



## Bilco™ Doors and Basement Fires

*B.C. Scott Ebbert*

Basement fires are among the toughest and most dangerous to extinguish safely. Getting water on any fire quickly provides us with the best opportunity to rescue viable victims and maintain the safety of our members. Descending the interior stairwell places crews at high risk for severe burns and provides limited points of egress, should conditions decline. When present, direct exterior access to the basement should be utilized to initiate the fire attack. These doors are often bolstered with additional security features to prevent break-in, or to protect them from weather. A clear understanding of these doors and proficiency at defeating them are crucial to providing quick egress and rapid extinguishment. “Bilco™ doors” present a unique forcible entry challenge.

The Bilco™ Company was founded in 1926 by George W. Lyons Sr. in New Haven, Connecticut, whose machine shop made the original metal basement door after growing tired of the constant upkeep of his own wooden basement door. Neighbors saw the steel door and asked Lyons to make them one. The company quickly evolved to developing other products including metal basement and sidewalk doors, hatches, smoke vents, and egress window wells now in use in over 40 countries. There are several other manufacturers that now produce similar products that are in use in both residential and commercial applications. Regardless of the manufacturer, these doors are constructed and operate similarly.

When conducting a 360, the I.C. or the member providing a size-up of side ‘C’ should identify and announce the presence of a Bilco™ door. Crews functioning on the interior must be aware of these doors in case a quick exit is necessary. When a secured Bilco™ door is the only means of exterior access to the basement, the first arriving engine company should consider deployment of the initial hand line to division 1 to isolate the interior stairwell and protect the first floor until the Bilco™ door can be forced and a line is deployed to the basement. This strategy protects any victims and search firefighters located on the floors above. As with any basement fire, officers should weigh fire conditions, time, and type of construction to ensure the safety of members operating on the floor above. Truck companies must prioritize forcing the Bilco™ door whenever a basement fire is confirmed or anytime crews must operate within a basement with limited access. Once access is made, don’t forget that another door is likely waiting beyond! Remember to control the door and coordinate ventilation efforts with crews operating on the interior so as not to create a flow path which can cause severe burns to anyone in the way.



### Tips for Forcing a Bilco™ Style Door

- The presence of protruding threads or carriage bolts indicate supplementary locks. Some owners secure the doors on the interior with chains and padlocks
- The doors overlap to create a weather proof seal. The locking bar is usually located half way up from the bottom of the door.
- A metal cutting saw is the fastest method of forcible entry. Attacking the lock with conventional F/E tools is akin to forcing a vehicle hood at the latch... metal will bend but the lock will hold.
- Use a haligan to locate the interior locking bar. Position the bar at the base of the door at the seam, the lock will be located within 6 inches of the top of the bar.
- Make the cut on the larger door - this is the door that overlaps the other.
- If a saw is not available, consider attacking the attachment points on the structure with the irons and remove the entire assembly.
- When attached to masonry, consider using a maul to strike at the screws and break them, then remove the entire assembly.



Forcible Entry: Basement Hatchway Door - YouTube  
m.youtube.com