

9. Blake April 11th, 2011 8:46 am

   Great idea! Chris, that's funny, about all of our firehouses in Charlotte use these to hold toilet brushes too.

10. RSFDNY April 11th, 2011 12:08 pm

    Primarily used by Engine Companies to get handlines up "Well Holes" quickly.

11. Happy Hooker April 11th, 2011 2:52 pm

    Aside from the well hole stretch we use this in the projects..For any fire above the third floor the nozzleman and boss go to the common hallway on the floor below, take out a window and drop it down to the back up who secures the nozzle and we hoist away…Saves serveral lengths on the strech and the need to have a man at each floor working the line around the corners…

12. Kevin - Homer Twp. Local 4223 April 12th, 2011 10:21 am

    I don't like it….ok take it easy it's just an opinion. The whole point of a throw bag is for easy deployment and retreval right? dragging a one Gal bottle 40'-50'underwater (its weighted) isn't very easy, and yes I've done it. You can get a throwbag for about 30-40 dollars with the rope so I say spend the money and get the right tool for the job. We wouldn't use broom handles with angle iron tapped to it for pike poles would we? Just my thoughts.

13. Phil April 12th, 2011 2:04 pm

    Kevin, I respect your opinion. But isn't the fire service about improvising? If you have exhausted your throw bags than why not try the bottle?. Its worth a try. I mean, I would certainly consider taking the weight out for the float.

    I understand your point. But, we will go out now and try throwing an actual water rescue throw bag, followed by the Clorox bottle. If we have better results with a bottle out of a recycling bin (No im not going to replace existing rope bags)…Than my job is to let the guys know why this works better, how to use it, and to absolutely consider it if we have a water rescue.

14. RSFDNY April 12th, 2011 7:18 pm

    The Clorox Bottle has NEVER been used for water rescue where I've worked. As HH stated above it is for easier positioning and deploying of handlines at upper floor fires where 2 lines are already in the stairwell, vacants, housing projects, etc. It works and works well.

15. Captain Daddy April 13th, 2011 1:37 am

    The Clorox Bottle has been in use in the FDNY for well over 20 years and works real good. I have it with me whenever I'm not first due. Another good use is stretching to the roof of a building. I recently critiqued a drill for a department and there was discussion of stretching an handline off the outlet of a tower ladder. I told them to set up the bucket and pull the line up and keep the TL available for rescue not make it a $1,000,000 standpipe. When deploying the rope out the window or off the roof stand on the rope don't clip it to yourself just in case some paniced resident decides to reach out the window and grab it.

16. Captain Daddy April 13th, 2011 1:43 am

    Don't forget to secure the hose with a hose strap, webbing, utility rope or whatever you have before you flow water the weight of the water is substantial and you want to keep the tension of the couplings.

17. Al Schlick April 14th, 2011 11:30 am

    Not one comment about a Donkey Kick…I am depressed.

18. DMAN72 April 14th, 2011 9:21 pm

    Ummmm…..Al, how do you think they get the hole in the bottle?

19. bulldawg2299 April 14th, 2011 11:37 pm

    well played dman

20. mfd August 5th, 2011 4:02 pm

    Whats the tape for?… I've seen similar markings on other tools, is it just for visibility?

21. Scuba Steve Truck 1 August 7th, 2011 6:10 pm

    mfd-most tools in the FDNY fleet are marked for company pride and to recognize your tools at a scene. That way some knucklehead from another company says "ooh I like that clorox bottle." and takes it. My company does that with stencils for larger objects and tape for smaller or round objects.

Grab the Right Tool

December 22nd, 2009 | Category: Outside Functions

Lieutenant Brian Dalrymple from Richmond (VA) Fire sent in this interesting adaptation to an aluminum stile door. The question is what tool do you grab and why?

Hopefully you didn't drawn in by the pad locks and think of the bolt cutters. Look at the photo below, the padlocks have nothing to do with securing the actual door, they are only there to hold the expanded metal grate in place to protect the glass. The metal channel that holds the grate also somewhat protects and blocks access to the mortise lock. So the K tool is out, the A tool may work sideways, but that's unlikely too. Some may suggest some irons work on the door, but you're almost guaranteed to end up braking the glass in the process and loosing the ability to control the door after the force. What about grabbing the rotary saw and cutting the lock throw? It may be the most viable option in this particular scenario. As with every other forcible entry scenario, slow down and *Identify and Visualize* what you are trying to do. While *Identifying* what was securing the door, it would become very obvious that the padlocks are insignificant. Don't get drawn in, we need to work smarter not harder.

25 comments

25 Comments so far

1. acklan December 22nd, 2009 11:40 am

   Pop the hinge pin caps with a pick head and pull the door with a haligan, from the hingle side.

2. Drew December 22nd, 2009 12:32 pm

   Donkey Kick…

   Having the K-12 saw up front at any commercial structure is good practice. Never know if you will need it, but sure never does any good sitting back on the truck.

3. FF_Goodnight December 22nd, 2009 1:42 pm

   The good thing about glass is that you can see through it. If there is no significant snoke build/fire… etc, its probably ok to break. I would like to pop the locks off real quick with the irons to get a better picture of the door and what could be on the other side of it. Im sure the rookie would figure it out if you told him his job was on the line….LOL. Solid Work Brian

4. John December 22nd, 2009 2:47 pm

JMO, door control in this situation is not a priority. The door opens to the outside, unlike a room or apartment door which needs to be controlled to prevent fire spread to an uninvolved area. The FE saw attacking the lock throw is probably the preferred option. As implied, most would probably be focused on the pad locks which don't look that substantial. Assuming there is a fire and the pad locks were cut, I would take the glass, knock out the cross bar and move in with the line.

5. Jamie Morelock December 22nd, 2009 6:59 pm

   The strap iron frame that the expanded metal is attached to appears to be 1/4" at best. Inserting the adz up from underneath the frame piece just covering the top edge of the cylinder one could easily pry it up out of the way. With the cylinder exposed it could then be turned out or pulled, gaining access quicker than a saw operation or removing the security cover or compromising the glass.

6. firefighter_632 December 23rd, 2009 9:23 am

   Assuming that you can't unscrew the lock from the door (I have met more than a few that I could), I would go for the K-12 to cut the bolt. This is likely to provide the best access with the least mess.
   Looking closely at the keyway I don't see a retaining ring. There is a chance that if I tried the cylinder with the vice-grips I can take the lock out. This is my favorite option on this type of door, especially when dealing with the 3am fire alarm.

7. 65roger December 23rd, 2009 9:31 am

   looking at this door and by going off the story the locks only hold the metal cage protection to the door. the red metal plates around the dead bold are welded to this cage. An easy way i see is cut the locks pull the protection off then you have full access to the lock and you can use anything, k tool, officer tool, to get the lock off and you are in.

8. Randy December 23rd, 2009 9:42 am

   I agree with 65roger. Even if you show up with bolt cutters you haven't really lost any time. 30 seconds the locks are cut take the grate out of the way and you have full access to the lock. But like I teach my guys, never just depend on plan A, always be thinking of another plan of attack.

9. DMAN72 December 23rd, 2009 10:53 am

   Eff bolt cutters! All bolt cutters won't defeat all padlocks. A set of irons will. Just saying….

10. Erik December 23rd, 2009 11:57 am

    You could cut the pad locks, that would let you remove the grate giving you full access to the lock cylinder.

11. Jamie Morelock December 23rd, 2009 1:18 pm

I see little value in removing the the security screen, it has no bearing other than the corner covering the top edge of the lock cylinder, which could be easily pried (folded)up out of the way for pulling the cylinder, and if you choose to cut the lock bolt, the screen will not inhibit gapping the door with the halligan to make the cut. Removing the screen is simply a waste of time.

12. Ryan E8T December 23rd, 2009 3:06 pm

    I have to agree with Jamie here, the lip of that frame is only covering less then an 1/8 inch of the mortise cylinder. A little prying and it seems you will have pretty good access with a rex tool to pull that cylinder. Great example of were the rex tool is superior, because it requires so little clearance to access the cylinders. This door is a good example to demonstrate the rapid entry that can be made by someone proficient in thru-the-lock. Once you have access, pulling the cylinder and tripping the lock should take you 20 seconds or less. Great input guys, nice find on the door.

13. firefighter_632 December 23rd, 2009 3:23 pm

    I have found that I perfer unscrewing the cylinder to pulling it. Using vise-grips I will not need to bend metal to rotate the cylinder. Also, if there is nothing (seems most common during the night) then you can relock and secure the property. While this is a detail it is important as we can clear and get back to bed!

14. Robby O December 23rd, 2009 6:48 pm

    I think all the methods discussed have merit….I will say that unscrewing the lock directly relates to the "beefiness" of the set screw and the teeth of your pliers….I have seen some I can screw out east and some that it would have just been quicker to yank out with the K-or rex tool.

    As has been stated size up is the key…Thanks Lt. Dalrymple for repping VA proper

15. fryman December 23rd, 2009 10:12 pm

    I agree with 65roger. Most of us may only have the basic of forcible entry tools when you find the door. If it can be done with the irons and lock puller with out sending for a saw you are a pro not a schmoo!

16. Not an engine guy December 24th, 2009 10:30 am

    The real lesson here is to be prepared for your assignment. Whatever it may be. Rears of commercials (and residentials) are generally more secured than the front. My guys are taught to always bring a saw (metal or wood depending on the const) when assigned the OV in the rear.And call out over the radio if you have a FE problem and will be delayed so everyone knows.
    Fires are like a box of chocolates, you never know what ur gonna get.

    Be safe

17. John December 24th, 2009 11:01 pm

Pop the locks off with bolt cutter/ haligan and use the K-tool on the lock. then you can secure the building gain and the owner can reattach the screen at a later time.

18. DMAN72 December 25th, 2009 1:47 pm

    I ordered a hoodie.

19. pfd27 December 26th, 2009 4:50 pm

    Sick bastid…oh…you said HOODIE. I thought you said…

20. Eric December 28th, 2009 3:33 pm

    ^^^^^^

    A Hoodsie joke? Isn't this a Southern/West Coast site. All Northeast/New England references shall be stricken from the record before the other brothers figure out what we're talking about.

21. Trucksgotthis December 29th, 2009 2:49 am

    I would take the pad locks then work on the main door, at the very least should you loose control of the main door yout access is not blocked by metal screen etc. Cut the locks pop the glass then take either the door or center cross bar.

22. Rescue2A December 30th, 2009 10:48 am

    This seems to be a standard glass door seen on any number of commercial store fronts. The red covering is only a protective cover to prevent the glass from being broken. That being said, taking it off will really serve no benifit when it comes to forcing the glass door. In my experience, the fastest way to enter one of these glass type commercial doors is with a K12. Simply cut between the door and it's frame, targeting the lock bar. This prevents damage to the door and the door frame. The inside workings of the lock are easily replaced.

23. Ladder 5 January 11th, 2010 12:53 pm

    what about using the saw and cutting around the mesh type metal leaving the frame in place but still making a large opening…big enough to work with. and then depending on how the inner door is break the glass or force the door with a maul…

24. From the QC January 24th, 2010 7:08 pm

    My response area has a lot of doors like this. Unfortunately, the rest of my crew does not believe in door control for a door like this (or thru the lock FE in a fire situation).

    They are of the opinion that it doesn't matter about door control, as it will be wide open with a hose line stretched through it anyway, so why bother with taking the time to go through the lock when you can just

break the glass and accomplish the same task? Never mind all the broken sheets of glass on the ground and glass stuck in the door frame you're now dragging the hose line through. They are only interested in speed vs. proper technique & safety. This attitude is rampant across my department.

New Style Hockey Puck

November 30th, 2009 | Category: Outside Functions

Tim Anderson from Philadelphia Engine 16 sent in these pictures of an interesting find. The first floor of the structure appears to be vacant, but the apartments above are probably still be occupied. The first floor is protected by three roll down gates. The two roll down gates on the sides are secured with the usual American Series 2000 Hockey Puck Locks, the center gate is secured with something a little different.

The traditional Series 2000 lock has been removed and the lock casing has been filled with cement. Instead of dealing with the locks, and what they may or may not be doing to secure the door, it seems like cutting the gate itself may be the best option.

23 comments

23 Comments so far

1. Ryan November 30th, 2009 9:02 am

   Anyone think there might be a need to bring back Jet Axe?

2. firefighter_632 November 30th, 2009 9:09 am

   The presence of cement in the gap between the door jam and the door gives me reason to suspect that the door is likely not in use and cutting it may be a waste of time. But seeing it also make me think the owners may have a few more surprises in store for us. If I need to get in I would try to find another way which is less likely to be so heavily fortified.
   It would be nice to see what is just above the top of this picture. If there are windows above then they would likely be a faster way into the apartments. There is a house with a door to the left and there is a window on the second floor to the right. Either one is probably going to be a better entrance than forcing or cutting a possible door to nowhere.

3. LTD November 30th, 2009 11:19 am

I've encountered interesting obstacles during pre-plan and area ride throughs such as this. I've just asked the property owner if I could take a look and explained that it was NOT an inspection, but for safety purposes that I wanted to see before an actual emergency. Most property owners don't have a problem with it and allow access. This may not always be the case, but it's worth asking.

4. Joel November 30th, 2009 12:17 pm

   A little softening with an 10 lb. sledge to the the cement may be enough… no?

5. acklan November 30th, 2009 5:59 pm

   I would think in this case going in through the windows would offer the quickest entry. The bars appear to be anchored at eight points. A K-12 with an abrasive blade would work nicely. Cannot tell if they are welded to the roll-up frames, or bolted in.

6. wicked November 30th, 2009 8:29 pm

   I cant believe nobody said donkey kick!?! My kid had another great idea, FALCON PUNCH!

7. Nate999 December 1st, 2009 10:26 am

   Maybe I'm just not understanding the setup here, but it seems more like a psych-out than a beefed up lock. If the lock mechanism was taken out and the casing filled with concrete, wouldn't it be easier to force? With no lock pin to secure the hasp, just breaking the concrete would work, no? Bear with me, these types of locks are rare in my area, so I might be completely off the mark. If so, I'd try cutting the channel guides above/below the lock and prying out to free the gate. Either way, please enlighten me with some further insight.

8. bed62 December 1st, 2009 11:02 am

   is it possible that the doorway has block or brick behind it ??

9. riley December 1st, 2009 12:40 pm

   What I want to know is, where the hell did the tv remote go?? It was here last shift.

10. wicked December 1st, 2009 2:12 pm

    @riley: LOL
    @ bed62: Quite possible, no inside pictures so we are left in the dark.
    @Nate999: More than likely the mechanism are in tack. With the concrete out you could see more.
    Honestly why the hell would you even waste time to open it though. Probably a good reason as to why the concrete is there.

11. PowderE25 December 1st, 2009 6:19 pm

I am with Nate999, it is a psych-out.

12. me December 1st, 2009 8:21 pm

    call the realtor, ask to look at. done.

13. firefighter_632 December 1st, 2009 9:07 pm

    Where do the tenants go in? Knowing this would be useful when we have to go in and get them.

14. Dan December 2nd, 2009 2:29 pm

    The tenants probably don't go in. Looks like a vacant to me. I don't think this is meant to psych anyone out or deter theft. Simply warehousing of a vacant occupancy. If the tenants really want to gain access, the sidewalk doors into the basement might prove the easiest way.

    Going through the "windows" might be a pain due to having to deal with both the plywood, bars and whatever may be behind the plywood.

    Personally, I think a partner saw through the main entrace gate would be my choice.

15. firefighter_632 December 2nd, 2009 6:18 pm

    From what I can see of the photo this appears to be a taxpayer. That being said there is probably another entrance for the upstairs residences.
    I have seen this quite a bit when I liven in the mid-south. The commercial occupancy would be either be boarded up or whitewashed and gated over. The apartments above were still occupied and the tenants had a staircase at either the side or the rear of the building.
    These apartments were very low rent and the occupants would fortify the entrances that they do not use.

16. champ December 3rd, 2009 12:15 am

    Check out Fire Engineering's website for other ways to combat the hockey puck lock. Watch the FREE training minutes and you'll see a method to cut the channel rail and bend the lock out of the way.

17. TRUCK4 December 3rd, 2009 4:45 pm

    I think the concrete is weak. It does look like in the close up picture that there may be a weld in the gap but it isnt very big. I think a solid hit with the 10lb. sledge would shatter almost all of the concrete. Then I would use the adz end of the halligan just below the weld and use body weight and push down on the bar which should crack that tiny weld. A good Entry team with solid working knowledge and use with the irons should be able to get through this door. Unless I'm missing something, I think it would be about a 5 minute job. Who knows what the inside of this door looks like but just the outside looks fairly reasonable. But be ready to use the rotary saw for sure.

18. DMAN72 December 3rd, 2009 8:03 pm

    Hey, I just wanted to let everyone know that I forced two doors this afternoon. Of course a great VES story, basement door was secured with 4 2×4's screwed across the door frame from top to bottom. First thing I thought was "This is one for the site!" Glad I didnt donkey kick the f@#ker, Ida broke my foot. Just wanted to share that cuz I got to force two doors this afternoon. There's days I like my job, then there's days I love my job.

19. Nate999 December 4th, 2009 11:25 am

    I would've expected at least a meter pull as well…

20. CB December 4th, 2009 12:55 pm

    First off all doors should be forced and opened in a fire. I would rather have a proactive Truck and Rescue team get these doors out of the way in case someone needed to get out.

    I do not have any personal experience with these types of locks but I would like to hear from someone who dose and what they would do in this situation.

    And a side note: TO all of the people on here just screwing around find something more productive to do. This is provides alot of good information and the unneeded BS should stop of out respect for your fellow firefighters. This unneeded stuff that is posted on sites like this makes the fire service as a hole look unprofessional and disrespects all firefighters that have gone before us.

21. Nate999 December 4th, 2009 6:13 pm

    While ideally you'd want as many egress points as possible, that's often not the world we live in. I'm not saying don't try to get them, I'm just saying that we should initially concentrate on finding "viable" access/egress points to allow us to aid in a timely fire attack/rescue (if I could get two nearby doors quicker, why waste time on one?). The next-in can get it or we can go back after other assignments are complete.

    On a side note:
    CB, thanks for the tip. If you read the rest of the posts (not to mention the first few comments of this one), you'll see that many of the "people just screwing around" often do contribute constructively and try to pick up some stuff while they're here. Every once in a while, some of us like to lighten the mood a little when checking for updated comments and such. In my humble opinion, the collective fire service sense of humor is one of the many things that makes this job great; being able to see what we see and go through what we do every day would be a lot harder if we didn't have some kind of outlet.

22. riley December 4th, 2009 6:35 pm

    Hey, I just wanted to let everyone know that I forced two doors this afternoon. Of course a great VES story, basement door was secured with 4 2×4's screwed across the door frame from top to bottom. First thing I thought was "This is one for the site!" Glad I didnt donkey kick the f@#ker, Ida broke my foot. Just wanted

to share that cuz I got to force two doors this afternoon. There's days I like my job, then there's days I love my job.

Did you find the remote??

23. Tim December 7th, 2009 11:32 am

Though the concrete may not prove to be too tough of an obstacle, its a good reminder to do a thorough forcible entry size-up. On roll down doors, sometimes you cut the lock, sometimes you cut the channeling, sometimes you cut the door itself. Make sure you know all of your options and don't stick to one method all the time.

Ladder Trick

October 19th, 2009 | Category: Outside Functions, Tips, Videos

Dan Dejkunchorn (D-Chorn) from Orlando (FL) Firehouse 9 showed us this great method to assist in throwing ladders. This method works great in a number of different instances. The first is when throwing a stick where an overhang is present and there is nothing available to butt it against. Another use is when on a hard surface where the stick may tend to slide like wet concrete. While this method works well in a number of different circumstances, the real reason it was developed was for the "not as tall" firefighter. This method works well on any length of ladder but was intentionally developed for the longer ones (14+). Just another example that proves that it's better to work smarter not harder.

http://www.vententersearch.com/videos/flv/laddertrick.flv

This ladder tick simply has the firefighter dropping their hook on the ground, stepping on the hook, and using the hook to butt the ladder. With a little practice, this method can be extremely effective. It's one of those things that everyone should try a few times to see if works for them. You never know when you may be in a situation that requires its use. The video shows the firefighter using the ladder to push the hook into the desired position. That was done intentionally for demonstration in the video. With some practice, it's easier to drop the hook closer to the actual point of deployment. Keep in mind, it's better to drop the hook early and push it in to place since it would take too much time to move or pull the hook back into position.

When a shorter firefighter throws a ladder greater than the 14, its more difficult to "get under" the ladder to get it rotated into position. The hook gives the advantage since leverage is not on their side. Throwing a ladder is a classic example of a class 3 lever. The butt of the ladder is the fulcrum, the firefighter is the effort, and the weight of the length of ladder is the load. Shorter firefighters have to work harder to throw a ladder because their height limits the location where the force is applied. Longer ladders have more weight beyond the point of effort (the firefighter). While throwing the ladder, this makes the ladder seem much heavier for the shorter person. Remember, anytime you change the location of any of the three points of a lever (fulcrum, force or effort, weight or load) you change the mechanical advantage. So again, it pays to

work smarter not harder. A simple trick like this solves the problem and gets the ladder into position without extra effort.

A special thanks goes out to Dan for sharing and Rob Petroff from Orlando (FL) Firehouse 11 for demonstrating this ladder trick for us. Dan has a few more ideas that we will be featuring in the near future.

76 comments

76 Comments so far

1. John October 19th, 2009 11:27 am

   Really…? I have seen guys 5 nothing toss 28ft 2 section ladders on concrete with no walls no problem. This is another example of things that are good in theory but ridiculous in practice. Learn the right way and master the technique

2. DownLow October 19th, 2009 1:42 pm

   If it works for you, great. I agree with the above comment, I've seen vertically challenged firemen do the same without dropping a hand tool to help them throw a ladder.

3. Bob October 19th, 2009 3:58 pm

   Chicks dig it!!

4. ffmed October 19th, 2009 4:39 pm

   While your looking down at your roof hook you'll miss something else, look up and ahead, remember the kid on the skateboard who hit the stone….if you cant throw a single fly ladder 14-20ft by yourself get off the truck and go to the ambulance.

5. PFD27 October 19th, 2009 6:35 pm

   Dear John…

   Well??? Don't be a tight a–! How does the 5 nothing FF do it?

6. Nate999 October 20th, 2009 8:36 am

   I think it's a good tip, try it out, and if you like it, use it. Whether 5-nothing or six-something, everyone will have the occasional slip when throwing a ladder, especially on a wet/slick surface like the post mentions. If you keep an eye on where you're going and do it pretty close to where you're throwing the ladder, then the kid/skateboard/stone theory doesn't really matter. It's just something else to file away in the ol' noggin.

7. VollyFF October 20th, 2009 10:05 am

1. I agree that this is something good to keep in the back of your mind for certain occasions such as the overhang roof. On the other hand, if you are dragging the butt end of the ladder on the concrete every time it is being thrown, over time you are grinding away the butt spurs creating an uneven, unstable ladder setup.
2. I understand this is just an example, but the ladder being thrown in the video only has the top rung barely touching the roof line. Basic essentials tells you to ensure there are 3-5 rungs above the roof line for ladders thrown to the roof.
3. If you can't throw ladders (especially single fly), get back on the pipeline. It is a requirement in my volly company to be able to throw each ladder alone (including the 35ft 2 section). We typically go out the door with a crew of 4 and the outside man has to throw ladders by himself, then go to the roof.

8. DMAN72 October 20th, 2009 10:14 am

   Jesus people, they're just showing DIFFERENT WAYS to do stuff. Right, wrong, or indifferent, it's another way to do stuff.

9. Jon October 20th, 2009 12:32 pm

   That climbing angle was dangerous, especially on concrete!

10. hookboy October 20th, 2009 4:21 pm

    hey, jon boy…. go back to your hole. its a type of style and skill to use, its not on the safety angle,sure hope when you work a baby is not in need of your ladder skills as it might not be safe for you do do your job!!! I hear that the post office is looking for stamp lickers, any thoughts on that job?

11. Drew October 20th, 2009 6:30 pm

    Great party trick.

    Tip of the leather to you. That was some highly creative thinking that came up with that, though not all that practical.

12. FFCA3 October 20th, 2009 10:50 pm

    Hey right on not for me but its thinking outside the box, props for that! And, for the hell of it i will try it and see how i like it.

13. TheOutpost October 20th, 2009 11:26 pm

    There are some tool bags on this site, its an idea people, STFU

14. Chad October 20th, 2009 11:36 pm

Great video!!! I love seeing different ways to do things. It never hurts to have more tools in your tool box! Thanks VES for the video! I will try it out with my crew next time we are doing ladder opps.

15. ray October 21st, 2009 8:58 am

    Pretty cool,but i'm not sure it will work well in the snow up here in the Boston area!!

16. Lockett October 21st, 2009 10:53 am

    Thats is the dumbest thing that i have ever watched. Its a 14ft ladder. STOP BEING LAZY AND GET THE LADDER UP. Don't come up with stuff just to put on the web. Also, don't forget "3" rungs over the roofline.

17. ryan October 21st, 2009 11:54 am

    "This method works well on any length of ladder but was intentionally developed for the longer ones (14+)." Speaking of lazy if you wouldve read the article you would have known that…. and the rung rule is 5… but when you need to get up there who cares… get it done… if your thrown a 28 by yourself this is a great method…

18. Keith102 October 21st, 2009 12:50 pm

    Who gives a shit how big the ladder was in the video, I'm pretty sure it was just being used to demonstrate the technique. If you don't like it don't use it, but it sure as hell didn't hurt anything to show off a trick that might help somebody, somewhere.

19. riley October 21st, 2009 2:25 pm

    Man, if I wanted to hear this much bitchin and whining I'd go visit Womansday.com, er…I mean FireRescue1.com. It's another tool in the toolbox. Thanks for sharing.

20. Loosecannon October 21st, 2009 5:07 pm

    What's wrong with that climbing angle? It looks just about perfect for me ! My long legs don't like no shallow angle. 

21. PFD023 October 21st, 2009 7:54 pm

    Lockett you need to chill out abit brother. As others have said…it's a tool. Don't use it if you don't need it….but if you do then you know how.

    Oh ya….it ain't 3 rungs over the roof….if ya wanna be safe you best have 4 as a minimum….just go ask IFSTA 

22. PFD023 October 21st, 2009 8:00 pm

    …….or 5 or more 

23. LT27 October 21st, 2009 10:22 pm

    The idea is nice, however, if it is too slick to anchor that ladder w/o a tool, should you be climbing w/o someone heeling it? Just a thought.

    Another tactic would be to grab the ladder @ its balance point (or farther back if you are short of stature however this will take more upper body strength to overcome the imbalance) with your non dominant hand, holding on your dominant side (right handed right side) tip end toward your target (I know, flame me for the blatant disregard of our forefathers thinking) Take your dominant hand and push down on the backside of the ladder, lift with your non dominant hand to reach the roof edge. Use your non dominant hand as the fulcrum and dominant hand as the load. Change it from a class 3 to a class 1. Angle appropriately.

24. sid October 21st, 2009 10:26 pm

    Man…talking about busting someone's chops. At least this FF is training instead of playing guitar hero. I like the energy in this forum. Be safe.

25. brickcity1306 October 21st, 2009 10:52 pm

    Sweet tip brother!! Man some of you guys never disappoint,,, who would of thought of This stuff ?? Man I am a ball buster but Volley and jon how about you come up with a idea and post it on this site.. I am willing to bet you have NOTHING to offer any of us so how about you take your SHUT THE FU&K UP PILL and sit down..Stay strong and safe for all the rest

26. Lad288 October 22nd, 2009 2:56 am

    I wonder if we put latex gloves on the butt of the latter if that will stop it from slipping….

27. jimm October 22nd, 2009 6:02 am

    **********READ THIS**********

    IT'S JUST AN IDEA! As I have said so many times before, if you like it great, if you don't like it, that's great too. Do whatever works best for you. Where has all of this negativity come from? Take it over to one of the other sites that enjoy that crap…Trust me, I know ball breaking is part of the job, but save it for the firehouse.

    I encourage everyone who has been outspoken about this idea, or any other idea from this site, to submit some of their own stuff! Let's see what you've got.

    So I recommend this, if you like it, use it, if you don't like it, submit some of your own stuff, or just sit back and enjoy some of the other 269 other posts on the site. Hopefully every one of us still has something to learn.

    Stay safe brothers and sisters and GO TRAIN!

28. Gary Rauch October 22nd, 2009 6:03 pm

    Nicely done. Look in the VES archives for J. Morelocks use of a short rope to do the same raise. Another tool for the box! Keep'em coming and BE SAFE!

29. kyle October 22nd, 2009 6:05 pm

    Like it but would hate trying it with a 3 fly 35ft ha

30. Tim October 22nd, 2009 7:42 pm

    Thanks for the tip, tried it today at work and though its not an everyday thing I'll have it in my toolbox just in case. Keep the good stuff coming. The rest of you please get over yourselves.

31. Joe CFD L15 2u October 22nd, 2009 9:20 pm

    Nicely said Tim. Brickcity I agree with you that some people need to take the STFU pill. I hear the same negative "not by the book" or "we'll never have to do that" comments everyday, when presenting some outside the box thinking or training ideas. I doubt any of the bitchers and whiners are really any prominent names in the fire service anyway. For the nit picking standards people, how about we have a new NFPA standard that states if you can't get the job done w/out worrying about every little rule in the book,then walk your sorry ass out the door and be careful not to let it hit you on the way out. Theres probably some czar position they can create for you to spout off useless information to people who truly care. I've yet to fight a fire that followed all the rules. To all the brothers/sisters stay safe and keep the ideas coming; still the best damn job in the world!

32. Sean October 22nd, 2009 10:29 pm

    Well said, Joe!! And for the Orlando Brother who posted the helpful video, KUDOS. I learned this trick at the OFD conference this past year, and have used it several times on real, not fake fires since then. This site is about sharing ideas so that our Brotherhood sets itself apart from the average person out there trying to do our job. The book is the book, but in the real world, sometimes to get the job done, you have to step outside the box.

33. riley October 23rd, 2009 11:33 am

    I got our guys out yesterday and we gave it a try. Everyone gave it a "thumbs up", and while it wouldn't be used everyday, we all agreed that it is something useful when it would be needed. Thanks again.

34. squadvolly October 24th, 2009 2:54 am

    Im short…the shortest in my department i can throw any ladder with the exception of a 35 footer by my self…i like this idea because there are some days its hard and there isnt always a wall to use or another guy….were all rolling light these days

35. LT27 October 24th, 2009 7:11 am

Just a side question, why is the 35 ft being referenced multiple times with regards to single person throws? Is this common place throughout the US? Around here, it is taboo to throw a 35ft yourself. For many many reasons…….

36. Chris October 24th, 2009 8:16 pm

Straight ladders are good for roofs and going below grade- never throw less than a 24' extension ladder if going above grade. hopefully most people can do that themselves. If you don't sooner or ladder you will come up short (pun intended.)

37. Greg October 24th, 2009 9:25 pm

Keep 'em comming man!! Great tip, used it twice already….And looked like a champ doing it, less effort to throw the ladders means I have more energy to do the 100 other jobs us truckies have to get done at a fire..Love it!

38. Spencer Bashinski October 25th, 2009 8:55 pm

Where do I start? I didn't even make it half way down the page of comments before becoming so angry, I had to post my opinion.
Some of you, are the most ignorant, arrogant, and inconsiderate ass holes I have ever seen. You all call yourself firemen? Please. I'm glad I spend my time in the firehouse with guys like Jimmy and Dan and not you F***S.
Holy Hell, God forbid a FIREMAN goes out and does training. And then be kind of enough to post it for other members of our job to use in a time of need. Instead lets rip him up over safety issues. How bout we boost our own egos on the backs of a brother? F. U. Thanks guys for all your hard work and effort. Keep it coming.
As for the F***K Tards that I mentioned earlier I'm embarassed to claim you as members of my job. As far as I am concerned, you aren't brothers and should never be allowed to use that term in a firehouise again. Keep your F'n negativity to yourself. And get your ASSES off the computer and go try to apologize for letting down the entire fire service.
Thank You Dan, for the post and your continued initiative.
Spencer Bashinski
Engine Company 8
Orlando Fire Dept.

39. squadvolly October 26th, 2009 1:44 am

I dont know anyone that can throw a 35 footer by them selves my departments has two flys and its a bitch with 3 guys

40. Sean October 26th, 2009 4:45 pm

Well said, Spencer!

"Holy Hell, God forbid a FIREMAN goes out and does training. And then be kind of enough to post it for other members of our job to use in a time of need."

41. Smith October 26th, 2009 5:46 pm

    THATS GREAT, BUT WHAT GOOD DOES A PIKE POLE DO ON A ROOF? CANT SOUND ON THE ROOF WITH IT, MAYBE ITS A CALI THING TAKING HOOKS RATHER THAN A PIKE POLE. GOOD IDEA THOUGH.

42. brickcity1306 October 26th, 2009 10:48 pm

    Oh MY Smith… Please tell me you are kidding us ??/

43. HAWK October 27th, 2009 8:54 am

    Spencer,

    You could've said it any better.

44. EPFDEngCo5 October 27th, 2009 12:55 pm

    Well said Spencer. Really, if you don't want to use a tip/technique then don't use it…it's that simple. Why don't you naysayers go bust the balls of all the "other" guys lying on the couch, playing on the computer or talking on their cell phones all day. They are our "enemy", not the guys training and trying to make this job better and safer!

45. GRONY October 28th, 2009 12:57 am

    Great Post DAN! Well Said Spencer. FTM!

46. Travis October 28th, 2009 2:06 am

    Nice trick, I'll have to try it sometime.

    We utilize 2 section 28's in my department. We are expected to be able to slam them by ourselves, away from the building on a hard surface. If you are of average height, throwing a 28' by yourself is significantly harder than a 24'. The extra 2' of length makes a HUGE reduction in mechanical advantage.

    I worked my ass off to master my 28'. It is my tool, and my obligation to master it. There are people who say slamming our ladders by ourselves is dangerous and not necessary. They are fools. Someday someone's life may be dependent on my ability to violently and efficiently place MY TOOL in a position to help them.

    We are always ONE 911 call away from having to do the things the aforementioned fools above say "we don't need to learn to do, because we'll never need it".

If you can't (or won't) slam an extension ladder by yourself than get the F out of the fire service. The world need plenty of bartenders.

47. Jon October 28th, 2009 3:11 pm

    Lighten up Francis (Spencer). I am sure you are a real joy to work with! LOL

48. Evan October 28th, 2009 5:15 pm

    I dont think there has ever been so much bi+ching over one post EVER!! My god. For everyone who thought this was a "stupid" or "bad" idea, I hope and pray that one day you'll run into a situation like this and have to use this trick. I hope you eat your words. As for the three rung above the roof "rule", if your more worried about the number of rungs that are above the roof, you gotta start worring about your job and not what the book said.

49. brickcity1306 October 28th, 2009 7:14 pm

    It's four or five rungs Evan LOL,, and if you think this has bitching you missed last year 140 + posts on a thread … I could see how this could be especially useful when encountering an overhang or obstacles close to a structure. I have not given it a shot yet but I will..

50. DMAN72 October 29th, 2009 9:12 am

    Evan, do you even remember the metere pulling post??? Or the bailout hook?

51. DMAN72 October 29th, 2009 9:22 am

    Make that meter. Wasnt trying to go latin.

52. Nate999 October 29th, 2009 11:21 am

    What about the Indy video, while we're at it?

    Tried this the other day, and not a bad thing to have tucked away in the ol' noggin. Worked better that I thought it would.

53. DMAN72 October 29th, 2009 12:42 pm

    I forgot that one! Hey, I got it! Let's all argue about what post prompted the biggest argument!

54. truck October 29th, 2009 10:59 pm

    Awesome tip man… I love it….and yes it can be used with the big boy ladders. This is a 28ft Heavy Duty truck company ladder (not the wimpy alco lite ones)
    Next trick im tryin for a 35 with an 8ft hook

55. truck October 29th, 2009 11:00 pm

    http://www.youtube.com/watch?v=Z9uo21WDNRI

56. Unit223 October 30th, 2009 4:46 pm

    I dont care what anyone says, that was sick, lol.

57. TRT October 30th, 2009 7:06 pm

    Works nice. We used it in a Orange Count Apt fire.

58. Jack October 31st, 2009 1:54 am

    Wow…Pretty pathetic that some of you guys are pounding your chests saying this is a LAZY way of throwing a Portable. Next time your in a Narrow alley between two buildings, someone is hanging out of a window, and youre alone and need to raise a portable to get them, you cant push it up against a wall to raise it, alley is too narrow. Youre going to tell the person IM SORRY IM GONNA KEEP TRYING BECAUSE I DONT WANT TO BE LAZY!!!!?????? The idea shown in this video is OUTSTANDING!!! Its great, Youre carrying youre tools and a ladder. Just drop one step on it and use it to butt your ladder. To the Volley saying the butt is going to get worn down; you just showed you are just that, a volley. Youre millons of tax dollars going to your shiny rigs too valuable to get used? Who cares about a butt being worn down. That is what checking the rig is all about and if something is worn, or broke, you take it out of service and get a new one or fix it. I cant imagine you are that busy that youre throwing ladder that much to wear them down. Besides if you read rather than watch the video, or are you the type to simply look at pictures and not read, Generation xbox? It states the dragging is simply done for demonstration and not to be done normally. Guys stop complaining and commend this guy for coming up with this. If you dont like ideas to help you on the fireground dont log onto sites like this. Go play xbox and find a new job. The fire service is not for you!

59. 7foothook October 31st, 2009 2:52 pm

    Nice job Dan. Thanks for the tip. Spencer, well said brother!

60. FFing paragod November 1st, 2009 2:56 pm

    some guys like it, some don’t. it’s just another tool to put in to tool box. Really good idea, i am sure to use it when i need it.

61. Stoney November 1st, 2009 11:45 pm

    Agree…another tool. However, seems to be another example of over thinking something. Just saying…

62. `bulldawg November 3rd, 2009 8:31 pm

    Wow.Iwas going to post a tip about putting fire out by using water, but I’m sure all the know-it-alls would shoot it down and say they had a better way!

63. DMAN72 November 3rd, 2009 8:52 pm

    bulldawg, CAFS works better.

64. `bulldawg November 3rd, 2009 9:00 pm

    dman…i'm not about to throw baby cows on a fire

65. Nate999 November 4th, 2009 2:19 pm

    It would be nice to have a steak before starting overhaul, though.

66. brickcity1306 November 4th, 2009 8:32 pm

    I suggest if you are in the hose dragger business you find a different site.. This is a real man site,, ya know the knuckle draggers AKA the truck Co!!! How some of these dumb a$$es even know how to use a computer without breaking it in half is one of the worlds mysteries!!!! LOL,, and CAFS are for sissies just throw it out the window and let the hose draggers put it out !! They are yard breathers anyway so it is less of a walk for them ;-P

67. FF_Goodnight November 5th, 2009 4:23 pm

    Just found ou that the rookie makes a good footing to throw the ladder as well. Nice post.

68. BCT26FD November 7th, 2009 10:41 pm

    Great Tip, works well with 1 person which for my department is not uncommon on a 24.

69. RT158 November 9th, 2009 12:10 am

    Great idea! I will be passing it on to the rest of my crew and having them give it try as well. The discussions,ideas, and tricks on this site have been a regular part of our drills since I learned of the site. VollyFF, why did you even waste your time posting those comments? I'm a volunteer firefighter myself, so if your department is anything like most other VFD's in this era, you're short staffed for a good portion of the day. That is when the great, innovative ideas like the one that you see here prove there worth time and time again. If you didn't catch it the first time you read the article, go back and re-read it as many times as you need to until you understand what "done intentionally for demonstration" means. The next time you go to your firehouse, take a second to look at the ladders on your rigs, I bet there is more damage being done to the ladders from lack of maintenance then there will ever be from pushing a ladder a few feet along a sidewalk. The "Essentials" manuals that I have used provided me with the information needed to pass my exam and get my certificate, not what to do when I'm by myself in the middle of the afternoon, trying to perform a job until the understaffed mutual aid department arrives. I think I will keep the essentials book on the rig from now on though, so when I wear down the foot of the ladder I can level it out and get my job done.

70. vazquez sq4C ocfrd November 11th, 2009 1:21 pm

Good stuff Dan. I did it and it worked good. Most of the post on here seem to be from experienced FF. So this technique probably isnt for you. But can we at least look at more of the positive side of this technique. Think of this. Rookie? Inexperienced? Someone who just doesnt work with ladders much? Which always seems to be the person who gets tagged with a this task that a lot of people take for granted, and it kicks there a??. This would benefit them the most. And of course YOU who needs the egress.

71. Scott December 4th, 2009 3:55 pm

I think it is a great idea! It shows outside of the box thinking. If you read the article and watch the placement it is secured with one beam in the grass. If there was truely this much ball busting as seen by the posts above in our own backyards, guess what that means…more training…more ideas and just maybe, just maybe….reduced line of duty injuries or deaths. You see it everyday about fire departments needing more manning, houses being closed etc. Here is a house that is trying to figure out some neat tricks of the trade. For those who fall back on the essentials of firefighting book, my question to you is. How much dust was on the book and how long did it take you to find the answer. This wasn't a recruit school video, this was a crew thinking outside of the box! Need more of it! FIRE TRAINING!

72. Shoey December 4th, 2009 11:35 pm

Great little trick Dan! It works great in sandy, moisture rich areas (beach communities). I had the pleasure of working with Dan, Rob, and Spencer….top notch Firemen. Unfortunately, I had to move back to S. California for family reasons, and I miss the brotherhood and family of guys like that. Here in L.A. its ALL about EGO. It is ridiculous and dangerous! If your INSECURE enough to make ridiculous comments on this site, then go back to high school where 15 yr old girls might think your cool!

OFD Pride!

73. gd December 14th, 2009 8:17 am

I tried this while doing ladder training one day with the crew. I'm only 5'4" and this works beautifully for me. We did throwing a straight ladder normally, then this method. For me, it works. We don't usually get many fires where we need ladders. Most of my county is either rural, or 1 and rarely 2 story residential. The tallest structure in my first due is a 3 story city hall. I'm going to use this method because of that. It's easy on the ol' back too so less risk of injury.

For those of you that don't like it, don't do it. Don't b*tch about it, just don't do it.

Insignificant Bars

October 15th, 2009 | Category: Outside Functions

Eric Baron from Hempstead (NY) Fire Department sent in these photos that show how not all security bars are created equal. These bars are essentially insignificant and are simply held in place by four cut nails (two on each side) as shown in the photo below. Some simple prying with the halligan on the bracket will pop the nails out in no time. Attacking two brackets on the same side will allow this bar assembly to be "hinged" on the remaining two nails and be taken out of the equation quickly.

Any time a window covering is encountered whether insignificant like this, or a real obstruction, it needs to be removed early in the operation. We never want to be in a situation of having a brother trapped behind an obstruction that should have been removed earlier. Besides, taking a window means TAKING THE ENTIRE WINDOW! That means everything: glass, sash, the works. This would include bars like this as well. So clear the window, and don't ever be fooled by insignificant security like this.

13 comments

13 Comments so far

1. LTD October 15th, 2009 9:52 am

   A good time saving tip for performing this task is to take ALL of your equipment with you to the objective. Irons, saw, rabbit (bunny) tool, whatever, in the event the window is in fact a "significant" theft deterrent. The one pictured can be simply pried off, but you wouldn't know that until you took a close look at it. Having your tools with you will save you time that you may or may not have, and a trip back to the rig.

2. forgotten October 15th, 2009 12:15 pm

   NOTHING is "Insignificant" if the operating membership doesn't know how to address it. Teach them. Train them. Save them from themselves.

3. DMAN72 October 15th, 2009 2:13 pm

   My momma used to say "Hope for the best, prepare for the worst." That's a true story. A lot of security measures are only cosmetic to deter people, like padlocks. You know what Id do to this bars….

4. DownLow October 16th, 2009 11:29 am

   Well put DMAN72, always prepare for the worst.

5. forgotten October 16th, 2009 3:02 pm

   El Reverso Donkey Puncho. It does seem like the best method to attack from this angle.

6. jake October 16th, 2009 11:57 pm

   Yep, even though these would take a few minutes from the outside, from the inside, it would feel like forever if you had to get through.

   With all the fancy, heads up displays, gps's, laptops and shit, ya gotta remember the basics. Another reason the irons are the best positon.

7. Dave October 17th, 2009 6:07 pm

Hey…..you insensitive BASTARDS…..what if it's a SISTER trapped behind an obstruction…….

8. Nate999 October 17th, 2009 8:10 pm

Uh oh…I figured it was just a matter of time before some meter puller or Kentland guy got another war goin'…

Another good reason to bring two tools (hand and power). Just like Confucius said, "Firefighter without tools just well-dressed civilian"…or was it something about a hole in your pocket and feeling cocky?

Fortified Door

October 09th, 2009 | Category: Outside Functions

Gabriel Angemi from Camden (NJ) Rescue 1 sent in these photos of something he and the brothers of Rescue 1 came across on a fire run. This door was fortified for something we don't normally encounter… This door was hardened to keep people in! Click here to see the full write-up on the door and how Rescue 1 attacked it.

17 comments

17 Comments so far

1. 8Truck October 10th, 2009 3:10 pm

   That is one mean door.

2. FitSsikS October 10th, 2009 7:42 pm

   If I may borrow Saturday Night Live's version of Senator David Paterson for a minute;

   "Doors like this are used to keep people in…….

   ..New Jersey!"

3. DMAN72 October 10th, 2009 10:09 pm

   OK, Im confused. Do they want or not want people to get in?

4. Evan October 11th, 2009 5:51 pm

   WOW I'm speachless.

5. Chris October 12th, 2009 8:50 am

   What's even more "bad-ass" than that door? Rescue 1- they know their doors and know their tools. PRIDE.

6. Bearpond118 October 12th, 2009 9:11 am

   Finding a door such as this when trying to gain acess is bad, because it slows our attack on the fire… But if we enter through another point and try to exit through a door like this then we will be slowed down considerably and in serious danger.

7. FF_Goodnight October 13th, 2009 12:20 am

   This door is the perfect job for the rookie…

8. Brickcity1306 October 13th, 2009 8:27 am

   Man not one donkey kick comment yet ???? JEZZZZZZ you guys are slipping 

9. Sean October 13th, 2009 10:39 am

   A door from hell!

10. FitSsikS October 13th, 2009 7:33 pm

    To quote Sean:

"A door from hell!"

This is not to be confused with the door to Hell.

It's my understanding that particualr door is easy to get into.

11. brickcity1306 October 13th, 2009 10:34 pm

    Ahhh please,,,,, that was my crib door!!!!! You are all are sissies!!! LOL,,,, welcome to friggan Camden New Frigan Jersey jeeeezzzzzz !!!! LOL

12. FitSsikS October 14th, 2009 9:43 am

    Brickcity1306 you got me thinking (crib reference)…..

    …obviously this is some sort of 'day care' facility for little'ns.

13. Jon October 14th, 2009 8:17 pm

    Dont you need a door on the firehouse like this in Camden? I went to a wedding there and the Church had a armed security guard!

14. DownLow October 16th, 2009 10:44 am

    Clearly this is a job for one of my dehydrated truck or rescue crews…just add water and they'll handle the door!!

15. DownLow October 16th, 2009 10:46 am

    Oh and I am trying to firgure out how to make dehydrated hand tools too. This way the firefighter that always walks around with a Galls catalog attached to his helmet can store the items in his pockets and add water to the tools as he needs them, thus taking up less space. Hell, he could even keep them in a latex glove to protect them from water and being inadvertantly used!

16. Montreal FD Engine 58 October 22nd, 2009 5:07 pm

    Holy cow, thats a serious door…

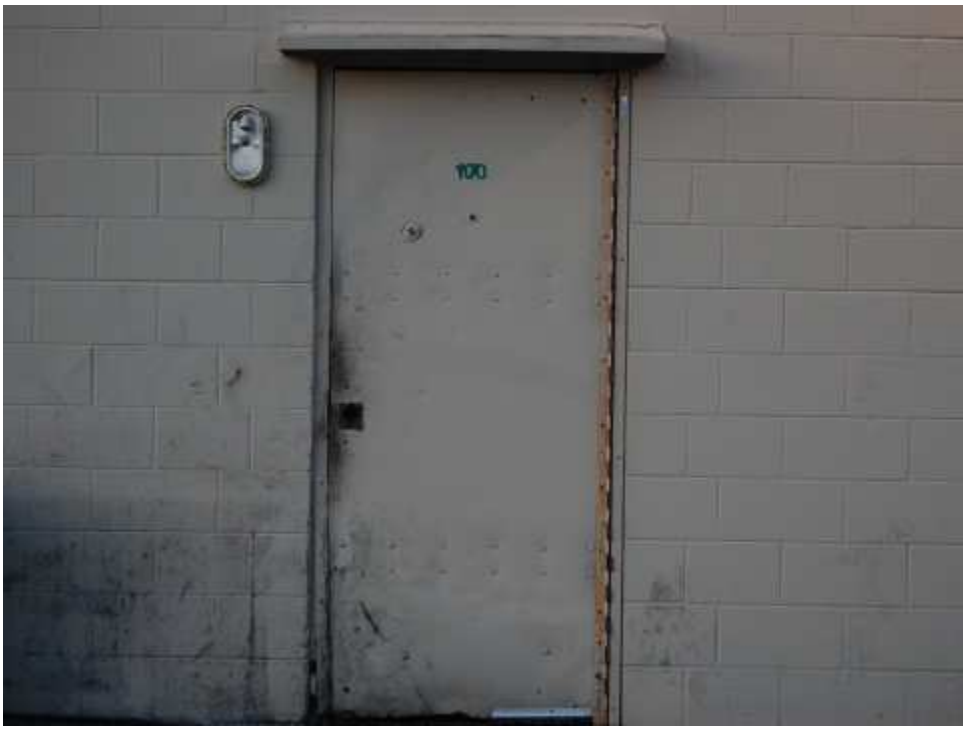
    Would probably have been easier to have the rookie go thru the cinder block wall with a sledge hammer!

17. Al November 19th, 2009 3:34 pm

    as a bricklayer besides firefighter it appears that using a sledge hammer and bolt cutters to blast a hole through the block wall much easier,and tapcon on a sheet plywood to secure the opening afterword

Double Drop Bars

October 07th, 2009 | Category: Outside Functions



Sometimes it's extremely easy to read the door from the outside. The door shown above is easy to determine that it has two drop bars present. Unfortunately, the picture we took from the inside did not turn out, but we can tell you exactly what it contained. It was a simple U shaped drop bar bracket that extended the width of the door. The brackets accepted simple wood 2×4 drop bars and was duplicated both top and bottom.

There are a few things that may slow us down when forcing this door. The fact that there are a total of 24 carriage bolts securing the two brackets may make attacking the carriage bolts a non-desirable option. The drop bar bracket being solid across the bottom somewhat limits the ability to knock the top drop bar out of position from a cut made in the middle of the door. The sad thing about the occupancy on the other side is that it was only a restaurant, not some mercantile stocked with high dollar items. This post is leading up to our next post that will show a similar but much more difficult door later this week.

6 comments

6 Comments so far

1. TRUCK4 October 8th, 2009 5:07 pm

My first question would be, what material is the bracket for the drop bar made out of? Then I think without going nuts, try another option first, obviously. Next, if your rotary saw is equiped with a blade that cuts multiple types of materials, I would make two verticle cuts between the first and second set of carrage bolts on bot the top and bottom. Thy only need to be deep enough to get through the far side of the bracket and about 2-4 inches wide. this will allow a section of the bracket along with the drop bar material to fall off the door thus disabling the drop bar. Your only problem after that is what type of other locking devices have been added to the inside of the door. But from the looks of these pictures. Conventional forceable entry with a set a irons should make quick work of the rest of this door. Of course I don't know what is inside this door, but I wouldn't if I ran into this situation on an alarm. If your able to get the inside pics up, I would like to see those as well.

2. PFD023 October 8th, 2009 7:42 pm

   Gap the door at the same level as the carriage bolts and then raise the drop bars by sliding your adze into the gap and force it up with your axe….if that doesn't work doggy door the lower quarter.

3. LT27 October 8th, 2009 10:43 pm

   I think a good starting point would be vertical cuts between the door jamb and the first set of bolts (as close as possible to the bolts) at both top and bottom left and right for a total of 4 cuts. Pry open with adz of halligan (in case the cut didnt go through the wood) and go from there. If that fails my next action would be, cut horizontally above the bottom one and horizonally below the top one all the way across. Again, I dont know the interior setup, but from what is described, I think this would work.

4. FF_Goodnight October 8th, 2009 11:07 pm

   you dont get to see the inside at an incident right. I like this better. I dont want the soloution to the problem. Use whatever technique you see best fit, if it doesnt work, come up with another idea, and if all else fails, you can always force entry through the masonry wall…

5. me October 9th, 2009 1:18 pm

   30 seconds…..tops.

6. ODDIE October 13th, 2009 8:16 pm

   two cuts one below the upper bar and one above the lower bar with a k-12. both cuts made horizontal from the rabbit clear cross the hinge. then with your new three piece door you reach in and remove the boards.

Single & Double Door

October 01st, 2009 | Category: Inside Functions, Outside Functions

Caleb Freeman from Redmond (WA) 16 Truck sent in these photos of something he and the 16 Truck crew use for training the rookies. From the outside the door looks like a standard double door, that should not pose too much trouble for the outside team.

From the inside the door looks quite different. One of the doors was framed over making it appear (from the inside) to only be a single door. It may cause some interesting and confusing radio traffic between the inside and outside teams. Similarly unique situations like this exist in almost all of our areas, and serve as great teaching points. Take the time to go over, review, and quiz each other on this "unique situations" and train on how to defeat them.

14 comments

14 Comments so far

1. Want To Be D Man October 1st, 2009 4:43 pm

   Could you donkey kick the fire extinguisher?

2. Steven Hoober October 1st, 2009 9:45 pm

   I have seen a similar installation on the front of a residence. The one I saw was original construction, even, and looked pretty sturdy. You'd spend some time trying to cut through the wrong door.

3. DMAN72 October 2nd, 2009 9:08 am

   No, but you could break the top of the extinguisher off and throw it at the door. It will blow up and open the door. I did that once in this big chemical fire factory. See me and my brother Steven found out a guy on our crew were lighting fires because this task force was closing firehouses, anyway, it was a big mess.

4. DMAN72 October 2nd, 2009 9:10 am

   Sorry, several grammatical errors. Really need to start proof-reading.

5. Nate999 October 2nd, 2009 11:27 pm

   I told Timmy to check that door for heat…

   Nothing to do but watch movies here at the Holiday Inn Express…other than brush up on my meter pulling.

6. DMAN72 October 3rd, 2009 11:16 am

   I know, Nate999, and now…he doesnt have a face.

7. FF_Goodnight October 4th, 2009 12:34 pm

   At least the building owner placed a broom next to the door so we could have the probie clean up the mess once that extinguisher went off.

8. brickcity1306 October 4th, 2009 8:53 pm

   OK,OK how about

   Schmidt: Yeah, it's jumping floors, Lieutenant!

   Lt. Steven McCaffrey: Well, where's the second-in companies, huh?

   Schmidt: Sorry, man, John Wayne time. You're on your own, boss.
   GOOD TIMES !!!!

9. brickcity1306 October 4th, 2009 8:55 pm

   And a REAL MAN could make that BIT%H a double door without breaking a sweat!!

10. brickcity1306 October 4th, 2009 8:58 pm

    How about and I have used this one:

    [In high rise elevator]
    Tim Kizminski: How are we supposed to know if the floor is on fire in one of these?

Lt. Steven McCaffrey: When the doors open, if it's hot, don't get out.

11. Lad288 October 6th, 2009 11:34 pm

    … So you donkey kicked out a window for ventilation. Was that before or after you noticed you were standing in a lake of gasoline? Was that BEFORE OR AFTER you noticed you were standing in a lake of GASOLINE, YOU IDIOT? And was it before or AFTER you put on your latex gloves and pulled the meter?

12. Want To Be D Man October 8th, 2009 9:44 pm

    Touche

13. brickcity1306 October 8th, 2009 9:46 pm

    Nice !!!!

14. Sean October 13th, 2009 10:31 am

    I know full well how true this hazard can be. I remember a time during one of my last days in recruit school, our class listened to a fire response go out in the morning, and one of the Brothers got trapped behind a wall that from the outside looked like a door to the truck crew. The communication was stressful because the trapped Brother had no way of telling that the wall he was on was actually a framed over door. Luckily, our truck crew just cut one hell of a hole to get him out!! It's one of those learning experiences everyone in our class at the time should always be aware of now. I applaud you for using this as a training tool for your department.

Service Drop

September 16th, 2009 | Category: Outside Functions

Bryan Martin from Redmond (WA) Truck 16 sent in these pictures of an interesting service drop into a structure. These power lines run from the pole mounted transformer across the roof into a weather head mounted in the middle of the structure. The lines are only about 3-4 feet off of the roof. In the first picture, the lines are extremely difficult to see. The second picture was taken with a flash from the same spot as the first, simply looking toward the right. In looking at the pictures, it appears that the roof that they were taken from may have been an addition to the original taller structure located toward the top of the picture.

The contractor simply left the existing service drop in place creating the hazard. We posted a somewhat similar set-up over a year ago in a post titled No Overhead Obstructions. Either way, it's something to look out for, and another reason to carry a good working flashlight with you at all times. Just something else the roof team needs to keep in mind.

37 comments

37 Comments so far

1. Joseph Chomack Station 26-1 Olyphant Pa. September 16th, 2009 2:40 pm

   A good reason to step back and look before you go rushing in and I always make sure I have at least 2 lights

2. Bryan Martin September 16th, 2009 4:50 pm

   Even a simple single story structure like this that is easily reached by ground ladders, putting the stick up simply for the use of the floodlights isn't a bad idea.

3. Jon September 17th, 2009 10:23 am

   I would have the utility company there that night. Someone could get killed cause they went the easy way out.

4. rjd2051 September 17th, 2009 12:08 pm

   You'll never see it in the smoke, bzzzzt!

5. Charles September 18th, 2009 8:56 am

   This website has provide a wealth of knowledge about what kind of hazards different departments are encountering. It never ceases to amaze me what firefighters find. The bottom line is this, you just never know what you might come across. Expect and be prepared for the worse.

6. LTD September 18th, 2009 9:26 am

   I have taken so many things from this site and applied them personally and reviewed it with my crew. This is just another fine example. I agree with rjd2051, you'd miss that in smokey conditions. Doubtful that any light at all would catch it.Thanks for the great site and keep up the good work! Stay safe all.

7. Kevin , Homer Twp.Fire September 18th, 2009 10:59 am

   If you can't see your feet you should be crawling, that goes for the roof also. This is another reason why we should be out in our still sizing up buildings "before" theres a problem!!!!!!!!

8. DMAN72 September 18th, 2009 11:13 am

   You've apparently never been to northwest PA. Most of the firemen up here can't see their feet anyway.

9. DMAN72 September 18th, 2009 11:21 am

   PS, You'd probably pick this up with a quick look through the TIC. As Ive said before, we'll stare at a f@#king burnt piece of drywall all day with that damn thing, but never pull it off for a size up. I can see in NFPA 1500 2013 edition, "Every firefighter on the fire ground shall carry a TIC" (Of course the TIC company presidents will be on that committee)

10. rjd2051 September 18th, 2009 11:39 am

    Here's the real test.
    Now that they know it's there, what's been done to correct the situation?
    The power company can add insulators until a permanent solutution is found.
    Kevin, even on your knees your SCBA could catch on the line. I like mine crispy

11. LTD September 18th, 2009 12:25 pm

    Agreed. A quick look with the TIC before you even step onto the roof is ONE HELL OF A GREAT IDEA. This goes for the surrounding area and not just the roof itself. Don't neglect to sound the roof though even with a TIC.

12. DMAN72 September 18th, 2009 7:28 pm

    Great point, LTD.

13. WHFD10 September 18th, 2009 8:22 pm

    You could always "limbo" under the wires!

14. Ladder96 September 18th, 2009 10:25 pm

    We have a similar problem at a glass manufacturing facilty in our area. The differnce is instead of power wires there is a band saw blade the runs for cutting large pieces of glass.

15. Jon September 18th, 2009 10:36 pm

    yeah good luck getting a camera for the roof man.

16. DMAN72 September 18th, 2009 10:40 pm

    I would like to retract all of my previous statements. I am in complete agreement with WHFD10!!!

17. Lad288 September 19th, 2009 3:52 am

DAMN72 – What if we just pull the meter??

18. SMK ETR E81 September 19th, 2009 1:03 pm

    Pulling the meter..LOL that is a classic, I love it!!! Big balls and bigs saws!!!! Stay safe!! PTB-EGH

19. DMAN72 September 19th, 2009 1:31 pm

    Lad288,
    I didnt even think of that!!!

20. scfireman September 19th, 2009 9:11 pm

    why not just donky kick the weather head off the roof and solve the problem
    Thanks for the site full of great info. Stay

21. shaggy1386 September 19th, 2009 11:09 pm

    It's hard to tell, but I don't think they are power lines. They don't appear to be triplex and even though they come from the same pole that holds transformers, they look like Phone/CATV. Especially considering the service drop by the bay door in the background. The service was most likely moved, however, since the LV doesn't fall under the same NEC inspections, it wasn't required to be moved. Still a hazard, but maybe not the deadly situation it appears. If I'm wrong, I take it all back, but let's not forget this is 1/2 the fault of the codes inspector whom inspected and approved this mess!

22. jmw September 21st, 2009 9:06 am

    What good will it do to pull the meter? The meter is further down the line and will only serve to secure power to the building. These lines will still be energized because they are on the supply side of the meter. You would have to cut the power at the pole.
    And in curiousity, how many dept's still pull meters?
    We have discontinued that practice long ago due to safety concerns.

23. Tommy G September 21st, 2009 9:16 am

    Shaggy1386 is correct, they Cable and Phone Drops (CATV is a dead term). They problem with them is you will not see them untill the the last moment, but….their is always a but….here is a trick, if you do have Cable or Phone drops in your way (either down on a road or on a roof like this) cut them. The magic size is under 5/8in or smaller and you will be fine (it means it is only a service drop and has no voltage. If the drop is what is called a mid-span you DO NOT want to be in the way cause it will wip. PS I am also a Cable Tech.

24. Jimm September 21st, 2009 9:34 am

Here is a closeup of the lines.

Click here for a full size version of the photo. -Jimm-

25. DMAN72 September 21st, 2009 11:18 am

jmw,
Please, for the love of God, don't start this again!!!!!! This is an on-running joke from a previous post. If you look back on the site there was a lengthy discussion on that topic. It became pretty heated. Get it? Heated.

26. rjd2051 September 21st, 2009 12:58 pm

So you run up a ladder on the backside of this structure with smoke pouring from the front. Your job is to open the roof over the fire.
IF you see wires, do you take the time to determine the wire is CATV?
Pull the damn meter and stick it in a latex glove

27. riley September 21st, 2009 7:42 pm

I'm tellin ya, an ATOMIC ELBOW works better than a pull!!!

28. shaggy1386 September 22nd, 2009 5:32 pm

I stand corrected. Definitely tri-plex. Thanks for the clarification Jimm!

29. James September 22nd, 2009 6:43 pm

All- Our fire prevention bureau and city building inspectors have confirmed that these lines are indeed electrical (not CATV/phone), and an illegal installation.
rjd2051- we took your question to heart and have taken steps to get this hazard removed. Believe it or not, our cities initial response was, "Despite being illegal, the city will not intervene to correct it." Now we are in the process of correcting that issue (the cities response), too.
DMAN72- As far as using the TIC during the size up to find overhead lines, one of our engine companies tried to find electrical lines using the TIC and they were invisible. Transformers showed up plain as day however. Good thought though.
Stay safe,
L16 C-shift

30. LT27 September 22nd, 2009 8:33 pm

    This looks like Telecom and 2 Triplex Drops (uncommon for my area at least, but who knows) Pulling the meter WOULD NOT deenergize those wires. This is a SERVICE drop from a pole more than likely. The only feasible solution to this is to contact Utility and have them pull the transformer fuse. Until then, STAY AWAY and consider ALL Power lines HOT until proven otherwise. Also, telecom carries medium voltage that COULD injure FF's. Stay vigilant and plan for worse case scenario.

31. LT27 September 22nd, 2009 8:35 pm

    Add: Pulling meters are usually a bad idea…….never have found good reasoning behind it.

32. DMAN72 September 23rd, 2009 8:36 am

    James,
    Just curious, what made them invisible? If they were live they should be fairly easy to see.

33. James September 23rd, 2009 1:05 pm

    The guys felt that the insulation sheath covering the lines and the ambient air temperature (hot night) probably shielded whatever heat was being pushed through the cable, much like a wall can conceal heat behind sheet rock or plaster. We also assumed that with little or no load going through the lines during the evening and with the absence of significant resistance, there might not be much heat build up in the lines anyway. This was just our observation though.

34. DMAN72 September 23rd, 2009 8:37 pm

    Thanks Brother! I never thought it was a problem. Never really noticed not seeing them with a TIC. Just like every other fire service rule, always exceptions!

35. firefighter_632 September 29th, 2009 5:44 pm

I tried using the TIC to find powerlines and you can see them. The commercial feed passing the station could be seen about 25’ away.
Granted it was about 70 that night and I knew where to look, but they could be seen.

36. DMAN72 September 29th, 2009 6:00 pm

Yeah, you can see them a lot of the time, but apparently in like the case James is saying, there can be variables.

37. Sean October 13th, 2009 10:15 am

I agree with Bryan Martin, “putting the stick up simply for the use of the floodlights isn’t a bad idea.” Whether your department uses a tower or stick, the excellent lighting provided by these trucks is a roofman’s best friend.

Roll-Up Door Prop

March 28th, 2008 | Category: Outside Functions, Props

Since our last post had some discussion about cutting the roll-up door it seemed appropriate to follow up with this. Engineer Jim Hanel with the Golder Ranch Fire District sent in photos of a roll-up door training prop. The prop was built by Jeremy Rinder, a steel worker/artist from their area. A lot of thought went into the design: It can accommodate any size door since the two sides are totally independent and even works with different sized center rods and roll size. The large yellow handles adjust the distance between the center rod hole and the roll down channel. The small yellow handle (seen in the second picture) secures the roll from rotating once it is all set. As mentioned above, although it’s hard to tell from the pictures, the roll-up slides down a channel just like on an actual installation. The channel prevents the roll up from bouncing while making the cuts, giving it a realistic feel. The nice thing about this prop is once all of the cuts are made and there is no useable door left, simply roll down some fresh door, secure it, and go! The prop can be broken down into 4 pieces for storage or transport and can be fixed to the ground by spikes when necessary.

19 comments

19 Comments so far

1. ... March 28th, 2008 8:07 am

If they havn't already, I would say they should go into the busiess of selling these props. Having one of these around would be nice to demostrate many principals when an already existing door is not present. Simple idea made into something very useful. Nice job.

2. Curious March 28th, 2008 4:42 pm

   Do they sell refills for it?

3. will clelland March 28th, 2008 8:58 pm

   Does anyone have plans for this prop, or even more pictures they would be willing to share??

4. John N. March 29th, 2008 10:13 am

   Hey all, I know that this has been asked but please if anybody has any information on this prop please post. Either plans or sale information would be great. Some of us who are involved in our local fire academy were looking into making a prop to practise roll down gate evolutions and this looks like a great design. Stay safe

5. Battalion 13 Chief March 29th, 2008 10:11 pm

   This looks like a great prop. If you get any more info on this please post it on your site. Stay safe…

6. Jack March 29th, 2008 10:19 pm

   We did something similar in my house. We salvaged two channels and used some angle iron to piece it together. The channel on the left is fixed and extending to the right is about 12' worth of angle iron. The channel on the right can be adjusted to accomadte any size roll down. We clamp the right channel into place and load the gat in it. It is held by two hooks at the top through holes we drill in the top slat. We have a local scrap metal guy who holds onto old roll downs which we get A LOT of and he lets us have them to cut up. We return them to him so he can cash in on them after we utilize it for our purposes. But it works just as well as above and was totally free and easy to make.s also easy to maintain and if you accidentally cut into the channel its no problem as its not as pretty as the above one. Either way they both work and are great to drill with and should be because how often do we cut roll downs now a day?

7. Jim Hansel March 31st, 2008 10:58 am

   I have more photos that I can e-mail and the number of Jeremy Rinder (the designer)is 520-260-0095 here in Tucson.

8. Dave March 31st, 2008 3:20 pm

   Prop looks great…..clear blue sky and mountains in background look even better….from cloudy/wet/cold Ontario anyways :>)

9. fitssiks March 31st, 2008 7:57 pm

Dual purpose device?
This could also be used in conjunction with a (red) golf cart. Firefighters could be taught to wait for the door to fully open before they drove through.

10. jacquie rinder March 31st, 2008 8:29 pm

    dirty, you the man! Seeing you create such cool stuff in the name of safety makes me forget I ever asked for a chiminea for my birthday!!!!!

11. Dave March 31st, 2008 10:39 pm

    We've also been after a larger hall for years….we could have 3 of these built in a larger version and just place them out in the mall parking lot…make great truck bay doors….the hall would be as big as the parking lot.

12. Joe Artanis April 1st, 2008 7:51 pm

    Looks like a great training prop, but what would the cost be? Looks like it will be a little expensive.

13. Jude Yandow April 4th, 2008 10:22 am

    Jeremy-It looks great! You make the family proud!

14. Jude Yandow April 4th, 2008 10:24 am

    Jeremy-You make the family proud! Looks great!

15. Jimm April 5th, 2008 10:58 pm

    We posted some additional full size versions of the photos of this prop.
    Click Here to check them out. -Jimm-

16. Tye April 7th, 2008 11:25 am

    This is a great looking prop. Sometimes roll-ups are hard to come though so get them when you can. You also should consider making a prop to use standard residential sectionals to cut on. We have some standards that are adjustable to accept 8 foot, 9 foot and 16 foot doors. The doors are readily available from a local overhead door company. We stack 4 in at a time and then use the self tapping screws to hold them together. I will try and send some pics to Jimm to post.

17. Mike April 7th, 2008 7:56 pm

    Great prop! Just reconfirms that you're limited only by your imagination. If you can't get your hands on actual doors, one other idea is to get sections of Q-decking. You can attach them to a couple of 4X4's with screws and put the 4X4's in a couple of metal mailbox post holders.

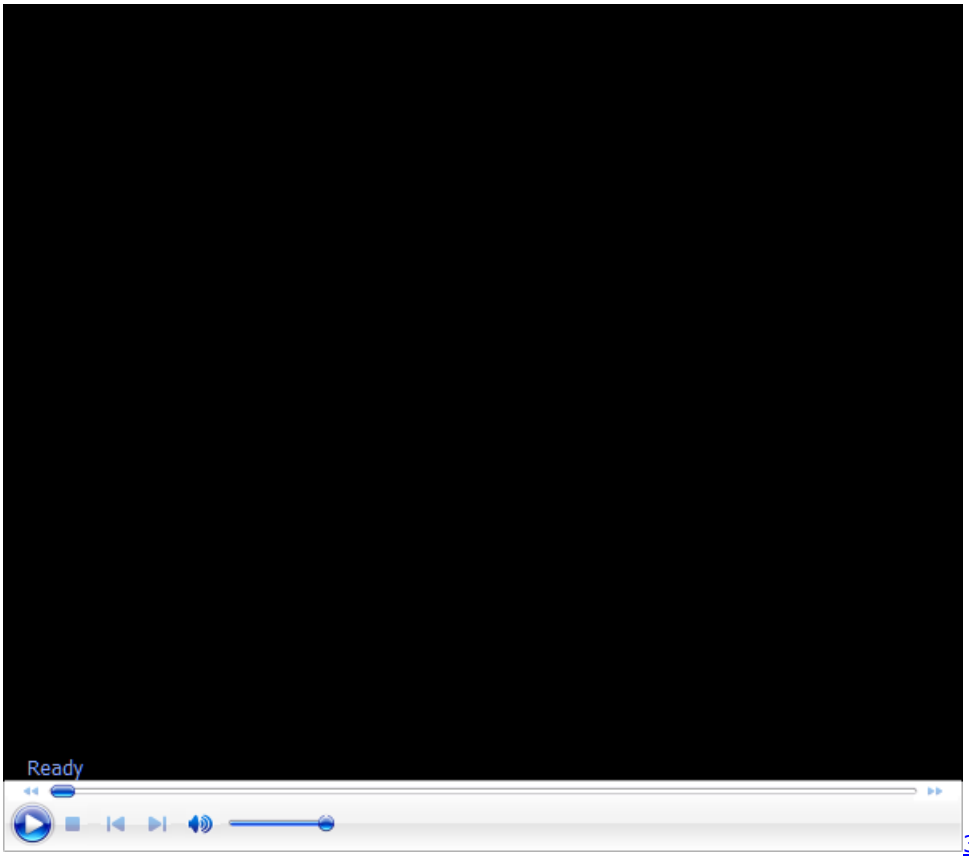
18. TONY July 9th, 2008 5:31 pm

Hi Guys
I am not a fire fighter but i am a fabricator of roll down gates located in Queens NY. The prop is great but it is not necessary. What we do for the fire house's in NYC is we fabricate a complete used functioning roll down usually an 8 x 8 gate attached to a steel tubular frame with a bottom brace bracket used from used steel and we give a quick lesson on how to replace the slats and adjust the spring if need be. Replacement slats are plentifull. On top of this I will give them away free you just have to give me ample notice 2 to 3 weeks to get it ready. Come by with a truck and pick it up. We can even give you extra slats at the same time.

Dual Pane Vinyl Windows

November 26th, 2007 | Category: Building Construction, Videos

John Clark from Sacramento Truck 6 sent in this video they captured during some acquired structure training. This video shows the strength of some of the new style dual pane vinyl windows. They were training on various VES techniques and discovered that these new style windows are much tougher than they appear. John pointed out that these windows have been becoming extremely popular in both new and refurbed structures. These windows are certainly not indestructible, but as this video demonstrates, we may need to discover more efficient ways of "getting them."



38 comments

38 Comments so far

1. Jamie Morelock November 26th, 2007 11:56 am

   This comes as little suprise. I wittnessed, on more than one occasion, truckies wind up with a Halligan bar (pick) only to have it bounce off when it struck the glass of an EFW. Sometimes requiring 3-4 strikes before the glass yeilds. Another problem is "port hole" ventilation in this type of glass. It is important to clean out the entire window glass.
   A major safety concern is caused by one of Newton's laws…for action there is an equal and opposite reaction. If the vent firefighter is working from a ground ladder, the energy that would have been absorbed by the glass is redirected back and could cause the firefighter to fall from the ladder. It is extremely important to lock in to the ladder by leg lock (or one of its variations, arm lock, or ladder belt. Mike Ciampo has written several articles on locking into a ladder check them out on Fire Engineering's website archives. Too many firefighters have the mindset of "I'm only going to be on the ladder for a second" and fail to secure themselves before performing an action. This mentallity is only going to get them hurt, or worse, someday. Stay safe.

2. T.Young November 26th, 2007 1:46 pm

   is it safe to say that after a couple whacks its just better to set the ladder for rescue and use the halligan pick?

3. Suzannah November 26th, 2007 2:52 pm

   I'm afraid I can't see the video or find a link. What am I doing wrong?

4. John November 26th, 2007 2:57 pm

   Yes T, first off… keeping in mind this duty is for an experienced FF who knows the ins and outs of taking windows. when to, when not to, and where are crucial. It is possible that the need for extention ladders to be put in place is not necessarily the exact time that a window should be taken. Please dont anyone get into the habbit of extending a ladder and automatically throwing it against a window. Second is what are we taking the window for? venting only or 'vententersearch?' venting only: tip of ladder at top of window on the windward side. ves: tip of ladder at window sill, clear window top first then toward bottom. SCBA face piece (atleast) should be on to prevent tiny shards of glass from getting into nose cone of face piece and also acts as face guard. As for the leg lock, not a big fan. slow and easy strokes at the window first then progressively faster. Gives you a heads up of the kind of kick back you'll get. Leg lock with no one footing the ladder creeps me out! But yeah, two or three attmpts with the tip of the ladder and if that doesnt work you really dont want to keep attmepting for another 45 seconds. hook or halligan is best and even those may take a few wacks before it does the job. Remember if youre taking window then YOURE TAKING THE WINDOW…..THE WHOLE WINDOW. So youre going to have to go up there anyway.

5. protectin' the hood November 26th, 2007 2:58 pm

if i ever come across this type of window in my district (which im sure i wont)i will be sure to not slam the ladder into it over and over…maybe just climb up and try another way. work smarter, not harder.

stay low

6. chris November 26th, 2007 4:56 pm

first off, john i think that you may want to talk to youre chief about setting up sog's for to people to a ladder its alot safer i found that out off the job luckey im still here…second what happens to thease windows under heat? do they weaken or does the heat not really have any effect?…also if you take youre halligan (pick side) to a corner according to physics thier should be less rebound (less risk of falling).

stay safe

7. John November 26th, 2007 5:23 pm

i agree. however, im not in charge of hiring unfortunately. other depts in the same situation (light staff'd) just make sure those ladder pads are dug real well into the lawn. Be Safe All!!

8. JC November 26th, 2007 5:23 pm

Hey brothers,
I just want to clarify a few things. This was ONLY our attempt to test the effectiveness using the ladder to initially break the windows during a VES operation. This is done ,if it works, to allow the smoke and heat to blow before we climb the ladder, clear the sash and enter the room. Trust me, we will not be standing outside a working structure banging on a window with our ladder until it breaks. Our plan is to bang it once or twice and then climb and clear it with a tool. We wanted to train on this because we found that often people will teach and talk about techniques without ever trying it themselves. So just keep in mind we only wanted to show the surprising strength of newer windows not a clinic on all the aspects of VES techniques and safety.
JC
SFD T6B

9. T.Young November 26th, 2007 5:59 pm

JC thanks for the vid. Definately got the point acroos!

10. BRM November 26th, 2007 10:34 pm

JC – Great video. Almost every new home constructed has these little babies in them (and almost all the remods). They are a SOB to get through if you go at them like a normal window.

What can be even more of a pain in the ass is when the framing is constructed of vinyl(plastic). Taking the whole window includes the sash, and this can be quite a chore.

We've found that although the OVM usually only had to carry the hook and a ladder, these type of windows have neccesitated the halligan bar also. What has worked absolute wonders is the big boy from Firehooks. Over 50" of halligan and enough kinetic force to seperate the sash at the joints and take the glass.

Since we are talking windows, anybody have a written policy that lets brothers know that the window (although vented) with a sash in place has no ladder outside waiting, but the one with no sash has one? With the "plastic revolution" in full swing, if your not using this, you may want to think about it. It will save time on the vent assignment, and will help to coordinate the interior and exterior functions.

"Vent, and the Engine shall live…"

11. G.S. November 27th, 2007 1:02 am

    Just another thought on dual-pane and triple-pane windows; they are designed and built to insulate the house…… So, be aware of this before you stick your ugly dome in the path of a backdraft; while trying to take the window. I'm sure there are studies somewhere on the likelihood of backdraft in newer energy efficient construction.
    G.Smith, SFD Engine7

12. protectin' the hood November 27th, 2007 11:41 am

    I would love to see a study on the effects of heat on these types of windows, along with backdrafts etc associated with the excessive build-up of heat. I would much rather go to work on one of these windows out of an aerial strictly due to the amount of force involved with taking them. Horizontal work is much easier than vertical, not to mention safer…

    stay low

13. 2dawgs November 28th, 2007 3:46 pm

    Great Job JC…Great Job also to the crew at sixes…I'll definitly keep this video in the back of my mind…that is if I can ever get away from this white cloud.
    Bring it

14. Ceepinitreal November 28th, 2007 3:59 pm

    WOW, ok keep your hands in the vehicle and stay seated at all times, if your heart is weak get off the ride cause were gonna get crazy! If you feel like vomitting I hope your in the back.

    Brothers Its a window whats with all the crazy talk 50" Halligans. There not Halligans there pike poles. Newtons laws of physics? Leg locks, I never saw anybody climb the ladder. At the risk of sounding Cleeshay K.I.S.S. I think J.C. wanted us to see this and go out and try it ourselves, not sit at the P.C. and point out/blame, and list all the infractions. Thats my job!

    FOCUS, I think the authors intent (J.C) was to say this crap is out there and watch out for it.

It was not a safety lesson or a quantum physics lecture. Did you read the directions on the box? Last time I checked this job is dangerous we risk a lot to save a lot "risk vs reward" does this sound familiar? I'm not asking anybody to hurt themselves or be careless just no your situation, have some tools to work with. Read the sticker on the Brim of your lid! I think it says something like "firefighting is an inhearently dangerous ultra hazzardous job" and so on.

"protectin' the hood" Nice! I hope you watch your remodels the 2nd job last tour had these windows in a remodel, by the way, when its hot they melt and fall out. Has anyone tried to by a single pane window lately?

SOG's for laddering "?" come on thats a training issue. If we have to carry a rule book for throwing ground ladders we need to re-think what we signed up for. GET'R DONE. Learn it in probie School, Practice and train with it on the line and please if your on the Truck/Ladder master your craft, Its your job. Oh, then train some more.

Ciampos class does not need an SOG. see one, do one, teach one, test it.

Go hit your thumb with a framing hammer. I bet you dont want to do it again. Thats what this is about "training".
Leg lock people put the hammers down, that was a metaphor, uh, a joke, dont do it. god I hope they read this part fast enough.

Do you really have time to read a study on the effects of heat on thermal pane windows as associated to the relative potential to backdraft in the modern energy efficent home.ZZZZZZZZZZZZZZZ. Sorry I bored myself.

How long does it take to set the aerial up? "I'll be right back, My hot pocket is burning in the microwave." I'm back, How many people does it take? Thats a good study. I bet one guy with a 24 and a tool is faster to the window, on a "VES" just a hunch.

"WARNING" for those of you with hurt feelings and bruised egoes. Maybee your daddy did not yell at you enough when you were little. This is sarcasim mixed with reality. This is part of the job, its in the description. If you don't like it Starbucks is looking for a few good baristas.

Brothers and sisters it's been real. The videos are great. Awesome site keep up the good work. The comments are awesome. Leg lock man and gheto guy it was nice meeting you also. I got to go, moms screaming cause I left the seat up again.

Stay Low…

15. Chase November 28th, 2007 5:59 pm

That's certainly the most entertaining post I've seen on here, and believe it or not, I actually knew what you were talking about. Well, most of the time.

16. Jamie Morelock November 28th, 2007 8:44 pm

> Ceepinitreal:
>
> Bro,
>
> The beauty of a fourm is that it can take on an entire different direction from what the original intent was. Sometimes a bad direction, but most of the time it generates some great info. As for Leg locks…are you saying that you do not advocate securing yourself to a ground ladder when working off of it. Not necessarily with a leg lock, but by some method. You also seem to advocate only knowing the hows of our job, not the whys. Correct me please if I have misunderstood your post.

17. mitchs1224 November 28th, 2007 8:58 pm

> It's a beautiful thing seeing 24's come off first (better to have to much than not enough) and "Takin glass with the ladder makes one of the most lovely sounds i've ever heard" as said by the boys inside. GREAT VIDEO LESSON. K.I.S.S sums it up.

18. TO JOHN #4 Reply November 28th, 2007 9:50 pm

> Your ladder placement is great for the IFSTA test in the academy. What happens when you put your ladder up to vent (next to the window) and you see/hear a victim inside? Do you go down the ladder, move it, resize it, put it at the bottom of the sill (best location) and then climb up it again? Seems like a waste of oh-so-valuable time. A ladder thrown to the sill can facilitate the most functions with the least effort in the shortest amount of time. I have no idea why the academy books tell us to throw the ladder different ways for different tasks. Just a little something.

19. John November 28th, 2007 11:54 pm

> To (no name.) Yes I gave the book answer. Not necessarily what i would do but based on the way a question was asked by another brother it seems as though he may be new. Not trying to screw him up and im sure he'll learn tricks of the trade as he goes along. thanks for your concern though, i appreciate it.

20. protectin' the hood November 29th, 2007 9:48 am

> ceepinitreal:
>
> The least you did is make all of us laugh…its a forum bro
>
> Stay low

21. Dale G. Pekel November 29th, 2007 2:04 pm

> We teach laddering the base/bottom sill of the window first, as you would for entering or rescue/removal of any vics – Instead of using the ladder to break out the window. Not that it is right or wrong – better or

worse, but we look at it as saving a step. Once your at the window, typically you would use a tool to clear out any additonal glass anyway, as well as sweep and sound the floor. By placing the ladder at the sill immediately, you don't have to extend than retract the fly section and you are in a position to make entry much faster.

Than the follow are the steps we teach in the order that they are typically performed:

1. One FF ascends the ladder – locks in with a belt, leg or their arm/shoulder.
2. The window is then vented. If it's a double hung,
the bottom pane is taken out first.
3. The FF assesses the thermal conditions,sweeps the floor for a vic, sounds the floor for stability and then makes entry if conditions are viable.
4. The FF healing the ladder steps back after entry, so the FF inside can completely and more safely take out the entire window (double hung) – in essence making the window a door.
5. Once the window is taken out, the inside FF quickly locates the door to the room, checks the hallway for signs of any victims outside the room (if negative), closes the door and than initiates the search. Obviously if a TIC is available, it is used to help assess fire conditions and search the room/hallway.
6. The second FF can enter as well to assist in the search and victim extraction. The third FF of the team stays at the tip of the ladder to monitor the entry team and receive and carry the vic down the ladder.

This is just a basic VES OP and variating any procedures is at the discretion of the VES team.

22. Ceepinitreal November 29th, 2007 2:09 pm

Jamie, or should I call you Mr. Morelock? How about Jeramiah?

Brother, please call me that for future refrence. The reason I chose to speak about almost everything but leg locks was, I have not been in the position to due one while trying to VES off a ladder. Maybe you have?

Its been my experience (to this Point) either the window is open, or the window is broken with the tip of the ladder. After getting the window we have trainded on many things.
cleaning the window, "this takes time". Leaving the sash vs taking it, alot of this depends on the direction of the sash horizontal/vertical and the size of the whole were creating, also where is the fire and how much time do we have?.

Just so we dont miss quote Lt. Ciampo, the idea for leaving the sash in was paticular to an upper floor room with multiple windows, you leave the sash intact on the windows that are commomn to the room, that need to be taken for Horizontal vent after leaving the ladder. Take the one at your ladder. This was done to help find the ladder if conditions changed rapidly.

Am I totaly discounting leg locks, or the whys of this job? Nope it was just my direction at the time. I needed to make a point that it has not been my experince to need one (a leg lock) until i'm on the ladder.

However when we have had chances to VES from portable ladders we have used all of the above, every time was diffrent and it seemed to me like getting off the ladder and into the room to shut a hall door was of my greatest concern.

As for the whys of this job, thats a matter of perspective. If you were brand new I think you should have quite a few questions. Hopefully if we train enough those slow down.

I also belive its generational my generation was brought up to do as your told, unless it was ilegal imoral or,, uh,, I forget the third one, oh yah "it's to dangerous"!

I understand they are making people diffrent now. The great teachers of this nation have taught a whole generation that there are no stupid questions. Thats great! The part they left out was that there are stupid people, and "you cant fix stupid".
Asking questiuons does not work in all situations use the military as an example not many questions are asked during an ambush and since we are paramilitary organizations it does not work well for us either.

Jamie I dont think your stupid, but i'm sure you have been around long enough to be witness to something like this.

I have taken Lt. Ciampos class. Fourtunately I have never been faced with jumpers while on a portable ladder, however you can bet I will be locking my leg in the day that I do. Also we train for this and a few other situations on he ladder. I'm curious if you have standards for these common situations?

I will say it again My intent is not to get someone hurt, I do not want to see a bunch of carless cowboys running around doing stupid things. However this great job is ultra hazzardous, an if you analyze everything (to death) you will not be doing your job, and someone else will. It's great that we have websites today to learn from each others mistakes from coast to coast.

To answer your question Leg Locks are in. when do we need to use them I dont have all those answers, thats a great debate. I dont need my boss concernded about a printed standard while I'm climbing the 35' ext. Hopefully we have trainded on it and have an understanding as crew/team of what is expected of each of us. I got to go my bran flakes are gettin soggy.

Stay Low

23. Parish November 29th, 2007 9:36 pm

    Can't see the video?

24. Chase November 29th, 2007 10:40 pm

    Try just cut/pasting this into your browser.
    http://www.vententersearch.com/videos/dualpanewindows.wmv

25. FF361 November 30th, 2007 12:16 pm

    After watching the second part of the video (12 strikes with ladder); what becomes of the ladder's integrity? Is the ladder compromised due to the amount of blunt force (specifically resorting to the beam for striking)?

    Good Stuff 

26. TRUCK 4 December 3rd, 2007 12:20 pm

    Awesome training bros. I know that here in Colorado most houses have these and if they don't they will soon. Since, I think maybe cause of the lack of oxygen here, we don't have much fire that it is good to see a training situation such as this. It really throws out the poin of being ready for anything. Including checking your tools and making sure that they are ready at the begining of the shift. Sharp, points are not rounded off, and saws are fueled. A video for every probie and rookie school to see. Again awesome video!!

27. Jamie Morelock December 4th, 2007 10:42 am

    Brother Ceepinitreal,

    I have read your reply over my breakfast this morning. There is one comment that disurbs me greatly…please don't call me Mr. Morelock, that's my Father. It distrubs me so greatly beacause I am now begining to realize that I am not as young as I used to be. It hurts when the pretty and young cashier at the store refers to me as Mr. Morelock. Jeremiah is my brother's name. Oh well. Now back to the thread.

    Questions do have a place on the fireground under some circumstances. Examples would be when you need clarification, and when you disagree with an order due to safety concerns (above the norm). Other than those two I can't think of any other time that can not wait until after that job is finished. If someone doesn't understand how to accomplish or perform a task…that's a training issue.

    You made reference to the Military. In the Marine Corp. you are told when to take a dump, how long the dump will be, what color and how it will smell. In other services you are just told to take a dump. They (who gave the order) expect that you know what they expect as an end result. They leave it up to you on how to accomplish the dump in an efficient and timely manner. Now if you are surprised and the dump gets scared out of you, trained properly, your subconscious should take over and you should react automatically and perform what is required to mitigate this issue.

    I'll take a thinking crew over a bunch of followers any day. The reason is, what happens when there is no one to lead them? What do the followers do when the problem is not the norm? Thinkers already have thought of contingencies and for the ones they haven't the thinkers will solve on the spot with little problem.

    My job likes to build thinking firefighters. Displined thinkers who will figure it out, accomplish the task, and still operate within the incident command system. They also expect us to do this with a high measure of safety (reasonable for this profession). Our recruits are put through 6 months of training that is considered basic. They know the hows and whys at the start so they do not have to ask when it is not an appropriate

time. We do not have specific standards. We use general standards. Specific standards do not allow for variation or adaptation. That type of micro-manging will only result in failure under many circumstances.

Something as simple as locking into a ladder (when the situation requires) should not have to thought about. It should be so well practiced that you do it without thinking about it. It should be a reaction. If not, you will take your mind and your focus off of the task at hand. Such as the victim or the fire. This should go for nearly every physical function your body performs on the fireground. It doesn't matter if it is hand placement on a Halligan, opening a nozzle, or locking into a ladder.

28. Smitty December 15th, 2007 4:23 pm

    As strong as that window may be, the ladder is lightweight and couldn't do the job. Put the damn ladder up and hit the window with a tool! Don't use the ladder for striking the window.

29. engine124 December 16th, 2007 8:03 pm

    yes you can fix stupid, but you have to get rid of osha so tha the stupid can recieve the darwin award and remove themselves from population. says alot about sog's verses sops. train and know the basics and some advanced and learn what the jake next to you has for a hobby or job off duty. this makes the task and the thinking to solve the problem much better. we don't do normal things so don't expect normal from us. train train and train it will take over so you can think on real stuff on the job. great video and love thinking outside the box.

30. jones December 18th, 2007 1:22 am

    this is great stuff

31. jones December 18th, 2007 1:25 am

    i think that posting the ladder in the correct entry spot to begin with is best. climb up the ladder vent and enter if nessary. this makes it a one step motion and there is no incorrect tool useage going on. the ladder is a climbing tool, not a striking tool. obviousley the ladder is not doing the job so use a different method.

32. FLFD 348 January 27th, 2008 11:29 am

    I am big on doing what ever you have to, to get the job done as quickly and safely as possible. I have used this technique to vent, enter, and search. It can be quicker than climbing and striking the window with an axe or halligan, however before entry one must still clear the window. After the third or fourth strike, one should try another way. These windows are clearly tough, so many conventional methods, using any striking tool, may not work either. Don't use all your energy and effort to just get the window, after the window is cleared you still have to go in search, and maybe remove a victim or victims. My suggestion, other than constant training, would try the ladder first, if that doesn't break the window go to conventional methods, and if the conventional stuff requires just as many strikes, a saw may be the best to start to clear these types of windows.

33. Chris Fleming February 3rd, 2008 12:31 pm

    Yikes! Tough windows. A couple of thoughts on these windows. Here in the Northeast we used to be able to rely on the fact that older buildings had old (easier) windows, however not any more. As old buildings are bought and rehabbed for energy efficiency, these new vinal windows are showing up all over the place. We've experienced the same effects as are shown in the video; bouncing ladders and tools off the things when going to vent them. Even if you do get the glass out, the sash is still a challenge. One thing we have found is that these new windows in old building are only held in by a few wood screws! If your ladder bounces like a ball off the window, re-position your ladder to the side and try and pry the whole thing out of the building. If you're lucky enough to have enough staffing for someone to foot the ladder, make sure you give them a "heads up". One other thought. These windows are part of what contributes to the whole "tight" building syndrome. When you run across these things let command or whomever is listening to the radio know. This is important because ventilation will be slowed by dealing with these things, and if you want to make a hasty exit you won't be able to quickly "take" the window and get out.

    By the way guys, this is my first time at your site and I think it's great. Keep up the good work and stay safe.

34. Joe Leffe L-15 2u February 11th, 2008 11:44 pm

    Great video! Our company and several others here in Columbus (OH) use this technique when necessary. I have personally encountered these windows on several jobs, both as the inside ff and the OVM. With all the functions the OVM has, this technique helps speed up the process. Especially, when staffing is minimum. After a few strikes with the ladder and it doesn't break, then position your ladder to the sill and go up and clear it with your tool. JC from Truck 6 says it best. This is just another technique to apply when the situation warrants. Hands on training is the time to find out how well different tactics work. Table top discussions and reading articles all have their place, but getting out and trying it for yourself is the only way to know how well a technique or tactic is going to work for you and your company. Nice Job SFD Truck 6, thanks for sharing!
    Great website brothers!

35. dadman February 12th, 2008 9:20 pm

    Hitting the window multiple times with the ladder using great force may damage ladder components and compromise the locks.
    Double check the locking of the ladder sections before climbing.

36. Capt. Court TL2 February 18th, 2008 8:37 pm

    I think you guys got this covered.. one point I have'nt heard yet was the fact that when performing VES. It's a "timed" tactic.. meaning if you take glass too early and dont get face piece donned, up the ladder cleared the rest of the way and in. You may never get the chance, YES! they are EEW's and do hold back tremendous heat and stuff.. So, on the ladder, just below, ready to go, let it blow.. and IN!

pretty good (just made that shit up) but really you got to consider that…
love this frickin site!

be safe ppls

37. Capt. Court TL2 February 18th, 2008 8:40 pm

One more point.. My man is spent after rackin this ladder more then twice! He is'nt gonna be able to make a search, let alone find someone and get then to the ladder, even if they are a 2 man team..
yes smarter, not harder..

38. Asstchief4302 March 19th, 2008 3:07 pm

Beware of blast proof plastic film covering. Recently had fire where we encountered this problem. The covering is applied to windows just like window tint on auto's. It protects occupants inside of a building from flying glass. Even after full room involvement the windows were still intact. Attempts to remove the windows from the exterior would take 5-6 strikes from a halligan before cracking. FYI
Stay Safe!

Cutting Hinges

September 06th, 2009 | Category: Outside Functions, Videos

We recently found some videos we shot over a year and a half ago, and we decided to knock the dust off of them and finally start to post them. The first video is a simple demonstration of cutting hinges for making entry. Obviously for this particular door, the window would be the easier option, but the skill was performed simply for demonstration purposes. When discussing cutting hinges a few questions come to mind: What order do you cut the hinges? Do you have a standard order? Why or why not? Does it even matter? Well, as shown in this video, our method is to start with the top hinge, then attacking the bottom hinge, and finishing with the middle hinge. This order allows you to make the most difficult cut (top hinge) first. Then the bottom hinge, while the door is still retained by the middle hinge. Finally, finishing off with the middle hinge allows you to be standing up in a neutral position when the door if finally released from the jamb. Another simple tip is to stand on the building side of the door, instead of right in front of the door itself. Again just in case to door lets loose before it's expected to. It may be totally insignificant, but this technique works quite well.
http://www.vententersearch.com/videos/flv/hinges.flv

27 comments

27 Comments so far

1. DMAN72 September 6th, 2009 2:24 pm

I liked the product placement on the door.

2. 10BOX September 6th, 2009 11:26 pm

   I REALLY like the product placement. But back to where I make my cuts. I always start up top. My school of though is that all the smoke, heat and fire gas is up at the top so when you cut the hinge, the door spreads away from the frame a little bit and this will release that crap at the top. Then its middle or bottom, either one doesn't matter to me as much. The most important to me is top first.

3. FitSsikS September 7th, 2009 8:12 am

   It's amazing how, "I left my keys on my desk in VES's office." turns into a training video.

   Did you guys try the windows?

4. DMAN72 September 7th, 2009 9:20 pm

   Cutting your workplace door with a big effin' saw, that totally kicks the ass of the video of the guy smashing his computer with the sledge.

5. Dirty Sanchez September 7th, 2009 11:41 pm

   I don't think it really matters which hinge is the first to be cut, however, I'd have to agree with 10BOX. I didn't really think about the bad shit that always rises and making the top hinge the first one to be cut is very wise.

6. FF862794 September 8th, 2009 12:05 am

   Why did the door split in half i only noticed 3 hinge cuts? Was there a cut across the door?

7. CareerandVolly September 8th, 2009 12:40 am

   I always teach top to bottom. That way (as stated) the fire gasses can escape when you cut the middle hinge and the top start to seperate from the jamb. It also leaves the cut man at the bottom when the door is opened, keeping him out out the way of the smoke/black fire and any possible auto ignition.

8. Ryan September 8th, 2009 1:34 am

   Another trick I was taught was to cut the side of the hinge that has the fewest tabs ie. a 5 tab hinge has 3 on one side and 2 on the other.

9. FitSsikS September 8th, 2009 8:15 am

Quote FF862794: “Why did the door split in half i only noticed 3 hinge cuts? Was there a cut across the door?”

That is what you call a cat “flap”.
This allows Smokey (VES’s office cat) to make regular trips outside.

(It was cut first.)

10. rjd2051 September 8th, 2009 12:24 pm

    Here’s another trick they should try.
    Eye protection

11. Jimm September 8th, 2009 12:39 pm

    I was wearing safety glasses and hearing protection. Thanks for your concern. -Jimm-

12. Jimm September 8th, 2009 12:45 pm

    The release of heat and gasses was another reason to cut the top hinge first. It was included in one of my versions of this post, although I’m not sure what happened to that version. The reason why the door split was because a video of the doggy door cut was shot on that same door. We tried to get two videos off of the one door. -Jimm-

13. Lad288 September 8th, 2009 9:15 pm

    I feel “top, bottom, middle” method is the way to go.

    I too always use safety glasses and ear plugs when I am using a saw. I keep them in a rubber glove in my bunker pants pocket.

14. DMAN72 September 9th, 2009 10:07 am

    Oh jeez, here we go again!

15. Bearpond 118 September 9th, 2009 11:36 am

    Ok… Say that you’re on a department where money is way tooooooo tight and dont have a K-12… How do you force this door if the window aint there??? Any suggestions?

16. DMAN72 September 9th, 2009 1:11 pm

    Conventional forcible entry, Bearpond.

17. Lad288 September 9th, 2009 7:57 pm

Bearpond…. a donkey kick of a falcon punch works most of the time.

18. Lad288 September 9th, 2009 7:57 pm

    Bearpond…. a donkey kick or a falcon punch works most of the time.

19. Loosecannon September 9th, 2009 11:31 pm

    Not being a smart arse, but what is the advantage of cutting the hinges vs. cutting the door in half down the middle? I understand about being able to put the door back in place if needed, but other than that…

20. Lad288 September 10th, 2009 4:38 am

    LOOSECANNON – When cutitng the door in half, you have to stand directly in front of the door and that may put you in a bad spot if the "fit hits the shan" and there is some type of backdraft / explosion etc… AND, once you cut the door in half, half of it is still attached at the hinge side. And as we all know from training, when we take out a window or door, we take ALL of it out. That half of the door still attached could pose a hose snag point or other obstruction for the members going in to or exiting the building. So by cutting the hinges, you are able to stay off to the side, and out of the way. And it removes the entire door. And like you said, being able to put the door back in place.

21. ladder1 September 10th, 2009 2:29 pm

    what about just popping the hinge pins out??also very quick easy and effective

22. bab1429 September 10th, 2009 6:59 pm

    way to bring the rain on that baseball swing right at the end…that was great!

23. Scott September 11th, 2009 5:05 pm

    Good video Jimm. I guessing that ole baseball bat swing with the halligan didn't go so good at the end…..

    Anyways, thanks for the continued content of this website.

24. Bad Andy September 11th, 2009 8:04 pm

    Keep in mind that when using a composite blade, you must be careful not to put sideward pressure on it. I witnessed a blade shatter while making the overhead cut.

25. Tye September 13th, 2009 2:35 pm

    If you don't have a saw you could also consider using the fork end of the halligan driven down (or up for the top hinge) to shear the screws and pull the spine out. They are usually very weak, even when set in a metal jamb. Got any videos of this technique Jimm?

26. Sean October 13th, 2009 10:00 am

> I agree with ladder1, popping the hinges is always an effective alternative to cutting hinges. Either way, I believe in starting at the top and working my way down with most forcible entry methods.

27. Bak3r104 October 29th, 2009 1:30 pm

> Way to go standing in front of the door when you pry it. Hope it doesn't fall/get blown on top of you.
>
> Also, my personal preference would be to cut the top hinge first to release some gases, bottom, then middle. If you were to cut top to bottom, and any of the door weight shifted, the weight would push downward. This could potentially make a difficult last cut and could also lead to the hinge pinching on the saw blade and causing damage.

Better Balance Point

June 16th, 2008 | Category: Outside Functions, Tips

Firefighter Eric Bearss from Orlando (FL) Tower 7 sent in this idea for a better balance point. He pointed out that he picked this idea up while assisting Mike Ciampo (FDNY) at the annual Orlando Fire Conference with Champ's Street Smart Ladders Class. Obviously, the main purpose behind the marking is to identify the balance point for each ladder. This larger marking serves multiple other purposes: easy equipment identification, and of course the ever important company pride (take a look at the fireground pics @ the station.) However, the most important aspect of this version of the balance point marking has to do with helping the outside team. In the instances when the outside team may be split up on the fireground, its

obvious to the other team member exactly which ladder is yours, and exactly what room you are currently VESing (by leaving your hook on the ladder.)

The picture above shows the balance point painted on the base section which, once the stick is thrown, puts the unit ID right at eye level. This tip will added to all of the other great tips on the Tips from the Bucket page.

41 comments

41 Comments so far

1. Glen June 16th, 2008 8:16 am

   Anybody notice that the portable ladder is thrown with the Fly Section IN towards the building?

2. Jon June 16th, 2008 8:27 am

   How about that climbing angle!

3. fitssiks June 16th, 2008 9:47 am

   "Anybody notice that the portable ladder is thrown with the Fly Section IN towards the building?"

   Let's hope that was so the photographer could capture the unit ID more clearly!

   Otherwise it may read as L-1.

Fits

4. Lance C. Peeples June 16th, 2008 11:15 am

   I don't think I'm too crazy about the idea of leaving your hook on the ladder. I prefer to hook it over the sill and leave it projecting into the room I am searching. That way there is less chance of missing the window when you return from your search…it's pretty hard to get past the 6' hook. I do like the idea of marking the balance point with the company identifier.

5. Chad Cox June 16th, 2008 11:37 am

   With the fly section in as the picture shows, one person can throw the 24' extension ladder by themselves. My company has trained extensively using this technique, and as you can see, if you throw the ladder the traditional way, the halyard is on the inside of the ladder between the ladder and the building. You would then have to face away from the fire building to raise the ladder. This way as shown in the picture allows you to face the fire building and raise the ladder to the desired height all while watching for hazards, etc. Good technique and good idea with the marking!

6. Stephen Truesdell June 16th, 2008 12:01 pm

   I agree you throw the 24' extension ladder with 1 person by placing the fly section towards the building, extending it, and pulling it away from the building getting your proper climbing angle. But once it is in place, rotate or "flip" the ladder so the fly section is facing out, as is the way aluminum ladders are designed to be deployed. The exception to this rule is when deploying wooden ladders, which a lot of west coast departments use. From what I have read and been told by friends of mine that work in San Francisco, they keep the fly section in towards the building.
   I do like the idea of marking the balance point on ladders for 1 person use. Any trick of the trade that makes our job easier helps.

7. Glen June 16th, 2008 12:04 pm

   Chad,
   I agree with your technique. We also train/operate to throw the 24' with one FF however, we then rotate the ladder over so that the fly is OUT.

8. Billy June 16th, 2008 1:37 pm

   I don't think it really matters which way the fly is facing when your in the middle of a fire performing VES.

9. Shawn June 16th, 2008 4:31 pm

   Climbing angle does not take priority over tip placement. Who cares if the ladder is at a 75 degree angle as long as the tips are at the window sill.

   Billy, your fly in / fly out comment is dead on !

10. Spike June 16th, 2008 4:45 pm

    Manufacturers will support either method

11. Battalion Chief June 16th, 2008 5:01 pm

    The Monday morning quarter backs need to get real. The topic is about the balance point. Mr. Perfect !!!!!

12. Jon June 16th, 2008 6:02 pm

    Another useful tip is to actually mark the rungs. If the runs are marked you will be able to know which end is not only up, but where to run your bowline through in the event you need to hoist the ladder up.

13. THE MUSTACHE June 16th, 2008 6:26 pm

    I thought the post was about a BALANCE point. I think its a great idea and looks good. Is the paint or the black lettering reflective? I know all our ground ladders at the house are getting new paint jobs next shift, thanks for the idea.
    ** All the Quarter backs need to get out and train!!! **

14. Jamie Morelock June 16th, 2008 7:03 pm

    FLY IN or OUT ????

    Alco-Lite will tell you that their extension ladders are engineered to be used either way, without compromising the ladder/components integrity or rated capacity. I was told that by the owner of the company. Duo Safety does not recommend utilizing their aluminum or fiberglass extension ladders with the fly in. However, the ladder will function with the fly in, at a 4% decrease in load carrying capacity, without issue. If my math is correct the Duo Safety extension ladder would be rated at 720 lbs. capacity with the fly in.

    ps- Nice job on the balance points…it makes a tremendous difference when carrying the ladder alone.

15. FyrFytr998 June 16th, 2008 8:37 pm

    why in life is there always that one person who just needs to nit pick where none is needed? And always doing so while never researching why the thing they are nit picking is the way it is?

    I am always looking to learn new things. And to tell you the truth I never knew that alcolites could be used fly in or out. Good to know that if I'm in a pinch for time, because some poor soul needs a ladder to their window. I can get it up to them immediately if I'm on my own, since my Dept uses Alco's.

16. Tom (Seattle) June 16th, 2008 11:24 pm

    I need to defend the nit-pickers. We do a job which expects perfection and deals with reality. Even the little stuff should be torn apart in order to improve (not to diminish others). That being said, The ladder should

generally be thrown FLY IN. We are discussing VES here (I think) and the angle should be 55-65 degrees during VES or preparing for egress. The key is to allow a rapid exit (bail out) or the removal of a victim. (Obviously tip placement and stability take president if necessary.)

I don't know how many of us have removed flaccid bodies from windows but the lower angle makes a world of difference in supporting and managing the weight, let alone if you had to bail out. Additionally the fly in configuration reduces the likely hood of slipping on the ladder while descending the ladder. I know we have all slipped while descending, between ladder sections (where your next rung is 2" farther in from the one above), and the fly in method basically eliminates this problem – try it.

Time and place for everything, but its often safest to throw it fly in. My Department went to OSHA with the aforementioned information and received a waiver to not follow manufacturer recommendations if needed to do this.

Drill Every Day

17. WCLT June 17th, 2008 9:28 am

    This is NOT to nit-pick, because it's a good idea, but should there be any concern painting the beams where the heat senor label's are like it appears in the picture?
    Should high-temp paint be avoided for that, or would it not really affect it.

18. Steve June 17th, 2008 10:31 am

    we have our ladders painted similarly when we stole the tip from Ciampo. I cant tell from the picture but we also paint the tip of the ladder for visibility in case it comes down to bailin' out and / or being certain there is a ladder there when you are coming out at night.

19. Jay June 17th, 2008 6:23 pm

    Dont remember how many times I've been told to never ever paint any part of a ladder…

20. Champ sometimes Ciampo June 17th, 2008 8:35 pm

    The street smart ladder class has taught there are a few ways that fire depts across the country mark their ladder's balance points. Some just put a sticker(L 1), some paint the number there, some use electrical tape but it can wear off if it slides in and out of the ladder trough enough, some depts. do something called marking the box (marking the inside and outside of both beams so the firefighter can step into the balance point with their shoulder) while others don't do anything and look like one of the 3 stooges when the 20' roof ladder is acting like a see-saw as they pull it off the rig. I believe in marking it with your unit ID # to provide some espirit de corp. If that ladder shows up in the newspaper theres a lot of pride in the firehouse and company. Pride and professionalism with an easy solution.

    We should NEVER paint the rungs because of the potential to slip off of it with the boot. With the balance point marked the firefighter will know where to place the rope during a ladder lift too.

One thing I would like to mention….if 2 in and 2 out was working so well, we wouldn't have to worry about one guy carrying a ladder, or performing the ladder drag technique and concerned about marking our ladders.

While I'm on my high horse…..why are so many departments failing to mark the butts of the ladder, the bottom of the butt visible by the firefighter while he is 25' away from the rig. Another thing that helps us reconize what size ladder is still on the rig while a good distance from it.

As for the 6 foot hook….take it with you to the top of the ladder, when you get into the window pull it in, and sweep the wall up about mid-way, looking to close the door to the room. If you sweep the hook to low it will get caught up on some furniture or under something. Shutting the door provides time, allows the room to vent, and stops pulling the fire in the direction of the ventilation/egress opening you just came through. Also, a lot of times the window is directly across from the doorway, to provide natural cross ventilation for the occupants.

As for the fly in and out, check the electrical warning/angle marker on the side of the ladder, it should also have a black arrow pointing to the direction the fly should face. Sure if we're in a one man raise it works to fly in and the halyard outward….know your depts. standards and act accordingly.

As for heat sensor labels-remember if they turn black they've been subject to over 300 degrees and should be placed O.O.S. and tested. These labels are attached below the 2nd rung from the top of each section/on each side of the beams, which should not be near the balance point.

21. Eric Bearss June 17th, 2008 11:17 pm

Thanks for the help,Champ! My intention was to address the balance point idea but,since it was brought up…Fly in/out: As was mentioned,the manufacturer(and my dept.)deems either way acceptable. I prefer to shoulder the extension ladder w/the halyard against me(to the inside),so when the ladder is spiked and leaned into the building,it can be extended simultaneously(one movement),which results in "fly in".
Hook on the ladder/sill? The point here is that we never ascend a ladder without our tools and whether it's left on the ladder or the sill is personal preference… it's used as an indicator to the rest of our outside team… hook at the window: occupied by OVM.
We all have to follow our respective department's SOP's… Keep training & Sharing info!

22. Sean Thorton June 17th, 2008 11:24 pm

Fly in vs. fly out depends on the ladder….period. As mentioned above wooden ones are usually designed to be thrown fly in along with some of the fiberglass ones. A good indicator of this is the presence of steel clamps that are attached to the fly section and prevent seperation by wrapping around the bed section. Know your brand and type of ladder.

Now for my opinion: To me the fly in on a standard fire service aluminum ladder is absolutely dead in the wrong. It's a complete game of give and take. I would much rather take the 2" step in on the bed section than to attempt to slide my brother firefighter up and over the bed section for a downed firefighter removal

situation. Also if I'm trying to make a rapid escape or a head first ladder slide I don't want the "speed bump" of smashing into the bed section. Fly out also gives you at least 2+ inches prior to hitting the pully with your foot (if you are more centered for some reason) and gets the halyard out of the way removing a potential tripping hazard.

We operate solo as an OV until the chauffeur finishes gearing up so I completely agree with throwing it as needed initially, and fly in is ususlly much easier with the 24 or 28, but flip the thing around when done, it only takes a second.

Stay safe all, and don't over-engineer things, Keep it simple and know what your ladder and/or department calls for to keep everyone on the same page.

I know this is a bit off the original topic, but I have no shortage of opinions!!!

23. Sven June 18th, 2008 2:57 am

Many good points have been brought up in this discussion. Fly In vs Fly out ? I for one like the fly in method. I think it is a matter how you train with your ladders and what your comfortable with. I dont think there is anything wrong with either way of using your Portable ladders. There are many ways to meet the same objective…..Ladders for Life!

24. Egan June 18th, 2008 8:34 am

First, thank you Eric for sharing your picture and idea. This post was about what Eric submiited, but do not get upset when someone brings up other items for discussion.

DISCUSSION is why I think the creators of this webpage have created and maintain it. It is these types of discussions that open up thoughts and make others think.

Last thing I want to say before I share the legal stuff I found… Every region, state, and department has its own SOP's and they are usually specific to the needs, training, equipment, staffing and operational needs. Keep that in mind before you judge or say someone is "doing it wrong"

I looked into the legal stuff for this…. Found on an OSHA site in regards to placement of fly sections of fire service ladders…

"On wooden ladders the upper section is controlled and held in place by guide irons and any forces applied between the two sections is transmitted through the guide irons. The proper distribution of the forces depends on how the fly section is setup. In most cases the fly section is designed by the manufacturer to be on top.

Metal and fiberglass ladders are designed to ride inside the flange section of the lower part of the ladder thereby giving more surface area in the flange lip to transfer the loadforces over a greater area. If installed

with the fly down you still have a greater surface area to transmit the load to the bottom section. Metal and fiberglass ladders, if approved by the manufacturer, can be used in either direction."

STAY SAFE!

25. Jamie Morelock June 18th, 2008 10:43 am

Sean,

Just few thoughts and I am not trying to argue your points, I am only looking for some clarification on your comments.

"To me the fly in on a standard fire service aluminum ladder is absolutely dead in the wrong"

-why would you limit yourself, it is nothing more than another tool for your box

"than to attempt to slide my brother firefighter up and over the bed section for a downed firefighter removal situation"

-the tips of each section are rounded over and protrude such a very minuscule distance that it would barely noticeable when making the transition from one section to another

"if I'm trying to make a rapid escape or a head first ladder slide I don't want the "speed bump" of smashing into the bed section"

-the head first ladder slide was never intended to be ridden all the way to the ground head first, it was designed to get you clear of the window enough to allow you to rotate your body to a feet down position and complete the descent, the idea is control and with that in mind it would make little difference if the next section was in or out.

One last question…were your parents big John Wayne fans? stay safe

26. Shawn Steinert June 18th, 2008 11:10 am

Hopefully, one day the Fire service will stand up and defend their practices to OSHA,NFPA,NIOSH,and every other agency that tries to govern how we do our job. Eric was only sharing a tip that works for him and his crew, all of a sudden it is an OSHA issue.

Maybe OSHA can investigate the ladder techniques AFTER the 4 yr old child is pulled from a 2nd floor bedroom. And maybe the ladder wasn't thrown with the fly out and the bedroom was searched by a Firefighter without the protection of a hoseline (VES). Maybe he did not use an IFSTA manual approved Leg lock or a butt man at the foot of the ladder. Did he use an IFSTA manual approved encumbered climb while he was carrying his tools up the ladder ? Did he check the climbing angle with an IFSTA approved method , how about wind direction and a weather report from National Weather service.

This site is about people sharing information that works in real life on the real fireground. Information that may not gain the approval of all the groups and agencies that make up the Super Duper Safety Police Squad.

27. Jamie Morelock June 18th, 2008 11:21 am

    well said

28. Sean Kletzka June 18th, 2008 1:27 pm

    I recently finished painting balance points on the ladders of our rigs, both the roofs and 24 extension ladders…I believe marking balance creates for a much quicker and effective carry when dealing with under-staffed or minimal personal. I just used a standard paint and marked simple 2 inch thick lines on the rails of the each side of the ladders to signify balance points…

29. Sean Thorton June 18th, 2008 3:14 pm

    Jaime,

    As not to hijack this great posting and/or go back and forth I am simply going to attempt to clarify my original post. Everyone always seems to get up in arms at the words "Wrong" "can't" "never" and I should know better than to use one of those "buzzwords" in these discussions! As for your questions:

    - I am not limiting myself in any way. I am simply stating that to me and in my opinion, the negatives of a fly in aluminum fire-service ladder outweigh the positives. And I attempted to show those negatives. I also am a firm believer that this "fly-in vs. fly out" decision you make needs to be made and trained on well prior to the 3am people trapped job. Other than differing ladder types, I can't see the advantage of changing this depending on the situation. That's just me.

    -Firefighter removal: The way my department practices firefighter removal is by bringing the downed member horizontally face down the ladder therby "riding" the ladder, and yes these rounded miniscule protrusions do cause a bit of a hinderance to the removal, especially within the first few feet of a window.

    -Self rescue bailout: Two things: First thing remember if I'm using a 24 foot ladder to a 17 foot window sill the "transitional bump" from fly to bed will be located somewhere around the 3-4 foot from the window range on the ladder and indeed will be encountered during a head first bailout. Secondly know that if you have others that are beating feet out your ladder (we are extremely lucky to have 5 assigned to the truck here) the first to slide will hopefully be sliding to the bed section (or even to the ground) to allow the others behind be to get out, prior to "flipping" themselves around.

    Great discussion, I hope I'm not muddying the waters here I just wanted to jump on my soap box a bit.

    As for your final question Jaime, I have this as an answer, I'm sure you can guess it's author:

"Tomorrow is the most important thing in life. Comes into us at midnight very clean. It's perfect when it arrives and it puts itself in our hands. It hopes we've learned something from yesterday."

Stay safe!

30. Jamie Morelock June 18th, 2008 3:59 pm

Sean,

I respect your position, and I do not promote either fly direction. I was only playing the devil's advocate.

"I also am a firm believer that this "fly-in vs. fly out" decision you make needs to be made and trained on well prior to the 3am people trapped job. Other than differing ladder types, I can't see the advantage of changing this depending on the situation."

Very true and fully agree with your statement. It seems to be more a geographical preference. Even when I worked in a small career department we trained for one-person raises and still placed the ladder with the fly out. Champ and I have discussed the possible benefits of raising and placing the fly in for understaffed truck work. I also agree that it should be one or the other, not this situation or that situation. We both know that keeping it simple creates smoother operations on the fireground.

The Duke could not have said it better…wait he did say that. Stay safe.

31. Elmo June 18th, 2008 5:41 pm

I think that you should just do whatever your SOP/SOG say to do. I would say that the balancing point should be marked and the lettering made the way your Department wants the ladders thrown (so that the letters can be read and are not upside down). If there is fire blowing out the window just get the thing up and get to work. If it is a safety ladder then throw it up the right way.

32. Jamie Morelock June 18th, 2008 9:54 pm

The thing I keep hearing here is the "right way". What make the fly out the only "right way". One of the two manufacturers state that the ladder can be placed either way, and the other does it at a minute reduction in load capacity. Several have cited OSHA variances allowing them to operate it that manner. Many west coast FD's operate with the fly in, what makes them wrong? I know guys from both Seattle and Orlando, two top-notch outfits, and perform more than their share of fire duty, employing aggressive truck operations with a emphasis on laddering the fire building. They do it with the fly in. Who is anybody to say they are doing it the wrong way. Just because my job or yours doesn't ladder this way, doesn't make it wrong. As for SOP/SOG's, there are many fire departments that do not utilize them.

Let's go back up and read Shawn Steinert's post again.

33. Chief49 June 18th, 2008 10:56 pm

Be careful when working around (taping, painting, cleaning, etc.) the heat sensor stickers. As mentioned above, they are supposed to change color at a specific temperature, but they will also change if you rub them too hard during cleaning or prepping them for paint, leading to some false assumptions.

34. Drew Smith June 19th, 2008 12:15 am

Whether you take one position or another is all fine and well but if you only pull the ladder off your apparatus one every 6-12 months you will be making up your own SOP at 3AM when it counts. Members must practice and practice can't be good enough-it needs to be perfect so that when it counts your actions are as good as they can be. There is no reason a simple one-man throw cannot be performed at every firehouse or a the city yard (unless someone is worried about a little scratch in the paint on the ivory tower). Every member need to know why we do what we do and more importantly how to do when it counts. We can all tell one another what we know but do we show our company members what we know? To repeat an anonymous quote I believe in "Don't train until you get it right-train until you can't get it wrong."

35. Eng851 June 19th, 2008 11:17 am

Since so many people are so willing to jump on the IFSTA manual bandwagon (or which ever other manuals you may use), I figured I would go and pull some of them down off of the shelfs. We actually have 3 different manuals from 3 different publishers. 2 of them state that the ladder shall be placed in accordance with the manufacturers recomendations and the department's sog. I guess they can't ever be held liable for a mistake. The other states absolutely nothing more than an explanation as to what a fly section is. The funny thing is that they all state that a ladder should never be painted for any reason. So as far as the books are concerned, this just tells me to put the things up however you need to to get the job done. As for painting, we have had paint on our ladders in my department for as long as I've been there and thats coming up on 20 years. We have always been very strict about our ladder testing schedule and not once have the reps said anything about the paint having any kind of effect on the ladders performance.
Excellent tip for the benefit of all of us and if anyone has another method for marking your ladders, please share them too.

36. chuck June 19th, 2008 5:02 pm

when placing roof ladders on your truck what do u prefer: hooks in towards the cab or hooks towards the rear? have run into the problem of a hook coming out and getting stuck inside the frame holding the ladders

37. Chief49 June 20th, 2008 10:30 am

My dept. places the ladders on the engine with the tips of the ladders toward the cab. We place the roof ladder on first though, and then the extension ladder. The idea behind this is that a ff needs the extension ladder to get to the roof in the first place, so that is the first one taken off. It also keeps the hooks behind the ladder in the event that they accidentally open up.
On our ladder trucks we actually do both. When sliding the longer roof ladders in (14 and 16 ft.) we put them in tips first. We also carry what we like to call parapet ladders. They are nothing more than an 8 and 10 ft roof ladder. We place these in foot first with the hooks intentionally left OPEN. This way the shorter

ladders don't slide all the way to the front of the ladder tunnel where we can't reach them. They hook themselves onto the frame work and the other ladders so they don't slide. If your hooks are opening up, you might want to have that checked, they usually lock into place. They shouldn't be opening without pushing down on the hooks first. If they are freely opening, then they might freely close while they're in use on a roof. That will get ugly.

Interesting Electrical Hazard

September 14th, 2006 | Category: Outside Functions

I have noticed a trend in many of our posts. They seem to follow the thought process of: **What you see is not always what you get!** I think this is an import thing to remember about our job. I believe that everyone who wears a lid should look at every single building and ask themselves or their crew "what if…" It is amazing the things you will find in your own first due area every single day! Captain Tom Redmond of Cocoa Beach sent in photos and a description of an interesting electrical hazard an alert Engine crew found while performing a Company Fire Inspection. Look closely at the picture, anything look out of place? Be sure to click on the supplemental page with more pictures and a complete description of this unexpected hazard. –Jimm-

2 comments

2 Comments so far

1. Dave September 15th, 2006 12:04 am

Talk about an eye opener! In our line of work we constantly have to remember that old saying "people don't call us because they've done something smart" and that human nature will cause people to do some dangerous things. I personally hate dealing with electricity, scares the be-jesus out of me. Great catch by the Engine crew doing something that we all dread, company fire inspections. "Isn't that what inspectors get paid for?" or "Why are we doing this when the inspectors just did/or will do it anyway." are some of the excuses I've heard (and may have said) over the years. We do them because of this example. We do them so we learn the building, the hazards, and the construction type. It is one of those tasks (which currently our department doesn't do) that may seem trivial or meaningless, but if it saves your butt one day, darn well worth it. It may be called inspections, but it is still training. Once again, great info. Keep up the great work and literally, stay safe out there!!

No Bolts

May 06th, 2008 | Category: Outside Functions

We always advocate trying to *identify and visualize* what is locking the door we are working on. Sometimes this is easier said then done. Captain Jerry Calabrese from Westminster (CO) Fire sent in these photos of a door they recently ran into.

Some doors, like the one pictured above, do not present us with the tell tale sings of what additional locking mechanisms may be present. The absence of exterior bolts makes it difficult to read what additional locking mechanisms we are facing. The absence of any handle, latch, or key should at least let us know we have something securing the door. It goes without saying, when working the rear door of a commercial occupancy we should expect some sort of supplemental locks.

29 comments

29 Comments so far

1. Chris May 6th, 2008 7:33 am

   I think it's funny that there is a reminder posted on a door that is most likely not used as an exit. Is that so they can turn off the swamp cooler when exiting for a fire?

2. dj May 6th, 2008 1:21 pm

   K-12 on the commercial everytime…

3. Badge May 6th, 2008 2:57 pm

   Aluminum Oxide Blades or the new Cutters edge (diamond tip), which supposedly leaves it to cut anything and everything from your plywood and OSB to your concrete and steel.

4. Jon May 6th, 2008 3:44 pm

The key to this door is not seeing the carriage bolts. Once you know that, its almost a given that it has BS sheet metal screws holding it. Hardest part of this door is going to be getting the adz behind that door to get it out. I would def hope I had some help coming as I would need more leverage that would be provided from a second halligan being married up to mine. If not just do as they did in Spies like us, cut the sucker!

5. Nate DeMarse May 6th, 2008 4:29 pm

While this would be classified as "extra security", I really don't think that this mechanism would give you any more of a problem than your typical rear commercial door. In my experience, a visual lack of security from the exterior usually means the exact opposite (drop bar or other locks like shown). To sum it up, there are not many areas where a store owner is going to have a simple door with no door knob or dead-bolt, so you should immediately think that there is probably something more securing this door.

It appears that the device shown is very similar to a Fox Lock or possibly a version of it (although, I cannot identify the vertical device with the padlock). Not knowing that this lock is present, I would obviously attack this door with the irons as a typical commercial outward swinging door. When met with significant resistance (near the bar) I would probably move move higher up on the frame thinking I was too close to the lock. Hopefully in doing so, there is not another drop bar present high on the door. Moving higher and away from the locking bar, will typically allow the door to crush or bend outward slightly so a purchase can be made in the crack of the jamb.

Insert a wooden chock (or axe, but then you lose your strike tool) to hold your progress. As you move down the door towards the lock, keep moving the chock down the door to hold your progress as you proceed. This will put tremendous pressure on the locking bar and will hopefully bend it. If not, the locking bar should be somewhat visible to attack with the forcible entry saw (if available) OR you could interlock the forks of two Halligans together for extra leverage on the door. Another option is to "grab" the bar with the forks and bend it or pull it outward.

Once the locking bar bends enough to pass through the frame, the door will pop open. The locking bar that is secured into the frame on the hinged side will act very similar to a hinge when the door is pulled outward. It SHOULD open up with slight force. Usually, there is no need to work on the hinge-side when dealing with two way or four way locks.

While a forcible entry saw (aluminum oxide or diamond) may assist you here, you will still have to force the door conventionally to get in as the locking bar will have to be worked out of the frame on the "lock side".

While I do recommend calling for the saw if you are having difficulty, that doesn't mean that it is the best route in. I would opt for the irons in this case.

As always, great find and thanks for throwing this stuff up here for discussion.

6. Nate DeMarse May 6th, 2008 4:47 pm

Chris,

I thought the same thing, but then I thought about it further. Probably the last thing that the owners/workers do before leaving through the front is to lock or make sure that the rear door is locked. That is when they will see the sign and assure that the swamp cooler is shut off.

Just my 2 cents

7. Macgyver May 6th, 2008 6:59 pm

I agree with Nate's suggestion of no evidence of hardware=heavy hardware. I have heard a lot of suggestions of a dog door cut (lateral cut below the locking hardware i.e. the doorknob) on doors with panic hardware. I expect most of us would try with the irons first, but wouldn't a dog door cut would work well here? It would provide access to the locking mechanism and there are few lock configurations that a dog door cut is ineffective against. I work in a rural department that does not get much exposure so I would appreciate getting others opinions.

8. Nate DeMarse May 6th, 2008 7:25 pm

Macgyver,

I am not sure if a dog door cut would help here or not. As I understand, a dog door cut is effective when you can manipulate the lock from the inside. If I am wrong on this term please correct me.

It doesn't appear that this lock can be "readily" manipulated from the interior. It appears that the padlock on the inside is securing the device that needs to be moved to release the bars.

I think that a dog door cut would be effective if you did a plunge cut on "lock side" and that plunge cut severed the bar. In theory, you could then reach through the dog door and pull the severed part of the bar out of the door frame from the inside.

By the time you were able to realize that what I described above needed to be done and then perform the required cuts correctly, you could probably be through it with the irons.

I may be wrong, just my thoughts. Anyone else?

9. Jimm May 6th, 2008 8:31 pm

Great detailed explanation Nate! If you can, please take some photos of that method and send them in!

As far as the Doggy Door Cut is concerned, it would work, but as already suggested it may not be the fastest method. It's hard to slow down a crew that is PROFICIENT with the irons.

We filmed a video of a doggy door cut and will be posting it in the next few weeks. It worked well, and would certainly defeat this set-up. The doggy door cut for this door would be a horizontal cut from jamb to jamb at about the 2-2.5ft level. Once the cut is made, the bottom of the door would open on the one hinge

that it is still attached to. This would allow a firefighter to crawl under the door and get inside. Once inside, the firefighter assesses what locking mechanisms remain, and determines the best way to defeat them. In this case, since the saw is already warmed up, a quick cut on the padlock or hasp assembly would defeat the remaining locking mechanism and allow the lock to be opened by hand. If the saw was not used inside, a well placed set of irons could also defeat the lock.

Our original write-up about the doggy door can be found by clicking here.
-Jimm-

10. Jimm May 6th, 2008 8:52 pm

Here's another thought, it may be a stretch, but it would work…

If you knew this exact lock was behind this door, the doggy door cut could be placed a little bit higher (2.5-3ft level) and would basically cut right through the vertical bar above the padlock. As indicated by the red line. This way, once the firefighter was inside, he could just rotate the locking mechanism by hand. –Jimm-

11. Nate DeMarse May 6th, 2008 9:03 pm

Jimm,

Thanks for explaining the doggy door. I thought it was a smaller square cut out of the door to reach in and manipulate the locks. I understand how a doggy door may be used in this situation.

12. Andrew Brassard May 6th, 2008 9:58 pm

I agree 100% with Nate and Jon, the irons are the way to go here for sure. A couple of points from me:

Nate,
You mentioned as an option after prying the door out you could use the fork end to "grab" the bar and bend it out toward you. I know exactly the technique you are referring to, typically it is used on Fox Locks…. Correct? Now correct me if I am wrong but would this technique not work on the lock in the picture due to the fact that the extending lock arms are round instead of flat stalk (like a Fox Lock)….. Would the halligan not just spin and not grab? Would using the pike in behind the bar maybe work a little better?

As for the doggie door, I think it is an option but I don't think it would suit the situation here for the simple fact that the irons should be quicker in my opinion. We also have to keep in mind that unless we knew what was on the back side of the door we would not know where to cut or even if there was a supplemental lock (no evidence of a lock even though we would expect one). There could be four barrel bolts screwed in (one on each corner) on the back side of the door for all we know, if this was the situation you would have just wasted the time cutting the door in half.

If we approached that door not knowing the interior configuration what would we do? I would start my standard forcible entry techniques (gap, set, force) just like Nate described.

One additional point on sizing up this door, there is one major clue that this door has supplemental hardware on the ass of the door. If you look closely at the mortise lock on the door it has no door knob and no cylinder in it, this tells me that either this lock does not work or it will be pretty easy to open either way could be a clue of additional security measures.

Jon,
You mentioned that you may need a second halligan to attain some much needed leverage. I was just curious if the second halligan was delayed or not coming could you not use the hook from the canman as your cheater bar? If there is a New York Roof Hook available could you not drop the prying end behind the pike and the shaft of the hook behind the forks to give you additional leverage?

I think this door is a good example of how important it is to "open the building up" and create secondary exit points for crews operating on the inside. If a mayday situation arose (collapse, flashover, lose water, primary egress cut off, etc.) and a firefighter with no tools in his hands (guys from the engine) made it to the back side of this door they would be trapped due to the padlock on the locking device. Don't wait till it is too late to start making secondary ways out for crews.

Stay Safe Brothers,
Andrew Brassard

13. John May 6th, 2008 10:21 pm

Did anyone else see the two bold heads on the door from the outside picture? After a closer look I realized they don't even appear to exist on the inside. My first thought was drop bar, so shear the heads and release the door from the bar. Doggy door is my vote. Good pics. Excellent discussion.

14. John May 6th, 2008 10:59 pm

Just realizing now that based on where i'd make the dog cut (seeing the 2 bolt heads outside) would prob end up being below the the lock, thus giving another obstacle to tackle anyway. Andrew puts it best: "keep in mind that unless we knew what was on the back side of the door we would not know where to cut or even if there was a supplemental lock." I just fell in to the trap of being able to see the inside of the door before making my decision on what to do. I would have loved to see the initial ideas if that second picture was held off for a few days. Maybe we could try doing that in the future on these types of submissions. Just an idea. Excellent discussion.

15. Nate DeMarse May 7th, 2008 12:05 am

    Andrew,

    Yes, I was pointing out the technique that we commonly use on Fox Locks and you are correct that Fox Locks are typically constructed of flat stock steel. Being that this one is round/cylindrical, I am not sure how it would work and you are probably right in your statements. I was basically throwing out everything that I could think of

    Nate

16. Truckee13 May 7th, 2008 9:20 am

    This a cheap door with cheap lock. Its a transvestite of a door. I believe I would be embarrassed to be the Kat walking around with the gas operated master keys facing a door like this a " wooden door with a metal skin " or the fancy lock that will fail when Force is applies properly. We overcome the engineering of the door and lock. I cannot stress enough the importance of knowing your territory don't be surprised.

17. Jon May 7th, 2008 11:37 am

    Andrew,
    Like the Brother Truckee13 stated, its a metal covered wood door. Wood doors are a pain in the ass as they tend to crack and not crush like metal ones, but still you can get it with the right two guys. Now as for using the NY Hook, you could try it, but I would be more inclined to use it as a chock like Nate said, moving it up with my purchase. The metal shaft of the NY Hook although strong, kind of losses a lot of energy cause it slightly flexes, nothing like the rigidity of two halligans together. Just remember, as always, we are the life hazard at tax payer fires. It kills me everytime I read about one of us being killed to extinguish something that can be replaced from China.

18. Jim C May 7th, 2008 12:43 pm

    How many guys here have a cordless drill on the truck? I would look at using a hole saw and remove the door around the carriage bolts. If you have a sharp bit, you can make those four holes in a minute or two, with the locking device removed from the door, just pull it open. Then a good blow from the sledge, and the locking mechanism would fall out. If that was a concrete filled door buck, with good penetration of the locking device, you would have one hell of a time forcing it out.

19. Jon May 7th, 2008 1:39 pm

    Jim, you must work in some well equipped fantasy land. We were issued a new 36v hammer drill with no bits!!!!! Luckily the Mobile Command Center 'donated' some

20. Nate DeMarse May 7th, 2008 6:13 pm

    Jim C,

    While I agree that your method may be successful, I have never found myself at the rear of a taxpayer fire with a cordless drill. Again, I am not discounting your method as it is innovative and you are thinking outside of the box which is hard to come by now days.

    In practicality, I don't see myself using this method as I will probably not be taking a cordless drill to anything fire related. In my experience, our cordless tools are somewhat unreliable due to the constant changing of batteries (twice per day) and the batteries losing their life (after building a memory). This causes the batteries to have about a two to three minute useful life at diminished power. Again, I'm not speaking for my whole job, but that has been my experience in the companies that I have worked in.

    While a concrete filled buck may give a little more resistance, it may also work in your favor. If the buck is filled with concrete, the frame should not crush, which should provide an excellent fulcrum for the adze end when prying outward (especially if the axe is used as an extra fulcrum). It is important to note that we are forcing the steel locking bar and the wood/metal door, not the jamb.

    My option #1 is still going to be the irons.

21. Truckee13 May 7th, 2008 7:49 pm

    wo-wow-we-wah, The comforts in life, cordless drills, 2 minutes. Ok we can agree that the scenario to force this door is a WORKING FIRE?
    This will give me a clue where we stand, What companies are getting the doors and windows on this job. To Truck or not to Truck that is the question. There is a little more to this job then the hose. The second due crew gets the truck work.
    Be Good

22. Macgyver May 8th, 2008 8:31 am

    Thanks for your comments guys like I said I am with a rural department so we don't get as many commercial fires as some of you do. And we have plenty of paranoid rednecks who fashion there own locks, so I am soaking up the information.
    I wanted to note it looks like the guys in the photo attempted to use the adze on the exterior above the old door plate, and you can see how effective that method was initially to get an idea of door composition. Additionally on the exterior I don't know whether there was supplemental locking hardware where the

marred brick is now. (you can see the brick dust over the door hardware plate.) Again thanks for your comments. Be Safe.

23. Firemarks May 8th, 2008 10:55 am

    As so many others state, this is just my two cents worth as well. My dept. carries multiple saws, both circular and chain type, with the circulars being set up for concrete and steel. Some are the 12 inch and some are the 14 inch blade size. Each of them have quite a bit of distance from the tip of the cutting blade to the actual arm where the shank is. The 12 in. is approx. 4 in. and the 14 is approx. 5.5. If faced with this type of locking problem could it be possible to plunge cut as deep as you can go, starting high and going as low as possible down each side and then connecting the cuts across the top and bottom? Even with the 4 in. cutting depth, it should still be able to go through the locking mechanisms. Also, of course dependant upon the reasons for our needing to gain entry into this building (some of our non-fire emergencies) it appaers to be some form of transom window over the door. Provided there is not extreme heat or flame venting out of it, it may offer us at least the ability to look inside from a short ladder and get a quick size up of the lock(s) we are facing.

24. Goody May 10th, 2008 7:52 am

    I agree with Nate, this resembles a fox lock or a king set lock without the external key hole. Forcible entry is an art form, unless you know what you're doing and practice it in your company level drills, it is very easy to damage a door so bad that you'll have to find another way to get yourself in. The door does appear to be wrapped in metal, forcing the door with a set of irons probably wouldn't be that hard, you just have to be careful that you don't damage the door to the point that you can't get in!

    The K-12 is always a viable option but practice standard methods of forcible entry first. If it becomes the standard to force doors in the ordinary fashion then it will become second nature.

    Stay safe

25. Lance C. Peeples May 10th, 2008 9:49 am

    The door in this particular picture shouldn't present too much difficulty for conventional forcible entry on an outward opening door using the Irons. The sheet metal screws should pull loose with minimal effort. However, I have recently seen (typically on Walgreen's store rear doors)a much heavier version of this same set up. There are no bolt heads that protrude through the exterior of the door and the lock is held on by "stirups" that appear to be integral to the interior of the steel door itself, i.e. welded. The bars rotate into both sides of the steel jamb and the door is secured in the locked position with a padlock. I have not had the opportunity yet to force one of these locks but I think the bars sit close enough to interior door face that they could be severed with a plunge cut from a metal cutting blade. If that fails a "doggy door" would allow entry and cutting of the padlock might be a viable option. Hence the importance of bringing the saw to the rear of taxpayer fires. Given the understaffing of most departments, who is assigned to get the saw to the rear of a strip store in your department? (If one of you smart fella's can tell me how, I could send a picture.)

26. Easy May 13th, 2008 9:44 am

    After discussing this in depth, it seems that simply taking your K-12 and cutting the heads off the carriage/lag bolts will get you in much faster. After doing that, the bolts SHOULD drop much easier. I was also told this works well with Fox Locks.

27. Q3 May 17th, 2008 7:23 pm

    After failing with the irons, I would agree with Easy that my first impulse is to shear the heads w/ the K-12, but the bolts that present on the exterior are erroneous to the locking mechanism. I probably would have been fooled on the first attempt and then gone with conventional forcible techniques. As for fox locks, a good method is to shear three bolts on the exterior assymbly with a halligan and striking tool, pivot the lock protector, and go through with the square tool. It takes some work, but once the interior of the lock is exposed, wind to the low (usually the lock) side, and assuming there are no other problems, the fox is defeated. Frequently in my area, a fox is paired only with a simple slam-latch that can usually be beaten by a simple halligan gap/shove-knife combo. I know this is basic to most, but a lot of departments have forgotten the art of forcible entry. Many depts. spend very little time training on this stuff. Some even break glass on aluminum stile doors without even attempting through the lock techniques. To me,this is only acceptable if the seat of the fire is obvious, close, and a hose team is ready for entry. The sticks seem to come up quickly after you create an 7 foot uncontrolled ventilation hole and a pile of bunker gear/flesh-tearing glass right where your brothers are about to crawl. Even if everything is set, it is almost always worth the extra minute to prevent a brother or sister from obtaining a potentially serious injury. It is fun to break stuff, but usually not practical or productive. Not to mention that when less destructive techniques are successful, it reflects well on your company and department, and can often allow you to resecure the door when the work is done. Sorry to get so off topic! Great discussion, and stay safe!

28. JD June 23rd, 2008 10:02 pm

    F.E. is a forgotten, or never mastered, art out here in the sub-burbs. I would guess 90% of the guys here would gap the jam and drop the blade of the k-12 between the door and the jam. Then pry it open with the halligan. Just not enough commercial work out here to keep anyone honest.
    JD

29. Jon June 26th, 2008 1:47 pm

    Finally the real explanation of what a swamp cooler is for us Northern Folks!

    http://www.wonderquest.com/swamp-coolers.htm

Roll Down

June 03rd, 2008 | Category: Building Construction, Outside Functions

Firefighter Jay Schlossareck from Hackensack (NJ) Fire sent in these photos they took while checking out their response area. The building is a two story multi-residential structure with some parking under a second

floor overhang. Frequently, on a set-up like this, you'll find the overhang sprinkled to protect from the inevitable car fire. Well here is another option that we probably haven't seen before. These windows are protected by "fire doors" on fusible links. If a fire were to occur, the heat will activate the fusible link and the roll up will slam shut to prevent the fire from extending into the structure. Good in theory…We guess.

This design would be just fine if the only thing that could possibly happen would be an extending car (or other exterior) fire. What about the interior room and contents fire that auto-vents? The fire would activate the fusible link and close the door on us. The photo below shows a close-up of the fusible link. In this set-up there is only one fusible link in the middle of the window. It would not be un-common to have multiple links all connected by an activation chain.

What if the OVM wasn't paying attention and vented this window from the outside without disabling or blocking the mechanism first? The fire would vent, offer some relief, the door could slam shut, and depending on the amount of fire, conditions could deteriorate inside RAPIDLY!

What if the fire was gaining on you and you ended up egressing out of that window? You take the window, bail out, and before the remainder of the crew bails out… The door slams shut. The bottom line is that these devices need to be "safed up" or disabled in some way as soon as possible.

Sounds like a job for that proactive RIT team…

10 comments

10 Comments so far

1. Egan June 3rd, 2008 8:12 am

WOW, thats a great find. Something to put on a prefire plan and make sure crews secure.

Sometimes people do not fully think out a "sounds great" idea. I am sure those were installed due to a fire code or fire inspector mandating it.

Thanks for sharing that with us.

Stay safe.
~Egan

2. Macgyver June 3rd, 2008 1:34 pm

   Thanks for the photos and great review of the benefit from car fire and the challenges of room and contents. Obviously if you have a tool with you (like a trash hook) can protect the egress with that but do you think a vise grip in the track would hold that door up or would the door blow through it? just asking how quickly this door would close and with how much force?

3. brickcity1306 June 3rd, 2008 3:22 pm

   Hay this brings up a question I have been kicking around for a while, how does your depmarent handle fusible links?

   Thanks in advance for all your input

4. 2DaRoof June 3rd, 2008 4:01 pm

   I have similar questions – what is the weight of these doors? How fast are the closing once activated? How many windows are protected like this?

   My first thoughts on securing them so they don't close was the use of vice-grips in the channel….however if you have multiple windows with these devices, exactly how far are you going to have to go to collect enough vice-grips to do the job (same with hooks).

   Second thoughts would be that of cutting the link (lowering the door) and then cutting holes in the metal…much more time consuming, much more expensive, but much more permanent and there is no risk of kicking a device such as a hook or vice-grips out.

5. Jay June 3rd, 2008 4:21 pm

   There are several groups of four windows as shown in the pictures. I would say there is a total of 5 roll down doors protecting every window on the first floor in the rear of this building. OVM and FAST team is gonna have to secure them or disable them for egress as well as ventilation. Also, what would this do to a delayed notificaion of a fire? I mean it vents or a window is left open the door drops now could you be facing a backdraft situation on arrival?

6. Lance C. Peeples June 3rd, 2008 5:33 pm

   I can't really tell from the picture…but it might be possible to bend the track that the gate rides in on both sides to prevent the gate from operating.

7. alindsey June 3rd, 2008 8:18 pm

   Could you cut a gap in the rail. so if the door closes it falls out of the track. then it would just flap there like a blanket. Maybe there is something in the drum to cut to prevent it from rolling down. ???

8. fitssiks June 4th, 2008 12:54 pm

   Jay, a few guys here are mentioning "tracks". Can you confirm that this particular version of this device operates in tracks?
   It's hard to tell from the photo (plus I'm using outdated optics that are well past their "best before" date) but it looks like the angle iron shown is more for weight bearing that anything else.

   Of course if these "curtains" just hang under their own weight (not in a track) then they are less of a problem.

   Thanx in advance.

   Fits

9. Truckie bLink June 5th, 2008 1:17 am

   looks as if you use the heavy irons and shear the heads off the bolts on the angle iron running between the tracks on the bottom. it looks like a stop bar. easily repaired and should the door come down (or cut it down) it will fall to the ground.

10. Battalion 13 Chief June 8th, 2008 6:56 pm

    What about a crew inside performing a Vent Enter Search prior to hose lines being put into place? What if the heat exiting the window caused the fusable link to activate and trap the inside crew that is without a hose line? This is why we pre-fire plan. Stay safe and train hard!

Spin Hitch

November 17th, 2006 | Category: Tips

Check out the updated Tips from the Bucket page for a great method of using webbing to move a victim. Firefighter Jeff Spinelli from Winter Park Firehouse 62 came up with it. It's called the Spin Hitch, and it works real well for moving a victim up a set of stairs. Thanks Spin for sharing this, and sorry it took so long to get on the page. -Jimm-

Click here for Tips from the Bucket

1 comment

1 Comment so far

1. Spin November 17th, 2006 1:28 pm

Thanks Jimm for the post. I don't know if I invented this but if I did it was by accident. It was discovered during "TRAINING". The scenario was to locate the victim and move them up stairs for egress, (simulating a basement rescue). The girth hitch should be made leaving the loop in front of the victim. This is opposite as you would do if you were going to drag the victim over a flat surface. Like Jimm stated you take that loop make two bites and pull them under each arm (making the webbing tight around the torso). This way you have two handles to hold onto. This method can be used by one or two rescuers. If used by one person it might be beneficial to use a D-Ring to connect the 2 bites thus giving you a firm handle. With 2 rescuers, each gets a loop and you go. During training we found that it keeps the victims head from banging on the stairs, and if used in a RIT scenario it keeps the SCBA from catching on each step. Give it a try and let us know if it works for you.

Halligan Envy

December 30th, 2006 | Category: Tips

The Halligan is by far one of the most versatile tools on the fireground. There may be that rare occasion when the standard 30" Halligan just can't get the job done. Trust me, it's rare but it could happen. Pictured above is a commercially sold 54" Halligan. Personally I haven't been faced with a situation that would make me carry it regularly, but it's nice to know that it's on the rig.

Another viable option is also pictured above. It involves using two Halligan's simultaneously. It's just like adding a cheater bar to the Halligan. When forcing an outward swinging door, place the first Halligan as usual. If more leverage is needed, place another Halligan's forks into the first Halliagn's forks. Now two people can easily apply force to the tool set. It's helpful if one firefighter places a hand over the forks to keep them engaged. It may look ugly but it gets the job done. –Jimm-

17 comments

17 Comments so far

1. DC December 31st, 2006 7:59 am

   I love showing this to all the non-believers of the Halligan!!!

2. MP December 31st, 2006 3:39 pm

   great tip. just a quick note though, this tecnique only works with the type of halligan shown. whick some refer to as a PRO BAR.

3. Heavy G December 31st, 2006 9:02 pm

   My buddy is on a truck co. in Queens and he told me they use the long halligan for burglar bars & security gates.
   Happy New Year!!! Wish everyone a safe & healthy year…

4. mitchs January 1st, 2007 11:47 am

   It probaly goes without saying but it maybe worth mentioning.The article above suggest to first "set" the initial haligan as usuall. this is important because if you marry the two pro bars in the same direction (as in picture above) the opposing pick will interfere with adz being able to "set" into jamb. by rotating the second pro bar 180* before marrying them. now the adz can be BURIED (as it should be) with the pick from second tool not getting in the way. this sounds more complicated than it really is basically just make sure the second tool is opposing if you build the cheater before you set it.

5. Jason January 3rd, 2007 2:24 pm

   What did you use to make the tool wrap on the handle of the Halligan bar?

6. jeff January 3rd, 2007 3:03 pm

   Jason,
   we wrap our tools first with Oxygen tubing (preferred)or rope. then its wrapped with a good quality sports tape. Tape also comes in colors to make company specific such as red, blue ect….JP

7. Cameron January 5th, 2007 4:29 pm

   Also note that one fireman should hold where the bars are married (with a gloved hand) so you know when it is about to break loose. Additionally when it comes time to break them loose. Just drop the married bars on the ground and they will break apart most of the time.

8. paul January 5th, 2007 5:39 pm

   Another kind of Halligan Bar (Caution – annoying music).

   It wasn't open when you were up here (it's across the street from Barleycorn's, which we did go to.)

9. Mr. Jiggy-fly January 7th, 2007 11:53 am

   And… if you do happen to "seat" them together really well using this trick, you'll discover that the two Halligans are permanently married unless you know the "other trick" to separate them… just give them a solid toss onto the pavement and they'll bounce apart. Or, give them to your two biggest knuckle-draggers and giggle while they try to pull them apart for hours!! Be safe Brothers!

10. Gerald Tracy January 10th, 2007 1:53 pm

    I was assigned to Ladder 108 in Brooklyn back in the 80's and we used to two Halligan methods until we welded two together to form the longer leverage version. We used this tool for the extra leverage when appropriate, but at the time it was used to remove a type of lock (Medeco) that was used to secure Roll Up type security doors. The lock was designed as the pin as well as locking mechanism in the roll up. It had the appearance of a Hockey Puck (American) lock. If you were to cut the hockey puck portion of the lock off, the remainder of the lock (pin) would remain in place. With the elongated hooligan(s) we were able to pull the entire mechanism from the door and then raise the roll up for entry and ventilation.

11. DC January 11th, 2007 6:32 pm

    Jason,

    The oxygen tubing works well, but another trick is to take hockey tape and spin it into a cord. Wrap that around your tool and then tape over with the hockey tape. This is just in case you want a smaller rib for grip.

12. brian January 22nd, 2007 6:09 pm

    researching new equipment for my dept. wanting to know where i can buy one of these king size halligan's or if its even on the market??

13. Mr. Jiggy Fly January 23rd, 2007 11:31 am

    Brian,

Look at Fire Hooks Unlimited. They make the BEST tools, hands down, and their prices are very reasonable. http://firehooksunlimited.net/ The 54" Halligan is on the "Pro-Bar" page of their site. Any of their authorized dealers can get you anything they make.

Be safe brother.

14. Aaron H March 11th, 2007 11:54 am

    Through a lot of research, we've discovered that the Pro-Bars are the only ones that truly marry together well. When trying to interlock other bars at the forks, we encountered problems with keeping them together as well as breaking the pins on the Zico bars.

15. Bill B March 11th, 2007 12:31 pm

    I prefer to leave the halligan bar unwrapped for two reasons. 1) dark or smoky condition inside while forcing a door, the ax can be rested upon the bar and driven into the shoulder of the fork end eliminating a missed swing and a hand injury. 2) I like a shackle secured over the bar, it moves freely so that I can quickley attach a rope for outside venting and it gives me a quick attachment point for my escape rope If I need to bail from an upper floor.

16. Jack March 20th, 2007 9:49 pm

    Bill B, beat me to the punch, I was just going to comment on the grip tape. I cant aggree with you more about the latest trend to tape the halligan handles, it actually LIMITS the use of the halligan in my opinion in the way Bill B stated. I feel it's critical to be able to slide your axe down the handle to the fork,in not only smoky environments, but tight spots where you cannot strike the adze end. (This technique, by the way, requires you to square off the fork end a bit with an angle grinder).

    There have been plenty of times (especially using the "baseball bat swing" method on wood doors) where my hands sliding down the handle was a huge advantage. Also when you are applying force to the halligan you are ususlly gripping the far end of the tool for max leverage anyway, no where near the tape. I've been asking the newer guys every time I see this trend "why" and never really get an answer!

    Hooks and Mauls, etc. the grip tape can be extremely advantageous when maintained, and I can't say enough good about this practice, so please don't get that confused with halligan grip tape.

    Our halligans in our dept are also kept spotless at all times (i.e. probies!) without any paint also. This not only is used as a sign of Co. pride for us but keeps the tool easier to clean when used heavily. And in my years of service I've never seen a halligan used lightly!

    Another great discussion, thanks for letting me put my 2 cents in, stay safe brothers.

17. Walt September 2nd, 2007 11:47 am

I'd have to agree mostly with Bill B. The wrap job as depicted is too much. A little bit can be useful, if you leave enough strike room for the forks. Ch Halligan designed his tool to have a hexagonal, then octagonal shaft to enhance gripping the tool. Today's fire gloves usually limit our dexterity, especially when they are wet. In that case, buy better gloves. email me if you would like a suggestion for one of the best gloves going. OFDWJL@aol.com. In either case, work with your tools as though you were in the actual environment so that you know how they are going to work. Be safe!

Fernald Lock Pick

March 28th, 2007 | Category: Tips

Jeff Janus from Bloomingdale Fire Protection District #1 sent in this tip for "forcing" a door with a jamb during non-hazard situations. Apparently it's called the Fernald Lock Pick, and involves a bleach bottle of all things. We love posting about the non traditional forcible entry methods everyone uses. Check out Tips from the Bucket section for details.

10 comments

10 Comments so far

1. Eric March 28th, 2007 2:05 pm

Isn't this the same principle as using a thin credit card? In addition our department has been using the smoke ejector bar for years until recently, because they are now are designed with a spring loaded shoe to

prevent over tightening and bending the bar. By the looks of the one in the photo it does not have the spring loaded shoe,check yours out !!

2. Brian March 30th, 2007 10:44 am

I don't know if it was covered here already. But I saw a way into doors with this type of door handle in Brownsville, Brooklyn NY. The security people in a womens shelter use a system that I'll try to explain. They used a long piece of metal that looks like a thick wire coat hangar. It was long enough to go under the closed door, and angled up to go around the door handle, and still leave enough metal to work the lock from the hallway side of door.
At one end it is shaped into a closed loop. At the other end it was bent into a shape like the end of a sheperds crook. The closed end was slid under the door and then manipulated up towards the door handle. The other end, the crook shape, was then moved until the person felt she had the looped end around the handle on the door. Pull down, door opens. I'm sure the guards there get a ton of practice doing this as the residents are always locking themselves out or forgetting their keys. The funniest thing was when the woman was showing us their technique and she said to the effect,"I size up the lock to make sure my tool is the right one for the door" and then performed the evolution. I kid you not when she opened the door in about 5 seconds and that was including her "size up". We couldn't believe it and told her to do it again. She proceeded to open three doors in a row as if she had a key for them. Impressive to say the least. I'm sure it couldn't be used everywhere but in certain situations, no damage, no security needed etc…
Stay safe.

3. Joe March 31st, 2007 2:05 pm

You carry a set of irons for a reason…Force the door…

4. Chris March 31st, 2007 4:52 pm

Very good idea, although I think it's for the service call type of runs only. Anything else, force it!

5. Brian April 1st, 2007 4:58 pm

I hear ya guys regarding the irons and forcing the door.
However this method caused no damage, so the door could simply be closed when you're done. That's a definite plus when you may be stuck "babysitting" a door for Police arrival at 2AM on a rainy Saturday night. Because we know how the PD "loves" running to sit on a door, and that's under the best of circumstances-if they even have the manpower to spare.
And as quick as this young lady (I'm guessing around 50)
opened the doors it is a bonafide option, in my book.
Stay safe.

6. Chris April 2nd, 2007 3:27 pm

This method is not meant for the smoke in the bulding, fire, hazard or anything with a major life threat. This method is used on lock-outs no hazard. I don't know about others but we do lock-outs to buldings and this

works on about 95% of residential unless the deadbolt is thrown. I work with Jeff so I speak from experience with this method. Just remember to place the Hanger bar above the lock otherwise you hit it while working the lock. It saves a lot of paperwork and insurance claims to the homeowner and good PR if you need it.

FTM-PTB EGH

7. Jimm April 3rd, 2007 5:53 am

   The Engineer I worked with on my first Engine company said it best: "If it's stuck, force it, if it breaks, it needed to be fixed anyway!" Not bad for an Engine guy.

   I can think of many calls that this little gem of a technique would have gotten our pretty little heads back to the pillow much quicker on a few late night fire alarms. Trust me when I say, If there is anyway I can remotely justify forcing a door, it's gonna get forced. –Jimm-

8. lee January 30th, 2008 12:13 pm

   I agree with Joe and Chris ….. FORCE IT

9. Truck 16 April 4th, 2008 11:25 am

   Can anyone explain how to do this?

10. Ace April 4th, 2008 9:21 pm

    Force it? Why break the door if there is no life safety issue. Even if the problem on the other side is a property damage situation only, it still might be better to go the "slow" route and pop the door using a damage-free technique. One good example is a water leak–by the time you get there, the water damage has already been done. Any additional damage that results in the 20 seconds it takes to pop the door using a damage-free technique is probably minimal in comparison to the cost of replacing what could easily be a $300+ door.

    You multiply that times every door on just one floor of an apartment building, and you are sticking someone with a pretty hefty repair bill to go smashing things…not to mention the safety issues if the tenants are allowed to return to their apartments which are now lacking a functional lock on the front door. What if someone gets raped or robbed because of that?

    We got guys in this area that like smashing everything they touch. They get a bad rap quick. We are here to protect property, not cause unneccessary damage.

    Sure, if you got smoke, fire, or anything serious, go through the door the quickest way possible. However, even then, the "quick" way may be to slip in the credit card. If the door has any play while the latch is in the keeper, it can often be picked in 5 seconds or less. With practice, some doors can be popped with a card in less time than it would take to use a key.

Many folks can't force a door in that amount of time. Time yourself–see how long it takes for you get the set of irons apart, hand one to your partner, line up the halligan, and take two shots, then pry it. I bet that's more than 5 seconds…

If it's a deadbolt, then grab the irons. However, if you are facing a cheap spring lock with some play in the door (especially with a soft rubber draft stop), my old AAA card will be quickly placed into service.

Modifying the Halligan

April 14th, 2007 | Category: Tips

In looking trough some older emails we found a tip was sent in months ago. This tip also has the unique honor of being the first one to share credit with two people. Firefighter Matt Scallan from Escambia County Fire and Rescue, and Firefighter John Gilkey from Montgomery County Fire/Rescue. They both sent in this tip within a few weeks of each other. The tip involves some simple modifications to the halligan. Check out the Tips from the Bucket Section for a full description.

19 comments

19 Comments so far

1. Brian April 14th, 2007 8:33 am

Not a bad idea, but the halligan already has a marker built in(in my opinion). The inside point where the two legs of the fork meet is a great spot to drive to. It's the way I was taught, and the way I remebered how

deep to set the fork was "Drive to the seat of the pants". The "pants" of course being the legs of the forks. The "seat" being the spot where the forks meet. With the tool in this deep and locked on the jamb edge it is very difficult for the fork to slip out. Of course on very tight doors you may not be able to drive the fork in to that extent, but get it close. Take you're time driving to the correct spot, apply even pressure, maybe the axe head under the halligan for added leverage- and most times you're in.
Stay safe.

2. T.Young April 14th, 2007 9:11 am

   You can also use a grinder to grind a line across the inside of the forks about midway, or wherever the best seat is on your tool, to force the jamb without sticking it in too far and over "torquing" . Granted with a flimsy wooden door its probably gonna come open anyways, it helps with the beefier doors so you know your getting good leverage.

3. mitch s April 15th, 2007 3:41 pm

   these are some great ideas i doubt if we'll ever stop learning new tricks for this tool. Brian could you clarify i didnt get what you meant about using the axe head under the haligan for more leverage.

4. Brian April 16th, 2007 9:33 am

   Sure Mitch. On some metal doors as the halligan is driven in and worked the door bends, and when force is applied to pop the door some of the force gets "wasted" because of the deformed door. After the tool is set the axe head is placed between the halligan(usually the forks) and whichever surface is your fulcrum point, thereby giving you a nice new solid surface to force against. If you can imagine it would in effect-make the thick part of the forks even thicker. Using the picture above if the tool was held like it is, and the jamb was on the left and the door was on the right-the axe would be placed under the forks on the right hand side of the forks. This technique is usually used on an inward opening door. I know it sounds complicated but to see it done, it is very simple and sometimes just that little extra to help get the door. I wish I had a camera to send a picture. Stay safe all.

5. Nick Marro Charlotte F.D. Ladder 1 April 16th, 2007 5:56 pm

   I learned that you drive the fork end of the halligan all the way to where the two fingers of the fork come together, sometimes refereed to as the notch. This way you have maximum leverage to push the door and that most of the fork is wrapped around the frame. You can etch a red line on the adze end to indicate when to maneuver around the rabbited jamb as you drive the tool in, on an outward swinging door. So not to drive the adze into the jamb.

6. Chuck @ Orlando FD April 16th, 2007 11:21 pm

   These tips all have a common idea as to the location of the "sweet spot" on the forks, my addition to this refers to the marking technique used. Within my department I've noticed different color tapes being used to identify the tool to a certain unit and also different paint colors. When painting tools I've always stressed not to paint the working portions. (This allows touching up the tips with the grinder as needed and doesnt

cover/hide any stress crack or burrs in the metal.) On the haligan thats usually the last 3-4 inches of each working end. On the fork end it falls about an inch below where the forks meet, giving you a very distinct visual drive line while forcing a door. Great topic as always…

7. Evan Swartz April 17th, 2007 2:17 pm

   The only thing is what if you get a wider/thicker door and you get to that mark and just do more damage to the door and make it harder to force……This is an excellent tip in a training situation but you have to eventually just get used to the feel. But for new guys training and forcing their first doors this is perfect and i think I may try it on my trucks.

8. Brian April 18th, 2007 8:46 am

   Well that's just it. On an inward opening door, the 11/2" mark may not be deep enough to really lock in on the jamb. Drive the fork in until you're close to that notch and you'll be in deep enough. It may make the difference between popping the door or the tool repeatedly slipping out. On an outward opening door the mark may work a little better but I'd still drive it a little deeper to try and avoid having the halligan slip out. And let me clarify I'm talking about forcing metal doors in metal jambs. Most wood doors in wood jambs will force relatively easy. Good stuff to talk about.
   Stay safe

9. Evan Swartz April 18th, 2007 3:15 pm

   I used this tip on all my rigs and today we used it for the first time, a new guy was forcing the door. It worked perfect, it gave him a reference point. About forcing metal doors, fire hooks unlimited sells a hydro-ram which is perfect for forcing metal doors so you don't have that question of "did I go far enough".

10. Chris - Concord Engine 1 April 20th, 2007 7:22 am

    Hey,

    We use a similar marking method… but we measure up 1-3/4 inches from the tips of the fork (both sides) and mark each side with a line "drawn" in with a hack saw… this makes a nice straight line and only takes a few seconds. We also do the adz at 1-3/4 inches from the tip.

    The 1-3/4 inches is the actual thickness of most exterior grade doors, and the idea is that when you reach that depth, the tool will begin to be driven against or into the stop or rabbit on the jamb if you don't start wrapping it around. Obviously, driving the tool against a steel jamb is just a futile waste of time and energy, while driving it into a wood jamb will usually split the rabbited stop off the jamb itself, essentially wedging the door and halligan tight (bad for forcible entry), so even the experienced guys like to use the depth gauges for increased efficiency.

We also make a second set of depth gauges on the sides of the forks, at the neck (seat of the pants), so you can easily identify that the tool is properly set for maximum leverage… and yes, we take the style points for the artsy-craftsy paint in the line too, it makes it alot easier to see the depth gauges, especially at night.

And… Chuck from Orlando is right about paint on the tools. We don't paint our tools at all, just keep them all well brushed and lightly coated with just a little oil any time a little surface rust starts to pop up. As for company identification, we don't use paint or tape, we weld the ID right onto the tool… A big ol' "E1" on the head of the axe or fork of the halligan isn't going to be replaced with someone else's tape or paint color!!

Evan, be careful with the hydra-ram, we've had two catastrophically fail during actual forcible entry on steel doors in steel frames (ya know, the doors they are supposedly designed for!). When the hydraulic cylinder blows out it makes a huge friggin mess, too!! We've also noticed that if they sit in the truck and aren't exercised every couple days they "lose their prime", so to speak, and have to be pumped continuously for several minutes, usually with the head facing down, to start working again. They might be light and single firefighter operable, but the sure aren't the old rabbit tool! As Capt. Morris (FDNY R1) says, if you don't know how to use the Irons, don't pick up the hydra-ram!

Be safe Brothers!

11. Evan Swartz April 20th, 2007 5:49 pm

    Thanks for the advice on the hydra-ram from now on I will start "exercizing" all the rams in my department.

12. Brian April 21st, 2007 8:43 am

    Yes the hydra-ram works fantastically(sp?) when it works. You will need the trusted irons if there is any failure with the hydra-ram. The irons will also be needed to hold any purchase you made with the ram, and you've maxed out the pistons extension. This is where many of these tools(hydra ram) fail. When the FF using it pumps the tool too far it may cause the seals to fail. And as Chris stated, we too have observed a lot of unexplained hydra ram failure on routine tool inspection. This is a tool that MUST be checked every tour because somehow they are prone to leakage. We have our guys simply test them by pumping them and then pushing the extended jaws against a wall. More times than you'd think those jaws start retracting with a little pressure. This condition will cause a very inefficient door force evolution. Great stuff.
    Stay safe.

13. Jack April 28th, 2007 12:07 am

    Keep in mind also that the Hydra-ram is designed to fail without any kind of leakage or noise etc. Any time you experience those conditions it's definitely "no good". There is an internal seal that is designed to fail when you are trying to force something you shouldn't be (my Truck has "blown up" 2 of them). The two failures had no leakage noted and after the failure, appeared to function properly until placed under load. We now routinely lift our firehouse dumpster to ensure that the tool is operational. If you have a failure it will not lift anything but may appear to function normally.

Failures are also common in rams that have sat for long periods of time without use, causing the seals to dry out and crack, therefore again causing possible failure. Remember to keep the piston moistened and cleaned with 3-in-1 oil. These tools are like human muscles, they need to be used!!

Stay Safe!

14. Steve Maslock April 30th, 2007 4:54 pm

    Does anyone have the specific number at which the seal in the hydra-ram fails?

15. Evan Swartz April 30th, 2007 11:49 pm

    Can anyone tell me how to oil my hydro ram with the 3 in 1 oil? Like where do i put it?

16. Chris - Concord Engine 1 May 2nd, 2007 12:11 pm

    Hey Jeff & Jimm – Looks like we need a Hydra-Ram training section!

    Evan & Steve:

    My curiousity was peaked by your questions and this discussion, so I called the manufacturer, Fire Hooks Unlimited (www.firehooksunlimited.net). I spoke with Bob, who I believe invented the tool. He was FULL of info and tips, and I tried to take notes as fast as he was talking about it. Incidentally, he said if you ever have questions or maintenace issues don't hesitate to call; he can diagnose and direct repairs of most issues over the phone.

    The tool will develop 31,000 lbs of force before the internal "implosion seal" fails. This differs from the old rabbit tool which would develop 10,000 lbs. of force then go to a "recylce mode" where the fluid would not develop further pressure but you could keep pumping the handle with no idication, thus protecting the internal mechanics from damage. Bob says, "The hell with the tool, if my kid is behind the door I want you to break the tool trying to get to him!"

    Bob also said the stronger you are, the greater amount of force you will be able to develop, but he has a 90 lb. girl in his office who was able to develop over 10,000 lbs. of measured force when they were testing the tool. The back-pressure on the handle will give you an idea how hard you are working the tool. He said he routinely lifts his forklift to test the tools, and has seen video of FDNY lifting a 15,000 lb. machine off a trapped person.

    The tool operates on a 3-stage hydraulic system. With 0-400 lbs. of load it will extend 3/4" per pump, with maximum extension of 4" in 8 pumps. 400-1200 lbs. will extend 1/4" per pump, and over 1200 lbs. will extend 1/8" per pump. The idea is to quickly take up the slack in a door/frame being forced, then apply a measured amount of force to break it.

The hydraulics are a fully-sealed pressurized unit, which uses Propylene Glycol as the fluid agent. The fluid is safe if it did get in your eyes or on your skin, as opposed to typical hydraulic fluid used in the old rabbit tool, which burns the skin. Also, it is basically just anti-freeze, so cold weather doesn't effect operation.

To check the status of the hydraulic system, fully extend the shaft, and you'll see a nickel-sized hole above where the shaft extends from the body. Insert a screwdriver all the way into the hole, mark the depth, and remove the screwdriver. Then, measure the depth marked on the screwdriver. If you were able to insert it greater than 5 inches, the tool has lost its charge and needs to be serviced by the manufacturer.

The other thing he mentioned was checking the position of the release lever when it's in the closed position. That spring-loaded lever operates a ball-seat valve. If it is out of adjustment, the ball won't seat properly, and you won't be able to properly develop pressure. In the normally closed position, it should be between 10 o'clock and 11 o'clock. If the lever is at or beyond 12 o'clock, call Bob and he will talk you through removing it and adjusting/calibrating the valve.

As it is a fully-sealed pressurized unit, the only maintenance required is regular cleaning and exercise. Don't open any seals or plugs. The tool may be completely submerged in water for cleaning, in fact it has been successfully used for underwater vehicle extrication.

After cleaning, fully extend the cylinder, wipe it with a clean rag, and oil the shaft with 3-in-1. Bob said if there are any black streaks on the shaft, you should clean them with metal polish, then reapply oil. After oiling, exercise the tool under load. He told me the more work the tool sees, the better it will perform. Most of the product maintenance returns he gets are from slower places that rarely take the tool off the truck. The busy companies that use the tool regularly rarely have problems. He recommended exercising it at least every two weeks.

Bob's final words of wisdom, were that the tool isn't "Fireman Proof", as nothing is… I'm sure y'all've heard about the 3 bowling balls the chief left in a room full of firemen… The chief came back an hour later and one was broken, one was missing, and the third was pregnant, and noone knew anything about it!

Be safe Brothers!
Chris

17. jimm May 4th, 2007 11:17 am

    We finally started a Hydra-Ram post:

    Click Here

    Please leave all further Hydra-Ram comments over there. Thanks for all the great comments so far! -Jimm-

18. kevinO June 6th, 2007 8:43 pm

Let me get this straight guys…….
your gonna put a red stripe on a halligan tool to tell you you've driven it far enough past the jamb?

What if there's a fire?
What if there is smoke coming out of the door jamb?
What if it's night time and it's dark?
If there's someone screaming on the other side,
your gonna look for a little red stripe?
Know your tool, know your talent.

Tabbed Ground Pads

December 14th, 2007 | Category: Tips

Lt. John Bannon sent in the latest Tip from the Bucket. He credits Walt Caber, President of the Reliance Hook & Ladder Co. 61 for the creation of this tip. They welded tabs on the ground pads (or jack plates depending on where you are from.) The tabs make it much easier to get the pads in the right place. Lt. Bannon pointed out that the pad can be slid on from the opposite direction in situations where the outrigger would have to be right up against an obstruction.

Obviously, any crew worth even being on the truck should be able to throw the pads in the right place every time, but this tip is still quite useful. In a situation when manpower is limited, or if the truck crew breaks into teams prior to the rig getting set up, the "tabbed" pads will make the setup much quicker.

24 comments

24 Comments so far

1. Jason December 14th, 2007 8:01 am

   Great tip. I always stand one arm's length from the truck and drop the pad beside the foot farthest away from the truck.

2. Bob December 14th, 2007 8:51 am

   I learned that with our E-One, you pull the pad, set it on edge right against the truck, roll it one length, and then lay it down… perfect spot every time.

3. Lt. J.Bannon December 14th, 2007 12:33 pm

   Bob thats what we used to do, but as a Volunteer fire company we run 2nd alarm in Chester City here in PA and we find that we have to re-position. With the ground pads on there you dont have to take them off to move the truck.

4. Joe December 14th, 2007 4:21 pm

   Two things: 1) The handle location creates a tripping hazard. It needs to be on one side. 2) IF you intend to leave them on the jacks while driving in order to save time on the fire scene, they will fly off once you make a sharp turn and hit some innocent bystander. Overall it is not a bad idea, however, did you ever stop and think why the manufacturer of your rig didn't have them welded on in the first place? Be careful of those homemade alterations. Think Liability.

5. Lt. J.Bannon December 14th, 2007 6:01 pm

   A few things: 1) E-One welded on the handles, 2)When I mean moving around on a fire scene I don't mean fly around the fire scene, (what I mean is if we are in a collaspe zone and need to move back some or if we need to move closer to ladder the building) 3) The handles on the plate don't move futher then the edge of the diamond plate.

6. Lt. J.Bannon December 14th, 2007 6:06 pm

   Just for the record the jack plates dont stay on the jacks, they come off and go into the holder when we are done with them if thats what joes concern was.

7. John December 14th, 2007 7:10 pm

   The pads on our TL are somewhat loose and have the ability to swivel (I dont mean spin) but they move freely to be able to match the contour of the ground its being placed onto. Will the weight of the plates swaying back and fourth cause my pads to lean to one side thus the plate sliding off the pad? Any prob's with that as of yet?

8. Lt. J.Bannon December 15th, 2007 1:31 pm

Negative, the guy that came up with the design is and Engineer at Boeing and he made sure that the weight is spread evenly and made sure they stay level.

9. Ray December 15th, 2007 2:14 pm

   Great idea. Simple and effective. It's easy to remove that tripping hazzard by always placing the handle/chains on the inside. I'd like to see them up close.

10. Charles Hillman December 16th, 2007 11:45 am

    Alterations that make the job quicker and easier are always welcome. When you have competent people to make the alterations any "homemade" alteration should not simply be thrown to the side because of liability issues. It is very frustrating when I come up with an idea and it is disregarded because someone thinks that just because it is homemade that it will not be effective and may hurt someone. Homemade alterations have their place and if they were not utilized, some of the tools we have today may never have been invented.

    Another suggestion for ground pads is running beads of weld on the bottom side of the ground pad to prevent the pad from moving on an icy road condition. If you have a smooth metal ground pad on an icy road there is potential for the pad to slide and the whole truck to move. Beads of weld on the bottom of the pad create a good surface-to-surface contact point to prevent this.

11. Rob Griffin December 16th, 2007 1:12 pm

    The idea for this at Reliance more than likly can be traced to Chester Fire Department's Tower 82, which has had the angle iron on the jack plates since the truck was delivered in 2002. Not sure who came up with this idea but we have found that being able to put the plates on helps. The staffing of 9 Firefighters, 2 Captains and 1 Battalion Chief per shift requires members to do several jobs at once and this allows one member to be able to place the truck into service quickly.

12. Ryan December 16th, 2007 9:20 pm

    We have tabbed aluminum pads all the way around and with our current staffing of 3 it's the only way to fly. I agree that a good truck crew that knows their rig can usually hit it everytime but this takes all the guess work out of it. One thing about these though is that when you start adding fab work and welds to them there is more stuff to break, keep a spare around! Great suggestion on the undersided beads for traction, if done right it could also act as hard surfacing similar to loader buckets and such. Great Site! Long live firehouse fabrications! (insert disclaimer here)

13. Evan Swartz December 16th, 2007 10:45 pm

    I dont know how everyone else trucks are set up but our truck has a laser it shoots out and you line the dot on the ground to the X on the plate.

14. Lt. J.Bannon December 17th, 2007 1:25 am

What year is your truck? Ours is a 1994.

15. Jason Greer December 17th, 2007 8:23 am

    At work (Lancaster City Bureau of Fire) we operate a 1990 E-One/Federal motors 95' Tower as well. This seems like a great idea. Our typical staffing on the truck co's is two maybe three on a good day so to fall in line with other comments I also know that anything that makes life easier with short staffing is a blessing.

16. Evan Swartz December 17th, 2007 6:44 pm

    We have a 2001 KME 95 foot Aerialcat.

    http://www.hudsonfire.com

17. Raymond Pierce December 18th, 2007 10:47 pm

    Bannon did you take the idea from Chester fire department tower 82?

18. Lt. J.Bannon December 19th, 2007 12:25 am

    No I did not I actually just found out that they had it from Rob Griffin. I guess thats where Walt got the idea from then.

19. Dave Collado December 26th, 2007 9:29 pm

    I like the welded angle irons to support outriggers from falling out.

20. Timothy Sattler December 31st, 2007 6:08 pm

    While on the subject of ground plates…I learned from some fellas on my shift that they are very useful for activating automatic driveway gates and arms. Simply slide the plate under the gate so that it stops on the sensor. The plate is substanstial enough to trip the sensor the same as an exiting vehicle would.

21. Dan January 1st, 2008 1:38 am

    The function of the jack pad is twofold. One is to increase the footprint of the outrigger.

    The other and most important is to reduce friction between the ground and the foot of the outrigger. When you elevate the rig the truck should move up, not pushed by the outrigger. The jack pad allows this while transmitting the weight via the pad.

22. fitssiks February 13th, 2008 9:35 am

    The same idea, although somewhat different. 

    [IMG]http://i39.photobucket.com/albums/e193/funepics/000_1548-1.jpg[/IMG]

23. fitssiks February 13th, 2008 9:38 am

> Ah, I should have tried the direct link first.
>
> http://i39.photobucket.com/albums/e193/funepics/000_1548.jpg

24. rick February 17th, 2008 3:23 pm

> we applied this concept to our 95’ aerialscope. not the best idea. I would agree with this concept on any other style of jack/outrigger except down jacks. everyone knows that scopes have 4 down jacks and 2 outriggers. we have found they take more time to slide them on the downjacks then just throwing the pad down. no reason to have them on a scope. just my .02$

Personal Escape Hook

February 19th, 2009 | Category: Tips

Engineer Jason Simms from Gwinnett County (GA) sent in this tip. He bought a small crow bar at the local home improvement store and cut it off at about 5 inches. He then welded two links of a chain to create an attachment point for personal escape rope. Jason says it works great and is quite a bit cheaper than the commercially sold products. The whole set-up was less than ten bucks. There’s nothing like a little firehouse ingenuity to save a few dollars.

115 comments

115 Comments so far

1. Jon February 19th, 2009 9:16 am

   Or to kill you. Crosby, the company that makes the hook we use for our PSS system is a respected rigging company the world over. If you want to think about how you saved a few hundred bucks or so when you are in the hospital then do it. The crosby hook is forged, no welds, no seams. Its strength is far far far superior to that of a crowbar and two welded 3/16th chain links. As for the rope, anything other than Technora is really putting your life on the line. The rope unit at the FDNY did weeks of testing and found the Technora rope to be so superior that it was the choice. Technora is a material all of us have been using for years and just did not know it. Technora ia a kevlar based fiber that is in timing belts. It will not melt till well above 700 degrees, due to its kevlar composition its ability to withstand abrasive movement is amazing, and for 152 bucks at the firestore you can get 50 feet with a crosby hook threaded and attached.

   Two great men died to come up with this system and its components, don't let it be you too.

   RIP Curt and John

2. ... February 19th, 2009 9:18 am

   Agreed.^

3. Hook February 19th, 2009 9:35 am

   Hey great idea, the bar MAY not fail but the weld most likely will. I agree good men have died to get us some better systems. The Petzl EXO system is the one we have in my department and the one I work for to train on, I have used the RIT system but hands down the PETZL EXO system is easier to use with a gloved wet icy hand. This is my opinion. The system has the technora rope and is connected to a crosby hook and comes in a fast deploy bag. very good system for the money and training is provided by factory certified reps. Be safe brothers.

4. mike February 19th, 2009 10:45 am

   you can always bury your halligan on a 45 degree angle in the window sill to serve as an anchor in a pinch, not ideal but effective.

   Rope is nice , and I carry it when on the truck but you need to take into account the height of the structure you are working in vs. time to set up your escape system. Sorta pointless in a ranch home or two story. Plus a good outside crew should be throwing ladders on all sides of the structure when working aloft.

   As my LT says, keep it simple stupid 

   good thought though

5. John February 19th, 2009 10:46 am

   God bless our fallen brothers and thier families. I need to say that first and foremost.

You guys obviously work for a department that issues something worth having. Not all of us have that luxury. We are issued a small chunk of 7mm cord. I have improved that with a longer piece and a bent gate carabiner. This idea is great. Consider this…without the resources you guys are recieving, the chance to get out quicker is better than getting severly hurt. I like this… I wouldn't depend on it for a tech rescue, but it is a better option than death.

Thanks for the ingenuity, brother Simms. We po' foke appreciate the thought!

6. Ladder 4 OVM February 19th, 2009 10:53 am

Not a bad set up there. I have a crosby hook myself. I love it. I got my hook for less than $40. I don't have an Exo system because our gear is not set up for the Gemtor harness. I have one but it slides down when I wear it, so I just use the crosby hook and if need be my SCBA waist straps and an Esacpe 8. I would have gone with a bigger chain link, but overall not bad.

7. DOB February 19th, 2009 11:22 am

I like it brother, wish I would have thought of that before I purchased two Crosby Hooks, one for Marietta and the other for Roswell.

Also, I'm pretty sure that 3/16th chain and weld would easily hold this FA (fat a**)!

Be safe

8. T2 February 19th, 2009 12:29 pm

Nice job. We are also just issued rope and a carabiner. It encourages you to have good welding skills. I wouldn't use one that someone else made, but would have no problem using one that I made. Let's hope it doesn't have to be used. Stay Safe.

9. Brickcity1306 February 19th, 2009 2:34 pm

So how do you think Petzl and all the others came up with their ideas? Somewhere a firefighter thought up a system and they refined it, Ok so it looks a little crude but like others have said for ten bucks it is not bad and better then not having one. I am sure if this guy had a FDNY patch in the photo some of you jebbrones would buy ten of them.. Thank you Jason

10. Jon February 19th, 2009 4:02 pm

The Petzl EXO was around long before we started developing our PSS, it was called the gri-gri. A member who was a rock climber saw this as an excellent piece of equipment to be adapted to the fire service.

I am sure this piece will survive a bailout, but if it is to be mass produced and marketed, it would need that all too familiar NFPA approval.

11. ff4life February 19th, 2009 6:01 pm

    i like it. for us guys in not so fortunate houses, this is a great tool…i personally would use it a LAST RESORT. id rather break a leg than get trapped, good idea brother

12. TONY P. February 19th, 2009 6:12 pm

    GOOD JOB BROTHER ! NOTHING WRONG WITH TRYING SOMETHING THAT MAY SAVE YOUR LIFE ONE DAY. IT'S ALL ABOUT BEING PROACTIVE IN THE JOB. MAKE SURE TO DO SOME TRAINING WITH IT FIRST AND THEN MAKE THE ADJUSTMENT AS NEEDED.

    STAY SAFE !!!

13. dave February 19th, 2009 9:04 pm

    If that weld fails, you shouldn't be allowed to use a welder. I weld structural steel for a living. I gaurantee you my welds won't fail.

14. SRL February 19th, 2009 9:15 pm

    No offense I like the idea and the DIY. When it comes down to it how much is your life worth?

    Stay Low and and let it blow.

15. Brian February 19th, 2009 9:15 pm

    Nice thinking Brother. Most important thing now is to train, train, train on it.

16. Mike Farrell February 19th, 2009 9:23 pm

    Brickcity1306 hit it on the head…if this thing had an FDNY logo on it you critics would be tripping over yourselves to get at it! Chock one up for ingenuity…remember that-the lifeblood of financially challenged urban fire departments, and the mark of a great Jake! Is it perfect, no, but neither is jumping out of a window because your fire department didn't buy you ropes (or took them away). My guess is the weld will hold, the rope will get you few floors closer to terra firma, and at the end of the day, we'll all have one less funeral to go to. Better than nothing in my book, props for the initiative to at least carry something with you…there's still, unbelievably, too many guys on our job that don't carry anything at all. Now that's stupid!

17. Ryan February 19th, 2009 9:48 pm

    Man I dig it. I think one too many people have been drinking the NFPA kool-aid though. I fully respect the sacrifices that pushed the Exo into existence. Keep in mind though that necessity is the mother of all invention, and if the Exo system were affordable and readily available the half a crowbar hook makers of the world would be using their talents elsewhere. I love it and am going to copy the hell out of it! Thanks brother!

18. Scott February 20th, 2009 7:53 am

    I agree with above… and they always say you get what you pay for! Our department recently completed the training on the Petzl Exo bailout system (kudos to those guys) for developing a simplistic and functional last resort system. Hopefully all of us can prevent bailouts by maintaining situational awareneness while operating at incidents. Stay safe!

    Sgt. Milliner
    Engine 2233
    Louisville, KY

19. JJ@WRFD February 20th, 2009 9:25 am

    Nice job brother! Great low budget solution that may end up saving your A** someday.

20. Truckee13 February 20th, 2009 9:41 am

    There is nothing wrong with a little Southern Engineering.

    The whole concept that because it wasn't purchased and is not tested nor rated does not mean it won't work and save his ass.

    That is what its for, Right!

    Nice Jobs Brother, I prefer webbing and the Halligan just to get to either the next level or the ground.

21. clent February 20th, 2009 12:03 pm

    I like it Jason! Heck with the na-sayers. And to the guy inquiring about mass marketing this idea, do you actually think he would post it in here if that was his intention?? Good Job Brother! Clent

22. RT158 February 20th, 2009 12:20 pm

    First- great idea. Some of the guys and I were toying with an idea very similiar with flat steel. Never gave the crow bar a thought, great ingenuity. There is a nice flat style hook that's fairly cheap and works well for those that don't want to spend the rediculous amount of money that some of these systems are being sold for.

    Second- Brickcity1306, i couldn't agree with you more! stick those four letters on anything and it will sell, regardless of what the item. The Petzl system is a perfect example. It's amazing how much that system is selling and for one reason only. Don't get me wrong, I'm not bashing the FDNY. They are with out question an excellent FD and designed a system that met THEIR needs.
    My concern with the EXO is how do you perform rope/hardware care on a system that can't be taken apart? After all, we are supposed to care for our ropes/hardware weather it is in an escape system or not.
    When I questioned a person from the EXO training group about this I was told that it never needs cleaning

because it is kept in its pouch. Hmmmm?
I highly doubt that any human being can generate enough force to cause a piece of solid steel stock (crowbar) to fail. The steel stock of the crowbar is actually thicker than that of the Crosby hook. The small chain links are questionable only because if the person doing the welding doesn't do a decent job there could be an issue but even that would be pretty hard to break considering welding can sometimes increse the strength of the metals.
Other than that, i like it and would use it.

23. Mike February 20th, 2009 1:57 pm

    I wonder how much the crow bar weighs?

    I think this is some great thinking, the guys that say this isnt safe..well its a last ditch effort to exit the building so Its alot better than staying inside because obviously you are Bailing for a reason

24. Matthew February 20th, 2009 3:23 pm

    I too like this idea! Maybe instead of the welded links which do seem to me the weakest point, the end could be flattened out and a hole punched in? Either for a snaplink or thread your rope through? I know that a blacksmith would be able to do this. But I'm up in VT and can find a blacksmith pretty easily.

25. Ryan February 20th, 2009 3:53 pm

    I would still hang my entire company on it. If your worried about strength of weld have someone run a TIG weld down it and use a quality chain link. Just a thought.

26. Chris February 20th, 2009 4:15 pm

    I think I would trust it if instead of welding the chain links, dont cut the crowbar as short and bend it to make a loop at the end. Then feed the rope through and tie your prefered knot.

27. Brickcity1306 February 20th, 2009 5:01 pm

    Chris, I was just talking to my metal guy who said the same thing, heat and put a small turn at the end and mig weld where the two meet it would be bomb proof. Still good stuff, stay safe

28. layn-n February 20th, 2009 5:51 pm

    All right, heres the deal. Since this awsome device is so cheap to make, why dont you critics make one and subject it to a test using maybe a winch pulling another vehicle.(If you dont know how to weld, catch up with your dept. mechanic and have him do it) Your talking about loading AT MOST 400 -500 lbs on this thing (some of us are bigger than others) during an escape. I can promise you the rope used in an escape situation would either burn in half or break before you pulled the chain link off of the hook.

29. Hawk February 20th, 2009 5:52 pm

Stop bashing the FDNY. What they have that many other depts have is a research and development department. They test all equipment and ideas over and over again. Their equipment is proven and the testing backs it up. They also do what is best for the FDNY. But they will always extend a hand any FF and or department with a vast library of research and development. Just check out the testing they did one just one of the first EXO system. I'm all for guys coming up with their own ideas. But test it out and see if it works.

30. DMAN72 February 20th, 2009 6:27 pm

    Why do I always play go between?? Hawk, you must have been arm wrestling when these posts were made(I'll bet no one gets that), not picking on you, brother, but they aren't bashing FDNY, they are bashing the idiots that have never had an original thought of their own. Brickcity1306, why do I always have to put out your fires? (Get the metaphor?!)HA!

31. Brickcity1306 February 20th, 2009 7:37 pm

    Haaaa, DEMAN 72 because a true truck guy puts out fires with an axe and a can!!! I was thinking about a post after my last with a disclaimer so here it goes. In my early years I was a buff with res1cue and had the pleasure of riding with some of the finest fire fighters I have ever met, I have unfortunately been to several of their funerals sense those days. I live about forty five min outside of Manhattan and have seen a whole ton of crap marketed because it was used by FDNY far prior to the R&D unit in full effect. There are lots of people that listen to all the big names LAFD, FDNY Ect and think that because it works for them it should be gospel. I am here to tell you it does not, I have the same respect for a department that runs a well trained well equipped volunteer crew (gasp did he say the V word) just as much as a guy with a cool patch on his job shirt and a chip on his shoulder. Leave your attitude at the door and don't even start with the "Waaaaaa you are bashing BS!!"

32. Backyard engineering February 20th, 2009 10:56 pm

    I made my own SCBA out of a 2 liter coke bottle and non-rebreather o2 mask. Hey we needed to save a few bucks.

    JIMM, If I were you I would remove this article ASAP. When some idiot cracks his melon by rappeling on a crow bar and dog chain they will surely say "I saw this in vententersearch.com"

33. Chris February 20th, 2009 11:27 pm

    I'm not crazy about this, as some of the brothers have said, there is a time and place to save a buck and this isn't one of them. I'd rather spend the dough and have the real thing.

34. brickcity1306 February 20th, 2009 11:29 pm

    Our roof radio is a tin can and a rope tied to the C/P!! it doubles as a zip line back to the ground in case of a problem, stand by for the Patton number !!!!

35. Bill February 21st, 2009 12:33 am

I love seeing guys think outside the box. Firemen are some of the best out there, who have the ability to look at one tool and see different ways to use it or even ways to modify it. I think this idea is a good one and I really don't see this set-up failing, snapping, bending, I bet it would work. This is just my opinion but I could see the hook part slipping off if not secured right. Maybe to improve the design, have the hook end at a sharper bend, and maybe go as far grind down the very end to a point so it will really grab in, more of a hook versus a claw.
I would like to have everyone's opinion on few points though.
1. If you made this would you have to get it approved though your department to use?
2. This question is more scenario based. Let's say you have this set up or something similar. Now let's say you have to use (God forbid), or you just test it out in training…and it fails, rope breaks, hook slips off ect. How would your department, city, workmen's comp, handle this if you suffered a career ending injury or lost your life. Would you and your family be taken care of the same if you would have be hurt or killed using a "approved" or "patented" device?
What do you think?

36. F007 February 21st, 2009 12:45 am

There is no disagreement that the Technora rope is ideal, additionally the crosby hook and the Petzl EXO system are great tools. I know Jason and he is a very big advocate of all of these items, in fact, he teaches RIT and FF survival and in his presentation he discusses Black Sunday and honors those that made the sacrifice on that day and changed the way we all view bail outs. His thoughts are to improve the survivability of those that really do not have the funds to buy bail out systems. I agree, this may not be the greatest bailout tool, it does beat other methods I have tried and seen over the past 20 years. Don't bash a brother for trying. FTM PTB EGH Be Safe and remember we're all in this thing together.

37. F007 February 21st, 2009 12:57 am

Bill, you make some very good points. The equipment should be approved by the department. Unfortunately, as we can see through case studies, most departments have the opinion that "we don't do bailouts". This is to prepare for the unimaginable. Just like ladder bails, NFPA is not going to approve it. In any type of training, tool tests, etc. belay lines and safety measures are essential. All training involving bailouts must have proper belay lines and experienced instructors teaching them. Currently, many departments issue an 8 mm rope, a caribiner, and a section of webbing. The bailout taught, including FDIC, is the body belay or wrap with a tool in the window. Emphasis has to be placed on the fact that these are catastrophic events that place a firefighter in a last ditch bail out or jump situation. Thanks for your input.

38. Nate999 February 21st, 2009 1:18 am

Bill,

I like the idea of the ground down point…might dig in a little better.

As for the questions:
1. We are fortunate in my dept. to have 75' of kevlar webbing and a mini-8 built in to the waist strap of our MSA packs (one of the only good things about them in my opinion), but we still only have a carabiner at the end. If we wished to add something like this to the system, we'd have to get it approved for sure. If it was just for our own pockets, we could probably get away with it.

2. I think this question is somewhat of a moot point. If training, and the homemade hook/etc. fails, I would hope that the belay you're using would save you from that career-ending injury (If we're not smart enough to have a back-up during training, we probably shouldn't be hanging off of ropes in the first place). As for actual emergency use, it sure beats having to jump and hope for the best. Stay safe out there and keep up the good ideas. Gotta go, I'm late for my arm wrestling match

39. FrankTheTank501 February 21st, 2009 1:58 am

I will keep this short and right to the point, lets be realisitic here, how many of "us" suburban firefighters really need a bail kit, tool, gee wiz toy, blah, blah, blah. Nothing more than three stories in my whole town, so guess what, I will use my hose line, or webbing, or rope, or a good leap and a prayer.

Other than that, nice job Brother!

40. brickcity1306 February 21st, 2009 3:27 am

Frank, that is a scary way to think. A three story fall can injury or kill you just as easy as a five plus fall will. "Suburban firefighters" die every year just like big city fire fighters do in some of the same ways.

41. Kelly February 21st, 2009 8:21 am

Frank,

A rope and an anchor will beat a a good leap and a prayer every time. It will also beat sliding down a hose. How many times have you had 30 extra feet of hose to throw out a window and slide down?

I'm not too keen on the welded screw link on the crowbar, but if they've trained with it, I think they are definitely on the right track. I would like to see how a hole drilled into the end of the crowbar works. You could put your screw link through that.

I'd also like to make a quick plug for the NARS hook that CMC Rescue sells. It's lighter than the Crosby and offers a few more anchoring options with the addition of the hole in the handle.

42. MetroLT February 21st, 2009 10:32 am

Oh boy. Here we go again. How much is the Crosby Hook? $80? I bet if you get a dozen or so ordered they would knock off at least 10% and throw in free shipping. Just a guess.
Innovative thinking? You betcha. I'm sure the welding skills are top notch. But wouldn't the welding weaken the link?

The "oh it could pull a truck" mentality is dangerous. Yeah, it probably could and wouldn't break nine out of ten times. But it still ain't rated. If I don't have the dough, I'll mow a couple yards to get a little extra to buy the proper equipment.
Again, innovative thinking that should not be discouraged. But it's still a life safety item and as such NFPA 1983 should not be ignored.
If it fails and somebody dies, the family's attorney will come looking for the welder. I guarantee.

43. Jeff February 21st, 2009 12:56 pm

I think this is a great idea. But being a bit of a rope geek, i would be concerned abouth the shock load on the hook. I have no doubt that the weld could hold a one-time lower of someone out of a window. What you really need to know is can the weld hold 3 x's the users weight to factor in a small shock load. A 3 foot drop @ 300lbs would be over 1,000 pounds of force.

I know 3' is a long drop, but is generally the standard for estimating shock force. I'll see if I have any ther conservative numbers elswhere.

Great idea to expand on!

44. GrumpyChief February 21st, 2009 12:58 pm

You're weld may lift a battleship. What about the robot that welded the chain? What about the cheap steel used to make the chain? I'm sure there was little quality control on those parts. Some things you can cheap up on. Some things you can't. This is NOT one to cheap up on.

45. Truck1 February 21st, 2009 1:33 pm

Man the lawyers have really got a hold on you guys. Sure a crosby hook is better, nobody doubts that. The brothers really did a good job with it. This brother is just trying to think outside the box and did a damn good job at it. If you like it….use it. If you don't….don't. Lets be grown ups here and use our filters if need be and not let the fear of litigation run us. It makes you sound like a medic trying to get out of training.

46. Squad 1 February 21st, 2009 1:48 pm

Brothers, The first couple of comments really disturbed me when reading the postings today. Although my heart does go out to my fallen brothers of the FDNY there's no need to bash this guy. The official product is probably much better. It was tested and so on and so on. But what ever happend to good old firefighter invention. In these currrent times 150 bucks is a lot of money and if my ass is burning up in a room I know would jump out on a tampon. Yes there are alternatives some 9 mm and a beaner with a tool, hose line, or comercial devise. The point is that we get out. I say keep up the good work and lets use our heads out there. The point at the end of the day is EGH….
FTM-PTB\

47. pfd27 February 21st, 2009 2:15 pm

With no experience with these systems, this is just an observation. It is unrealistic to think that the "store bought" tool holds up 100% of the time, everytime. That's kind of an "It won't fire , the safety's on" way of thinking. Lawyers will go after the manufacturers of the crosby hook and the Petzl EXO systems just as zeolously as the home-made when a failure occurs.

That being said, I'd feel alot better if there were no welded chain (rather, looped & tacked as suggested by Brickcity1306). It wouldn't take much to do a 3 or 4:1 test on the crowbar for that matter.

48. F007 February 21st, 2009 2:44 pm

Well said squad 1. Thanks for the input, that is probably a good way to end the beating of this horse. FTB-PTB metroatlantafools

49. Jon February 21st, 2009 3:41 pm

If your life is not worth 150 bucks get out of this job. You are probably the same cheap bastid that wont buy a meal when going on vacation. It is a device like an insurance policy. No one ever thinks about their policy till they need it. As for the EXO needing to be serviced, it has sealed bearings, what could you possibly do to it? That was one of the most ridiculous statements I have heard in a while.

50. Rob February 21st, 2009 4:06 pm

Man I love this site! I am always amazed and learn so much from all of you. Like everything in our service, there are many ways to accomplish a task. Thanks Jason for the creativity. If my *** was in serious trouble, I wouldnt think twice about using it if it was all I had. Some good ideas from the other brothers, keep refining it.

51. DMAN72 February 21st, 2009 4:52 pm

Me again! Frank, I hope for your sake, your family's sake, and your department's sake you are kidding. I know everyone else already attacked you, but holy hell, brother, I supposed you don't have car insurance either cuz' you probably won't be in an accident. Oddly enough no one has mentioned that the best thing is to NOT GET IN A SITUATION WHERE YOU NEED TO BAIL!!!!!!!!!!!!!!!!!!! But hey Im a 90's kind of guy, shit happens, and if I need out, I'll use a 400 lb. woman's thong if it's laying there. Remember there are no stupid ideas, only stupid people.

52. Squad 1 February 21st, 2009 5:10 pm

Jon, Thanks for the insult. I wasn't attacking anyone or there character. Just giving my opinion. I thought thats what we did here.

53. Brickcity1306 February 21st, 2009 5:53 pm

Haaaaaa DMAN72 Ya know I did not like you at first, but you Fu^k*ng crack me up. A word of advice, I have never (thank god) had to use a 400 lbs woman thong as a means of egress but I have seen one in a

thong trauma naked (god I shiver thinking about it, someone fetch a shot of Jack please)but I can strong lee suggest for the love of god keep your SCBA on!!!! Suffocating is a far less painful death then smelling that!!!!! And what the hell is FTB-PTB?? I am sure I know and am going to kick myself for asking but who cares I am off for three days and the jack is flowing so raise a glass lads!!!!

54. Big D February 21st, 2009 5:58 pm

To all the guy's that want to pick Jasons idea to death, SHUT UP! Thank GOD you guys weren't around when Hugh Halligan, Captain John Kelly, Humphrey Pierce,and Fredric Seagrave were in the thinking phase of there dumbass inventions, because all their ideas to you are most likely the dumbest things ever thought of. I mean damn guys, Jason came up with a fix to his problem, I didn't see any part of his post that says "Add Your Two Cents Here". If you don't like it then click out of it. If you have a question of "Hey man, has this worked for you?" or "What would you do diffrent to make it better?" or even "I know this is a last resort from possible burning to death or jumping into the unknown, but have you maybe tried this?" Maybe this is your sign as to why NASA hasn't called you back to interview for that rocket mechanic job.

Good Job Jason! Thank you for thinking outside the box. If this idea helps one guy to thinkout all their options about survival then thats one less name in Emmitsburg that has to be cast in brass.

55. Jimm February 21st, 2009 7:31 pm

Fellas, Fellas, Easy now… If you like the idea great, if you don't like the idea great. Take it for what it is, it's simply an idea. Perhaps you think it's a great idea, or perhaps you think it's absolutely crazy, either way; there is no way we could all totally agree on everything.

Let's try to keep the comments constructive and not petty bashing back and forth. VentEnterSearch.com has always been known for not having the BS keyboard ranting that can be found elsewhere on the internet. Remember, that's why most people like coming here, possibly even you. –Jimm-

56. Erich February 21st, 2009 8:57 pm

I'm sure many who have looked for bushes to land in after being chased out the window wish they had any other option available. I'd rather shake out my shorts hanging at the floor below by someone's home-brew than hanging by a thread in the burn center. Something's better than nothing although any type of commercial PSS is the better choice. Don't blame guys for practical ingenuity; blame manufacturers for overpricing nylon, rope and cheap steel. Anyone ever try relying on a few lengths of 1 3/4" with a 15/16" tip? Oh well, at least one Brother in Gwinnett County will live to argue that one.

57. F007 February 21st, 2009 9:52 pm

I can't stop thinking about bailing out on the 450 lb. woman's thong. Seriously, FTM PTB and other items you might see on this website are acronyms for phrases adopted by FOOLS fraternal order of leatherheads. Go to foolsinternational.com to check it out. Or you can just click on my name F007 and it will direct you to metro atlanta fools chapter website, from there you can go to the international link.

58. brickcity1306 February 21st, 2009 10:29 pm

    I don’t get it, but I am a little drunk LOL so I will check it out later but thank you ..

59. LT February 22nd, 2009 12:28 am

    How about some more home brewing and lets find a way to put “MAN” back in the word Fireman. Great idea, I’m gonna try it out. If anyone want some BS flavored Kool-aid that NFPA and lawyers sell, let me know. My Dept. has plenty and I will send you some.

60. A/CM February 22nd, 2009 10:39 am

    If you guys want to follow an NFPA standard, try starting with 1710! How about proper manning to help us not need these freaking bailout things. No one’s arguing the rated hooks are better, but any hook is better than many of us have right now. I’ll probably make one up this week and carry it, with no fear or litigation or it breaking. I won’t expect my dept. to authorize it, if they want input in this personal decision they can buy me the rated one. Your down to the point that your bailing out, and you’re worrying about the hook? How about the non NFPA rated window sill or whatever you’re hooking to? Does the Crosby or any other hook maintain it rating after training with it? How many times can one bailout on the same hook without causing some sort or weakening? Look at all the other great ideas on this site that we don’t bash for being non-compliant: modified halligans, hooks, using tools in manners they weren’t designed for, but we seem to pass that off as getting the job done, but we can’t see this hook as a last ditch tool that might save one of us? The reason the rated devices are so expensive is the testing process and insurance costs have to be passed of to a very small number of end-users for the company to turn a profit.

61. A/C Mazzeo February 22nd, 2009 11:51 am

    OK here is my 2 cents worth. I have never posted to one of these things before and probably won’t again, but this must be said.

    Truck God Tom Brennen (may he Rest In Peace) once wrote in his artical Random Thoughts some thing to the effect of “don’t wait for your department, NFPA or OSHA to tell you which rope is safe for the fire service, get a rope and put it in your pocket, get one at the home center, the hardware store hell take a line off your boat, so what if it breaks when you’re half way down, your that much closer to the ground aren’t you?”

    I for one, am sick and tired of those who qoute NFPA chapter, line and verse (most only think they know the chapter, line or verse anyway). If its not NFPA its no good. BS! The NFPA equipment committees are made up of a bunch of equipment manufacturers who want more of your money; the term “self serving” comes to mind. The point is there is alot of good equipment out there that was NFPA compliant once and now isn’t, or isn’t NFPA compliant and never will be due to some hoop that wasn’t jumped through. How many of you still utilize 1992 compliant SCBA? We do, and we test them per requirements, replace parts as needed and they are still better than any heads up computer driven SCBA now on the market. Lots more SCBA failure out there since computers got involved, but its “NFPA approved”. How many of you wear a leather hat with

borks? Still the best hat going, but for years it didn't have NFPA approval but better than any NFPA approved plastic brain bucket with 6" face shield on the market. Plastic helmets melt and face shields melt and break, but they are "NFPA approved".

Lots of the equipment now accepted by some approval agency, was originally developed in the firehouse and used for years without these approvals some still don't have or need any approval: the halligan, rabbit tool, and patrol bar come to mind. Don't tell me they are not the same as the crow bar hook Brother Simms came up with 'cause you are taught to bury your halligan in the wall and tie off to it when you need to bailout. I'm sorry but is the halligan third party tested and NFPA approved for that use? No, but you were taught that procedure to SAVE YOUR ASS when its about to get burned up. Guess I'll stop and think about my halligan not being NFPA approved for a bailout when the room is about to light up. That will do alot of good for my life expectancy.

I don't advocate departments going out a purchasing a bunch of crow bars, some chain links, making these things and issuing them to their members, but don't sit high and mighty singing the praises of NFPA and OSHA when someone makes their own for their own use, and hey here's a news flash for ya "It will probably work" and if it doesn't he'll be that much closer to the ground and have alot better chance of survival, with a good quality of life, better than if he stayed in that room thinking about NFPA!

All these regulatory agencies have there place and do alot of good. I spend alot of time in the NFPA Standards and Codes because I do inspections but its about time that people start realizing that NFPA is not the be all, end all for everything. I agree with safety regulations and third party testing and approvals on most things especially equipment sold commercially but the people worried about this guys own escape hook not being "NF whoever" approved is going overboard.

Good job Brother, don't let the narrow minded put you down, and hope you never have to find out if that thing really works. Stay Safe Brother.

M. Mazzeo
Assistant Chief

62. pfd27 February 22nd, 2009 12:12 pm

    Just a quicky to Chief Mazzeo's point, we once had NFPA approved coats at a time when you were allowed to have removable liners…as long as the liners were sewed in at the collar!

    For those of us that are acronym inclined: CYA & SSB

63. Tom Cole February 22nd, 2009 12:52 pm

    I like it…

64. FitSsikS February 22nd, 2009 2:45 pm

Wow lots of comments.

Let's say guy comes home unusually early from work…..

Now you're trapped…somewhere where you're not supposed to be!

Then >

http://i39.photobucket.com/albums/e193/funepics/sheetyidea.jpg

Seriously, whatever gets you home safe.

65. ed February 22nd, 2009 5:18 pm

hi check out this site for bailout systems or PSS
its http://www.narsusa.com the bag is much better then the exo. note in the pic with the halligan tool the "Charleston Cleat" for bailout off roof or type 3 buildings
stay safe

66. DMAN72 February 22nd, 2009 5:23 pm

I want to see the previous photo done with a series of thongs!

67. Kelly February 22nd, 2009 6:48 pm

Two quick points:

1. Regarding rope systems, NFPA is a MANUFACTURER standard, not a user standard.

2. How do you inspect the cam portion of the Petzl EXO cam for wear? You can't. This is the same piece that Petzl insists on you inspecting on their Gri-Gri and I'd. Nor can you replace your own cordage.

68. Egan February 22nd, 2009 8:28 pm

Jimm, thank you for NOT removing this. This is exactly why this webpage is here. Discuss an idea, pros and cons.

Every article in here will not work for every firefighter that reads this, but if at the VERY least, it inspires thought, debate, and future ideas.

Take this webpage for what it is, a place to discuss, learn, ask, and seek out knowledge from others.

Stay safe everyone.
~Egan

69. Jimm February 22nd, 2009 9:41 pm

    FitSsikS… NICE!

    I'm pretty certain that if I came home early, and you needed to escape, I would not have a smile on my face. Thanks for making me laugh though. -Jimm-

70. FitSsikS February 22nd, 2009 9:45 pm

    I wasn't sure that you'd recognize yourself!

    Nyuk nyuk!

71. deflep86 February 23rd, 2009 2:42 am

    +1 for do what you gotta do to get out alive. Seeing ingenuity like this always gets my brain working.

72. deflep86 February 23rd, 2009 2:42 am

    +1 for do what you gotta do to get out alive. Seeing ingenuity like this always gets my brain working.

73. DMAN72 February 23rd, 2009 1:00 pm

    I just had to say that I just got my shirt. They are awesome. If you are reading this, buy a shirt.

74. Neo827 February 23rd, 2009 11:14 pm

    A lot of interesting stuff flowing through this topic. A few of my own thoughts…

    First, all forms of FF survival are based on creativity, be they head first ladder bails or breaking through a wall. Whatever works is better than the alternative. The focus given to rope bailout the last few years has been great, and I know we all regret the cost of bringing it to our attention. Esentially, we're talking about a parachute sytem for the fireservice. I'm sure when the actual parachute was invented, there were many who said it would never be needed, never of any use. Hopefully ropes will one day be a standard issue like a parachute for pilots.

    That said, I like your thinking! I don't think you can argue that a manufactured version may be safER, but hey it may be a perfectly viable option. Might I suggest a cheap addition? I'm concerned about the rope's acute bend over such a small loop in the chain. Add 6in of plastic/rubber tubing to your rope where it runs through the chain. It may help with abbrasion. As far as chain and weld strengths, I have no idea. Again, if the option is burning, go with whatever works. A few years ago before the black sunday fire, I stole an idea from and FDNY SOC firefighter who had six feet of hardware store steel cable around his waste crimpped off with carabiners on the ends. He said hey, at least it will get me a few feet out the window and it won't melt.

As far as the exo and other systems that have variable speed desent control divices (such as the CMC Escape Artist that was pictued a few posts ago), they are GREAT because they give you hands free edge negotiation. In other words, anchor it and jump out the window. You don't need your hands on the rope at all, and you can worry about lowering once you're out of the oven. This is a major plus because studies have shown when you get trapped in a situation where its hit the fan, your body's dexterity deteriorates, so you don't want to be worrying about maintaining perfect tension on the rope, such as in the simple wrap it around your bottle, grip it and hold method. This works great in training, but I dont how with it I'll be trying to escape a flashover. So, to have an auto locking device is a great asset.

The downside is if something in the system gets jammed, you're left hanging there. I've rigged up my own system, a version of both the exo and cmc escape artist, and added a carrabiner into the mix that will allow me to escape the whole mess should something go wrong. As far as cleaning the exo, yeah its tough to do. I'm an avid climber and have used a grigri for years without a problem and have never had to clean it, and thats with muddy wet ropes moving through it at times. All gear needs to be inspected and cleaned, but I don't think that's a reason to discount the exo at all. Its a great system and certainly the most tested one out there.

The big picture, though, is that this bailout stuff is again based on getting out alive. Its interesting to note that we're not the only folks interested in these systems. Since they've become the rage, some the military special ops teams have caught on as a possible bailout option for getting trapped in urban combat situations. While I haven't personally seen this, I've heard of training evolutions where some crazy special ops guys were bailing out on VERY improvised anchors with success. For example, the halligan bar at an angle across the window? These guys rolled up a magazine, tied a rope around it, set in the window corner and it held as an anchor.

Bottom line, the research has been done and there are full systems out there that you can buy that have been well tested. NONE are perfect and no one system will fit every dept.'s needs. I don't have a store bought system, but what I do carry is a mix of a bunch of different systems rigged to meet my requirements.

If you want to improvise your own, sure its a risk but hey the next big thing might just be what you rigged up between runs that no one thought of before. The first parachute probably started as some sheet in a garage. Whatever gets you home safe is worth carrying.

Great stuff folks, sorry to any of you who actually read this whole reply.

75. Walt Lewis February 24th, 2009 1:04 am

Dig the ingenuity. To repeat others, if you like it, try it. If you don't, don't. It truly is a risk to use something homemade, but, each of us should understand what our position in life is and to what are willing to risk for our necessary gains.

On another note, I also like the late Andy Fredericks phrase, "if you put the fire out, you don't have to jump out the window." This is coming from an Engine guy… pretty profound!

But in the case of last ditch effort, desperatime times call for desperate measures. I have been blessed to work for a dept with innovative guys who sold our chiefs on installing personal escape packs in the mid 90's, with the expected anchor being a halligan and our harness being 1" webbing. Things have gotten better since then. Thanks Mike. Thanks Larry.

Another thought- If it weren't for creative thinking, I'd be writing this on a stone tablet, so… nice work bro.

And thanks for keeping the discussion-making post up. It would be a bland world if we all thought the same.

76. RT158 February 24th, 2009 11:15 am

    Thank you Walt, Fredericks did put it best. There are plenty of things that we should be worrying about rather than a hook!

77. Jimbo February 24th, 2009 3:13 pm

    If the questions about the chain holding are a concern, why not weld a 'rated' carabiner to the hook.

78. sal February 25th, 2009 11:23 am

    Welding a carabiner on to the hook will not make it a rated device. As we all know metal is only as strong as the welds holding it together. It would definatly have to be a rated steel biner. I like the cosby hook because it is forged. http://www.awdirect.com/ba-grade-70-j-hook-with-eye-attachment-8-in-n711-10/hooks/ something like that mini J-hook that is forged might be a little better. My dept has the bail-out kit built into our SCBA and all it has is a carabiner on it, I carry a crosby hook just in case I dont have a tool with me . Before u guys tear me apart, I am in an engine company but we run as a deptmartment so any member can get on any truck.

79. Ryan February 25th, 2009 2:09 pm

    Beating a dead horse here but most crow bars are also forged. They are obviously not as high of quality alloy as a Crosby hook but forged nonetheless. Just a thought….

80. Capt. 54 Truck February 26th, 2009 12:06 am

    Great idea, which is why I visit this site. Might not use it myself, but maybe I can come up with an adaptation that suits me.

    So there are departments out there that actually issue webbing and carabiners? Wow, you buys have it made! The kit I carry consists of 40' 8mm rope, a carabiner and a rescue 8. All of which I purchased on my own. It's carried in a bag that I carry on my waist with a leather truck belt. I cut off the cheap clasp and added another carabiner to hold it. Will it work? I hope so. But hell, anything is worth a try.

Stay safe Brothers.

81. RT158 February 26th, 2009 12:37 pm

    My earlier post wasn't meant to discount the EXO system as a unit, from everything I've seen of it it does appear to work well. However the rope in the EXO system can't be removed from the the device or from the Crosby hook such as with the GriGri. Another down fall to the EXO is that it is only designed for use on one side of the body and in conjunction with the Gemtor FDNY spec harness, a nice sales gimmic for all companies involved.

    I personally have purchased the CMC escape artist. It is basically a mini version of the 540 belay device and allows for hands free exits as Neo827 stated. I have two auto locking carabiners and 35 ft of 8mm rope and keep it in a small pouch on my hip. It works the same as the EXO system, but it can be taken apart and cleaned if needed, carabiners removed if they become damaged, and costs a lot less.

    Also for anyone that is not familiar with the Petzl GriGri that has been mentioned a few times now, it is the device that the EXO system was designed from. IT IS NOT FOR PERSONAL ESCAPE USE. Although it works in a similar way, it is designed to be used with larger diameter ropes, much to large to be practical for escape rope, and it is meant to be belay device particularly to climbing activites. Don't use the GriGri as the cheap method of building your own EXO system. It could lead to serious injury or worse.

    Proper initial attack line stretching and attack, stretching secondary back up lines, the right form and timing of ventilation and good situational awareness go along way in avoiding the need for which ever system any of us choose to use, weather purchased as a system or made in the back room of the fire house.

82. Brickcity1306 February 26th, 2009 2:16 pm

    RT158, I am not a NFPA book head and I do not drink the cool aid but do you think because you are using patented equipment in a "non approved manner" that you would be held any less liable then Jason?? That being said I like your set up and am going to check it out for myself.

83. Chad February 26th, 2009 2:35 pm

    I would go with something that has been through a substantial amount of testing. Not the worst idea I ever seen, but spend the money on the real deal. (the ones that are mass produced passed saftey testing).

84. youngin February 26th, 2009 7:03 pm

    i like it . if the world goes to shit you can get out quick . as for the weld as long as you dont put any sudden pressure on it it should hold. (such as loosing grip and then catching you self)but there aint nothing wrong with this

85. Josh February 26th, 2009 8:55 pm

    Scary idea…..I have the Petzl Exo and thats the best system out there….hands down! Stay safe out there.

86. jeremy March 3rd, 2009 7:27 pm

> I think the system looks pretty good. If it had come out prior to the petzl system it would be all the rage. If you have trained with it and are confident in its performance go with it. It sure beats the swiss seat and 8mm we were using years ago. Perhaps you could provide a video of your system, how its carried, how it deploys, and how the actual bail out goes. That may help the nay sayers to better understand.
> Nice Touch!

87. Kelly March 4th, 2009 5:16 pm

> Here's a video of my setup in use. NARS hook, CMC escape artists and belt.
>
> http://www.rescue2training.com/custom.html?id=4146

88. DMAN72 March 4th, 2009 11:55 pm

> It's pretty obvious that this was not your first rodeo with this system, Kelly. Point being that what ever system you use, you better be pretty effing good with it. A bailout is no time for OTJ training.

89. FrankTheTank501 March 7th, 2009 4:30 am

> Kelly February 21st, 2009 8:21 am
>
> Never said I didn't agree, but you know us stupid people, it was meant to be sarcasim. However there is this thing called training in the fire service and if you do not have a gee wiz toy or the crap is coming down, there is nothing wrong using the things I talked. Have ever trained bailing out of three story window using a hoseline? Hanging out of a 3rd floor window wtih webbing/prusicks/rope? Have ever trained bailing out the window with your haligan buried in the drywall and a piece of rope? You do not need some expensive gadget to save your life. It comes down to training and knowing how the use everything on the fireground and most importanlty good training on fire behavior and building construction and good retention of that knowledge will allow to never put yourself in a situation. Ask yourself this how many brothers have survived and bailed out of structures for decades before all these toys hit the market?

90. FrankTheTank501 March 7th, 2009 4:38 am

> Remember there are no stupid ideas, only stupid people.
> Thanks for the compliment DMAN72. Now put away your Starwar toys your mom is calling you its bed time.

91. Kelly March 7th, 2009 9:46 am

> Frank,
>
> I agree, it all comes down to training; and I'm sure that I didn't call you stupid. I thought that maybe I misread your post the first time and completely missed your sarcasm. Well, I think I'm still missing it. The web isn't the best medium for being able to read into somebody's sarcasm though, so I'll accept that.

I also agree that you do not NEED an expensive "gadget" to save your life. However I think that it is a disservice to firemen who have died before us, who could have used this stuff, to not find a better way to save ourselves.

Similarly, buckets with water put out fires, why do we need these fancy "gadget" firetrucks? It's a pretty extreme simile, but the point is the same.

92. Capt. Dave March 9th, 2009 7:26 pm

If something designed will help hold a door open, (block of wood, nail), hold a flash light for you, (rubber strap on helmet)anything that makes our job just a bit easier…I've always said go for it as long as it doesn't go against safety. With that said…here we go,
The fire service has never been able to get along with itself. There has always been struggle between companies…Departments, etc. Therefore we have never been able to look after each other in a unified force. Because of this someone else has stepped in to make sure we are "safe"….NFPA…OSHA…PESH…etc. If we had been able to look out for one another way back when, we wouldn't have to jump through so many hoops that others REGULATE us with. We could be regulating ourselves, but we…the fire service…only have ourselves to blame.

Think of how many things we have to conform with, standard this and standards that…

Don't get me wrong…WE need it in some areas. I'm from NY and we just had a rope standard stuffed up our.."you know what". Great, a rope to bail out of a bad place….learn building construction and fire behavior and put the fire out..guess what…you don't need to bail out now. I'm in a small Dept. of less then 30 members with a total operating buget of $52,000 a year, (to include aparatus payments)
Who's buying my rope for me? 3/4 of the houses in my district are mobile homes…what do I need a rope for? the standard in NY, states we have to be protected to an area we may respond to…mutual aid districts. Now what?
Stay safe and focus on the basics.

93. cornbread March 16th, 2009 8:28 am

Good idea Jason. I would use it in a heartbeat. For all the naysayers typing on this site. Think about what this site is for…to spread the wealth of knowledge and ingenuity to the brotherhood. It gives the poorest firefighter, the richest firefighter, the biggest department and the smallest department to feed off somebody's else's idea and either hone that to there needs or assist in giving an idea to improve it. For all of you who knock things and say "FDNY does this and they do that" My question is….if FDNY crapped in a box and put there name on it…. YOU WOULD BUY IT because your close minded and ride other people's coat tails. Show some love, respect and pride or shut the hell up and comment on some other website. Jason, keep up the good work and ideas. Remember the ones who came before us, and NEVER forget 343!!

94. 5Lt March 17th, 2009 11:13 pm

Ok, next time I'm in a room about to light up and I need to get out I will grab a frozen snickers bar if that's all I've got. Whatever works to get me home, ALIVE. I'll probably make one to use, even in my "suburban" area. Keep thinking like it won't happen to you and you'll be a statistic soon enough. I'm from a volly dept. (oh no not that word again!) and we don't even get issued rope.

His system probably isn't better than a commercially produced system but heck, if it's all I can afford then that's what I'll get. Kudos to you for having enough sense to care about your own a**!

95. DMAN72 March 18th, 2009 8:45 am

Plus, with the Snickers bar, you will have a tasty treat once you get to the ground!

96. pfd27 March 18th, 2009 5:21 pm

Damn straight DMAN!! They help me stay in shape (round is a shape, isn't it??)

97. 5Lt March 19th, 2009 5:04 pm

I have always been a little partial to the Snickers. (And it shows!)

98. Scott March 19th, 2009 11:51 pm

I gotta go with the the first guy to comment on this page. Yeah it seems cool to have something in the pocket of your gear that you made yourself, and if it's something like a chock or tool sleave, I agree. But when it comes down to what's between you and a drop that would kill or cripple, I'll go with tried and tested, not home-made.

99. 5Lt March 19th, 2009 11:54 pm

Ha here we go again.

100. Scott March 19th, 2009 11:58 pm

Look man, all I'm saying is that I'd rather spend the extra bucks on a reliable system than on an improv hook I or one of the guys in my house threw together. I'm not saying it wasn't a clever idea.

101. 5Lt March 20th, 2009 10:26 pm

Oh this debate shall never end.

102. DMAN72 March 20th, 2009 10:34 pm

Holy s@#t, LOOK OVER THERE!!!!!!!!!!!

103. pfd27 March 21st, 2009 11:44 am

That's not funny, DMAN! I just snapped my neck!!!

104. DMAN72 March 21st, 2009 1:55 pm

You can still move your fingers to type. Id say you're ok! Granted, I know this will probably start an argument over prematurely clearing c-spine injuries without ER or X-ray evaluation.

105. Nate999 March 21st, 2009 3:37 pm

I cannot believe that someone who is not a physician would be so quick to dismiss a potentially life-threatening spinal injury, especially without further evaluation and x-ray in the ER. If your department ran as many calls as mine, you'd know of the serious potential for unseen injury! At the very least, you should have attempted a full neuro exam via keyboard, duh! Anyway, I have to go eat my Snickers before it melts…80 and sunny here in FL

106. pfd27 March 21st, 2009 3:45 pm

I bet he slept in a Holiday Inn Express last nite…

107. DMAN72 March 21st, 2009 6:25 pm

CALGON, TAKE ME AWAY!!

108. DrT March 21st, 2009 6:25 pm

SO as the volly FD who's an erp let me not encourage it, but state that the essential functions seem fine… (sense of humor, typing, spelling, lets see what else…) :>

109. NorthPhillyCowboy..... March 23rd, 2009 7:31 pm

i don't like it…..

110. ATLJake March 23rd, 2009 9:55 pm

Just a thought or two; a fellow jake on my crew had a crosby hook and I wanted to put it to the challenge- old school vs new school. I am used to, and comfortable with, using a 50' section of 7 mm rope with a figure 8 on a bight out of a small rope bag. When I need it, and have, I put the halligan through the loop, into the corner of the window, around my airpack, hold on with one hand to the rope and the other to the bar and out I go. The challenge was timed bail out from second story wood frame window, old school 4 sec., new school 7.5 sec. (3 times back to back, same numbers).
I noticed that given the majority of our building construction, wood frame, that the extra time was spent trying to find a good purchase point for the crosby where as the halligan bites in the same way every time. Having grew up in N. Jersey and a working knowledge of the majority of building construction in NYC I am wondering if the crosby is designed to work with that specific application and not so much the wood frames we have in the south, and most other places as well. My opinion from observation, I did not feel comfortable

throwing this hook into the windows that we encounter on the reg. Just look at the way most of these windows are installed, a few nails here and there. I don't want to fall to the ground with a window to follow. I am not a rocket scientist, only a Jake that has looked a little deeper into changing something that is proven to work, and as my little experiment demonstrated takes less time. Would the brothers in NYC still be alive if they just had some rope or is the hook a necessity. R U guys in NYC taught to use the Halligan in the window or something else? I do like the idea that he had with the crowbar but I will stick with old school for now.

Check Cashing Store

For some reason we have recently had a significant increase in the amount of check cashing stores in Central Florida. We're pretty sure they are increasing across the nation. These business typically have a large amount of cash on hand, and therefore take security pretty seriously. This translates into difficult forcible entries, and interesting search problems.

From the outside this rear door doesn't look like much. (photo above) This particular door doesn't display the tell-tale bolts alerting us to an interior drop bar type or any other hardened locking mechanism. Notice the custom use of expandable foam at the bottom, they must not use this door regularly.

But from the inside we can see something we may not have expected. (photo above) This type of lock secures the door on all four sides (hinges on left), making forcible entry much more difficult. That's the point! They don't want anyone breaking in, even us. There are a few different forcible entry options, one will be explained at the bottom of this page.

The interior of these occupancies are typically divided in half, The front half for the customers, and the rear half for the employees. Bulletproof glass is frequently used as the interior partition. This partition uses a type of door that we had not seen previously. (photo above) This door remains closed most of the time. Notice the extra lock at the top portion of the door.

In this photo above, you can see this extra door (mini door) portion on the right hand side. The main door would normally be in the closed position. This mini door prevents the main door from fully opening. It was difficult to take a picture of it as it normally sits (in the closed position.) Imagine the full sized door in the closed position. The mini door to the right prevents the full size door from opening fully. This is done to create a tiny area in-between the two doors that is only large enough for one person to fit through at a time. If you were coming from the front room, you would open the door, it would hit the mini door, you would step to the side, close the main door, and then be able to enter the other room. This is done to prevent people from bum-rushing the back area.

Could you imagine having to deal with this during a search? We know these descriptions and pictures do not do it justice. We encourage everyone to go out and pre-plan these occupancies if you have them in your area. Spend a little extra time with the business owners explaining to them why you are interesting in looking around. We can tell you from experience, that they may be a little hesitant at first. Explain to them that you are only doing it to keep them safe.

The photo above pictures the "Doggy Door" cut. Battalion Chief Jeff Pindelski from Downers Grove (IL) Fire Department sent in this idea.. BC Pindelski is also a co-author of the Delmar publication Rapid Intervention Company Operations (RICO.) He pointed out that the hinges remain an option on the outward swinging door, but this too could be very useful method. Once the bottom section is pried open a firefighter could reach or crawl in, and manipulate any security devices on the door. The beauty of this option is that most of the locks added to the door will be located above the midline. This option should make pretty quick work of forcing most doors.

I have never tried this cut on one of the doors found in the check cashing stores, but it looks like it may be a viable option. A special thanks goes out to BC Pindelski for sending in this awesome idea! -Jimm-

What's Behind Door#1?

February 13th, 2007 | Category: Outside Functions

So what is behind door #1? It is very important to read the door, to determine what's on the other side. We have shown a number of pictures on the site about the "drop bar" and had a few discussions on methods to force entry on some of the unique ones. Check out the supplemental page to read a description about these two doors.

Special thanks goes out to Lt. Matt Rettmer, Castle Rock Fire & Rescue Department and Firefighter Chris Naff, Engine 1, St. Johns County Fire Rescue for sending in these photos.

9 comments

9 Comments so far

1. fireman2094 February 13th, 2007 6:25 pm

   Looks like we could "plunge cut" either door and use the framing square or Boston Rake to open either one. Difference being the side of the bar we cut. Door #1 would require us to cut under the bar so we could knock it out of place.
   http://www.vententersearch.com/framingsquare.htm

2. Truckie942 February 14th, 2007 1:27 am

   Door #1 cut alongside bolt heads at 45 degree angle to cut the bolt heads off, Pike end of halligan to push bolts thru the door, bar falls off door. Force door conventionally or use Circ saw to cut locks. Door number 2, you can also use the circ saw to cut the bolt heads off….bar drops off the door…easy entry since no other locks to contend with. Just another method!

3. Chris February 14th, 2007 3:55 pm

   After sending in door # 1 my crew started to talk about different ways of forcing it. The previous ways would work great, but we also though of the K-Tool. Fits over the outside pins very nicely. Just break them off and force it normally. Thanks

4. T.Young February 14th, 2007 4:31 pm

   Would the Doggy Door method not also work for Door #1?

5. Egan February 15th, 2007 9:06 am

   Thank you for submitting the pictures.. Creates some great discussion and thinking.

6. JM February 16th, 2007 10:09 am

   I like T. Young's idea. Even though it would be low, it might work for both doors. Great pictures!

7. 22truckie February 16th, 2007 7:04 pm

   I would agree with truckie942 for most cases but when presented with a rear door with only 4 carrage bolts and no other locking hardware would it be safe to assume (hate using that word)that this is probably panic hardware and is the only locking device (know there is always some weird exceptions)? This seams to be the case in our response area. If this is true, then the plunge cut with the circ saw and "T" square for tripping the device seams like it would be a little faster. Also on our truck we took the great idea of the "T" square and ran with it a little further: Was going to make a folding one so it could be stored flat and attached to the commercial irons. Found one, however, at the local hardware store aready made up! Just used the old "inner tube rubber band" to attach it to the sledge hammer on the irons and she's ready for work. Will take a pic soon and post it on "Tips From the Bucket".

8. Mr. Jiggy Fly February 17th, 2007 11:06 am

I'm not so sure I agree with those who think the T-Square method is the way to go here… In my neck of the woods, panic hardware is generally installed with no visible exterior hardware. Usually when we see exterior bolt heads its some kind of drop bar, which may or may not be a formidable enemy.

I'd lean toward cutting the bolt heads off, or using the sledge to drive them through the door with the pike of the halligan… Or, cut a good sized triangle in the center of the door to facilitate manually dislodging the drop bar.

I've got some similar exterior pics, with interior shots too. I'll send 'em in.

Then there's always the Fox Police Locks (which the above pics are not) that also have visible exterior bolt heads, and through-the-lock is the way to go.

Be safe Brothers.

9. Mitch Lake April 1st, 2007 11:53 pm

what if you had a 6" hole saw driven by a pnumatic drill
(read scott bottle)and you could cut a hole for inspection,reach through for removal of locking hardware, even access for a nozzle under the right conditions.

Low Drop Bar

Lieutenant Brian Bull from Clermont Fire sent in these photos of a different type of burglar bar installation. First of all you will notice the bolt pattern that should instantly alert you to some type of burglar bar installation. But look closely at the location and pattern of the bolts. It's a little bit different form the typical installation. Another important thing to size up is the hinges. What hinges you ask? Well the hinges covered by the "burglar proof" strip of metal running down the right side of course.

The picture below is a shot from the inside. You can see the metal reinforcement that corresponds to the bolt pattern we saw on the outside. It's similar to every other type of burglar bar installation, however, it just on the bottom of the door. They also added a small throw latch on the top of the door for additional security.

Below is a close-up of the burglar bar brackets. The burglar bar obviously drops in and spans from one side of the door frame to the other. This particular drop bar was made out of metal. The other thing to think about are those brackets... Those brackets stick out from the door about 10"-12". This would create a significant trip hazard even when the door is opened.

A special thanks goes out to Lt. Bull for sharing these photos with us.

Door #3

March 04th, 2007 | Category: Outside Functions

Firefighter Chris Johnson from Concord Fire, Engine Co. 1 sent in these photos of yet another unique drop bar installation. From the outside it has the tell-tale signs like any other drop bar installation. Carriage bolt heads, "blank" in place of a door knob, and covered latch assembly. Click on the supplemental page to see what's waiting for us on the other side. In addition be sure to check out the safety memo (on the supplemental page) that Concord Fire uses to share this important information.

4 comments

4 Comments so far

1. Chad Cox March 4th, 2007 1:49 pm

   http://www.iaff135.com/pdf_files/Heat%202006-2.pdf

   Scroll down to page 9 to read the article I wrote regarding drop bars with these indications on the exterior. Yes you are still going to have to attack the slide bolts with conventional methods, but you can have another option for getting the drop bar out of play. Any questions,want the pics, email me:
   chadsworthks@yahoo.com
   KTF
   Chad Cox
   Wichita Fire Dept

2. Mike March 5th, 2007 1:02 pm

   Chad thanks for sharing that site. Is that something that Wichita updates monthly or quarterly?

3. Chad Cox March 7th, 2007 10:06 pm

quarterly The new one will be coming out within the next few weeks, with the permission of the editor, I will forward it on to you

Door #3

Firefighter Chris Johnson from Concord Fire, Engine Co. 1 sent in these photos of yet another unique drop bar installation. From the outside it has the tell-tale signs like any other drop bar installation. Carriage bolt heads, "blank" in place of a door knob, and covered latch assembly.

From the inside you can notice the addition of four barrel bolt style locks.

Here's where it gets interesting. Due to the depth of the rear wall of the structure a "typical" drop bar would not work. So the business owner had to get a little creative. When asked, management "assured" that the drop bar is removed and locks are disengaged any time ANYBODY is in the store, but we all know how that goes.

Here's a shot of the entire installation.

Engine 1 found this installation during area familiarization, and happened to have a camera with them. Not only did they share these photos with us, they shared them with the rest of the department! Click here to check out the safety memo that was sent to everyone in the department. It contained the photos and full description of this unique installation.

I cannot say enough good things about they way Concord Fire is getting this information out to all the troops. This idea kicks butt!

Don't forget the basics

April 06th, 2007 | Category: Outside Functions, Videos

Today's fire service is getting more and more technologically advanced. Some of this technology works well and is a welcomed relief to our fire ground operations. Some have been implemented with lack of adequate testing and research and have been proven inefficient. However, it has been embraced due to being technologically advanced comparative to traditional old school methods and thanks to some slick- tongued salesman from corporate America who sold it to management as the latest greatest. Thanks to Captain Adams of Sacramento City Fire Department training Bureau and Mike Ferguson Sacramento City Fire

Department E2C (Downtown Delirium) for this video focusing on the basics of forcible entry into a structure. During Probie School we have learned the basics of tool operation such as fork in adz out techniques in relation to halligan use and operation. This is the basic method in which we operate however there are many ways and uses for each of our tools. You and your mind are the limiting factors to what a tool is capable of. This video shows a variety of other techniques using the same tool such as the baseball swing. This is a great technique on wood doors when searching in areas such as roomers, older hotels, apartments ECT. and during low visibility operations where striking tools such as during traditional two man operations is often times difficult at best. Today we often utilize the rabbit tool or hydra ram for our forcible entry operations. Remember it has its limitations, it is not appropriate for all situations and it can fail. We absolutely must maintain proficiency with the basics and basic tools. Remember these techniques just as with hydraulic based tools should always be based upon your size-up and situation.

"Never relinquish basic firemanship skills in leau of technology. Even the most advanced technology can not make up for poor tactics and judgments. " quote from B/C Mike Wilson, Charlotte Fire Department

Click here for the video

21 comments

21 Comments so far

1. Mark April 6th, 2007 11:02 am

This is an ecellent video. It is a great way to review.
It shows a lot about the brothers in Sacramento to include the bloopers also.

I think every Firefighter in america should learn and ingrain the comment from Chief Wilson.

2. Rhett Fleitz April 6th, 2007 11:49 am

   Great video.

3. Lt Robert M April 6th, 2007 11:58 am

   Great current video, no fluff just the basics, its nice to see the ease of the Halligan in full use, this is the right video for forcible entry to show a new recruit. I think we all can relate to the bloopers though, keep the good stuff coming.

4. 11 Truck April 6th, 2007 7:54 pm

   The video is great! Nice clean skills. Bloopers are always a plus as well. Keep up the good work and as always keep this stuff coming!

5. Mike E April 6th, 2007 8:36 pm

   Excellent video, good stuff to show the rookies and a good review for others. Great job!

   FTM-PTB-EGH

6. LT. BENWAY April 6th, 2007 9:07 pm

   GREAT VIDEO, I WILL SHOW TO MY SHIFT. BUT REMEMBER, EYE PROTECTION. COVER THE EYES, THEIR THE ONLY ONES WE GOT!! BE SAFE, WE ALL GO HOME.

   P.S. LOVE THE SITE JEFF

7. bigpoppafire April 8th, 2007 6:34 pm

   Good vid…during this video you may want to consider some door control rope. Be agressive, but don't "commit" to what may be waiting for you on the other side of that door.

   stay low, look high
   Caro ECFR E319

8. AJ April 9th, 2007 10:55 am

   What a great video. Excellent back to basic stuff. I love it. Little weak on the eye protection. I mean, there is no need to risk an injury while training. Other than that our Brothers out west have done a great service to the service with this video. Thanks!

9. "Chop" BCFR 82-A April 10th, 2007 8:24 pm

   Excellent video……Thanks to the Brothers of Sacramento for the time to educate and refresh the things that we take for granted.

   Also, one thing to mention is to keep control over the door when forcing such as using vise grips with a chain attached.

   Sacramento…..Thanks again for publishing this as well as the bloopers

10. Shawn Roark April 14th, 2007 5:32 pm

    I watched the video Tues. Night While I think we all knew how to do this it always pays off to look back over things!

    Wed. After I was riding backwards and my company was first due on a single family job. I got to force three doors one outward 2 inward doors into a house and back room!

    Thanks for the free training!

    Stay Safe
    FTM-PTB

11. Brian April 22nd, 2007 10:16 pm

    1)Shock
    2)Gap
    3)Set
    4)Force

12. dj stone April 23rd, 2007 9:48 am

    splitting the door jam is pretty sweet. nice work

13. Chris - Concord Engine 1 April 27th, 2007 10:15 am

    Brian -

    Add:

    5) Control.

14. Tyler August 28th, 2007 9:24 pm

I want to thank all for the sweet web page I recently found it from a fellow firefighter and I have passed the word of it. I watched this video three weeks ago, I'm a intern firefighter and used the baseball swing with a pick-head axe on an inward swinging door on a structure last Friday I found it to be the sweets thing. Keep up the great work.

15. Campbell November 2nd, 2007 9:39 pm

    great video. just the basics, put it in and swing…none of the "insert the adze 2 inches above the main lock.." BS that there usually is. just do it

16. Jack December 1st, 2007 9:00 pm

    The "strike" man should take a "knee" and swing with his axe vertical to allow for a larger "strike" area with the Halligan.. It's very diiicult in a smoke condition to swing and connect with the small 1 1/2 surface of the adz and flat head… always cross your tools…
    J Courtney, Captain
    Truck 1
    Plainfield NJ

17. Patrick Tetsall December 27th, 2007 12:26 am

    Really great video. The medium of videos are essential to stay up on the basics when we have long down time between fires and forcible entry possibilities

    Patrick
    Truck 5
    Berkeley Fire Dept
    Berkeley, ca

18. brent w December 29th, 2007 5:47 pm

    Nice refresher video. Besides the eye protection issue, there was a couple of times that the guys were using quite a bit of shoulder on the doors. We've had guys diong damage to their shoulder when the door doesn't move.

19. brent w December 29th, 2007 5:50 pm

    Also, compliments to the guys using hand tools instead of their foot on the doors. Looks great on video, but there are plenty of tools that will do the work too.

20. "sponge" December 31st, 2007 12:08 am

    Great video! Shortly after watching this we were faced with a forced entry situation on an outward swinging wooden door. Only difference is there was a wall running perpendicular to the knob / lock side with only about 3-4 inches of space in between. Needless to say using the fork or adz end off the bat was not an

option. What we found to work was placing the pick of the haligan in between the door and the jamb, just below the dead bolt. A couple taps with the axe gave a "widened" purchase. We could then place the adz all the way in and pry open.

Interior Security Bars?

June 12th, 2007 | Category: Outside Functions

Lieutenant Mark Silverman from Cocoa Fire Rescue sent in this photo. If you look close, those security bars are on the inside of the window! He reminded us that condominium associations usually dictate what owners can do to their units. Specifically, they dictate modifications to the exterior of the building that affect the appearance (they are usually not permitted.) This ingenious condo-owner responded by installing the bars on the inside. I guess they can't tell you what to do inside your home!

When faced with a situation like this, we can only imagine that it would make forcing and clearing the window, and removing the bars slightly more challenging. Not impossible, just challenging. The one obvious drawback is not being able to remove the bars without compromising or "taking the window" during proactive RIT functions.

15 comments

15 Comments so far

1. Squadguy June 12th, 2007 11:33 am

   Better to take the windows now during proactive RIT than have to waste time doing it after a member is pinned down in that room!

2. Evan Swartz June 13th, 2007 2:57 am

   Rebar cutter anyone?

3. 4 Roof June 13th, 2007 8:40 am

   Evan (and anybody that uses rebar cutters)-

   Can you give me some thoughts based on your experience with these tools? Each of our truck companies was recently issued a unit for the purposes of removing window bars (the first officer to notice them is to notify the incoming Chief who will add a company to assist in removal, other RIT stuff, etc). We've been given a ton of rebar stock to practice with, but have been as of yet unable to "find" a set of window bars to cut. Personally, until I get a chance to try them under realistic field conditions, I'll still with the metal saw and irons. I'd love some feedback.

   On the photo – I'd be very interested to see how those particular bars are secured to the building.

4. Evan Swartz June 13th, 2007 5:06 pm

   the rebar cutter we have is made by Holmatro, its a very nice tool to have. Quick and easy. If your department does not have a rebar cutter, Cutter Edge makes a black diamond blade which i used the other day and it was faster then the rebar cutter.

5. Marc June 13th, 2007 5:06 pm

   It's hard to tell from the pics but they don't look real stout.
   If we're talking about how do we get this window cleared out, I'd say try it with what you have. I've seen a lot of "Mickey Mouse" sh!t in peoples places. They may pull right out!

6. jon June 13th, 2007 10:48 pm

   Those are Mickey Mouse BS bars. If you tried a rebar cutter on them you would be wasting your time. The rebar cutter works on the fact that rebar is cast not forged. It actually cracks the casting, it doesnt cut anything. This window bar garbage can most likely be taken out with a few meaty swings of a halligan, I would not try a maul as you need good aim or you either brake the handle or your hand! (thats experience talkin folks) If not attack the hinge side (the one without the lock or slide bolt) In NYC, the Battalion calls an additional tower ladder immediately upon discovery of a window with bars in it. Our window bars are usually slide type of a scissor like construction. The lock is generally protected so we always force it from the hinge side as the screws are generally pretty weak.

   Stay Safe

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   Stay Safe

8. T.Young June 14th, 2007 10:48 am

   Ive been told you can also use spreaders and spread them off the mounts.

9. Evan Swartz June 14th, 2007 3:57 pm

Sometimes the old saying comes in, “try before you pry.” Many times if you pick the bars up the will unlatch and swing in or out.

10. trevor June 14th, 2007 9:19 pm

    I agree with jon. Most likely the wall isn’t masonry on the inside and the mounting screws should be easily pulled away or sheered with the irons.

11. Dave June 15th, 2007 11:51 am

    From the looks of it, those bars are not mounted too “securely”. Like Jon said, a few extra swings with a halligan would do the trick. In cases where people do stupid stunts like this, you can usually be assured that it wasn’t done by a professional installer. The homeowner, with his trusty black and decker 4 volt screwdriver, did the install. If they are installed in a bit more “meaty” way, then, like it was mentioned, RIT needs to go to work finding a way to clear it.

12. jon June 15th, 2007 5:46 pm

    Just be careful and coordinate your venting with the first due officers, you do not want to add the oxygen or draw the fire to them.

13. ves9102 June 18th, 2007 5:32 pm

    “Just be careful and coordinate your venting with the first due officers, you do not want to add the oxygen or draw the fire to them.”

    Exactly!!! the RIT may be a little too pro active on a situation like this. Seems like a k-12 will still make the same impression to me though if needed. ALTHOUGH, this one pic does not show the entire size-up of this property. Are All the windows like this, if so, depends on the RIT and conditions.

14. Jack June 22nd, 2007 11:38 pm

    The biggest problem we have had with those rebar “lobster” cutters have been the batteries. The unit has a battery indicator LED set on the side of the unit that may read that the battery is full but when you go to use it under load, it may or may not cut the window bar due to the battery being worn out.

    That being said, I feel they’re unreliable. However, they are small enough and light enough to grab AS YOU GO FOR THE METAL CUTTING K-12. So give it a shot, if it works…great, if not have your “partner” at your feet and ready to cut.

    SIDENOTE: Have also seen a few guys think the tool won’t cut, when it was simply the release nob that was not tightened prior to cutting…..

    Stay safe…good stuff yet again!!

Rex Hook

May 18th, 2010 | Category: Tips

Sgt. Pullen from DCFD Truck 4 sent in his idea of "making it work" with another rex tool modification. The tool was created by removing the collar from a mini rex tool and adding it to a shortened halligan (NY roof) hook. Once the collar was removed from the mini rex, a hole was drilled through the head, and a 2" piece of round stock was added. The round stock was then sleeved (and welded) into the hollow end of the shortened hook. The round stock gives the tool the strength required when prying with the rex head. The welding was performed by FF Wipprecht from Truck 4.

Sgt Pullen points out that the tool has proven to be useful for a number of different situations: going through-the-lock on investigations, lock-out's/lock-in's, forcing into the "charlie" side with nothing evident, into exposures, and to the floor above in apartment houses. All with minimal damage to the door and sometimes even quicker than conventional methods.

Obviously the shortened four foot hook has some advantages and disadvantages. Some advantages are that it's nice to have the rex tool handy without the weight of it in the pocket, the tool has the strength and stability required for the lateral movement of working the rex head behind the lock, and it provides the user with a hook once entry has been made. Some disadvantages are that the tool is too long to be used in some hallways, and is too short for extended use pulling ceiling over head.

It's just another great example of firehouse ingenuity and working smarter, not harder.

31 comments

31 Comments so far

1. Lance C. Peeples May 18th, 2010 9:23 am

I don't have any personal experience with this modification…but the drawbacks described by the author appear pretty significant to me. A hook that is too short to pull ceilings and a cylinder puller that can't be used in some (many??) hallways. I'm all for multiple use tools…but the disadvantages seem to outweight the advantages here. I think a standard 6' steel roof hook and a halligan tool coupled with a "lil Rex" in a coat pocket is a better combo. Just my two cents. Again, I have no personal experience with this particular modification and would like to hear others thoughts on the matter before forming a final opinion. Stay safe, Brothers.

Lance C. Peeples

2. DMAN72 May 18th, 2010 9:38 am

   We don't have hallways, lock cylinders,or ceilings in my district.

3. Nate999 May 18th, 2010 1:29 pm

   It seems that this tool fits the niche it was designed for very well. Like the post mentioned it may not be the best choice for "extended use" in pulling cieling and in "some hallways", but it sounds like it works well for the FF who is assigned to check exposure apartments and such where you'll probably only be poking a few small holes. Another positive would appear to be gaining a little more leverage due to the length, than is available with the Halligan.

4. Ronnie May 18th, 2010 4:13 pm

   Sounds like you need to do some district training DMAN.

5. bulldawg May 18th, 2010 7:26 pm

   great idea, can you use it to pull a meter? will it fit in a rubber glove?

6. DMAN72 May 18th, 2010 11:40 pm

   Excellent question, bulldawg!

7. TK4LVR May 19th, 2010 5:44 am

   I wish my department had a FF Wipprecht. I wonder if he'd like to come and impart his welding wisdom where I work. You think he'd let me ride truck 4 with him?

8. brickcity1306 May 19th, 2010 2:24 pm

   DMAN thank of what ya could do to a cow or bull with that sucker!!!! Man why doesn't any one post something we can get in a rip roaring heated discussion about??
   I bet if ya put on rubber gloves on and took a going yard swing on a meter it would send that sucker flying over the fence!!!

And what is a truck tool without 3 rolls of hockey tape and some 14 gauge wire for that grip ?? Still good job DCFD way to think outside the box!!

9. towers do it better May 20th, 2010 12:38 am

   This isn't a cure all tool, Peeples, but it seem like a GREAT tool for the job. Actually this site has helped my department find new ways of doing stuff to suit our needs as well.

10. OKFF65 May 20th, 2010 9:55 am

    Another great and interesting tool mod, it seems that the two headed tool is on the rise! one burning question I have is where everyone is getting these rex tools to cut up and weld! My department does not use them (or metal hooks- but thats another post), so I bought one a while back and cringe at the thought of cutting the head off it- $$$! If anyone knows a bargain basement tool distributor let me know!

11. stewpac May 20th, 2010 11:24 am

    I have always found that with a good leather man you can widdle one out of a 12 inch solid block piece of Pittsburgh steel, as long you know how to widdle steel that is.

12. drop_the_box May 20th, 2010 3:17 pm

    Mr. Stewpac, Could you please instruct on how to widdle steel?

13. Brickcity1306 May 21st, 2010 7:56 am

    OKFF65 said "two headed tool" HAAAAAAAAAAAAA sorry I am a 13 year old at hart

14. acklan May 21st, 2010 9:08 am

    Does this tool have a solid steel handle, or is it hollow?

15. FitSsikS May 22nd, 2010 8:02 pm

    I find that an IAFF or association/union decal in the back window of my car is enough to sway most police officers if they are on the fence about you and your driving.

    IMO, the hook on the trunk lid is a bit over the top.

16. pfd27 May 23rd, 2010 8:37 am

    Apparently, the "Cops are Wussies" bumper sticker isn't helping my cause??!!

17. DMAN72 May 23rd, 2010 9:45 am

The last time I got pulled over the cop said "Where you going in such a hurry?" I said "We have a fire and I gotta drive like an @$$hole and beat the engine there so I can park in front of the hydrant and completely block the street." The cop said "That sounds like a pretty stupid thing to do." I said "Yeah, it sure does." P.S. I get laid.

18. pfd27 May 23rd, 2010 11:40 am

    Last time I got stopped, the leo asked if I knew why he pulled me over…you'd think he would have f***** known that!!!!!!

19. Nate999 May 23rd, 2010 6:38 pm

    Damn DMAN, when did you start working in my town? Maybe we've never seen each other because we work in the biggest dept. on the busiest trucks…And yet we still find time to post comments on this site…Amazing, isn't it?

20. riley May 24th, 2010 4:13 pm

    We have a two-headed tool on A shift.

21. riley May 24th, 2010 4:14 pm

    No…wait…thats a two-faced tool….sorry.

22. brickcity1306 May 24th, 2010 5:45 pm

    riley you only got one ??? If ya ever want any sent your way I got a pool just say the word brother 

23. riley May 25th, 2010 4:00 pm

    brick….if you have an extra one that at least knows his job, well then we can talk…hehehe

24. Sam Villani May 25th, 2010 8:09 pm

    Ordered my NY hook and Rex tool yesterday to marry and make this thing my detail tool. As a float Lt., I have to carry a variety of tools (and sometimes a limited choice or undesirable choice) to do my job. Thanks for sharing Bart!

25. Dan Rockwell May 26th, 2010 7:26 pm

    This may be one of the worst ideas I've ever seen. Anyone with any knowledge of how a Lock-puller (Rex Tool) or a Roof hook is used would know that this homemade tool is completely useless. It is pretty clear that the person who constructed this tool has zero experience using a lock-puller. Good job.

26. Nate999 May 26th, 2010 10:06 pm

"Sgt Pullen points out that the tool has proven to be useful for a number of different situations".

…sounds like it works for him.

27. Billy Madison May 27th, 2010 5:51 pm

Mr. Dan Rockwell, what you've just said is one of the most insanely idiotic things I have ever heard. At no point in your rambling, incoherent response were you even close to anything that could be considered a rational thought. Everyone on this web site is now dumber for having listened to it. I award you no points, and may God have mercy on your soul.

Ratchet Strap

July 03rd, 2008 | Category: Outside Functions

Engineer Steven Negedly from Orlando (FL) Engine 9 sent in this photo of an interesting find the crew discovered during an automatic alarm. The owner of this commercial occupancy found a creative way to secure the rear door. Apparently this supplemental lock is in response to some recent break-ins. As you can see, the supplemental lock is simply a heavy ratchet strap from the panic hardware to a nearby railing. The interesting this about this set-up is that there is absolutely no indication on the outside of the door. It just another one of those things you wouldn't expect.

28 comments

28 Comments so far

1. Patrick July 3rd, 2008 2:51 pm

   That's just creative! It sucks for whom ever has to force that door, but you have got to give the property owner credit for thinking this one up.

2. forgotten July 3rd, 2008 4:20 pm

   I wonder what the chances would be if while forcing this door conventionally that the belt slipping out of place would be and not being an issue at all. Also, if there was a high heat condition and / or fire being in that part of the building compromising the strength of the belt. Either way more fun while trying to open up.

3. Jon July 3rd, 2008 7:40 pm

   If you do not see carriage bolts on the outside then you are golden! That just means you have BS sheet metal screws holding it together.

4. HF July 3rd, 2008 8:45 pm

   Jon,

   You think forcing this would be easy? I don't think that would be the case.

5. ... July 3rd, 2008 9:25 pm

   Correct me if I am wrong, but I think Jon's point was that if the panic hardware was secured using carriage bolts it would be nearly impossible to force. If you just had sheet metal screws it may be easier. Not sure if the panic hardware would actually come off with the ratchet strap but having it secured with carriage bolts would make this very difficult.

6. Andrew Brassard July 3rd, 2008 9:29 pm

   I think that this door would be fairly easy. If you look at the set up here the ratchet strap is attached to the push bar on the panic hardware, this bar is made of aluminum and is attached (usually) with a small set screw.

   After you GAP and SET the door on the lock side and drive the adz around the door on to the backside you and your partner can work the halligan back and forth causing the bar to bend and it will pop out of the bracket.

   It is not as hard as it looks.

   Just my opinion.

   Stay Safe Brothers,
   Andrew

7. Jon July 4th, 2008 10:29 am

   No outward opening door is easy. But, not seeing carriage bolts means you will have to force the locking mechanism off and not the lock itself. Does that make sense?

8. D Warren July 4th, 2008 12:43 pm

   It might make it tougher to force,I think the nylon strap would have the spring effect. Best case scenario is that as you force the door it slides to the end of the panic bar giving you room to open the door to access the strap. Typically panic hardware doesn't bend it will pull loose or shear before the bar with bend.

9. Nate DeMarse July 4th, 2008 1:35 pm

   I don't think this one would be much of a problem when using conventional forcible entry. The scenario that Andrew presents will probably be the result. Jon also makes a point that the screws affixing the panic assembly to the door are probably not that formidable. The entire assembly may pull off of the door when outward force is applied.

   Only one side of the panic hardware will need to fail to defeat this homemade device. It looks formidable and probably is to a run-of-the-mill burglar, but a trained firefighter will probably have no trouble.

   Nate DeMarse

10. ... July 4th, 2008 6:06 pm

    Yes Jon, that does make sense. That is what I thought you meant but it is hard to tell through typed text. Nate, I am also agreeable with your points. This should not be that difficult for a well trained firefighter to overcome.

11. T.Young July 5th, 2008 2:28 am

    Nate and Drew,

    see if Jeff or Jimm will throw Brotherhood instructors up in the links section! Another great site.

12. Dave July 5th, 2008 8:28 am

    Metal door…….Metal saw.

13. Ken Barron July 5th, 2008 1:49 pm

    I agree with most. I don't think this will cause too much of a problem. I think that when the outward force is applied the bar will either bend or break clean off the door.

    Ken Barron

14. fitssiks July 5th, 2008 2:19 pm

    I think the strap is 'viagara' for the crash bar.
    Without it the bar probably just falls limply into the open position. Increase in break-ins? I dunno, I think the owner just doesn't want to buy a new crash bar mech.
    It may be worth a check to see if he stopped that pipe from dripping by turning off the OS&Y. 

15. Squadguy July 5th, 2008 9:48 pm

    In ref. to "Metal Door, Metal Saw" I was just wondering if its a pretty standard practice accross the board that when presented with these type doors (metal door in metal frame set in block)the saw comes off the rig along with all your regular tools. I guess I just started a survey! Let me know.

16. Fireman 3 July 5th, 2008 10:10 pm

    Squadguy
    If you can't find another means of entry then grab the saw it's not there to look pretty

17. tt July 6th, 2008 10:32 am

    The door shouldn't even be a problem if the owner has had problems with people breaking in. The door is most likely already compromised. Getting the adz in there and prying it open will most like cause the strap to rip the panic hardware right off. Just gotta look out for the door flying wide open.

18. Two-Seven Squad July 6th, 2008 11:54 am

    Squad Guy –

    My answer to your question is "It Depends."

    If there's just couple or less metal doors, then I would force them by conventional means. (or at least try to)

    If there's several metal doors and a metal window bars or screens or any combination of both then I would suggest someone running around with the metal saw cutting everything free while a second person can work behind with irons finishing off the work.

    Just my suggestion

19. Nate DeMarse July 6th, 2008 1:01 pm

    Squadguy,

    In response to your survey:

    No, that is not a standard where I work or where I've ever worked.

Members use conventional forcible entry to defeat steel doors/steel frames set in concrete or block almost always. I've never heard someone say, "Uh oh, that's a steel door, go get the saw!"

Nate

20. Lance C. Peeples July 6th, 2008 2:02 pm

    I would imagine that the strap would either slide to the knob side of the door or that the panic bar would bend and allow sufficient play so that the door could be forced and the strap cut. (Or the screws holding the hardware onto the door would give way.) As for the saw, I don't think it's needed here…but it's probably a good practice to take it to the rear of "taxpayers" initially. There are often roll down gates,drop bars and burglar bars on rear windows that may require the saw. This assumes that the saw is not needed at the front of the building.

21. Gary Rauch July 6th, 2008 8:41 pm

    Hey Brothers, how about making a doggy door out of it.
    BE SAFE!

    Gary

22. Niklas July 7th, 2008 10:23 am

    I think truck drivers sometimes use ratchet straps to prevent themselves (their trucks) from inbreaks while having a sleep on a parking lot. So I think the shop owner actually can't claim all the credits for himself .

23. Brandon Lane July 7th, 2008 7:02 pm

    Great find Negedly of OFD!! Very unexpected!

24. Dave July 8th, 2008 9:56 am

    My "Metal door…..Metal saw" comment was meant to prompt the realization that you can't see that strap or that panic bar…..or the welds, or the bricks, or whatever might be on the other side of said door…..While you're standing OUTSIDE. The assumption that your super duper "irons" skills will force every door every time in an expedient manner, is foolish (forgive me if that ruffles your feathers). We know for a fact that, that door is metal, I know for a fact that we have a saw that cuts metal quite effectively. What I don't know is what exactly is holding that door shut. The end result is a faster entry and a big hole in the side of that building that's not flopping all over the place. Do you want to get in there and get it, or do you want to practice your "irons" skills while it burns. Please don't take this as an affront to conventional forcible entry methods because our "irons" will be quietly standing by should there be a need to go to "Plan B".

25. tk31 July 8th, 2008 2:14 pm

the door needs to be assessed, from the outside obviously. but sometimes from an alternate view which may be gained from the inside via a doggy door or maybe just a small cut to stick your arm inside and "feel" around.

26. Squadguy July 8th, 2008 11:42 pm

Thanks for the responses guys…What I was getting at was along the lines of Dave's school of thought. I'm sure plenty of these metal doors in metal frames have been forced by conventional means. I just hate seeing guys bust their balls only to have to "run" back to the rig to get other tools. Stay safe everyone!

27. Brian July 10th, 2008 8:40 pm

If you have an extra saw having it set up with a metal blade might be used by the OVM, or whoever is getting the rear, at commercial occupancies. Many rear doors at commercial occupancies that I've run into, either on runs or building inspection, many times have a roll down gate inside the rear door. If it wasn't locked by building owners great, but after working to get a door only to find a locked roll down door awaiting you is a real kick in the-well you know. Having an extra saw is of course a luxury, but if there is a spare in a chiefs office or anywhere else-having it on the rig would be a much better spot for it.
All in all-Great Stuff. Keep looking in your areas. As this site and others prove, over and over again, is how important it is to get out in the neighborhoods to see what you'll be up against.
Stay safe all.

28. Jeromy July 14th, 2008 9:42 am

Thinking outside the box here, but possibly using the rabbet tool or hyrda-ram on this outward swinging door could prove useful. Even though its intent was for an inward swinging door I can see some possible effectiveness should an arriving company not have power saws. Maybe try to spread the hinges away from the jam along witht the help from the irons.

Notice Anything Else?

August 10th, 2009 | Category: Outside Functions

Dave Mylum from Henrico County (VA) Division of Fire's truck 6 sent in these photos of a door he recently found. The door originally appears to have the same locking mechanism we spoke about last week in our post titled: Indentify and Visualize.

However, take a closer look… Click here to see what's on the other side.

6 comments

6 Comments so far

1. Nate999 August 10th, 2009 6:58 pm

   Another good post. I was curious what was behind the bolts by the middle hinge. The last bit about the inside door reminded me of an article I read recently called "yard sale".

2. Bearpond118 August 11th, 2009 10:39 am

   Pre-planning will also help. This type of door will usually only be found in commercial structures and if we complete our pre incident plans, we can make a note of these types of doors on a building. This can make our job easier and faster.

3. Mike Bishop August 11th, 2009 3:18 pm

We have this exact same set up in one of our newer strip malls, down to the drop bar on the door to get to the main floor area and one on the door to get to the alarm panel. It is a video game store called "The Game Shop" or "Game Store" I can't remember which.

4. FFGoodnight August 12th, 2009 12:31 am

So all I wanna know is whats behind door number three!!! Ive seen the hinge pin mechanism placed behind every hinge too. Saw it at a Best Buy while doing some "out of district"…. wayyyyy out of district pre-planning. hahaha

5. Patrick F. August 25th, 2009 9:58 pm

Can anyone tell me if the lock mechanism still works if power is cut to the whole lock assembly?

6. brett beach June 1st, 2010 5:38 pm

This is the new industry standard. In my first due I have a mall, and the management their said that thids is what all of the doors will look like eventually. The only difference is the doors we have have a covered piano hing instead of the exposed 3 hing. We have decided that the best course of action is a single cut into the door above the panic bar, and then using a metal framing square to pull/push the panic bar.

Hinge Pin

Dave Mylum from Henrico County (VA) Division of Fire's Truck Co 6 sent in these photos of a door he recently found. The door originally appears to have the same locking mechanism we spoke about last week in our post titled Indentify and Visualize.However, take a closer look…

From the inside it’s apparent that the locking mechanism is the same one we just spoke about. There are two major differences. The large metal plate behind the door is one difference. It doesn’t appear to be too substantial, it more than likely only adds to the rigidity of the door. It wouldn’t even slow down a rotary saw. Those are alarm contact points above and below the pin locks, nothing to do with the actual locking mechanism.

And on the hinge side...

Below is a close-up photo that shows this door has an additional supplemental mechanism on the hinge side. It's a simple pin that "prevents" the door from opening on the hinge side. While this particular set-up may be designed to stop the average bad guy, all it will do to us is slow us down a bit. Again, as with every forcible entry situation, we need to **slow down** and *Identify and Visualize* what's keeping the door secure. Something as simple as this little pin could frustrate the hell out of anyone and cause us to loose precious time and energy trying to defeat it.

Well if that wasn’t enough within ten feet of the door shown above, an interior door had a supplemental lock of its own. The door pictured below separated the back storage room from the main business area. Again, nothing we can't deal with, just a simple pain in the @$$.

Good thing we didn't just drop the tools outside after we forced the first door…That's a story for a future post.

Identify and Visualize

July 31st, 2009 | Category: Outside Functions

Click here to see whats on the inside.

8 comments

8 Comments so far

1. Nate999 July 31st, 2009 1:08 pm

   Interesting setup with the 3 connected locks. Good to find it now instead of 2 am. Don't carry a framing square, but have seen a similar video where a halligan was hammered through the center of the door and levered against the panic bar. Seemed to work pretty good…just another tip to keep up in the ol' noggin.

2. Keith102 July 31st, 2009 1:16 pm

   Not knowing if the above and below locks are connected to the panic bar or not, I would probably just cut the hinges with the saw.

3. Antiqufirelt July 31st, 2009 1:53 pm

   I'm with Kieth, I like the hinges on this one. A normal panic bar usually can be actuated from the center of the door, but this on seems to be toward the lock side a little. Knowing just where to cut might be difficult and the possibility of another release mechanism may exist depending on if this was not a required EXIT or not. But all good info and more info to stuff into the corners of our heads.

4. Eric Derham August 1st, 2009 2:48 pm

   With the exposed hinges, I guess cutting the hinges would be the easier option. I like the framing square idea. Just might have to get a couple of those to put on our rigs.

5. DMAN72 August 2nd, 2009 1:58 pm

   Shear the bolts above and below and use conventional forcible entry on the middle. (Non-saw option)

6. Gabe Galaz August 25th, 2009 10:57 pm

   We teach using the Framing Square method but instead make your cut on the bottom half of the door so if it is a drop-bar the framing square can possibly lift the bar out of the way.

7. Jim September 5th, 2009 1:03 pm

   I'm not a firefighter, so maybe I've missed something, but where is the eye protection for the guy with the saw? I certainly wouldn't cut a wood 2×4 without eye protection, never mind a metal door.

8. Nate999 September 5th, 2009 1:15 pm

The pic seems to have been taken for demonstration purposes. Notice that the saw blade is not spinning and no sparks are coming from the door.

Identify and Visualize

From the outside this door has some obvious signs of supplemental locks. The handle is missing and it has been replaced by a hardened plate. Additionally, the top and bottom of the door have additional lock attachment points. The entire lock side of the door is also protected by a steel plate that runs the entire height of the door to further protect the locking mechanisms.

From the inside, it's a bit easier to see what is securing the door. There is a total of three locks: a normal locking mechanism, and two pin locks. A simple push on the panic bar disengages all three locks simultaneously.

Shown below is close-up of the tradtional locking mechanism.

Shown below is a close-up of the lower pin lock. The upper pin is similar.

As with every forcible entry situation there are many different options that could open this door. Obviously, some methods are quicker and more efficient than others. On this particular door, attacking the panic bar would seem to be an effective method. One method could possibly bethe framing square method we discussed almost three years ago. Click here for a write-up on that method.

Different styles of locking mechanisms similar to this are showing up at an alarming rate. We know through experience that hand tools, power tools and brute force can get us through almost any door. However, we owe it to ourselves to get out in our district and learn about these doors ahead of time. It allows us to better apply the *"identify and visualize"* method of forcible entry. Remember, work smarter, not harder.

Framing Square Forcible Entry

Battalion Chief Tom Cole from Miami Dade Fire Rescue sent in this great method of forcible entry. This method works on commercial metal doors equipped with panic hardware. This can be utilized when forcible entry is required, and the ability to secure the door after the operation is desired.

A plunge cut is executed above the level of the panic hardware (lock level). It is important to verify the absence of an interior drop down horizontal security bar. When these horizontal security bars are utilized, the four (or more) bolt heads can be noticed above the panic hardware. If that is the case, another method may be preferred.

After the cut has been executed this is the only damage that is present. After the operations are complete the door and be re-secured. A strip of duct tape over the cut will conceale it until the building owner can get it repaired.

Here is the bread and butter of the operation. A framing square is placed into the cut.

What doesn't everyone have a framing square on their rig?

A view from the inside shows how the framing square is utilized to manipulate the panic hardware.

Lets go to work!

Now that is a cool idea! A special thanks goes out to Battalion Chief Cole and the Brothers and Sisters from Miami Dade Fire Rescue for this great tip. -Jimm-

Rebar Security

June 19th, 2009 | Category: Building Construction,Outside Functions

Michael Riley from St. Augustine (FL) Fire sent these photos of something interesting he found. Each of these windows had a homemade security device on them… On the inside. The bars are made from 5/8 and 3/4 rebar (some windows have different sizes.) The building owner actually painted most of the bars white to match the blinds behind them. This makes the bars somewhat difficult to find at first glance. Since the bars are on the inside, they may go totally un-noticed if the building was changed with smoke. The bars are imbedded into the window frame on each side. from these pictures it's tough to know exactly how deep the bars are embedded, but they present a problem none the less.

On a related note, something should be mentioned on the radio to all units when bars are found on the structure. This could be done by the first arriving officer performing a 360, the Outside Truck team, or anyone else who may be first to run across them. Regardless of who transmits it, it's an important piece of information that should be shared.

21 comments

21 Comments so far

1. Lad288 June 19th, 2009 10:23 am

   A good swift and well placed Donkey Kick should do the trick here….

2. DMAN72 June 19th, 2009 11:21 am

   I was gonna suggest that. Or a karate chop (with a gloved hand of course).

3. Drew June 19th, 2009 12:37 pm

   Chuck Norris laughs at this post.

   How deep do you think these bars could be placed? Even if they are sunk the entire way through the window frame, it would not take much to remove them.

Yes, a hinderance. Great catch, something you need to know about. I seriously doubt that they would stand much a chance against a determined outside vent man. Or an engine dude trying to bail out a window.

4. ... June 19th, 2009 12:39 pm

   These are simply placed into the wood frame by the looks of it. I don't think it's going to take much to defeat this. If all else fails, call for the partner saw. But again, if this is on the outside, what else can be hiding on the inside?

5. DMAN72 June 19th, 2009 12:52 pm

   I agree that it PROBABLY won't take much. The real issue is recognizing that these are there before it's too late.

6. ... June 19th, 2009 6:18 pm

   A good OVM will notice these while doing a 360 and relay the information to the IC. It may not be obvious in smoke conditions but if you look it won't be that hard to see these bars.

7. PFD023 June 20th, 2009 10:43 am

   Taking them out means taking the window out. Might affect your venting ops depending on where and how you are venting….something to think about.

   Also…..sure these are glass….and not Lexan?

8. Keith102 June 20th, 2009 1:20 pm

   Those would definitely suck if you are trying to bail out. Because if you are having to bail, the shit has already hit the fan and you need to be out now. You would have to be standing up in the heat for a lot longer than normal having to wrestle with those bitches, wheras normally you just bust and bail.

9. ... June 20th, 2009 6:15 pm

   These windows and window bars should be out before something goes wrong. You shouldn't be waiting for something to happen before you take these bars out. When the window goes, the bars go, and everything else inside that space goes. Make every window a door.

10. FitSsikS June 21st, 2009 9:04 am

    Like DMAN72 said:

    "The real issue is recognizing that these are there before it's too late."

    As I have said before in my dept an "urgent urgent" may be announced to draw attention to this dangerous feature..

11. forgotten June 21st, 2009 5:44 pm

    Being that re-bar does not bend it should be assumed that this is an ensert. Meaning it is a Pre-measured wood frame with bar inserted then the whole rig is fit in place. Many ways to "take" them. K-12, Lobster Tool, and maybe just beating the Sh*& out of each bar could also work. Regardless, I believe that the awareness factor and informing the brothers operating inside is paramount. Knowing before hand keeps us with the upper hand. Good stuff. Keep sharing brothers.

12. Jon June 22nd, 2009 10:43 am

    Just think this way, this house is in Florida, wood does not do well in a damp environment filled with crack heads and cops I would make sure this is not a block house before you go ASSuming it is a wood frame and it will be a quick shot with the maul. Another case of knowing building construction.

13. nick June 22nd, 2009 2:19 pm

    My company had fire in a single family residence and I was doing my outside walkaround of the house the front of the house was going good I forced a rear door for the engine to have a 2nd way out and vented a window and I noticed the burgular bars and I knew the fire wasnt in the room that was barred so I did nothing about it. Once the fire was knocked down the boss got onto me and it was a good learning experience, from now on if its a good working fire and there's question I'll take them out unless venting could spread the fire.

14. Albert W. Schlick III June 28th, 2009 11:45 pm

    Looking for some help on what a Lobster Tool is. Its a new one to me. If anyone can send me anything on it I would be greatful. Thanks again for all the great posts and feedback…I always learn something everytime I come here.

15. PFD023 June 29th, 2009 3:17 am

    http://fascut.com/Handheld_bar_cutters.htm

16. RT158 June 29th, 2009 9:43 am

    This is rather simple to make and just as simple to defeat (hopefully). We actually build this as a training prop at our station from time to time.
    To make this, determine the length or height of the wood, determine the length and spacing for the bars and pre-drill the holes in the wood. Then slide the wood over the bars, place the whole assembly in the window frame and screw it in.
    Provided the homeowner doesn't use lag bolts or some other form of heavy duty fasteners this may come out as one big piece after a few good hits with the right tool or by prying the wood away with the haligan.

17. Albert W. Schlick III June 29th, 2009 10:38 pm

To PFD023 thanks brother. I have seen that tool before but had no idea what it was called. Thanks again and stay safe my friend!

18. forgotten July 1st, 2009 2:40 pm

RT158;

That is what I was saying. Thank you for simplifying it.
However, according to some Florida does not use wood.
I live north of there and Florida to me is going to Disney and Seaworld. Any "floridians" about?

19. Christopher July 1st, 2009 3:13 pm

Most homes in Florida, at least in my area, are concrete block or concrete wall. Not going to be easy to get the bars out. But if the owner has done this what else has he done?

20. riley July 1st, 2009 3:32 pm

Here in St.Augustine, most of the homes/buildings are VERY old (Nations Oldest City). Being that old, most are wood. The newer(?) construction, say 1950's and newer, are block, or a combo of block and wood. In the downtown, or Historic District, we have buildings dating 200 years old that are still occupied. This building is a Dr.s office, block construction. The bars were made in a wood frame of 2x6s and the frame inserted into the opening. It is anchored by wood screws and nails. It has a drop ceiling, normal exterior and interior doors. Deadbolt locks on the exterior, and no alarm or sprinkler system. There are no other "surprises" that we are aware of (like I havn't said that before).
Stay Ssafe
riley

Double Door

May 25th, 2009 | Category: Outside Functions

Lieutenant Brian Dalrymple from Richmond (VA) Fire Department sent in these photos that he uses for forcible entry training. Take a look at the door, determine how you'd force it, and click here to see what's on the other side.

16 comments

16 Comments so far

1. DMAN72 May 25th, 2009 7:23 pm

   I'll say it first…I missed the inward swing cuz I wasnt looking. NO hinges, recessed, jamb out,duh for me. Buuuuttt…I did guess right on the double drop bar!

2. David May 25th, 2009 11:23 pm

   caught the drop bars and noted it was a rabbited steel jam in a masonry wall. So my thought was to grab the partner saw. But i did miss if it was inward or outward swinging door.

   Nice to see some stuff on here from the river city Lt. Was this in 1's first due?

3. Silver (RFD) May 25th, 2009 11:56 pm

   Hey Lou Dalrymple!! Thanks for the brain teaser. I always look forward to my daily stop by ves.com.

I hope you're well up there in Richmond.

4. FitSsikS May 26th, 2009 9:44 am

   I missread the double 4 bolt pattern as an indicator of verticle style barring.

   Warning Firefighter Humour Ahead

   Ah well, you guys missed the Islamic writing on the doors indicating the possibilty of the presence of explosives inside.

5. Jon May 26th, 2009 12:14 pm

   Always look at the hardware. A double door like this would have to have some serious reinforcing through pins top and bottom on the left hand side to make it substantial and not be susceptible to being just donkey kicked open. I hate to say assume, but it seems appropriate for FE to AssUME the worst!

6. John May 26th, 2009 12:52 pm

   I was predicting both the drop bars and also, like FitSsikS said, some sort of verticle slide rods similar to a half fox lock. I caught the the fact that it was inward opening but didnt catch on to the fact that bolt shearing wouldnt help in this situation. Notice making a triangle cut in the door and reaching in wont help if the bar is padded to the bracket. The saw plung is prob the way to go but notice that you have to plunge higher than the level of the bolts to actually get a good cut on the bar. I had suggested on an earlier post that any 'door forcing' submissions, only the outside of the door gets shown first this way it forces us to read the door before we get to see whats actually inside. I THINK THIS WAS A GREAT POST…. keep em' commin'

7. PFD023 May 26th, 2009 2:16 pm

   Is that door #10 from The Price is Right?

8. DMAN72 May 26th, 2009 5:36 pm

   Nothing can withstand a well placed donkey kick!

9. brickcity1306 May 26th, 2009 5:50 pm

   A good Donkey kick or a good pair of irons with a 6'9" knuckle dragger does the trick every time!!!! LOL

10. Brian May 26th, 2009 7:49 pm

    David,

    This would actually be 5's district, although it would be Rescue 1's first due.

    Hey Silver from the other RFD. What up!

11. Silver May 26th, 2009 9:51 pm

    Brian,

    Send me an email at silv333@gmail.com to catch up.

12. Nick May 27th, 2009 1:07 pm

    I initially noticed it was inward swinging and I caught the top drop bar but I wasnt expecting the additional lower drop bar I thought it was some type of lock going into the slab. I realize that the drop bars could be locked but if they werent could you cut a “doggy door” and reach in and push the bar up.

13. Dave May 28th, 2009 6:53 am

    Metal Door……Metal saw.

14. Dave May 29th, 2009 7:16 am

    An “improved” doorway. Look for an easier way in. If none, we break it.
    Try working a shove knife in and sliding it up. Double doors are relatively weak, a common way to reinforce is with drop bars. If they are secured all bets are off. I was expecting a kick bar going back to the floor.
    Without the bars, FF w/ a set of irons should open these doors.
    Might try the portable jaws on bottom of the hinge side of the door with the lock. If you could get a purchase, hydraulics would make short work of this. Wouldn’t be much left to secure. Not a job for Rabbit tool.
    Partner saw is the direct answer. Cut it. You’re going to throw a lot of sparks off those bars, maybe not the way to go at a fireworks factory.
    Options are a good thing.

15. Tony W--KY June 29th, 2009 1:25 pm

    Yep I missed the inward swing. Bad me.

16. Richard Ray July 7th, 2009 12:56 am

    Thanks for the tip! I missed the bolts and the inward swing too! Keep the info coming!

Read the Door

Lieutenant Brian Dalrymple from Richmond (VA) Fire Department sent in these photos that he uses for forcible entry training. Take a look at the door, determine how you'd force it...

Did you focus on the carriage bolts? Did you realize that it was an inward swinging door?
(Come on, at least one person must have fallen for it...)

In this setup, cutting the bolts will not accomplish much, it certainly won't open the door. The bolts are only there to hold the hasp for the padlocks. The presence of the padlocks eliminates being able to manipulate the drop bar from the outside (after making some sort of opening.)

To top it off the drop bars are even set into the walls a bit on either side.

It's another setup you don't find every day. A simple plunge cut right down the seam of the two doors should do the trick.
It's not impossible, just makes you think a bit. Remember, *Identify and Visualize.*

Nothing To It

May 19th, 2009 | Category: Outside Functions

Lt. Joe Pennino from Largo (FL) Fire Rescue sent in these pictures of something they discovered during the ever important pre-plan of their area. At first glance this door looks like it wouldn't even slow a good outside team down one bit. Especially if they *identify and visualize* what is locking the door as they are working on it. As we all already know, you should always expect some sort of supplemental locking mechanisms on the rear doors of commercial occupancies. This time is no different, however, these pictures prove that sometimes it's not so easy to determine what types of supplemental locks are present. There are no tell tale bolts visual from the outside indicating the presence of a drop bar installation. This particular bar bracket is welded to the inside of the door.

A little over a year ago we had a similar post on a drop bar with no bolts, you can find that post here. That particular door was a little different because of the absence of an exterior handle. Either way if we can keep the frustration level down when forcing the door it will quickly become obvious what the issue is and you can work around it…*Identify and visualize.*

36 comments

36 Comments so far

1. PJS May 19th, 2009 8:00 am

   When going to the rear of a commercial building fire be sure to bring a forcible entry saw. This is an example of what you will find. Well fortified doors. You can cut the hinges or worst case make a door within a door with the saw. I personally take a maul and a halligan along with the saw. You can use the maul to break any blocked up windows to provide a vent. And be sure to give a report from the rear. Some buildings are one story in the front and two in the rear. Let the brothers know.

2. Truckee13 May 19th, 2009 10:00 am

   The owner of this door was trying to make up for cheap locks on a even cheaper door.

   I have found while forcing doors with the additional security engineering in place actually make the door less sound.

Once you get past the cheap deadbolt and doorknob then comes the choices (doggy door) or fold the door at the weld (its doubtful the weld would go all the way across the door to support the bar) and expose the cross bar to cut and Blamo your in.

3. FitSsikS May 19th, 2009 10:12 am

   Certainly this would be a frustrating door (what with no exterior 'tell tale' bolts showing). If you made an exploritory opening you would be happy to find the wing(?) nuts which help the occupants facilitate the regular installation of this security bar*.

   It appears as though the bar may not be present at all times. Question: is it put into place at the end of the work day?

4. LTDT May 19th, 2009 10:32 am

   If when faced with this situation, and your "traditional means" of entry are not working, as in this case when a simple pop-n-go method has run into a snag, don't waste time rethinking what's next. Go with the "doggie door" option. Simple, effective, and less time consuming when the first traditional attempt fails due to an unforseen obstacle is encountered.

5. PFD023 May 19th, 2009 11:19 am

   Good find.
   Here's a question…hope it's not an ignorant one. You make the discovery…include it in the preplan. 2 years go by and lots of faces have changed in your dept.. You get a call at this location….the info is in the preplan….how good is your dept. at sharing this info to the arriving crews prior to struggling with the door? How do you guys use your preplans? Sorry admins if the question doesn't fit the thread.

6. FFCA3 May 19th, 2009 4:46 pm

   why is it that so many people i talk to seem to be against the "doggy door"? just like FitSsikS said if traditional methods arnt working the "doggy door" would be the easiest second option to get in and take apart the drop bar and then open the door. Does anyone have a reason why they wouldn't do or don't like the "doggy door"? any other options?

7. DMAN72 May 19th, 2009 6:22 pm

   OK. I got it! Sound the door with a tool to determine where the bar is. Then drive the fork of the halligan through the door with the ax and blow the bar off the back. Like someone said, cheap door, no outside indicators so must just be screwed to the door.

8. Eddie Crombie May 19th, 2009 6:22 pm

   Good catch!! Definitely makes you pay attention on your pre plans.

9. Lad288 May 20th, 2009 2:10 am

   DMAN72 – Good eyes catching that there are no outside indicators, however, it may not be just screwed to the door. It may be welded to the door in which case, it would be a bit more difficult to take care of. Infact, loot at the ends of the bar against the door, it appears it may be welded on there. I am not sure if the bolts are welded to that bar, however it would make sense it they were. Good catch tho.

   Best defense is PREPLAN! PRE LAN! PREPLAN!

10. DMAN72 May 20th, 2009 8:13 am

    Lad288,
    That's a good point. I never thought of that. I actually looked again, and you're right I think those are welds. OK, plan B-Cut the top hinge and the bottom hinge and flip it like a slab garage door.

11. FitSsikS May 20th, 2009 8:29 am

    "..and flip it like a slab garage door."

    To quote Al Borlin, "I don't think so Tim."

12. RT158 May 20th, 2009 10:34 am

    I have to agree with the doggy door (or something similar) option as well. I have seen something very similar to this on a door leading to a store room at a gas station with a convenience store in it. This "store room" is also actually the office for the manager which included the safe and daily transaction money, hence the reason for the additional security. This outside door was the only way in and out of the room. The bar system that we found was even a little more permanent. The section of the bars that the wing nuts protrude through and then tighten up against was permenantly bolted and hinged on the wall. The door would be closed, the inside bar hinged across the door so the bolts would poke the through and the wing nuts tightened down. Then from the opposite side a smaller piece would hinge over both bars and a nut and bolt would be inserted through the entire system locking it all together.
    After failing to defeat the locking mechanism on the first try, continuing different methods to get through the lock is just plain tunnel vision. Utilize the saw and get through the door. In our particular situation we may have an immediate life safety situation due to the fact that there may be one or more occupants trapped behind the only door to the room. Our ability to open it quickly is truly life or death.
    I know for a fact that the manager would lock himself in the room, weather he used all of the coponents of his system is unclear but he did use some of it. I used to deliver products to the location multiple times a week and could hear him fumbling around with the nuts and bolts or the regular keyed locks to open the door! I actually locked myself into the room just o get pictures of it but I have no idea what I ever did with the pictures.

13. DMAN72 May 20th, 2009 11:53 am

I seriously think it would work. It wouldnt be ideal, but may give you enough clearance to get someone out under it. Gimme the address, Im gonna go try it! FitSsikS, you just grab the tools and ASSIST me.

14. MetroLT May 20th, 2009 3:56 pm

    Doggie door should fast become the first choice in any emergent scenario. Alarm ringing? Probably not. Confirmed fire? Yes. Why screw with all the other bullshit if you have a saw? With occupants coming up with innovative ways of securing their buildings, there are few that will survive the doggie door. At the very least the DD gives you the ability to assess the situation. Like RT158 says, cut the door.

15. DMAN72 May 20th, 2009 4:51 pm

    Nevermind. I thought about this. This wouldnt work.

16. forgotten May 21st, 2009 11:58 am

    Option in this case:

    Cut a triangle large enough to fit your arm through about 1/3 up the door. Reach in and push the bar out.

    Doggie Door also does not have to be left as such. It is a starting point to getting the entire door out of our way. As a friend used to say to me, "Whatever it takes."

17. me May 21st, 2009 5:34 pm

    RESCUEOFD.COM

18. 18Truck May 22nd, 2009 10:18 am

    Plunge cut through deadbolt and drop bar close to jamb. Should be able to cut both with 1 plunge. Door swings out so no need to worry about hinge side of drop bar. Bars appear to be hollow, should be no problem for a saw with a decent blade.

19. DMAN72 May 22nd, 2009 12:18 pm

    I would just donkey kick it as hard as a could. I learned that from a Harrisburg truck guy so it's gotta work.

20. DCrockett May 22nd, 2009 1:27 pm

    K-12. Or the raging donkey kick. Exactly what I was thinking. =]

21. Keith102 May 22nd, 2009 4:46 pm

    18Truck,
    That would work, and was my initial thought, but the whole point is that we don't know that that bar is there. Not being nit-picky, just pointing that out.

22. firemedic May 22nd, 2009 6:05 pm

    doggie door, you wont be able to tell that there is a bar.. like the other guys said what ever it takes..work smarter not harder

23. PFD023 May 22nd, 2009 6:40 pm

    double keyed dead bolt as well….gotta love those.

24. 18Truck May 22nd, 2009 7:29 pm

    Keith102,
    Point taken as well. But, if discovered during your VBI, you know its there. The whole idea of pre-planning!

    Gotta love watching people donkey kick an outward swinging door. Even better when its a steel frame in URM.

25. DMAN72 May 22nd, 2009 9:48 pm

    If you kick it hard enough, the frame should come right off of the wall.

26. 318Truck May 22nd, 2009 10:15 pm

    try “traditional methods”, then doggy door it. i think in hind sight i would be glad i went that route with this door.

27. forgotten May 23rd, 2009 1:12 am

    ……..and call for assistance from 2nd or 3rd arriving trucks, as well as letting inside brothers know there is a delay in opening up the rear. Keep everyone in the loop. Another option if you did not take the FE saw is to use the Maul to break through the block wall next to the door. Reaching in afterwards to remove the bar or at least get a better understanding of what the locking mechanism.

    I don’t see any of the attack methods being “wrong” here. Just other options. Maybe mods could add a section on this site for brothers to return here with examples of executing things that they learned here and applied in the field to validate ideas. I have already used a few ideas on here and broadened the minds of others with ideas posted here.
    Stay Safe Brothers.

28. Keith102 May 23rd, 2009 9:26 am

    My bad 18Truck, I forgot about the pre-plan. Unfortunately, I would have probably forgotten the pre-plan just like I did here.

29. 18Truck May 23rd, 2009 10:00 am

I forgot. What were we talking about?

30. DMAN72 May 24th, 2009 9:16 am

    Whether or not to pull electic meters.

31. Lad288 May 24th, 2009 10:57 am

    18Truck – we are talking about Donkey Kicks.

32. forgotten May 24th, 2009 10:59 pm

    I Donkey Punched a chick once……..

33. FFCA3 May 25th, 2009 12:24 am

    good move… (thumbs up)

34. Keith102 May 26th, 2009 1:13 pm

    "Donkey punch"! Ha Ha Ha, I almost spit my lunch on the screen. I love it.

35. Tim August 29th, 2009 11:13 am

    I was wondering if anyone had any ideas about how to get into a commercial steele door other than spinning the lock (which usually bugers up the threads on the lock cylinder) or shove knife on handle lock?

36. Tim August 29th, 2009 11:19 am

    piggy back on my last comment I was trying to see if anybody had a technique that wouldn't damage the door?

Two-Man Technique

March 06th, 2009 | Category: Outside Functions, Tips

Captain Daniel Troxell from DCFD Truck Company 6 sent in this ladder carrying tip. This technique is useful for an outside vent team that needs to transport ladders and tools to a rear position that may be inaccessible for the apparatus. Each member removes a ladder from the either side of apparatus and places them side by side. The hooks are stored already attached to the ladders, similar to what was shown in a post titled DCFD Hook & Ladder a few months back. The ladders are placed on their beams, and each member gets in-between the ladders. The Halligan bar is placed as shown, with the pike end stuck in one of the rung holes on the top beam. Then the ladders are transported to the desired location. Upon arrival, the

tools are then removed and laid on the ground, and the ladders are raised into position.

50 comments

50 Comments so far

1. JJ@WRFD March 6th, 2009 9:42 am

   Great use of man power! While some crews spend there time bitching that they need more more man power you guys are finding ways to get the job done quicker with less man power. Bravo Brothers, I will no doubt use this in training next time we do ladders.

2. Red March 6th, 2009 2:59 pm

   Do you guys have a trick for carrying the saw with this set up? We usually pile the gear on top of the ladders and carry them in a flat raise with the roof ladder hooked over the extension ladder and trash hooks and the saw hooked over the rungs, but it is a little awkward with 2 people I think this would work better.

3. Nate999 March 6th, 2009 5:32 pm

   Maybe a webbing loop or strap and just slinging the saw over your shoulder? I dunno…might be awkward too. I think with the saws your method might be the best bet. Or maybe you could have one of the cops carry the saws for you after he moves his car from in front of the fire building. Any other ideas?

4. brickcity1306 March 6th, 2009 11:34 pm

This roof hook holder looks different then the other, is this a new mount system?? Unfortunately we have quite a few structures in our area that this is needed. The man at the tip carries the TIC and a can, hooks, Halligan bar and axe on the ladder, 2nd man carries/slings the saw. I have found that most functions can be done with this set up you just have to pray it is a short walk and not uphill. We carry up a two fly and a roof ladder good job thinking outside the box boys !!!

5. PFD023 March 7th, 2009 4:45 am

   Red….have a look at the training videos at fireengineering.com….scroll down to the bottom of the Training Minutes, Season 3 to "Ladder Drag". Mike Ciampo shows something which might work for you. Two methods of carrying gear and ladders.

6. brickcity1306 March 7th, 2009 5:47 am

   http://www.fireengineering.com/videos/index.html then what PFD023 said

7. D. Clime March 7th, 2009 12:57 pm

   Take it a step further… with the DC Truck manning/operations, have the tillerman take both a 24' and a 16' in one shot(Easier than it sounds). Officer and Hookman take a 30' and 16' on the same shoulder. Four ladders to the building with 3 people… works like a champ.

8. JD March 7th, 2009 7:25 pm

   I found this on youtube. I don't know if this has been posted here before or not.http://www.youtube.com/watch?v=47TaV30K4H8

9. 4 Roof March 8th, 2009 5:42 am

   Great idea. A retired truck boss that worked through the War Years told me that he would routinely have his guys stack up a couple of ladders (often two 35-footers – tough guys!) and do a flat shoulder carry to access multiple windows. He said that they knew they'd need them to get people out and it saved a ton of time having to shuttle back and forth.

   I've also seen (and done) laying a ladder down on its bed section, hooking a roof ladder onto the fly section with the hooks deployed, tossing a tool or two on that and dragging them to where they're needed.

   Anything we can do to reliably get more equipment to where it's needed with less people is definitely a great way to go. The senior and retired guys are definitely a wealth of knowledge in 'outside the box' maneuvers…I also got to get the rundown on how to do a two-man raise with a 50' but that's one I haven't tried to date; think I'll save that one for a real emergency.

   Be safe.

10. PFD023 March 8th, 2009 4:33 pm

uh oh….just saw the video from JD…I'm thinkin some are gonna change the topic very soon!

11. Jon March 8th, 2009 5:10 pm

    30 MINUTE Cylinders, sigh… I wish.

12. brickcity1306 March 8th, 2009 7:20 pm

    What's wrong with 4.5 30 min bottle???? You like that big ass bottle on your back??? A word of advice, there is nothing good that cannot be done in twenty minutes that is any fun!!!

13. Jon March 8th, 2009 10:10 pm

    I dont have a choice, it is 45 or nothing.

14. billfitz March 8th, 2009 10:59 pm

    you guys are insane and are a major part of what keeps the fire service from getting the proper manpower!!!!

15. DMAN72 March 9th, 2009 8:37 am

    billfitz,
    What's your deal, dude?? What is insane? The only thing that keeps the fire service from getting proper manpower is money and politicians who don't understand. Meanwhile, wtf are you supposed to do, sit around and say, "Well I guess we'll wait for more guys." I dont know anyone who isnt hurting for people, so we need to find ways to get the job done with what we got.

16. Chris White March 10th, 2009 2:57 am

    My dept went to 45 minute bottles about two years ago and we love them. I cannot even remember what it was like before them. We have not seen an increase in injuries or anyting along those lines. On high rises we switch to 4.5 with one hour bottle instead of 45 minute ones.

17. brickcity1306 March 10th, 2009 3:43 am

    There is no doubt in my mind there is a place for bigger bottles like RIT/FAST, Haz mat and so on. I don't like them for your bread and butter interior fire fighting, I am sure we can all go on for days on pro's and con's .Chris you better knock on wood, there a lot of study's and reports that say the opposite of your departments experience.

18. pfd27 March 10th, 2009 10:08 am

    We will be replacing our 2.2's the fall and have been talking about going to 4.5's. Does anyone know where I can find those studies or other info on the pro's/con's? (pfd27@comcast.net) Thanks

19. Jon March 10th, 2009 12:10 pm

    billfitz is 100% right on. We always are our own worst enemy's. They see what we can do with 5 guys so they take one away, hmmmmm, these guys can still do the job with 4. No times are ever kept after you get on the scene and that is all they care about!

20. pfd27 March 10th, 2009 12:43 pm

    My rant,

    My wife is a teacher, which means her salary is paid through taxes just as fire, police, highway and other services. As such, she will always be subject to scrutiny and attempts to "save the taxpayer" money through budget cuts (personnel are always the easiest targets). I've heard "teacher's have it so easy" alot more than "firefighters just sit around and wait for calls". Right, wrong or indifferent, that is the nature of the beast and no amount of chest thumping will change that.

    Every state in this nation has a mix of paid, combo and volunteer depts. And each has at least one voice to speak on it's behalf. And there in lies a much bigger disservice we commit. As an example, law enforcement gets around $18 BILLION annually from the Feds. How much does you dept receive for manpower programs? The best we could come up with was less than $1 Billion and one of the worst bidding process I've every seen to beg for that money.

    In my state, there are 3 voices for the fire service. Each has it's own agenda and that inability to act as one has done untold harm to the service as a whole. As Joe Taxpayer, I'm not about to support a group that can't agree on their own priorities…Would you?

    The answer is much, much bigger that blasting a web site for making our efforts easier, safer and more efficient.

    Probably have to change my username now…

21. PFD023 March 10th, 2009 1:05 pm

    or they may get confused and I'll have to change mine….lol.

22. steve March 10th, 2009 1:09 pm

    I agree to a certain point… we as the fire service have always got the job done….with/by whatever means possible… and that is a down fall in the eyes of the bean counters. They think if we can get the job done with 4…well they could squeak by with 3…. Outside of our fires service family little is understood as to what we do or how much we do with so little. In John Q Publics eyes we all have more than enough staffing on our apparatus…they think everyone is like our brothers at the FDNY,IFD,Chicago,Houston,Orlando or any other large dept…. those depts have the minimum levels that we on smaller dept should have…those brothers need more…
    Back to the topic….I for one appreciate the creative ideas found on here and have added some of the ideas

to my bag of tricks…working on an understaffed apparatus, these ideas sure have been very useful…keep them coming

23. DMAN72 March 10th, 2009 2:52 pm

    I think we are all focusing way to much on career depts. here anyway. Here in the great state of PA you can't swing a dead cat without hitting a voluteer fireman, but those guys are hurting for manpower, cuz' most of them have real jobs, which means who ever shows up, that's what you get. 2, 4, 5, 6, they have to figure out how to do it period and that has nothing to do with cutting manpower, it's just how it is. So what do you tell them, not to use these types of techniques?

24. brickcity1306 March 10th, 2009 4:21 pm

    pfd27 I think there was some reporting on NIOSH http://www.cdc.gov/niosh/fire/

    If you have never been there stroll around and check stuff out, I use the site quite a bit while teaching those groups that need a little "smack across the face" to wake them up on how we are killing our own!!! Sorry I do not remember where or when it was but good luck..

    To comment on the staffing discussion; I have several friends that have no idea how emergency services work, sectaries and white collar worker type. I was asked by a woman one night "our firemen are saying they need five more firefighters because they are understaffed but every time I see a picture of them there are twenty or more standing around with enough fire trucks to have a parade waiting for something to do at the fire". That is the vision of some in our society today, I explained the best I could about our strategy and tactics and staging and command but it is a tuff sell. I must admit thinking about it from the other side in today's world we are not the only people "running light". The question I guess is what is RELISTIC optimum staffing, if two guys can do it why do you need four ? And no I am not talking about the IAFF and other union mumbo jumbo, I mean realistic staffing.

    A disclaimer, before all you IAFF/union brothers get your panties in a bunch, I am a proud union member and very pro union so calm down !!!

25. DMAN72 March 10th, 2009 6:07 pm

    Ditto for me on your disclaimer, brickcity, and I used the V word!

26. Jon March 10th, 2009 8:00 pm

    For the record, those panties were not mine!

27. Steve March 10th, 2009 11:58 pm

    PANTIES….. just like a bunch of firemen….start a conversation off about carrying tools/ladders and it can become anything….

But seriously, the average citizen is clueless about what we do…regardless if we do it for free or as our career.

For the record, I am a card carrying member of the IAFF

28. pfd27 March 11th, 2009 3:10 pm

brickcity1306,

Please understand that I'm not bashing anyone. We serve next to a paid dept that is getting their ass kicked with personnel cuts. It's not right. John Q has no concept of what should be a minimum staffing response to a 5 story bld. My panties knotted up because this site is not to blame for staffing issues.

29. ffgoody March 12th, 2009 2:41 am

If it gets the job done, with less people, faster or as fast, and its safe… why not? our combo department has 3-0 staffing to cover over 1,000 (yes 1k) sqyare miles out of 1 station (lots of Sierra Nevada Mountain Range). We need all the "short-cuts" we can get. (as long as its safe) Even if you have the staffing, it just opens up the door for someone else to start another task. The only downside to this it the weight. How much can 2 people carry? does your departments physical strength differ by station or even by shift? there could be a lot of factors in this. Im more of a person to at least try somthing a few times to see if it works before i make a solid decision. I say good work on the innovation. Maybey we should talk to Duo-Ladders about fabricating some clips and hooks for tools on their ladders. Unless there are actuall hooks rated and made for this application already. So far im not aware, please let me know if there is. solid work fellas!

30. jams from the yard March 13th, 2009 6:01 pm

come on VES..iv seen way better posts than this idea..nothing new here.. I think its time i threw in some of my own local findings to bring this site back up to par!!!

31. brushbunny March 15th, 2009 12:25 pm

I agree. There is nothing special about this ladder carry technique. Maybe it's just my area that I'm from, but if you need ladders to the seen you carry all that is on your engine at the same time and tools. Not to take away from the brothers over at DCFD but its nothing special.

32. brushbunny March 15th, 2009 12:30 pm

In addition for you out their on an engine, carry your roof and extension together. When you throw your ladders together have your partner get the roof and throw it on the other side while you tie off your ladder, (if you don't have a continuous halyard) and by the time you partner is back you have your saw running and are ready to go up with two escape routes established.

33. forgotten March 15th, 2009 5:41 pm

Dman;

"swing a dead cat".
Coffee out my nose brother.
As for the technique.
Whatever works.

34. brickcity1306 March 15th, 2009 8:05 pm

Hummmm if you use the roof ladder as a 2nd means of egress what do you use as a roof ladder???

35. brushbunny March 16th, 2009 5:54 pm

where im from most of our roofs dont need a roof ladder to walk on.of course if it is needed then take it up with you.

36. brickcity1306 March 16th, 2009 11:25 pm

Ok,, so if you don't need a roof ladder why are you on the roof??? In a perfect world if you are venting a roof there is fire under you, you should ALLWASE work off a ladder! Unless you are only working off a flat roof or popping a scuttle, I would guess you would make neither off of a two fly so agene why are you up there?? FF 101 my friend

37. forgotten March 17th, 2009 5:07 pm

"should" has a very broad brush in the fire business.
There is the book and there is the street. I agree with the perfect world strategy and approach. However, I am sure we have all been to those jobs when the roof ladder just doesn't seem to make it there and as mentioned earlier, "we do what we have to do".
Continued safety to all .
Happy St. Patricks day brothers.

38. Brickcity1306 March 18th, 2009 8:30 am

Forgotten, I said "should" for that exact reason and did not want to get blasted by my own guys!!! Should I have been working off a ladder when the engine is making the 2nd floor and there are clear signs that things are deteriorating rapidly on the fire floor and the place needs to be opened NOW? Should you take the two min to throw it when it is a low pitch roof? I can tell what the NIOSH report will say if you fall through and die. Just so you understand I am the furthest from a "by the book man" but there is a time and place for the book and not under the kitchen table to level it out either..

EGH

39. 564 March 21st, 2009 8:27 am

"place for the book and not under the kitchen table to level it out either.."

Whoops….I'll have to replace it with my EMT-Basic book.

Brotherhood above all.

Stay safe.

40. brickcity1306 March 21st, 2009 10:10 pm

    Ohhh please do!!! Let me tell you a well known secret,, I have been am EMT for 25 +++ years and nothing has changed, just some stupid shit to keep some dumb pencil pushing FAG employed for 80 K a year!!!!! God that pisses me off to no end ..

41. kentvill March 22nd, 2009 2:10 am

    hey brickcity 1306…your stupid!!!

42. makingthepush March 22nd, 2009 2:54 am

    Finally, something we can all agree on – EMS SUCKS!

43. brickcity1306 March 22nd, 2009 9:03 pm

    LOL,, Ems sucks but it pays the bills!! And here is a thought we work for our money, unlike most of you bucket heads that sleep for twelve hwr out of twenty four and see fire every ten shifts!!! Losers bite me fu&^ing hose draggers, makingthepush what a FAG name

44. forgotten March 23rd, 2009 7:53 pm

    With posts like those above the validity of ANYTHING you say afterwards goes right out the window. Lets stay on topic brothers.

45. brickcity1306 March 23rd, 2009 8:44 pm

    Yea after I posted it I wish I could delete it, but I have said stupid stuff and wished I could take it back too. I am who I am, LOL good bad or indifferent.

46. ATLJake March 23rd, 2009 9:14 pm

    God Bless, does it make sense that there are brothers and sisters from smaller departments that just like to see new ideas or maybe put some new tricks in their tool kit that don't have the privaledge of having 3 or 4 workn' jobs a day. It's all good, keep the drama down to a min. Stay safe

47. brickcity1306 March 23rd, 2009 11:29 pm

I am just an asshole and a mean SOB sometimes!! Ask people that know me, LOL I am working on it but I slip once in a wile 

48. pfd27 March 24th, 2009 4:28 pm

    Don't change brick, you make me look like a saint!

49. DMAN72 March 24th, 2009 9:05 pm

    Brickcity1306,
    You better effing man-up or they're gonna stick you on an ambulance! Or worse…an engine!

50. brickcity1306 March 24th, 2009 10:19 pm

    We are for the most part lucky here in the "Garden state" big red things with hose and some ugly yellow ones do fire suppression and white things "AKA the box" do EMS runs. I know an amazing concept!!! I am even worse on the ems side, DMAN72 I bailed on the street about two years ago moved to dispatch. Now dispatching bucket heads/EMS/helicopters. Thank god I still ride the tower, where I am from we embrace assholes and mean SOB'S, they make the day go by faster. Please do not tell me I am the only one on this forum, LOL and pfd72 I will do my part as long as you do yours.

    Forgotten I am just curious, why if you ream someone out does your "validity" go right out the window??? I am not starting with you just curious, I admit that post was over the top but I was just wondering..

Wood You?

January 02nd, 2009 | Category: Outside Functions

Firefighter Kevin Galt from Fort Lauderdale (FL) Ladder Co. 2 sent these photos of a find from his first due. Your first thought (since you know the pictures are from FL) may be that the building owner did this for hurricane protection. Well, hopefully that's not the case here since they would work much better on the outside. This set-up is on a vacant building so more than likely for anti-vandalism purposes.

These simple boards, and the fact that they are mounted on the inside, could cause some issues on a working fire. So the first question is: Would you even notice the plywood at night? Is it possible to just look at the window, see it in tact, and never really look into it? The plywood would/could certainly delay the escape of smoke from one of the windows causing a delay in alarm, and taking away the ability to read the fire's intensity and location upon arrival.

Another issue could be: When softening the building, removing any plywood coving openings would be expected, however, with this set-up it may not be as easy. In order to remove the plywood most (if not all) of the window may have to be ventilated, which of course could just make the building into a piece of Swiss cheese from a ventilation standpoint.

Since access inside the building was not possible when the photos were taken we are unsure exactly how the plywood is secured. It could be a Mickey Mouse installation that could be easily pushed in from the outside, or it could be much more secure. Either way, a simple sheet of plywood on the inside of the window could prove to be a bit of a pain in the ass.

11 comments

11 Comments so far

1. Evan Swartz January 3rd, 2009 1:06 am

   Let it burn!!

2. T January 3rd, 2009 7:58 pm

   Chain saw and just let them fall right in

3. Joe D. January 4th, 2009 1:34 am

   forget the chainsaw… every truckie loves a challenge, break out the 35' and go to work with a hook or a bar or something…

4. Kevin LD2FF January 4th, 2009 12:14 pm

   Just a little backround on the pics I sent in. We have had 2 or 3 warehouse fires within blocks of where the pics were taken. One went to a 2nd. This area is very mixed use and ever changing, warehouses on the same block and adjacent to multi-family, ect.(See top pic, new "loft-style" apts next to this warehouse.) Many are mom and pop places that are filled with who knows what. We have found some warehouses converted to makeshift living quarters.
   "T"- chainsaws are my bet too.

5. Jon January 4th, 2009 2:41 pm

Welcome to the new "Obama Economy"

6. Jamie Morelock January 4th, 2009 2:56 pm

   This is where good preplanning of your district pays off. The biggest issue I see is the necessity to remove the framework of small angle iron that makes up the window in order to easily access the plywood sheeting. These windows also appear to be out of a firefighter's reach when standing on the ground. It will probably require the use of a rotary saw with an aluminum oxide blade to remove the metal frame, followed by either a chainsaw or rotary saw with a vent blade to remove the sheeting. Working off a ground ladder to perform this would be difficult at best, not to mention akward and dangerous. A better option would be to operate from a tower ladder bucket if one is avaliable. If you don't have a tower, pull the chief's ride up under the window and stand on the roof, at least it wouldn't be in the way of in-coming companies then…

7. 564 January 4th, 2009 6:19 pm

   "pull the chief's ride up under the window and stand on the roof, at least it wouldn't be in the way of in-coming companies then…"

   If I ever get the slightest opportunity to try that I'm goin' for it! That's awesome.

   Brotherhood above all.

   Be safe.

8. DMAN72 January 5th, 2009 2:35 pm

   Been a while since I gave my two cents so….I agree with Jamie, preplanning is key. If you find a problem like this, you need to get inside and see the whole enchilada. Also the key word in this scenario is "vacant" building. I know "homeless people" blah, blah. Risk little, blah, blah. I don't need to repeat that. I can only imagine this building has a metal roof, so condsider how long venting these winders is going to take and whether it would even be neccesary to be in there.

9. DMAN72 January 5th, 2009 7:45 pm

   ALSO I'VE POSTED AN EXCELLENT LINK FROM OUR MILITARY. THEY ALSO UNDERSTAND THE IMPORTANCE OF QUICKLY GAINING ACCESS TO BUILDINGS.

   http://www.youtube.com/watch?v=yIDqCNk6i1o&feature=PlayList&p=F66BCD184DA40ED0&playnext=1&index=19

10. RT158 January 6th, 2009 12:23 pm

    Don't count out the possibility that the wood won't be removed if the property is occupied again at some time. This could present some major problems for RIT operations, even though the windows are fairly high from the ground, they may still provide a viable option for a firefighter removal depending on the "new"

layout of the interior once a new tenant moves in. We recently had a similar situation in our response area in which the windows were covered during renovation operations and were then left that way. To add to it the glass was covered with extremely dark window tint, like you would see on a limo, so now not only is the wood hidden, but this could lead to some false smoke readings during a size up, particularly at night.

11. 10foothook January 8th, 2009 10:33 am

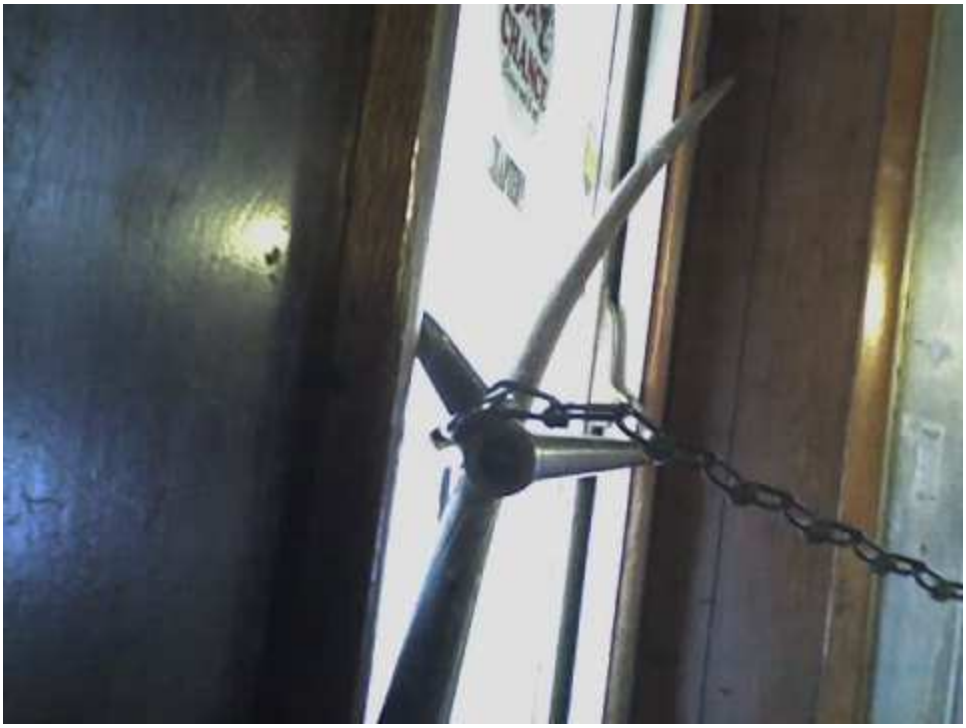
Looks like there might be enough room to get an aerial (stick) into the parking lot. Why not just drop the stick into the panes and take the windows that way. Use the rig as a tool just as you would any thing else on it.

Galvanized Security

December 23rd, 2008 | Category: Outside Functions

The first photo was submitted by Lieutenant Randy Hunter and Captain Derek Church from Bluffton (SC) it actually from the same building we discussed in the post a few weeks ago: "View from the Inside." The owner simply placed a galvanized pipe through the door handle. It's not going to make forcible entry impossible by any means; it just may take a little more work than originally expected.

The second photo was sent in by Derek Long from Oil City (PA.) Fortunately this one is a little easier to see from the outside. This building owner placed a walking stick through the panic hardware and used a chain and padlock to another door on the opposite wall.



These photos prove (like we have on many other posts) that business owners will do what ever they "think" will work to keep people out of their businesses after hours. This is very typical on the rear door of a commercial occupancy and most of the time you will not be able to see what the crafty business owner has done to secure the door. This is why we as skilled professionals need to be well trained and well prepared to perform forcible entry. The rear door of a commercial occupancy may present itself with some challenges, but as we have advocated in the past: *Identify and Visualize*.

7 comments

7 Comments so far

1. DMAN72 December 23rd, 2008 3:30 pm

   WOOOOOOOOOOOOOO! MY PICTURE FINALLY MADE IT! I'VE BEEN WANTING TO GET ON HERE FOREVER!!

2. FitSsikS December 23rd, 2008 5:53 pm

   Hehe.
   Somehow that's strangely reminicent of Steve Martin yelling, "The new phone book is here! The new phone book is here!"

And an early Merry Christmas to you all!

3. DMAN72 December 23rd, 2008 6:31 pm

   STAY AWAY FROM THE CANS!

4. hef December 23rd, 2008 7:26 pm

   on the second picture, entry would seem to be a little easier then the first picture because it seems the front of the door is glass. you can observe this potential problem while doing your initlal size up of the door.

5. Keith121 December 24th, 2008 2:01 pm

   I wish I had a camera last night. We had a small grease fire in a house and I noticed some interesting construction while we were clearing out the smoke. The braniac homeowners had put in a new kitchen floor, that was about half an inch higher than the bottom of the inward opening back door. It made the door useless, but without a great inside view it would appear to be a good means of entry or exit. It wouldn't be a terrible problem to force from the outside, but would have been a lot more complicated than it appeared.

   Sorry this is off topic, but as soon as I saw it, I thought about this website. Merry Christmas!

6. D. Clime December 27th, 2008 2:33 am

   The first picture is a piece of cake…. smack the door handle on the out side with a sledge…. then punch the handle through with the pick on the bar….

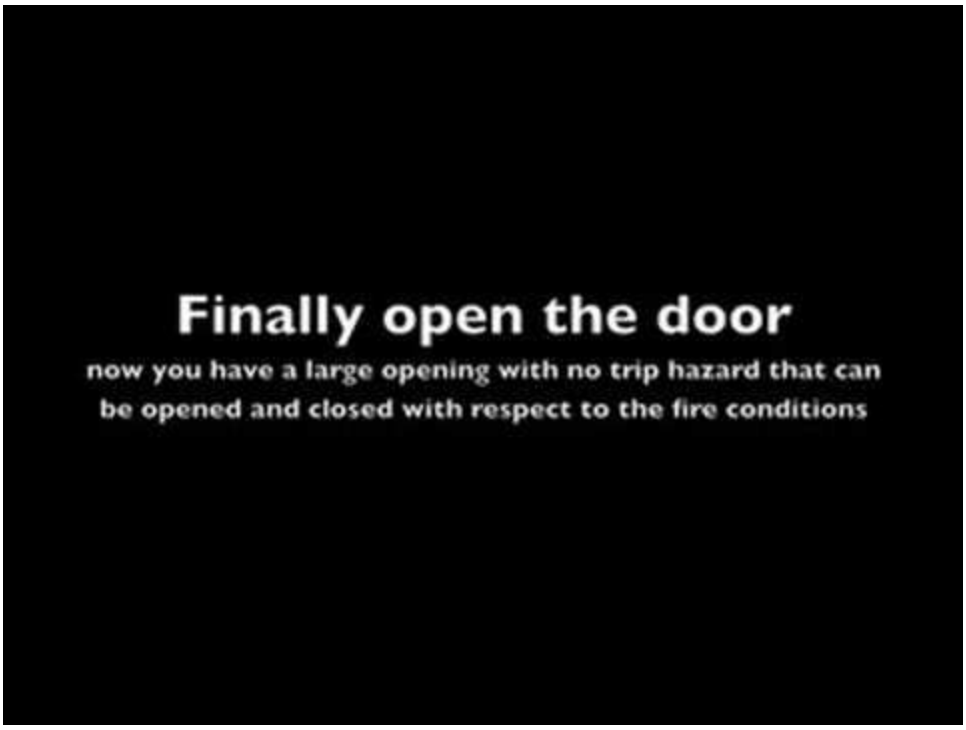
   Even if you didnt know it was there it makes life easier for outward swinging doors… Give it a try… it works!!

7. truck 402 February 4th, 2009 2:24 pm

   us best bet for the first door is to bet around the door frame with a tnt tool and then try to push the door in and if all else fails just grab the saw and put a metal cutting blade on it and then go to town on the door or the hidges.

West Coast Cut

November 17th, 2008 | Category: Outside Functions, Videos



Firefighter Ryan Gilbert from Bellingham (WA) sent in this method of cutting an overhead or garage door. The nice thing about this particular cut is that it will work on many different types of doors. For instance, many roll-up doors are riveted or pinned on either side near the track, so the one-cut method doesn't always work. It will also work relatively quickly on the residential door as shown in the video.

Some call this the "Inverted L", however, they refer to it as the "West Coast Cut", since it was originally taught to them by some LA City brothers. Call it what ever you'd like, it's simply another option to open a roll up door. Ryan points out that one of the benefits they enjoy about this particular method is the ability to control the airflow if for some reason that ability is needed.

39 comments

39 Comments so far

1. Ex-Chief 32 November 17th, 2008 10:07 am

   Good method, another twist to this is two guys can cut at the same time. The second can start the horizontal cut once the first begins the vertical since the triangle cut and the base angle cut are time consuming. Both should be done around the same time.

2. Tye November 17th, 2008 12:36 pm

   This a great way to cut overhead doors, but very few people know about it. A good way to practice this technique is to go to an overhead door company and get some residential sectional panels. The easiest to

work with are the 8’ panels. Find an existing garage door and open the door fully. Lightly clamp the panels in place on the channel guides and use self tapping screws to screw the doors together. Also use the existing hinges from the panels and screw them on. I would suggest you put some plywood under the panels so you don’t cut into anyone’s nice concrete.

Most overhead door companies have no problem giving you the panels and it allows everyone a chance to cut in both vertical and horizontal positions.

I sent Jimm a photo of a way to make a prop for cutting the panels as well.

3. 2dawgs November 17th, 2008 1:50 pm

   Great Video guys. Thanks for adding it. I got to do this cut in Seattle at the Fools Convention, quick and simple. BUT…ok…I’ll say it…Ryan..dude…brother……wtf was with that music????

4. Jake November 17th, 2008 2:03 pm

   What was ever wrong with the “East Coast” triangle cut?

5. ryan November 17th, 2008 2:27 pm

   Awesome tip about two saws at the same time. thanks. And Tye, that’s a great idea about getting old sectional panels from the overhead door company. We were going to buy 8’ sections of galvanized roofing for training. 2dawgs: c’mon man, that a classic!

   we’ve found this technique to be faster even than the “slash cut” for rolling steel doors. When doing the slash cut, you still have to cut the angle iron at the bottom, plus slide out all the slats. additionally, on some rolling steel doors every slat is riveted to a guide roller, so none of them will slide out. But just like everything we do, on this technique attention to detail is key.

6. Jon November 17th, 2008 4:12 pm

   I wish we had doors that flimsy! How well does it work though when the smoke is pushing hard? Would it matter which side you cut it on? I know on residential doors I would go for a quick angle cut at the top to release the automatic door opener the roll it up.

7. Ex-Chief 32 November 17th, 2008 4:23 pm

   With smoke pushing I would make the top cut first so you finished crouching on the ground cutting the angle. Even if the panel flopped the smoke should be going over your head.

8. Tye November 17th, 2008 4:30 pm

This cut also works well on non-slatted single piece overhead roll-up doors that are very common at public storage facilities. I believe they are also called continuous curtains. They are about as flimsy as it gets which tends to chew up abrasive blades.

9. Tye November 17th, 2008 4:37 pm

   Also here is another good video from Long Beach FD. Use the jump to feature and go to "Inverted L Cutting Technique."

   http://longbeach.granicus.com/MediaPlayer.php?publish_id=283

10. Walter November 17th, 2008 6:20 pm

    "What was ever wrong with the "East Coast" triangle cut?"

    Nothing at all. Some people prefer to take the extra time to make a larger opening. Bigger opening = better access, more lines and faster egress.

    It's all preference.

11. Capt Courtney November 17th, 2008 7:43 pm

    I agree the top cut first. similair to taking the hinge side of a door. no need to put smoke and heat in your face. and whats the deal with the triangle at the base?? prop it with a hook finish through the bottom and move on?? nice vid brothers

12. Walter November 17th, 2008 9:47 pm

    Capt. Courtney: If you want to cut the angle iron at the base, you'll have to cut a small teepee cut in order to get the saw in deep enough to finish the cut.

    Sometimes there's just one L-shaped piece of angle iron at the base; sometimes there's 2 pieces (making an inverted T shape). You can't tell which one you have until you cut it.

13. Ryan November 17th, 2008 11:38 pm

    Great video! Awesome production and great content.

    One tip i've learned the hard way with this cut is to be sure and overlap your cuts a generous amount, especially when dealing with wind braced sectional doors.

14. Stefan (Germany) November 18th, 2008 5:15 am

    Could you please explain the purpose of the triangle cut to a newbie from Europe?
    Thanks in Advance!

15. Dave November 18th, 2008 10:47 am

    To save your blade, a halligan (or just about any kind of wedge) can be used close to the cut to raise that bottom bar up just a little off the floor. Gaining even 1/2" is worth the effort. Only takes a few seconds, makes the cut a lot cleaner. Saves going back to catch that last bit of steel you missed the first time.
    We avoid using 2 saws in close proximity for safety reasons.

16. ryan November 18th, 2008 11:15 am

    "Could you please explain the purpose of the triangle cut to a newbie from Europe?"

    you make the triangle cut just big enough to get the saw into. because of the round profile of the saw blade, this is the only way to consistently cut all the way through the angle iron at the bottom of the door. We've tried to lever the door up with a halligan, but you still need to make the triangular cut.

17. Stefen November 18th, 2008 3:51 pm

    Great video Ryan, I've been looking for a well put together video showing this technique. I'll use it next week for a class.

    One problem that we ran into while making the top cut first was that it made the vertical and diagonal cuts more difficult by pinching the blade.

18. Matt November 18th, 2008 5:00 pm

    I'm sure this technique works well, I just personally don't like the idea of a firefighter kneeling on the ground to make such precise bottom cuts. If this go haywire, I'd rather be on my feet, in a boxer's stance, so I can make a get-away if I have to. I prefer simple left and right vertical cuts, a horizonal cut at chest height, AND CALL IT A DAY. It's forcible entry, not origami.

19. Capt Courtney November 18th, 2008 9:37 pm

    I've cut quite a few doors and the one important item that can not be over looked is when you go to work you must have a full blade. anything else should be taken off and saved for training only.
    So yes, if you did not have a full blade you may not get through the bottom.Also if you do not prop up the bottom to expose it to the largest radius of the blade you won't finish it. then I can see the extra cut at the bottom. Nice work fellas.

20. jimm November 19th, 2008 7:02 am

Here is the photo that Tye spoke about above (the second comment to this post.)

21. John November 19th, 2008 2:47 pm

    cant view video for some reason. whats the youtube title of it? I'll try it on youtube.

22. Chris November 19th, 2008 3:05 pm

    Great Video! Thanks for the tips on the prop's too, any more pictures? Im just wondering how the panels are secured to the Channel.

23. 2dawgs November 19th, 2008 3:55 pm

    Thanks for the photo of the prop Jimm. I am at the very very early stages of putting together a small training site at my firehouse, it would be great to see more photos and or diagrams for more training props….maybe a new category…"Training Props". As always this is a awesome website, keep up the great work men.
    FTM PTB

24. Tye November 19th, 2008 5:37 pm

    Chris,

    The panels just slide into a channel. The large uprights are C-Channel and there is a short piece of flat steel welded in to form a the channel. They slide in, then are secured together with the self tapping screws. We have experimented with using a strap to tie in the top. I will see if I have more pictures of the backside and

get them to Jim. One of our guys is actually designing one that will accept sectionals as well as rollups. We are working on a site to share prop ideas. Maybe Jimm can handle it through this site.

25. Jimm November 20th, 2008 7:19 am

    Funny thing you guys should mention it. We have wanted to start a training prop page here on vententersearch. So it's official, we'll start it right now, the category should be up soon, and we'll go back and tag all of our old posts, in addition we'll start a separate page much like the tips and pockets page to collect all of the props. So that's what we are going to do; now we ask what are you going to do? Please send any photos and descriptions of training props you'd like to see featured here on vententersearch and we'll do the rest. Thanks again for the continued support, you guys are the best!

26. Dan November 20th, 2008 9:30 am

    On the second door the video ended and they don't show them pulling the door to the right like they did with the first door. The angle iron at the bottom of the second door is much thicker than the bottom piece of the first door and I would like to see if that would actually bend as it had in the first door.

27. nick November 20th, 2008 2:08 pm

    Here's a video of the rolling steel tactic, it works well — I didn't know that some are riveted.

28. nick November 20th, 2008 2:09 pm

    Sorry, it didn't go through — here's that video:

    http://www.youtube.com/watch?v=rUlv35TMXhU

29. John November 20th, 2008 2:38 pm

    thanks nick

30. Chris November 21st, 2008 12:27 pm

    I haven't had the chance to try the inverted L cut yet, I do like the idea of making the top cut first to release some of that heavy smoke pushing my only question is, By the time you make your verticle cut to the bottom and start hacking through the angle iron what's going to stop it from flopping forward at you while your trying to finish your cut. Problem solved if you have another guy there to steady it, we all know it is not always the case.

31. Dan November 24th, 2008 12:01 pm

    Ryan,I had asked about the bending of the bottom of the second door that was cut,but I never got an answer,I'll repost the question.

On the second door the video ended and they don't show them pulling the door to the right like they did with the first door(garage door). The angle iron at the bottom of the second door(loading dock door) is much thicker than the bottom piece of the first door and I would like to see if that would actually bend as it had in the garage door.

32. steve November 29th, 2008 3:38 pm

I see that cutting the triangle at the bottom is so you can get the blade in to cut the angle iron at the bottom. What if you wedged the fork of the haligan underneath the door, between the pad and the angle iron to give it a bit of a rise off the ground so you can get at the angle iron on your first vertical plunge? Would that work? I wish we had one of these doors to practice on so I can tape it to show you what I'm talking about.

33. Mike Stallings November 29th, 2008 11:16 pm

This cut works on most doors, however, you must be careful when cutting residential garage doors that use torsional cables. The torsional springs are located behind the door at the ceiling level, and it has cables running on either side of the door (on the back side). One year, while teaching at FDIC West, a few brothers from San Jose Fire wanted to try this cut on such a door.

Everything went well until they made that bottom cut which compromised the support brace on the very bottom. Once that cut was made, both of those cables ripped the entire door up into a huge ball of metal, and it happened so quickly, we barely got out of the way.

If this is the type of door that you run across, I would suggest you do a different cut, or if you must do this West Coast cut, do NOT cut that bottom brace, or you will have one mess on your hands, not to mention a good possibility of getting someone hurt.

Be safe.

Your Brother in Fire,
Mike Stallings
Orlando Fire

34. 2dawgs November 30th, 2008 3:35 am

Steve,
Brother your right on both ends. Yes the Triangle cut will allow you to get the blade all the way to finish your cut, and yes you could also use a tool of choice to prop up the door up to finish the cut. Both will work, it all really depends on sizeing up that door. If the door is tough and well built then you may have to think triangle cut since there is no real good give to the door. But hey if the door has a lot of give…give it some hell with a hook. All in all bro it's just another way to skin cat.
ktf

35. Craig November 30th, 2008 9:22 pm

    Very cool cut, unfortunately for us here in Florida many of the overhead doors are reinforced for hurricanes, with U bars going across the entire door which extend 5" away from the exterior of the door. Best bet with those, find another way in, if it's your only option Ive found a triangle cut to take care of the veneer then attacking the grillage is your best bet. Hurricane construction can be a really pain in the ass.

36. Sully December 1st, 2008 12:31 am

    Craig, in reference to your comments about hurricane protection and myself also on the job in the "deep south".. this tactic still does work well with the added hurricane bracing. The technique requires an additional vertical cut just adjacent to the first vertical cut (just wide enough to get the head of the saw in to "finish" the cuts on the bracing. If 2 saws are available then both of these cuts can be made at the same time. Takes a bit longer (not much) but well worth the effort when the door needs forced,,, great video and great site … as usual!

37. ryan December 17th, 2008 4:19 pm

    Dan,
    sorry about the wait. I's been busy here. The rolling steel door in the second video does have a stronger piece of angle iron at the bottom. It's still easy to open as long as you hook the angle iron(with your halligan) rather than the door slats themselves.

    Steve,
    We've found that prying the angle iron up with your halligan to be much less reliable than making the triangle cut. even if you can get it up enough to cut through the whole thing, sometimes the saw blade binds in the stressed metal.
    -Ryan

38. Troy February 14th, 2009 4:45 pm

    Interesting cut always like to see other ways, however…how long is this taking, how much water is getting on the fire? The old inverted V still alows water application to the overhead area as the panels are being cut and droping away. Sure in a smaller door it leaves less headroom…but when did we decide its ok to walk instead of crawl brothers. Still another technique for the toolbag, thanks.

39. Chris July 27th, 2011 3:31 am

    Now, im a new-ish firefighter, been in for 2 years, but my dads been a chief since i was around 6. im just curious as to if an additional cut on the bottom of the right side of the door would make pulling and closing the door easier? Or instead bash the bottom right side of the door with a maul od the flat end of the ax. Or is it easy enough to pull w/o what im saying?

Razor Roof

October 31st, 2008 | Category: Outside Functions

Captain Tim Herman from Garner (NC) Engine 1 sent in these photos of something he and his crew discovered during some pre-planning of their area.

This building owner decided to put razor wire along the roof line in the rear of the building. This is definitely something we could get past, but probably nothing we would normally expect to find.

Anytime you are confronted with something out of the ordinary like this, we always advocate stepping back for a second, gathering your thoughts, and getting the big picture.

Why deal with the wire if you don't have to? Ladder the side of the building and get the job done.

21 comments

21 Comments so far

1. Evan Swartz October 31st, 2008 2:10 pm

   The first one, nice. I would look at this step back a say to myself was this guy a moron? But it is nice to see pre-planning happening. Observing the buildings in your area is a good thing to pratice this way at 3 in the morning you dont come across this and get hurt. Be safe god bless.

2. Joeyd October 31st, 2008 3:51 pm

   If I saw this I would be thinking: "What else did this guy do and why?" what else does he have on the roof that we can't see. I would do some checking into this one for sure.

3. Jamie Morelock October 31st, 2008 6:03 pm

   This is pretty common on inner city taxpayers. The razor wire has nothing to do with laddering. It helps prevent the would be criminal from utilizing the building's features and objects (ie. dumpsters, sheds, fences)near the building to scale the wall high enough to grab the roof edge and pull themselves up.

4. Gary Rauch October 31st, 2008 8:02 pm

   Also, how about thinking what this guy has inside the building that could affect our operations.

BE SAFE!

5. Jamie Morelock October 31st, 2008 8:04 pm

   The reason that the other wall does not have the razor wire because apparently nothing on or near the building for someone to climb up.

6. FitSsikS October 31st, 2008 8:16 pm

   Like Jamie said.

   It would imply that entry to the building may be easy from the roof. There may be sky-lights, vents or a utility structures that compromise the roof. This may be something to keep in mind depending on the nature of the call, ie alarm bells, no key holder present/responding or with regards to fire spread or ventilation.

   Or I post a picture showing the wires…gone.

7. TFS,A/C433 November 1st, 2008 2:31 am

   You wouldn't do that would you??

8. Rocco November 1st, 2008 5:32 pm

   This is all over the place in Camden NJ. Im sure its everywhere in cities with high crime rates.

9. Capt Duke November 1st, 2008 10:15 pm

   I'm a Fire Captain for California Dept. of Corrections, I work at a prison, sometimes we may have to rescue a gaurd from the gun walk which has simular razor wire. We double layered a thick canvas salvage cover and used that as edge protection. So if you had no choice but to traverse the wires and you don't have time to cut them, this is one way to protect yourself and your crew. Be safe! Stay low and let it blow!

10. Capt Duke November 1st, 2008 10:17 pm

    Guard– have to correct my typo.

11. RES24CUE November 2nd, 2008 2:04 am

    Be extra careful at night…the wire will not stand out as it does during the day!!!

12. Squad 47 November 2nd, 2008 8:25 pm

    If you opt to cut it, watch for any spring back!!!

13. DMAN72 November 3rd, 2008 10:27 am

    I swore I was staying outta this one…but. Extend your ladder over the wire and tie off the bottom. Use a roof or attic ladder, tied to the ground ladder, to descend to the roof. It's in the book. You could also do a gin pole, possibly. P.S. We have a Snorkel so problem solved..raise upper, raise lower, lower upper and you're on.(Snorkel people will get that)

14. truck402 November 3rd, 2008 1:22 pm

    wow people are thinking way to hard about this why cut it if you can go around it. simple think smart and quick

15. chief49 November 3rd, 2008 3:59 pm

    Thank you truck402. it would be much faster and easier to place a ground ladder up on the wall to the left of the picture (near the door but not directly over it) or, put one up on the far back wall on the right side of the photo and go up, around, and back down. It appears that either method would all but eliminate the need to deal with the wires. My problem with this is what happens when we all need to get off of that roof in a hurry. Add a decent smoke condition to this at night time and this becomes a real big problem.

16. PJS November 3rd, 2008 4:28 pm

    There is so much of this in the ghettos they call it "ghetto ivy".

Drop Bar Padlock

September 19th, 2008 | Category: Outside Functions

DJ Stone from Fort Walton Beach (FL) Truck 6 sent in these photos of a drop bar installation with a pad lock. They ran into this in an office area of a large warehouse style building. Obviously, once the padlock is in place, it takes away a few of the options we may use to defeat the drop bar from the outside.. While some of the bumping the bar from the outside trick may not work on this one, the rotary saw treatment to the bolts would definitely still defeat this. Another point to mention is that you would have no way of knowing if this was present from the outside.

The arrows in the photo above show where the padlock would be installed on the drop bar to prevent it from being bumped out of place.

7 comments

7 Comments so far

1. Mike September 19th, 2008 10:28 am

   A couple of thoughts on this one… From the picture, it would appear that there will be carriage bolt heads will be visible on the exterior of the door since nuts are visible on the interior – it's "through bolted". So, cutting the bolt heads with the rotary saw or shearing the heads with the Halligan adz would work. If there are not bolt heads visible on the exterior of the door, then the drop bar assembly would be attached to the door with screws not nuts and bolts. If this were the case, using the irons should prove effective. As the door is forced outward, the screws will pull out of the skin of the door.

2. John September 19th, 2008 11:44 am

   Another case of $2 worth of hardware holding up $50 worth of bar. Its still nice to know what you have out there to deal with. Nice find. Keep em' commin boys!

3. Jon September 19th, 2008 3:35 pm

   Excellent find. Like Mike and John said, attack the hardware. I would be hitting them with the pike end though, drive them through the door. But as always, try before you pry!

4. ... September 20th, 2008 9:37 am

   Seeing the bolts on the outside I would go ahead and hit them through the door, thus allowing the security device to fall off the door. Seems to be the easiest route here rather than trying to fight with the hardware attached.

5. Landon September 21st, 2008 8:19 pm

   If there is a working fire in that occupancy you may not have enough time to analyze or guess what the hardware maybe connected to. I would just resort to the ever faithful "doggie door" and be done with it.

6. PJS September 24th, 2008 3:46 pm

   Most doors with security like this will be found in the rear. Where most everthing is fortified. Be sure before you go to the rear of a taxpayer or commercial occupancy take a forcible entry saw. So you won't be delayed in opening up. I will bring a halligan, a maul, and the saw. And a good light for night time responses.

7. JA September 30th, 2008 3:00 pm

   Best Buy uses these for night security on their fire exit doors. Some doors will have one and some doors will have one on top and one on the bottom. Make sure and size up the door from the outside to see if you have 4 or 8 carrige bolt heads!

Spare Time and a Welder

August 05th, 2008 | Category: Outside Functions

Ryan Royal from Colorado Springs Truck 8 sent in this interesting door from their first due. He wanted to make sure that the crew from Truck 8 and Engine 8 got credit for the find. The door is in a 160' by 30' commercial building that sits among many highly secured buildings in a high crime rate area. Apparently, as a result of multiple break-ins at this building, the owner got pretty creative. The photo below is the back door of this building. Remember, the building is 160×30 so the building only has two doors, Side A, and Side C. All the windows in this building had been bricked over, so it is fairly reasonable to say that this door may have to be opened.

Click here to see more photos and descriptions of what's on the other side of this door.

15 comments

15 Comments so far

1. Egan August 5th, 2008 8:15 am

First, thanks for sending that in. Great pictures.

I am also VERY glad the shop owners in my area do not view this website. For the area I work, this would be a great door for the shop owners. For us, not so much.

Wow, so many items to take care of. I would just use the charge of C4 and blow the door (like in the movie "Towering Inferno" – LOL)

Stay safe and remember to use a long fuse on the C4 or you might loose a finger.

2. Jon August 5th, 2008 8:39 am

I think that it is safe to say that, 'high crime' is the understatement of the year! OV to Chauffeur, bring me chains and a dump truck, and some det cord, K.

3. ... August 5th, 2008 9:42 am

Looks like a death trap for us, and needless to say we are going to need more than the irons to force this.

4. Dave August 5th, 2008 4:13 pm

Getting through each of the obstacles isn't what concerns me here….it's the time involved in discovering each obstacle. You'd be spending time on gaping the door before you discovered not one but three points which have to be breached. You'd probably start by conventional methods until you discovered the drop bars….unless you had a rabbit tool. Then I'd say it's time for the rotary saw in the gap between the frame and door. Three cuts in total. Force the door open then either single cuts on the left or right of each padlock. Barring that idea I'd revert to one of the other posts made regarding the steel plate door…..truck and chains!!….lol.
This also reinforces the basics before making entry….someone better do a damn good size up before sending a crew inside cause forcing this door ain't gonna be something you want to remember if you need to get in cause PASS alarms are going off.

5. Havoc August 5th, 2008 6:55 pm

Ghetto vault of the year award for sure.
What kind of store was this, first national bank of tha hood?

6. verbs August 5th, 2008 11:07 pm

At least it was nice of him to put " Door Is Blo"

7. 119 Firefighter 84 August 6th, 2008 12:44 am

attack the bricked windows with a battering ram or masonry blade. prob your best bet.

ps, i understand the joke, but C4 is inert unless activated by electrical contact . no fuse.

8. Dave August 6th, 2008 3:51 pm

Basically, if a door says "DOOR IS BLO..", don't even try it.

9. layn-n August 6th, 2008 4:28 pm

   Mark that page in your pre-plan book with a brite piece of paper and when you get called there, LET THAT MOTHA BURN!

10. TxFirefighter August 10th, 2008 2:08 pm

    Wow… okay and I thought I had some ghetto places in my district! What are they keeping in there that is so important?! Or for that matter wtf is going on in the Springs that requires this…

11. Seth Shagnasty August 11th, 2008 3:29 am

    The guy just loves that dam trash can, kids keep stealing the darn thing!

12. chet August 19th, 2008 12:58 pm

    "DOOR IS BLO". Forgot to mention that BLO is an acronym that means "Built Like OX"! heh.
    Chet

13. Sean August 22nd, 2008 7:13 pm

    This would be an absolute nightmare of a job breaching this structure! I totally agree with this statement…

    "Looks like a death trap for us, and needless to say we are going to need more than the irons to force this…"

14. Adam August 27th, 2008 2:57 pm

    I'd be concerned that this is just one of the entry/exit points. How are the rest of the windows and doors secured? A hardened building like this may call for an extra truck or two depending on your normal box (defineatly would in my area). I'd want to be able to dedicate as many truckies as I could to making holes for egress if an interior fight was to ensue.

15. nate October 2nd, 2008 9:11 am

    Firstly, fine job of finding this door in your first due. Effective firefighting is more than just what you do on the scene. Inspections, whether formal or just out looking into bad buildings in one's district, can be very useful. To be forewarned is to be forearmed.

    With that rear door set up like it is, there would be no interior attack, and I would talk to the property owner and let him know that, and that the decision was made by him. By installing that level of theft protection, he has made his bldg too dangerous to us, and he has forfeited any level of fire protection beyond exterior attack. Whatever it is he is trying to protect, is not worth the life of one of our firefighters. Pre-fire it as "Do not enter".

I enjoy the "what ifs" and "how to's" discussion on breaching that door, but as a practical matter, knowing how that rear door is and with the bricked up windows, I would hope that we would never put firefighters through that front door with smoke showing.

Spare Time and a Welder

Ryan Royal from Colorado Springs Truck 8 sent in this interesting door from their first due. He wanted to make sure that the crew from Truck 8 and Engine 8 got credit for the find. The door is in a 160' by 30' commercial building that sits among many highly secured buildings in a high crime rate area. Apparently, as a result of multiple break-ins at this building, the owner got pretty creative. The photo below is the back door of this building. Remember, the building is 160x30 so the building only has two doors, Side A, and Side C. All the windows in this building had been bricked over, so it is fairly reasonable to say that this door may have to be opened.

The first photo shows the outside of this door. Besides the custom made sign at the top, it has no obvious bolt patterns or signs of locks. It does however appear that there is some type of modification or reinforcing all the way around the outside of the door. The door is approx 3 inches thick.

The photo above shows the modifications that have been done on the inside. The door has been hardened with 1/4 inch thick steel welded all the way around the perimeter of the door. In addition to the steel, the owner welded drop bar mounts both high and low on the door. The drop bars are 1x3 pieces of tubular square steel. Although it may look totally out of place, the panic hardware is also mounted to this reinforced frame.

The photo above is when it is all buttoned up. A homemade gate (angle iron and rebar) is put in place as an additional means of protection. The gate is secured by two padlocks in the middle. If you look at the drop bars, you can see that they too get padlocked in place, preventing them from being defeated but cutting, or knocking them out of place. The trash can is more than likely put in place just to piss you off one last time after getting through all of the locks.

Steel Plate Door

July 29th, 2008 | Category: Outside Functions

Lieutenant Michael Brown from Baltimore (MD) Truck Company #15 sent in this interesting door. Like any good Lieutenant would, he wanted credit for the picture and description given to his crew of Truck Company 15 "A" Shift.

The picture is of a structure in their first alarm district. It is secured with ½ steel plates. For obvious reasons, they are unable to determine the exact type of locking mechanisms used on the inside. So, like so many forcible entry problems, you have to use the information apparent from the outside to determine how to force the door. The hinges appear to be half barrel pin hinges, but the weight of steel and the height from the ground would more than likely make lifting/leverage very difficult.

The brothers at Truck 15 A came up with few possible solutions: First, depending upon fire conditions, enter via ground ladder on the second floor and make their way down to the door/window to be able to identify and disable the locking mechanisms from the inside. The second possibility would be to attack the window where the two swinging doors meet; the window appears to be very weak at the seam, once the windows are opened, enter through the window and get the door open from inside. A third potential solution would be to use the rabbit tool to pop the door. This may or may not be feasible depending any bracing of locking mechanisms located on the inside.

29 comments

29 Comments so far

1. Jon July 29th, 2008 9:04 am

   How about just setting up the TL out front and pouring water on it so none of US gets killed for another damn vacant building? This is definitely NOT a nice Jewish neighborhood so who is gonna call and say those firemans didnt fill up their ropes with water! How about just popping the plywood of the building next door and breaching the wall? Thats probably where the fire will be anyway cause of its easy access to skells and the like.

2. Dave July 29th, 2008 9:38 am

   I would try to "pop" the window under the reinforced window and enter to unlock it from the inside. The easiest way in would be to cut the hinges with a oxy-gasoline torche. No one needs to enter and two fire fighters can do it with little effort.

3. Dave July 29th, 2008 9:42 am

   Sorry, my fingers are two fat and are hard to type with. I mean torch not torche!

4. ... July 29th, 2008 9:43 am

   I am going to have to agree with Jon on this one. By the looks of this building, it is vacant, and if it isn't it is a life hazard to us as firefighters. Just because this type of security measures are visible doesn't mean there are others that aren't visible. So no matter what, this type of building is going need a good overlook before making any quick interior decisions.

5. DMAN72 July 29th, 2008 11:32 am

   I must read this website differently or something. When I read posts like these, I assume worst case senario, i.e. you have to get in. Therefore I try to think of ways to defeat what is seen on the post. I agree a lot of what we see posted are building we would not enter, but what if these doors were on a different building, with people in it, then what?

6. Jon July 29th, 2008 12:52 pm

   If people are in it? That lock will pop right out of that brick. Get a maul and get the brick away from the lock. Or just torch it, but thats gonna take some time and who knows how thick that steel is, when it falls the guy doing the cutting is not gonna be happy!

7. chris July 29th, 2008 12:58 pm

   Jet Axe!

8. Chris July 29th, 2008 2:43 pm

Dave said about popping the window below the reinforced window and unlocking the other. I would think that the bottom window takes you to the floor below? I may be wrong but with the layout of the steps ect, it points to the 1st floor / basement floor separation.

9. Tom July 29th, 2008 4:07 pm

   I like Chris's idea..pop that grate and window out and try and get in that way. Also, some most truck companies dont carry torches so if the rescue is taking a while youd have to think of something else. Popping the windows may or may not be a good idea as well. If you have an active fire in that room trying to open the swinging doors might prove problematic unless you jammed a hose in there. Finally, the last choice I can see would be to use the Partner saw and cut the hinges on both doors and let them flop down.

10. Truck105 July 29th, 2008 6:38 pm

    Looks like something from one of the SAW movies.
    It will let you in, but wont let you out.
    LOL

11. BCFD July 29th, 2008 10:17 pm

    knowing how things are in baltimore if you walked around back you'd probably come to find the back door wide open or the roof collapsed into the basement and the only thing left standing is the wall on side A

12. forgotten July 29th, 2008 10:58 pm

    Where can I get doors like these.
    Maybe that will keep my mother in law OUT.
    Stay Safe Brothers.

13. Egan July 30th, 2008 8:18 am

    First, thanks for submitting.

    I have to agree with DMAN72…. real world presents us with a great opportunity to find real things at the worst times. This webpage is a great way to find something and use it as a training "WHAT IF?" scenarios. Here we can find the worst things at the best times.

    I have heard some fire schools even use these pictures on this web page to discuss those types of items with their students. (I know two states that do that at least)

    At the very least, this web page starts thinking, sometimes in the box (or bucket), sometimes out of it. Use the pictures with your crew to discuss what they would do if they were faced with this item and HAD TO GET IN.

Read and discuss it here as well, but remember local SOP and situations may differ from what someone says here. We all know regions, states and sometimes shifts do things differently then others. But reading and sharing what you would do may spark thoughts for others.

Stay safe.

14. HCFR3491 July 30th, 2008 2:21 pm

    My gut is side charlie. Breaching the wall of the Delta 1 exposure is brick, and know Bmore, probably load bearing. If it is a severe middle of group (unlikely in Bmore) go through Delta1 to access Charlie side. Baltimore has a BAD habit of turning single families into multi tenanted units. A hard lesson learned from Allen Roberts. RIP, brother. If you must access Alpha, smal cuts at the bolt heads on the hinges to defeat them. One minute tops with a cut off saw.

15. B.King July 30th, 2008 11:53 pm

    I agree with Chris on the jet axe,what ever happend to those things? Oh ya they don't trust firemen with explosives,only the copper types have breaching charges… Wouldn't think that that would make our jobs safer go to the roof lay some det cord get back in the bucket move away pop the hole,no staying on the roof with saws and axes.Only thinking for this modern world

16. 52Capt. July 31st, 2008 6:44 am

    If the back of this building is as secured as the front, I'm going with Jon's idea. Flood from the outside so everyone goes home. If the building is as secured as it appears to be, what are the chances that it would have people in it? Unless they got in from one of the exposures, and if they did shame on them. Remember, our safty comes first. Remember, we didn't put them there. You can't always fix stupid. Be Safe Brothers and Sisters.

17. Dave July 31st, 2008 8:42 am

    Are those security bars I see in the window of the dbl steel door? I suspect if you get that door open you might be facing another hurdle. I'd be more than a little leary of going in through the basement window…..if you need a second means of egress you might find yourself facing those bloody doors again from the opposite side this time….in bad conditions.

18. me July 31st, 2008 9:09 am

    interesting. this cat will get skinned, the how is up to you. but this cat weighs upwards of 600 pounds. Also you are operating on open steps, or from the bucket or a ladder for the double doors, adding a certain degree of difficulty. So when you skin the cat, make sure the skin doesn't fall on you. it just might hurt.

19. Jon August 1st, 2008 12:31 am

One of the brother's mentioned the hinges and cutting the top of them. These hinges I have seen before on old alley doors here in NYC. They are a solid design with a male and female half with the door basically having the female half of the hinge sit on the male portion. You may be able to lift them off, but then you have a heavy problem on your hands, not fun at all! Also the one Brother mentioned the fact that we can all see the obvious, and after reading that I too responded with what we would do in the event we HAD to get in there. I would hope the obvious (our safety) is in fact obvious!
Stay Safe Bro's!

20. Jeromy August 1st, 2008 10:35 am

I agree with the small window idea. However it might be advisable to take a small folding attic ladder with you into the basement incase this is a house under renovation and has no stairwell to the main floor. I would have to assume that trying to hop back up and out of that small window would be troublesome.

21. James August 2nd, 2008 12:51 am

Here's my take:

Someone mentioned that they saw burglar bars on the windows, what most likely happened is that they figured that they wouldn't prevent the windows from being broken, so they added this extra measure.

The door: the barrel/pin hinge can be used to our advantage, K12 the left side of the door where the lock/handle would traditionally be, then slide the rabbit under the door to one side, lift up the heavy mother and it'll do it's own job in falling off onto the curb.

What you might find is actually a 4way multilock on the other side of the door (http://www.vententersearch.com/?p=242) then one could make a cut in the center of the door in the shape of a square, each cut being 12-14 inches long, hopefully defeating the assembly.

Everyone's feedback greatly appreciated….

22. 16Capt August 2nd, 2008 8:52 am

As always our safety comes first, but this site is known for thinking outside the box. Is there any way we could get a close up pic of the locking mechanism on the door? ALL locks can be defeated, some just take longer then others. As for the window, with the appearance of burglar bars on the window, the locking setup may not be as complicated as we think. it quite possibly may just be a drop bar with a padlock. if we had closer pictures, we may skin this cat quicker then first thought. FTM PTB&S

23. Keith121 August 2nd, 2008 10:56 am

I'm thinking outside the box and the city. We are an all volunteer dept. in a tiny rural town, so there is always at least one of us on scene with a big-ol pick-up. We would just bust the glass, run a chain through the holes in the window, and snatch that mother down. It's not pretty or by any means by the book, but it would work.

I love the website, it gives me a chance to see and learn things that we never face out here in the sticks. But it sure will be nice if I am ever faced with any of these "problems".

24. Jon August 2nd, 2008 2:41 pm

    Git 'er Dun right keith? 

25. Keith121 August 3rd, 2008 10:21 am

    Yessir! Rednecks and firemen tear up stuff better than anybody I know, so when you put the two together just sit back and enjoy the show.

26. out there August 6th, 2008 11:30 am

    hey, thats my house =(

27. BCFD Westside August 13th, 2008 11:54 pm

    I would probably scout the rear, or make access through the easy to breach basement window and attempt to unlock the door or window from the interior.

28. Steve August 17th, 2008 11:41 pm

    I didn't read every single response above, but…

    Why not treat the door as a 'doggy door' and just cut the bottom 1/3-1/2 of the door under where the locking mechanism might probably be and swing it open (crawl in) and unlock it for everyone else from the inside…

29. JGR September 9th, 2008 8:18 pm

    I like the chain idea it opens both of those doors to the left and gives you a sizable entry point and exit point if needed. You should not enter where you cant get out quick.

Doggy Door the Video

July 20th, 2008 | Category: Outside Functions, Videos

The doggy door forcible entry technique may not be many people's first choice, but it's a technique that could prove useful in certain situations. We originally posted the doggy door forcible entry technique back in November 2006. Here are links to the original post and supplemental page.

As you can see in the video, the cut took about one minute fifteen seconds. The nice thing about this technique is that it only took one person, and the person is still "fresh." We have no doubt that a well trained team of two firefighters could make quick work out of many doors, but there may be that time when the situation calls for the doggy door. The key to performing a successful doggy door is cutting well into the

jab on either side of the cut. This is obviously done to ensure that the door is cut all the way through at the beginning and end of the cut. Notice that a knee was used to stabilize the saw, this can be a useful method, but it has some potential safety issues. The other nice thing about using the knee is that it places the cut at the perfect height.

*This particular door, and the locks presented, would not normally call for a doggy door cut. This video was made simply to demonstrate the technique.

http://www.vententersearch.com/videos/doggydoor.flv29 comments

29 Comments so far

1. Brian July 21st, 2008 8:41 am

   Seems like an aweful lot of work. The wall is sheetrock, it is much easier to use a tool (halligan on the floor in the video) and punch a hole in the wall next to the knob, reach in and unlock. Cheaper for homeowner/business to repair the wall, than to replace the steel door.

2. Drew July 21st, 2008 8:50 am

   It was loud, destructive, and it worked. Nice Job!

3. rattle man July 21st, 2008 11:23 am

   Just muscle up and use the IRONS sitting right next to you. Faster, quieter and safer.

4. layn-n July 21st, 2008 11:59 am

   better yet the hinge pins are on the exterior of the door. drive out the pins or use a slice tool to completely remove those jokers

5. 564 July 21st, 2008 12:14 pm

   You will see the note on the post:

   "*This particular door, and the locks presented, would not normally call for a doggy door cut. This video was made simply to demonstrate the technique."

   So comments about alternatives for this particular door would not be prudent.

   Its a great idea. Thanks for the video.

   -564

6. T.young July 21st, 2008 1:36 pm

IS that the DOT building?

7. CFD HOOK July 21st, 2008 2:22 pm

   Hey brother Nice gloves? Nice eye protection. good technique but you dont want to be on firefighterclosecalls.com because o lets say the gas cap comes loose while using the saw, o that one is already there. WEAR PPE.

8. Lt29 July 21st, 2008 4:05 pm

   What if there are flammables gases on the other side of the door?

9. Chris July 21st, 2008 9:16 pm

   I think you guys are missing the point. Here's just another alternative to get you thinking. And as far as safety, it looks like that's a Partner K12FD saw, which has the gas cap on the left side. Holding it the way he is keeps the fill hole upright.

10. Hook and Ladder 1 July 22nd, 2008 12:27 am

    You will see the note on the post:

    "*This particular door, and the locks presented, would not normally call for a doggy door cut. This video was made simply to demonstrate the technique."

    So comments about alternatives for this particular door would not be prudent.

    Its a great idea. Thanks for the video.

    -564"

    Why show a technique on the wrong door? That makes no sense. Train like it would be real. Use the irons and people should stop trying to reinvent the wheel in the fire service. Power tools and technology can not replace proven techniques and brute force..

11. T.young July 22nd, 2008 12:50 am

    probably because they have this door to destroy so they did it for a good cause!

12. L 2944 July 22nd, 2008 10:53 am

    This is a pretty good idea. Something I hadnt thought of. Could definately be useful for gaining entry thru those commercial doors that use a drop bar for security.

13. chris July 22nd, 2008 7:30 pm

For those of you who missed the original note about the type of door, look at the original post theyy linked to at the beginning of the article. This works very well if you have some sort of burglar bar in place. Just look at the bolts in place in the dooor which are probably holding the bar and go 6-8 inches below that, cut as shown in the video. Keep up the good work with the site guys. I have learned a bunch of good tips from here and put them to good use.

14. Brian July 23rd, 2008 2:55 pm

Nice video. This is a method that is just another option to gain entry. Whatever it takes.
Many times, especially at the rear of commercial occupancies, you can run into some tough opposition courtesy of the building owner. We have a building in our area where the owner placed three drop bars-top, middle and bottom of the door. This is in addition to a couple of dead bolts. So your not just "popping the door" now matter proficient you are with the irons.
Stay safe.

15. Evan Swartz July 23rd, 2008 4:15 pm

Its real funny how everyone is the expert. It is and example. You might not use this on THAT door but THAT was used to show how to do it and who it works.

16. RES24CUE July 23rd, 2008 10:46 pm

This is an interesting example…however, not in a positive context. First, the fact that the door is not opened completely is troublesome. I would be hesitant to send a company through that opening because it may be difficult to relocate in order to evacuate quickly. Second, the way that the saw is held in this video is atrocious. The easiest way to stabilize the saw in this position would be to hold your arm in a right angle under the body of the saw (still holding on to the handle) and stabilize the saw in the crook of your arm. The balancing of the saw on a knee leaves too much room for error in the event that it slips or the operator loses balance. Lastly, the fact that someone would make a video demonstration of a technique and flagrantly disregard proper use of PPE is also troubling. I must say that this is an extremely important time to wear your PPE because you are setting an example for others to learn. Also, remember that it is important to train correctly and safely so that the operation will be performed correctly on the fireground. Overall I had a lot of trouble with this technique, however, it is another example that can be put in our repertoires in the event of an odd or unusual situation.

17. DMAN72 July 24th, 2008 9:39 am

THANK YOU EVAN SWARTZ. I AGREE COMPLETELY. DO WE REALLY HAVE TO NIT-PICK EVERY LITTLE THING ON EVERY VIDEO? I ADMIT THAT I WENT PRETTY BAT SHIT ON THE SACRAMENTO ROOF VIDEO, BUT THIS WAS MADE AS A TRAINING DEMO! I DO AGREE THAT PPE IS ALWAYS AN ISSUE, BUT LET ME MEET ON PERSON WHO ALWAYS WEARS ALL THEIR PPE ALL THE TIME. EVEN BILLY G!(NO OFFENSE TO HIM AT ALL)PICKING APART EVERYBODY'S VIDEOS IS A GOOD WAY TO BREAK DOWN THE NETWORK AND GET PEOPLE TO STOP POSTING THINGS. THAT'S WHEN THE LEARNING STOPS AND THAT'S WHEN PEOPLE START GETTING HURT!

18. Sick of the Experts July 24th, 2008 12:33 pm

    I can't believe some of you people. Are you that bad at forced entry, you have to nit pick this video just so you feel smart? Good thing, we have some people do contribute tips, if we had to rely on the morons commenting on this video vententersearch.com would have shut down long ago.

    Maybe some people have depts that can afford to buy the supplies so that you can practice a technique on the exact kind of door you'd use it on, but here in the real world that luxury doesn't exist. They had a door they could cut, so they did it. Better to practice on the wrong door, then hold out for the right one and never practice.

    Some of you people just sicken me with your nit picking.

19. kd July 24th, 2008 1:50 pm

    Res24cue

    it is my understanding that after the cut is made, and members gain entry, the locking mechanism is manipulated from the inside and the door is opened.

    be safe brothers

20. forgotten July 24th, 2008 2:14 pm

    Thank you for sharing the technique brother.

21. Brian July 25th, 2008 7:36 am

    Ditto what Sick of the experts said. I can't believe I missed the saw in the crook of the arm. Maybe I should retire.
    Stay safe.

22. JM July 25th, 2008 10:12 am

    I don't know about all of you brainiacs out there but something I learned long ago was to not reject or ridicule something that hes been done for you out of kindness. These guys do this for all of us, in an attempt to better our profession. As stated above, it may not always be the "right way" for the textbook junkies, or your way for you people who are better fireman than the rest of us. But when someone gives me something I can use, for free, I learn from it. That's what all of us should be doing. Read the post and understand it before you ridicule someone for helping you.

23. brickcity1306 July 26th, 2008 10:51 pm

    What I see here is a clear case of dinosaurs VS Pepsi generation. I for one am a dinosaur that has evolved to my environment. I must say there are far too many dinosaurs on this site that will be extinct soon; you

guys need to get a grip. Train as you do, do as you train. Why would we support some of the shit you do on this site. Some of you are so called "professional" members of the fire service, you sure could fool me. What the hell do you do on shift just sit back and cost not investing in your carrier? How can you say "it's ok brother" like some of you dumb asses do??? This is yet again another case of, it is not being done rite in training so will it be done rite on the fire ground. But that is ok because he is a "brother" so we should blow smoke up his ass rite???

24. Egan July 27th, 2008 12:11 pm

    Jimm, thanks for the video. I can read and see that this door was SET UP for you to use as an example. Did no one notice the symbol for this web page was painted on the door on top. Its easy to see that this door was given for the making of this video.

    If someone out there has a door that actually needs a doggy door that you can cut up, by all means… go cut it and video it and I am sure the guys on this webpage would post it. (BE WARNED – you will be subjected to the panel of arm chair experts and judged on your actions)

    Thanks for submitting this video. It will be used by my crew to see how to do so when and if they are ever faced with a door that they will NEED to use this on.

    Stay safe.

25. Sick of the Experts July 29th, 2008 9:11 am

    brickcity1306, since you seem to be sticking to your guns about "practice like its real" what would you have them do? Go out and buy locking mechanisms to make this door a good canidate for a doggy door and WASTE TAXPAYER MONEY. Or just cut the metal door and practice a technique that they probably don't get to practice often due to its extremely destructive nature.

    Can you answer another question for me. How the heck do you practice vertical ventilation? Do you set the attic of the training house on fire then vent directly over this fire? I mean, you just can't go to a vacant and cut holes as you would on a burning house if there is no fire underneath to vent. That wouldn't be training as we do.

26. brickcity1306 July 30th, 2008 3:07 am

    Lack of proper ppe is my only real problem , the type of door has. Nothing to do with it,I may be wrong but I just feel if you are going to put your self out there it should be right. Here in NJ and I thought in most of the country it is illegal to burn in a "training house". We have training centers with several different types of vertical and horizontal simulators as well as toys for the hose drageres so I guess my answer is yes that is what we do.we train as we do in full ppe in a safe and controlled manner and with realistic simulation.

27. brickcity1306 July 30th, 2008 8:36 am

Furthermore your screen name as well as your statements Mr. "Sick of the experts "shows your ignorance. keep walking with the dinosaurs, just please don't bring down those of us that strive for better education and pray for the day no one gets hurt in training. I am not trying to bust balls,(well maybe a little) I am just trying to point out training flaws in hopes that someone may learn from it. Isn't that what this site is all about?? I suggest this link as proof http://firefighterclosecalls.com/cc_training.php

28. 11 House Probie August 8th, 2008 9:53 pm

Brick City, let me start by saying I dont think your negativity is necessary on this fire department training site. Jimmy and the boys work very hard to get this information out here for the rest of us to learn from, and I find it rather immature of you to get on here and bust balls for stupid things. If you have better ways of doing things, then share them. But if you are unhappy with the learnig tools placed on here, we dont care. We are here to learn, not hear to listen to your complaints about the site.
Further more, I believe these dinosaurs you speak of are not the people we should put down and beat up. They are the men that should be placed on a pedestal and given respect for all they have done. Rather then saying that these dinosaurs are the people that will be "extinct soon" maybe you should take the time to learn from the men that have been on this job for many years. The men that truly do whatever it takes, and dont let IFSTA, NFPA, or Safety Chiefs, get in the way. Maybe you should do a little less bashing and a little more listening to those dinosaurs. I bet if you had listened, you would have never placed half of your responses on here. You are the reason that I am afraid for the future of the fire service. You are the type of guy that wants to make this job so safe that you loose site of the job at hand.
My problem is that instead of taking an opportunity to learn something from this web site, you take the opportunity to start arguments with other people on this site and bash those that are bringing this priceless information to the entire fire service. Who cares if a training video doesnt meet the standards set forth by the "BELOVED" NFPA. We all know the steps necessary to protect ourselves. Who cares if the NFPA standards are not met on every job we go to work on. WE HAVE A JOB TO DO! While you are out in the front yard worrying about your NFPA codes and your two out, the occupants of the structure won't be getting any help. So I guess it will be the dinosaurs that make the grab. The last I checked we work for them, not the NFPA. Get over yourself!. Get over your fear of the dinosaurs! Shut your mouth! Open Your eyes and ears. Learn something!
Thanks to Jimmy and all of you who keep this site running by sharing your knowledge with the rest of us.
Just a little venting from the
11 House Probie

29. 1835wayne August 10th, 2008 2:57 am

Well, now that all the complaining is done, (I hope!) I just want to thank you for a great method for getting through a tough door. I work at an industrial facility(Steel Mill) where almost every door was constructed out of heavy steel with 1X tubing as the frame of the door. The Irons are all but useless to us as we are more likely to break them on most doors here. I will be showing this video to my crew when I go on turn tomorrow, as an alternative method. THANK YOU

For some reason we have recently had a significant increase in the amount of check cashing stores in Central Florida. We're pretty sure they are increasing across the nation. These business typically have a large amount of cash on hand, and therefore take security pretty seriously. This translates into difficult forcible entries, and interesting search problems.

From the outside this rear door doesn't look like much. (photo above) This particular door doesn't display the tell-tale bolts alerting us to an interior drop bar type or any other hardened locking mechanism. Notice the custom use of expandable foam at the bottom, they must not use this door regularly.

But from the inside we can see something we may not have expected. (photo above) This type of lock secures the door on all four sides (hinges on left), making forcible entry much more difficult. That's the point! They don't want anyone breaking in, even us. There are a few different forcible entry options, one will be explained at the bottom of this page.

The interior of these occupancies are typically divided in half, The front half for the customers, and the rear half for the employees. Bulletproof glass is frequently used as the interior partition. This partition uses a type of door that we had not seen previously. (photo above) This door remains closed most of the time. Notice the extra lock at the top portion of the door.

In this photo above, you can see this extra door (mini door) portion on the right hand side. The main door would normally be in the closed position. This mini door prevents the main door from fully opening. It was difficult to take a picture of it as it normally sits (in the closed position.) Imagine the full sized door in the closed position. The mini door to the right prevents the full size door from opening fully. This is done to create a tiny area in-between the two doors that is only large enough for one person to fit through at a time. If you were coming from the front room, you would open the door, it would hit the mini door, you would step to the side, close the main door, and then be able to enter the other room. This is done to prevent people from bum-rushing the back area.

Could you imagine having to deal with this during a search? We know these descriptions and pictures do not do it justice. We encourage everyone to go out and pre-plan these occupancies if you have them in your area. Spend a little extra time with the business owners explaining to them why you are interesting in looking around. We can tell you from experience, that they may be a little hesitant at first. Explain to them that you are only doing it to keep them safe.

The photo above pictures the "Doggy Door" cut. Battalion Chief Jeff Pindelski from Downers Grove (IL) Fire Department sent in this idea.. BC Pindelski is also a co-author of the Delmar publication Rapid Intervention Company Operations (RICO.) He pointed out that the hinges remain an option on the outward swinging door, but this too could be very useful method. Once the bottom section is pried open a firefighter could reach or crawl in, and manipulate any security devices on the door. The beauty of this option is that most of the locks added to the door will be located above the midline. This option should make pretty quick work of forcing most doors.

I have never tried this cut on one of the doors found in the check cashing stores, but it looks like it may be a viable option. A special thanks goes out to BC Pindelski for sending in this awesome idea! -Jimm-

Check Store & The "Doggy Door"

November 28th, 2006 | Category: Outside Functions

We have noticed a significant increase in the amount of check cashing stores all over Central Florida. We are sure everyone else has them too. These stores have some interesting forcible entry and search issues associated with them. Check out the supplemental page for a full description and additional photos.

A special thanks goes to Battalion Chief Jeff Pindelski from Downers Grove (IL) Fire Department for his idea on the "Doggy Door" cut. Check it out. –Jimm-

6 comments

6 Comments so far

1. chuck November 29th, 2006 11:13 pm

A couple of things to key in on from the outside. #1 the type of occupancy (check cashing store). #2 The plate covering the old door knob hole tells you some type of hardware change has been made. Notice that there are no bolts in line with the old door hardware, the bolts would tell you that panic hardware had been installed, but those arent there. Theres are also no bolts up high on the door telling you there isnt a drop bar. Obviously the interior pics show the locking mech, but these other things could held to identify it from the outside too.

The Doggy Door cut looks like a good plan of attack on this door, but you may need to cut the lower hindge and pull the door from the top of the cut to defeat the pin going into the ground. Get the cut lip clear by pulling out and then up and out.

2. DC December 4th, 2006 3:07 pm

   Im glad this was posted. We have had several of these check cashing stores pop up in our first and second due and I had never really given it a second thought. Keep up the awesome work everyone, and stay safe!

3. Dave December 4th, 2006 5:50 pm

   Very good lessons learned on this call. Whether it is a check cashing store or just a store in a not so nice neighborhood, it may have some sort of extra security on the door like this one. There is a shoe store in the same first due area that has a back door designed much in the same fashion. Top and side steel rods into the frame and a bar across the back. Not made to get in to. Another thing to keep in mind is while taking pictures of such things for training, let the owners know. I believe Jimm got a few looks from the management when he was snapping these photos.

4. 52capt. December 5th, 2006 6:35 pm

   Just a thought, maybe I missed something, but could you just cut a small whole in the right center of the door and reach in and push the lever down to gain entry?Seems like it might save some time. Any thoughts? I can't stop learning news ideas on this site. Great work guys and girls.

5. Jimm December 8th, 2006 9:23 am

   52capt, that is an excellent question. Here are some of my thoughts: Cutting the small hole in the right center of the door is still a viable option, if you knew for sure this was the type of lock involved. The beauty of the doggy door is that it has a very good chance of defeating a majority of types of locking mechanism that may be encountered. We have noticed that a majority of the additional locking mechanisms out there have been located above the mid line of the door.

   The other thought is about the saw technique: Best case scenario for a small hole would require a triangle opening consisting of 3 plunge cuts. When plunge cutting, the saw takes a little bit of time to actually work into the metal. The doggy door would only require one plunge followed by extending that one cut the full width of the door. What I'm trying to say is that the 3 plunge cuts would probably take longer than one continuous cut. Also cutting and moving the saw 3 times for the triangle cut requires that the saw blade (spinning at full speed) would be removed from the door 3 times versus only once with the doggy door. Probably not a big concern, but I'm just thinking pros and cons here. I have never personally tried the doggy door myself, I only learned of it a few days prior to putting it on the site. I guarantee that it will be executed at my earliest possible convenience. Somebody's door is Winter Park is gonna get it! The saw is warmed up and ready to go.

   The bottom line is: Do what you (and your crew) are comfortable with. Both options will get this door open. Next time you have the option to train on a door try both and see which one you prefer and are comfortable with.

   Remember: You perform the way you train! –Jimm-

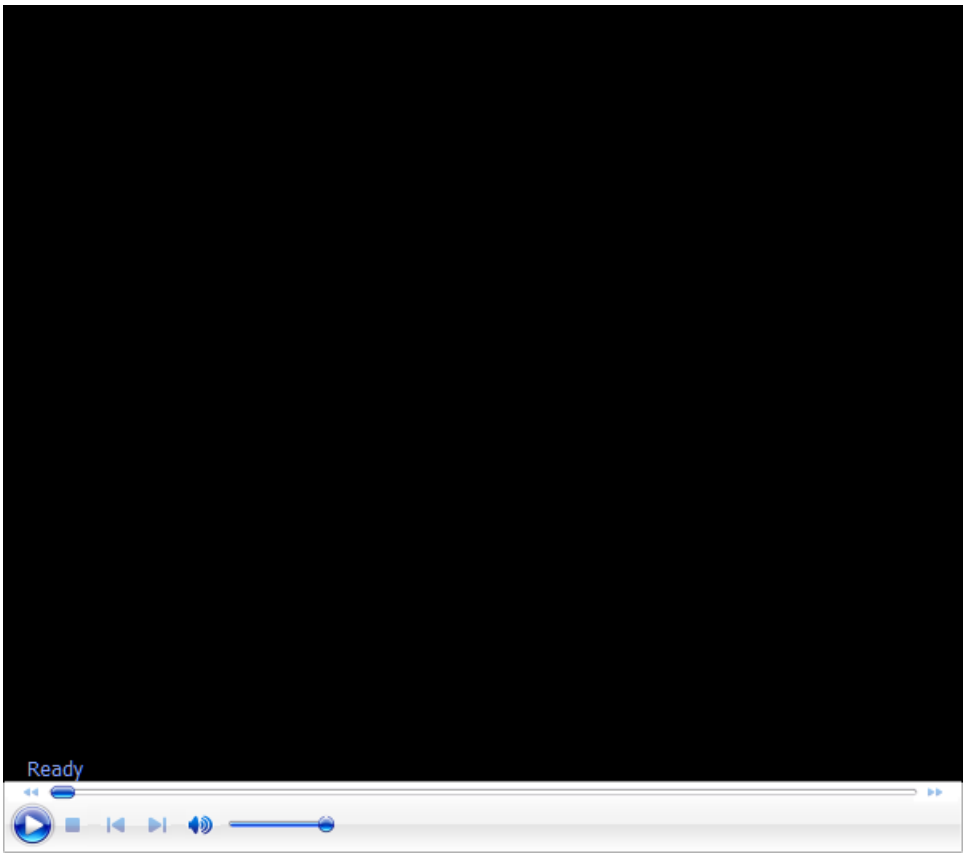
6. 52capt. December 8th, 2006 4:17 pm

Thanks Jimm, sounds like the doggy door may be the way to go. Like you, I've not come across this type of locking mechanism. A plunge followed by a continuous cut would be faster then a triangle. Thanks for the input. Be Safe!

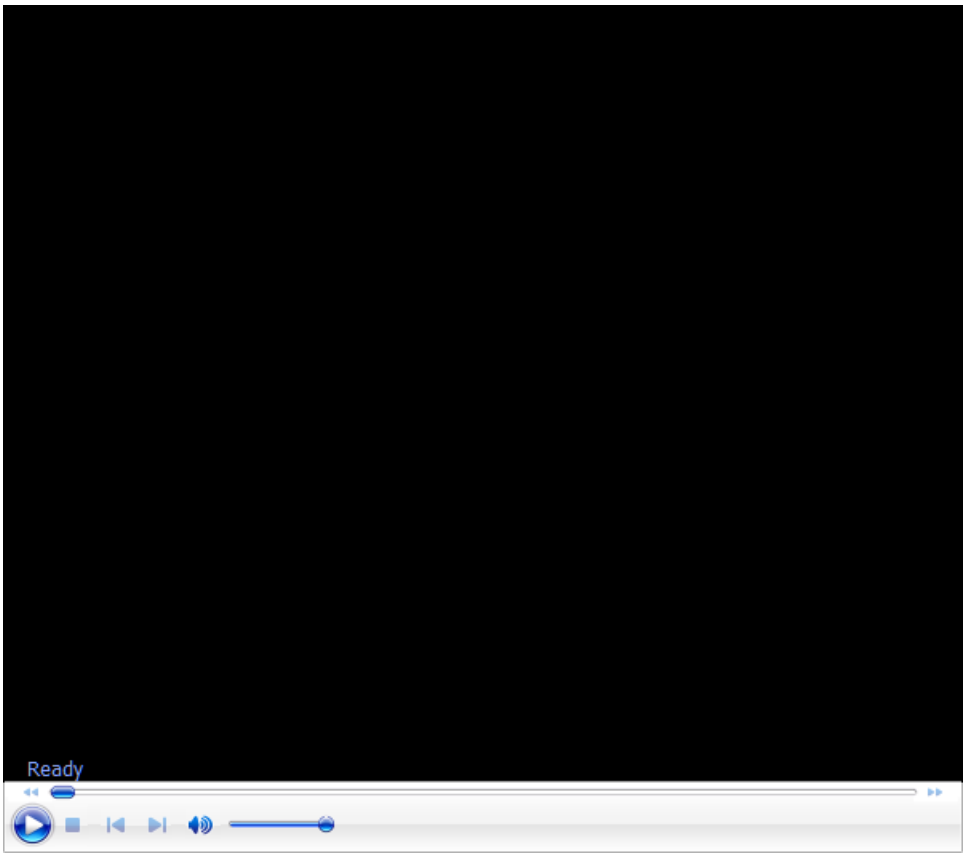
Weakest Link II

February 21st, 2008 | Category: Outside Functions, Videos

Battalion Chief John Riker from Newark Fire Department sent in these videos of the more commonly found weakest link on security bars.



The first video shows that sometimes the halligan is all that you need. Obviously the fact that the security bar assembly is only secured into a wood frame wall makes it a bit easier.



The second video shows the irons being used to defeat a security bar assembly secured on the outside of the window opening in a bock wall.

Be sure to check out the supplemental page with more pictures and step-by-step instructions on this useful and effective method.

20 comments

20 Comments so far

1. Brandan February 21st, 2008 10:52 pm

   Good Video I like the technique. We don't see many security bars out here, only on a few store front and industrial properties, and we had mostly trained to cut them. One little gripe though, I feel that PPE should have been worn even if for no reason other than to set a good example for our newer more impressionable Jakes out there.

2. DMAN72 February 22nd, 2008 10:26 am

   THANKS BRANDAN. I WAS GOING TO SAY THE EXACT SAME THING ABOUT PPE, BUT I DIDN'T WANT TO BE FIRST. REMEMBER PRACTICE LIKE YOU PLAY! GOOD VID THOUGH.

3. E-32Lt February 22nd, 2008 12:48 pm

   I have to agree. Thx for the insight, but wear your gear folks.

4. acklan February 22nd, 2008 4:44 pm

   You are right. It is not practice that makes you perfect, it is perfect practice that make you perfect. Or at least as close to perfect as one can get.

5. Truckee 13 February 23rd, 2008 2:45 pm

   2 things: The walls looked very soft
   Know your territory most of the security bars around here go through the concrete wall and attach to some sort of designed security device. Get the power tools

6. E-10LT February 23rd, 2008 6:43 pm

   good stuff

7. engin18 February 24th, 2008 10:12 pm

   The F/F in the video is HOTT, are all you Newark F/F's that good looking?

8. JQ February 25th, 2008 11:12 pm

   I think that the video is great and it's about time everyone worried about themselves, We are all grown men and women out here if he didnt want to wear PPE then he will figure it out when and if he gets hurt. Great Video and it looked safe to me.

9. Egan February 26th, 2008 12:17 am

   If I was being recorded or filmed I would make sure I was wearing PPE. In today's "you tube" world, liability can be thrown back in your face and some fancy lawyer could get his hands on a film showing you not following your PPE SOP then you may have a little trouble getting workers comp or your departments medical retirement if you got hurt.

   Not to mention how many firefighters watching it immediatley are critics when they see anyone not doing something 100% safe or proper.

   Just food for thought.

   Now, I think it was a great concept and I will discuss them with my crew. The walls did look soft but the concept is solid. It just might take a little more work in the real world. You know how hollywood films can be. (just kidding)

Thanks for submitting them.
Stay safe.

10. mitchs1224 February 26th, 2008 6:50 am

    nice work. great video. GREAT PICS! thanks

11. JC February 26th, 2008 2:22 pm

    Good video, looks like most of our local older houses.
    HEY PPE NAZIS, ENOUGH ALEADY!! If that is the most dangerous thing that guy does all day then I would call it a good day. It is just a demo video, thats all. No fireground pace, nobody hanging out windows, no cats and dogs livin in sin, no live fire, no real danger. It is the senior jakes responsibilty for making it clear to the new guys what is acceptable PPE for them. If they dont know already then you have failed. So take off your pen protectors, put down the microscopes, definitely stop with the fuckin lawyer/lawsuit bullshit and take it for what it is, A DEMO VIDEO! Thank the guy for his time and effort and keep the vagina monologue crap about PPE for when knuckleheads are tossing their helmets from building to building.
    thanks for the video fellas

    there's nothing common about sense

12. squadguy February 26th, 2008 3:54 pm

    I love that guy JC!!!

13. JQ February 27th, 2008 12:37 pm

    Hey JC, Thanks I was saying it outloud but just not typing it in that way. The Guy was doing simple carpentry or tradework. I dont wear PPE when doing Tradework for the mostpart. And by the way If that video is from Newark NJ those guys see alot of work, these guys know when to and not to wear gear. Check them out on YOU TUBE type in (Newark NJ Get IT DONE) great video of them knocking down alot of fire in a little time. Thanks and let me know what you think of the video.

14. brian February 27th, 2008 6:33 pm

    AMEN J.C. PPE Nazis, funny
    Stay safe all

15. G February 28th, 2008 1:24 am

    I think that the video is just another card for the trick bag it was great.(Reguards to PPE) I was just wondering what happened to this job being a dirty, hard nosed job? I 'll tell ya what I think that people have stopped looking on how to improve they just look a new ways to point out flaw or say the obvious. The thought that everyone doesn't want to go home or be as safe as possible is crazy. Those people that worry

about being sued, have forgotten about how this job is still supposed to be a dirty, blue collar job! Maybe they should stay where they probably really want to be,,,, in an office, behind a desk.

16. Battalion 13 Chief March 1st, 2008 2:21 pm

    This is why it is so important to do a walk around of the structure early in the incident. The RIT team should also be doing a walk around in the event that they are utilized as well. Keep up the good work guys. Stay safe…

17. J March 2nd, 2008 11:45 pm

    God Bless you chief, Keep that RIT team busy with size up and making sure egress is clear for the brothers inside. Be ready for the Mayday! ITS OUR JOB!

18. Rescue 8 March 9th, 2008 10:57 pm

    Then I guess someday we will have a LODD and funeral for all of you that are griping about picking fly s@#$ out of pepper in regards to the whole PPE thing. You got it, wear it, and go home with all your fingers and toes. Remember that every lesson we learn has been paid for in blood.

    "Keep'em outta heaven…
    Take'em outta hell."

19. Caddy March 10th, 2008 10:34 pm

    The first video are the bars connected to wood stills very common. The second video are the bars connected to cement blocks covered with stucco, also common. Those walls are not soft its common construction for most older and some new construction in buildings. Just keep this in your mind, this may be quicker when faced with the same construction than getting the saw.

20. Engine14 March 26th, 2008 5:31 pm

    I agree that the first video is wood however the second video may also be stucco over wood as well. You can see wood framing in the second video after the frame is removed. The consideration I have in my district is the type of bars that are used. Many in my district are placed on the house and are actually 4 inches or more off the concrete block. The tool doesn't work too well. I'm gonna try this next day with my crews on an abondoned house but I think the K12 will still work better.

Security Bars

We have pointed out in the past that when forcing entry, attacking the weakest link is typically the most efficient way to accomplish your objective. Windows with security bars are no different. The following pictures and videos were provided by Battalion Chief John Riker from Newark Fire Department.

Our initial inspection shows us that we have security bars that are secured into a brick wall on the inside of the window opening. One well placed strike from irons (using pike of the halligan), quickly shows us what we want to find... "the weakest link."

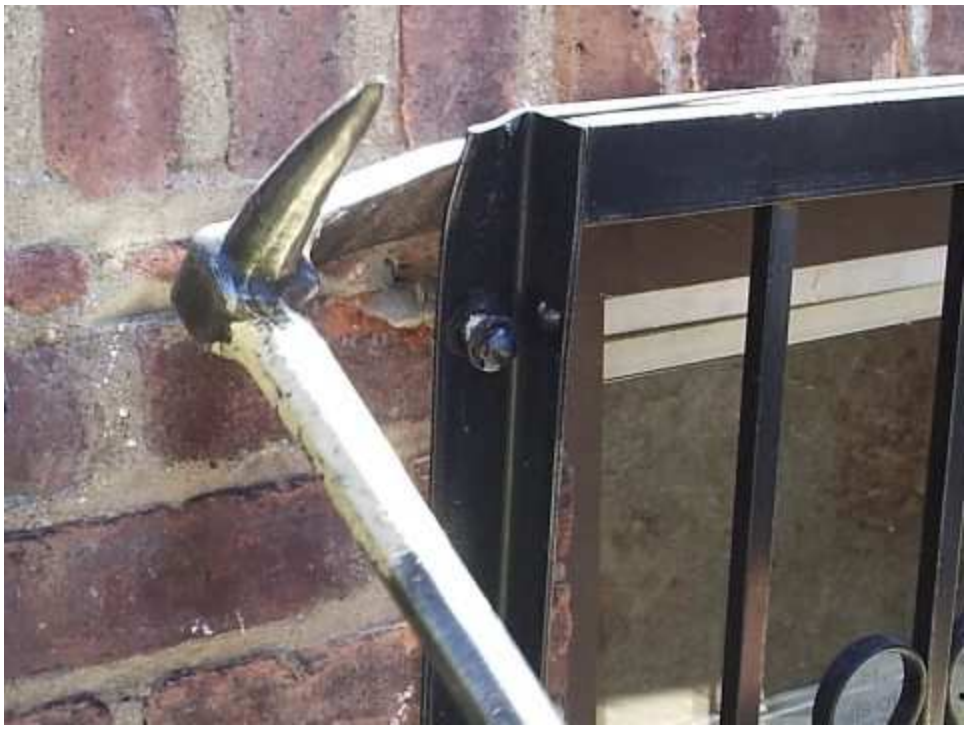
After a few strikes of the irons, the entire anchor will be exposed. The exposed anchor can then be pried out with the fork of the halligan.

Once the fork end has created enough of a purchase, switch to the adz end for more leverage.

Once the adz is placed, use the pike as leverage to bend the entire security bar assembly to defeat to remainder of the anchor. Focus on all of the anchors on one side, once the entire side is defeated, try to pry the entire security bar assembly away from the building.

The picture above is a little bit different. This security bar assembly is mounted on the outside of the window opening. This particular setup is frequently easier to defeat then the inside the window frame opening. This time start off with the adz and set it in-between the building and the security bar assembly.

Again, use the pike of the halligan for additional leverage when possible.



At least one side of the window is not set-up perfectly for using the pike as leverage.

As mentioned earlier, focus your efforts on one side and pull the security bar assembly away from the building.

The first video (click here)shows that sometimes the halligan is all that you need. Obviously the fact that the security bar assembly is only secured into a wood frame wall makes it a bit easier.

Thesecond video (click here)shows the irons being used to defeat a security bar assembly secured on the outside of the window opening in a bock wall.

Special thanks go out the Battalion Chief Riker and the Brothers from Newark for sharing this information.

Another Rex Tool Modification – By: Andrew Brassard

Comments (3)

Ever since my first blog on modifying a standard rex tool to be able to carry it in your pocket I have received lots of emails and had lots of questions about which modification (the pipe or the adz bracket). The reason why there is a debate about which one is better or more applicable is because I tend to like the adz bracket modification better because it allows you to rock the tool side to side and "walk" tough cylinders out off the door, with the pipe modification you loose the ability for the side to side movement.

The main reason that some guys like the pipe modification better is because in their company they utilise the wide adz halligan. So my latest project was to come up with a way to use either the pike or the adz to pull the cylinders. I have also seen on different blogs and websites several other modifications by other people to give the ability to use both, this was usually accomplished by welding a pipe on the top of the adz bracket. This modification made the tool extremely heavy and awkward. Remember that this is a

tool that you want to carry in your pocket most of the time, it should not look like something that a gas station should have the rest room keys attached to!

The first thing I did was cut the handle off a standard Rex Tool with a band saw. The next thing was I cut the length of the head down by 1" to decrease the weight and size of lock puller, the head was now ready for the new staple. The new staple had to be made to accommodate the pike and the adz, the answer was far simpler than you might think. With the help of Jamie Hiller at H and R Machine I used a shop press to bow the centre of a piece of 1/4" plate, the ends were then bent to fit the width of the lock puller. A MIG welder was then used to attach the bracket to the lock puller.

This modification gives you the best of both worlds, it allows you to be able to perform through the lock using either the pike or the adz. This new modification gives you a tremendous and light weight lock pulling option that you can keep in your pocket.

Cutting the Locks

Comments (9)

Brotherhood Instructors believes in having multiple plans in mind for any forcible entry situation. A back-up plan for forcing an outward opening door can be cutting the locks. We prefer to gap the door away from the frame and cut the throw of the lock as opposed to cutting the door, known as the "bird beak cut". The bird beak cut seldom works since

it is very difficult to cut completely through the door due to the door frame getting in the way.

If you decide to cut the locks, gap the door away from the jamb using the halligan or axe. Start the saw blade spinning at a low RPM to make a groove in the bolt of the lock and then throttle to full RPM to complete the cut. This is an especially helpful technique when dealing with foot bolts. Having the power saw set up in the outboard position will allow the saw to better cut the foot bolts. Click here for our previous blog on foot bolts. Be sure when cutting the bolt of any lock to cut as close to the door as possible. This will ensure that the lock can not re-latch once the tool holding the gap has been removed.

Hit, Hit, Hit Part 2 – By: Andrew Brassard

Comments (0)

In the last article we talked about ensuring that the striking firefighter has their top hand at least 6" down from the head of the axe. This is to ensure that any missed strikes don't crush the striking firefighters fingers.

Now we are going to talk about where to place your bottom hand and how to position your body for optimal striking during conventional forcible entry operations.

Just like the placement of your top hand, your bottom hand placement can be critical to a smooth forcible entry operation. For some reason, lots of firefighters want to choke their bottom hand up to around the middle of the axe. This grip can lead to problems during forcible entry operations. What tends to happen when using this type of grip is that as the striking firefighter swings the axe, the butt end of the handle digs into the firefighter holding the halligans leg. The momentum of the axe being swung usually doesn't stop once the butt end of the axe handle bumps the firefighters leg. The momentum tends to carry the axe through the swing but drastically off target. This obviously can lead to missed hits and the potential of injuring a member. Instead, place your bottom hand down at the bottom of the axe just above the fawns foot. This will allow you to be more aware of where the butt end of the axe handle is.

Don't be a Fool…. Cross your Tools

Another very common striking mistake is not crossing your tools. The optimal striking position for the axe is to have it crossing the adz of the halligan and not in line with it. The reason for

crossing the tools is that it increases your striking surface to allow for small inaccuracies. With the axe in line with the adz it leaves very little margin for error for the striking firefighter, if he is off the mark by only 1" this could cause a glancing hit on the adz and cause the halligan firefighter to be struck. If the axe and the adz of halligan are crossed it will increase your margin of error by giving you 2" up and down and 3" left to right leeway in your swing.

Keep your Eye on the Ball

When I was a young kid my father was teaching me how to catch a baseball and the first thing he said was "keep your eye on the ball", this principle applies the same to forcing a door. You should always try to make yourself eye level with the adz, this will make your swing much more accurate. Depending on the location of the lock being forced, you may have to take a knee, crouch, or you may be standing straight up, but for the majority of locks that are located in the middle of the door the striking firefighter should take position on their knees.

These small tips will help you be more proficient during you forcible entry operations.

Until next time, stay safe.

Foot Bolts

1 comment

Tweet

Foot bolts are substantial locking devices that can, like many others, be overcome easily with the proper tooks and knowledge. Foot bolts are slide bolts that are installed along the bottom rail of the door and lock into the floor. These locking devices can usualy be identified from the outside by the bolt pattern just like a slide bolt that locks into the door jamb. To determine if the foot bolt

is engaged or not, take a key tool or shove knife and slide it under the door. If the tool hits the bolt, the lock is engaged. This will prevent wasting time on a locking device that is not engaged.

There are several ways to force these locking devices. One of the quickest is using the power saw to cut the bolt. This will be difficult if not impossible unless you have a power saw set up with an outboard blade. As seen in the picture, the outboard blade allows the saw operator to slide the blade under the door to cut the bolt.

If you don't know how to change your saw to the outboard position check this video out. This two minute real time video demonstrates how to perform this modification to your power saw.

Forcing Doors In Zero Visibility – By: Andrew Brassard

Comments (3)

Anyone who has ever forced a challenging door in zero visibility knows it can be one of the most difficult forcible entry challenges a crew will ever face, for those of you that have not… This challenge still awaits you.

Weather it is an apartment door on the fire floor of a garden apartment, the illegal basement apartment door in a private dwelling, or the door in a SRO on the floor above the fire the potential to need to force some tough door under arduous conditions is always present. The fact is that we as a fire service typically don't get much practice or direction on forcible entry techniques under favorable conditions let alone under zero or diminished visibility conditions. In this blog we are going to look at several different techniques for forcing entry under zero visibility conditions.

Size Up
Since we are unable to see size up is going to be tougher and normal and is going to be accomplished primarily by feel, both with your hands and the way the tool reacts on the door.

The first step is to feel the door with a gloved hand for any primary and secondary locks, bolt patterns, heat, etc. This will help establish a game plan of attack on the door. Remember you want to start with the highest lock first and work your way down so any heat or smoke behind the door will vent up and away from you.

After a rapid and thorough size up is complete you can begin forcing the door. You are going to GAP, SET, FORCE just like any other forcible entry operation, the only real difference comes from the setting the tool and more specifically the hitting techniques. We are going to look at 3 different hitting techniques that you can utilize to help you drive the halligan into the SET position.

Double Tap Method
The double tap is more than just Rule 2 in Zombieland, it is a great method for forcing doors in smoky conditions. The double tap method works well in limited visibility situations but it allows a little to much margin of error for zero visibility operations to be an effective option. To perform this technique the axe firefighter lines up the axe with the halligan, he then taps the halligan lightly followed up right after by a more powerful hit. This small tap does a couple of things for both the firefighter holding the halligan and the firefighter hitting. First, it provides a small "practice" swing for the axe firefighter allowing him to build some muscle memory. Second, it gives warning to the firefighter on the halligan not to move because a more powerful hit is coming. Some firefighters like to use the double tap method all the time while forcing doors regardless of the conditions, it really comes down to preference.

Squared Off Shoulder
Most firefighters I talk to about the topic of zero visibility forcible entry say that they square the shoulders on their halligan forks off so that it will provide a striking surface without having the possibility of missing and striking the firefighter who is holding the halligan. This modification is not new to the fire service and I see firefighters modifying their tools like this all over North America, the problem is that if you are going to modify you halligan like this and then not practice the technique often and in realistic conditions then you might as well not even bother performing the modification in the first place. It can be challenging to perform this method and can take a tremendous amount of practice and patience. After the shoulders have been squared off the firefighter with the halligan can place the forks in between the door and the frame, with both hands on the back of the halligan the axe can be placed on the halligan shaft and slide it down to make contact with the squared off shoulder. Ensure that you keep a open palm grip on the back of halligan, if you have a firm grip on the adz or pike and the axe is brought back to far the blade of the axe could severely injury a finger… So keep a open palm grip. I like to keep the squared off shoulders for tight spaces or narrow hallways where you cannot stand behind the halligan to hit it.

One Handed Method
This technique in my opinion is the best method for forcing entry in zero visibility. The halligan firefighter takes their normal stance and hand position on the halligan with the exception of their hand closest to the adz, slide the hand closet to the adz more towards the middle of the halligan. The axe firefighter is going to take a kneeling position behind the halligan firefighter, the bottom hand on the axe is taken off and placed onto the halligan directly behind the adz. This hand is

placed on the halligan to provide a point of reference for each swing of the axe. Remember to keep a loose grip on the halligan, your mission is not to impede or steer the halligan but to simple provide that point of reference. The next thing the axe firefighter can do to make life easier for them is to place the butt-end of the axe between their knees, this with help there swings tremendously by making the axe into a large pendulum. This pendulum action will help you deliver even and steady hits on target each time. Sometime with higher locks the firefighter will have to stand to swing the axe, the same steps are repeated with the exception of placing the axe between their knees.

Depth

How do you know when the halligan is in the set position? When you can see, we know that you want to drive it in until the crotch of the forks is level with the door stop but when we can't see we have to perform this by feel. An easy way to tell is by placing your thumb on the shoulder of the halligan then place three fingers along the side of the forks, the finger furthest away from your thumb should be level with the door stop. Slide your top finger forward and feel for the halligans orientation to the door stop. Not having the halligan set deep enough before prying is one of the biggest problems I see with zero visibility forcible entry, if the halligan is not driven in far enough it may pop out when it is pushed to the door.

The key to being able to force doors effectively in zero visibility and challenging conditions is to prepare for them through aggressive and realistic training. I recently talked to a close friend from a extremely busy urban department that just experienced a close call at a fire, one of the major problems that they experienced on the fireground was a delay of getting water on the fire due to a drawn out forcible entry operation. Crews were faced with a very difficult door in fairly horrendous smoke and heat conditions. After the fire crews talked about how they had never really been shown how to perform forcible entry operations under such strenuous and difficult conditions, the problem is that lots of firefighters tend to feel they don't need this type of training because they have never needed to force a real tough door under these conditions before. I use the analogy of RIT training, you only ever have to use it once on the fireground to make the training worth while.

I often get asked about injury while performing this type of training. I taught a recruit class for my department recently and I had the 10 recruits force hundreds of doors in zero visibility and in live fire conditions and never once did we even hurt anyones feelings. You need to ask yourself "what is the potential for a fireground injury if we DON'T do this training!"

Till next time stay safe!