

Residential Garage Doors

This month's article is focusing on Residential Garage Doors, specific to construction, identification, forcible entry, and securing them once opened. It is not the intent to discuss strategy and tactics of residential garage fires, just the forcible entry of the overhead doors. When looking at most residential overhead garage doors through out the city, there are two primary types found in every district. The first is the rolling sectional door, which is the most commonly found door in use today. The second type of door that can still be found in older homes (usually built in the late 1960's and early 1970's), is the Panel Overhead Door.

Construction:

- Sectional Door- Are found in both commercial and residential construction, just like most Fire Station Apparatus Doors. These doors are constructed similar to the Sheet Curtin door in that using a light gage piece of steel/metal fabricated into a section approximately 18" to 2' in height. These sections are connected together by metal hinges and rollers which are placed on the ends and placed into tracks to assist with opening and closing. These types of doors will also have vertical straps of light weight metal to add further support.



(Black Arrow) measures almost 2" in depth.

Vertical Bracing





Overhead Panel Door- Are solid flat doors that when open pivot as a single piece. They are built using a skeleton frame construction of either wood or light weight metal bracing in a Horizontal, Vertical, and Cross Bracing layout. The exterior skin of the door can be either light weight metal or most commonly wood affixed to the structural members by either screws or rivets.



Identification:

Sectional Door- Are identified by the small gaps that are found where the sections are hinged together. When leaning against the door, the Sectional Door it will stay more firm than the two other doors addressed in this article and will also sound more solid.

Overhead Panel Door- These types of doors are easily identified by the solid flat front. The exterior screws or rivets that affix the panels or exterior covering to the skeletal bracing are visible from the outside.

Forcible Entry:

Sectional Door- Once properly identified, Sectional Doors can be forced by using two primary techniques. However prior to first cutting the door you should "Try Before You Pry." These doors will either be secured by means of an electric garage door opener (most common) or by means of a locking mechanism that secures the door to the track in the lower corners. In the event that the door will need to be forced, it is recommended that a Rotary Saw using a metal cutting blade. Preferably it is best to use the 14" saw due to the depth of cut needed to cut through the back side of the bracing. The depth of cut

on a 14" saw with a new abrasive blade is 5", just enough depth to cut through the bracing. Below the 2-Sided Cut and the 3-Sided Cut are illustrated.

2-Sided Cut

1st Cut
(Black Line) -
Vertical cut
1' inside of
the left
edge of the
door at or
above head
height.

2nd Cut
(Blue Line)
- 45 degree
cut from
the initial
Vertical cut
through to
the bottom
edge of the
door. This
cut will
enable the
Firefighter
a purchase



point to continue the 1st cut through the bottom portion of the door.

3rd Cut – Complete the Vertical Cut through to bottom portion of the door,

4th Cut (Red Line) – Horizontal Cut at shoulder height of the Firefighter, making sure to cut as close to the middle of a panel as possible to avoid having to cut through a hinge, connecting the Vertical Cut and stopping 1' from the right edge of the door.

Finish – Ensure that all cuts have cut through the dept of the door and its structural members, Use an Axe, Halligan, or Pike Pole and pull open the door to allow Firefighters to enter the garage or smoke and the products of combustion to escape.

3-Sided Cut

1st Cut
(Black Line) –
Vertical
Cut 1' from



the left

edge of the door, from at or above head height through the bottom portion of the door.

2nd Cut (Blue Line) – Horizontal Cut at shoulder height, in the middle of a sectional panel to ensure not having to cut through a hinge, connecting the Vertical Cut and stopping within 1' of the right edge of the door.

3rd Cut (Red Line) – Vertical Cut from 1' inside of the right edge of the door through the bottom portion, making sure not to cross connect with the Horizontal Cut.

4th Cut (Green Line) – Cross connect Cut 2 and 3.

Finish – If either bottom portions of the Vertical Cuts are not entirely completed, complete them to ensure that the entire section is cut away from the remaining portion of the door. Either leave the cut section on the ground or remove it from the area to allow Firefighters to enter the garage or allow for the escape of smoke and the products of combustion.

Overhead Panel Door - Once properly identified, Overhead Panel Doors can be forced by using one primary technique. However prior to first cutting the door you should “Try Before You Pry.” These doors will either be secured by means of an electric garage door opener (most common) or by means of a locking mechanism that secures the door to the frame in the lower corners. In the event that the door will need to be forced, it is recommended that using either a Rotary Saw with the appropriate blade or a Chain Saw depending on the type of material used on the exterior covering.

One
Horizontal
Cut (Red
Line)
making
sure to
avoid pop-



rivets/screws and bracing.

Finish - Pull panels to expose bracing and further secure an opening through the door to allow Firefighters to enter the garage or smoke and the products of combustion to escape.

These type of doors that are not controlled by an electronic garage door opener will have the secured by the means of a simple locking mechanism (Black Arrow).

Securing the Overhead Door:

In the event that the garage door was unlocked and able to be opened form the outside or that an interior crew was able to release the electronic door release latch and opened the door from the inside, it now must be secured opened. Below are illustrations of the electronic door release latch and how to secure an open door using Vise-Grips secured to the door tract, which will prevent the door from closing.



Electronic Garage Door Release (In the manual position)



Using Vice-Grips to secure a door open