Metal Roll-down Doors

By Ted Corporandy

According to John Norman, Battalion Chief, F.D.N.Y., one of the rules of forcible entry is “Don’t Overlook The Obvious”[1].This is good advice, especially when time is critical. When you encounter a serious fire situation with several possibilities for entry, why choose the most difficult?

One of the most time-consuming entry situations will involve getting through a metal roll-down door. The appropriate reaction to encountering this type of door should be: “Is there an easier way, and, if I go that way, will it achieve the same results as if I had forced the metal roll-down door?” Because of fire location and intensity, there may be no other choice but to go for the roll-down door. If this is so, you'd better be prepared.

If locks are visible and can be removed, then do so and raise the door. If the door is manually raised, entry is a simple matter of pulling it up. If it is mechanical, it means accessing the chain and pulling it to raise the door. If the door is electrical, it means activating the switch, removing the cylinder and shorting the wires, or accessing the chain and clutch through the motor housing. If all else fails and it comes down to “OK, I am going to have to cut the door,” then what is your procedure? There are a few “trick and fancy” methods, but the experienced and time-proven method is the inverted “V” cut, sometimes known as the “tee-pee” cut. Most firefighters are familiar with the procedure: cut the “V,” pull the slats, make entry. Compare the alternatives with the inverted “V” cut:

- One alternate method advocates making a cut about one foot in from each side of the door. Next, make a cut in the center, between the two side-cuts, then, pull the slats from the center cut. If all goes well, the upper half of the door retracts upward while the lower part falls or is knocked to the ground. What happens if the slats cannot be pulled? Valuable time will have been wasted and another approach will have to be attempted.

- Another alternate method involves making a cut on the side of the door where the chain mechanism for raising the door is located. The firefighter, after making the cut, reaches in, grabs the chain and begins retracting the door. Easier said than done under fire conditions. The question is what if you don’t make your cut at the location of the chain? Or worse yet, the chain is not easily accessible, or there are locks on the interior?

- The time-and-experience-tested method is the inverted “V” or “tee-pee” cut. Start from the center of the door above eye level and cut down at an angle towards the ground. Next make a cut intersecting the point from where you started your first cut. It also goes down to the ground at an angle. The resulting cuts form an inverted “V.” The hole is large enough for firefighters to enter and can be

enlarged by pulling the slats on both sides of the door. Once the slats are pulled the upper, portion of the door retracts upward while the lower portion is knocked or pulled out of the way.

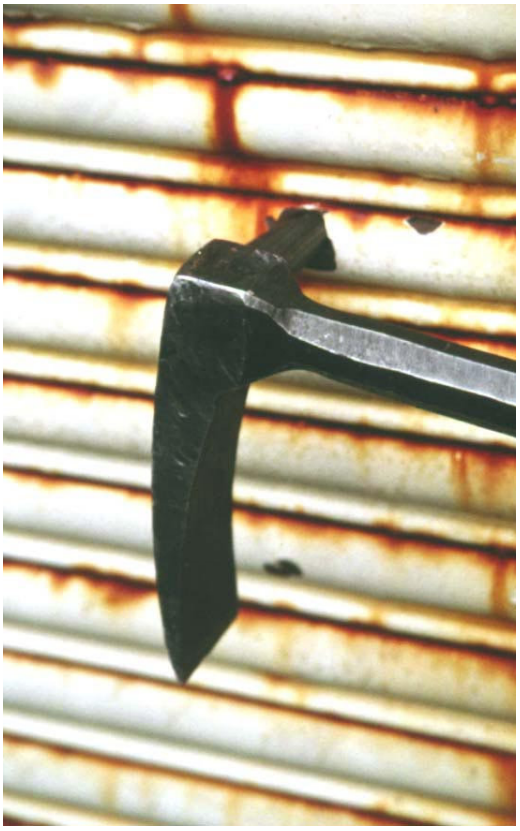
The inverted "V" technique is superior because, with two cuts, a hole large enough for entry is made. The other methods rely on the ability to pull the slats or reach the chain in order to make entry. Pulling slats with the inverted "V" technique is a bonus not a requisite to entry. Furthermore, as soon as the second cut is begun, an aggressive engine company will launch their attack by directing a stream into the opening.

Whatever the method used, pulling slats are not always as easy as some training videos would have you believe. In many cases they will have to be forced. One method involves hammering the slats with a flat head axe or sledge. This requires the slats have enough "head start" to get the axe or sledge into position. In the event this is not possible, try driving the point of a Halligan Tool into the slat to be pulled, then driving the Halligan Tool to remove the slats.

Left: *Start the first cut at the center of the door above eye level and cut down at an angle towards the ground. The second cut begins where the first cut did. Make sure the cuts intersect at the top. Cut down at an angle towards the ground. The two cuts will form an inverted "V."*

Above: *Once the second cut is started the cut portion will begin to drop creating an opening in which the engine company can direct a hose stream.*

Right: *Once the two cuts are made, the slats can be pulled creating a larger opening. The larger opening will allow for better ventilation, ease of entry and exit, and better placement of master streams if necessary. Even if slats cannot be pulled, the "V" cut still allows for entry. This method of entry does not rely exclusively on pulling of slats.*



Left and Below: *With slats that are difficult to remove, drive the point of the Halligan into the slat then drive the Halligan with a flat head axe or sledge.*