

Handline Placement

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Once a handline of the appropriate diameter is selected, the next decision is where to place this critical first line. Keeping in mind that the first handline stretched at a structure fire is the key to saving lives, placement decisions must be based on the need to safeguard building occupants from the encroaching flames and stem the production of blinding smoke and toxic gases as quickly as possible. We will limit this discussion to residential occupancies.

There is a widely held belief that structure fires should be attacked from the "unburned side." This rule most likely stems from the inappropriate use of fog streams in interior firefighting. The short reach of the fog stream combined with the danger of "pushing" fire into uninvolved portions of a structure often dictates that fire-attack efforts begin in the unburned area in order to minimize further property losses. Unfortunately, this approach does not address the issue of civilian (and firefighter) life safety. A more effective method is to attack structure fires directly using the main entrance or front door, regardless of where the fire is in the building.

In practical terms, consider the extra hose that would be required to reach the rear entrance of most residential buildings in your first due area. Even in the case of a relatively small private dwelling, think about the difficulties involved in stretching down a side alley, driveway, or gangway, over fences, under clothes lines, over piles of snow, around parked cars, and past that large and unfriendly dog roaming free in the back yard. Grade-level changes are another factor. The rear entrance door may actually lead to the basement. If the fire is on the first floor, the handline is now one floor below it with a consequent delay in getting water on the fire. Many preconnected handlines will fall short and additional lengths will be required. Rear entrances may also be heavily fortified, particularly in high crime areas. Using the front door is simply more efficient and will save valuable time.

In the case of a one-story private dwelling, the line can be quickly advanced through the front door to the involved bedroom or used to defend the bedroom areas from a fire located elsewhere in the house. In the case of a two-story house or a multi-story building with an open stairway, using the front door permits the line to be placed at the base of the stairs to defend them from a first-floor fire. Keep in mind that an aggressive attack on the fire should be initiated as soon as possible, but the attack must commence from a position that will drive heat, smoke, and flames away from the primary means of egress.

If the fire is above the first floor, the stairs will provide a secure "beachhead" for launching fire attack operations. This will protect the stairway and help limit fire extension from the room or apartment of origin.

In addition to safeguarding the means of egress for building occupants, securing the stairs also protects them as a means of *access* for firefighters assigned primary search duties. This is particularly important for firefighters ascending above the fire. In most private dwellings and many older multiple dwellings, the stairs are often painted or varnished wood and may be involved in fire. They must be extinguished quickly to preserve their integrity. The old adage "save the stairs, save the building" couldn't be any truer.

When a fire is located below grade in a basement, cellar, or sub-cellar, the objectives of protecting the means of egress and quickly extinguishing the fire remain unchanged, but different tactics are required. The first handline stretched at a basement or cellar fire *must not* be used to extinguish the fire. Rather, the first line should be brought to the top of the interior basement or cellar stairs to defend the upper floors against smoke and fire spread.

If the color and temperature of the smoke venting from the basement or cellar indicate a relatively minor fire, the first handline can be advanced down the stairs and the fire extinguished. If the fire is larger, keeping the interior basement or cellar door closed is imperative and the first line will be used to prevent the fire from burning through this door. The second line will be advanced via an outside entrance to extinguish the main body of fire. If the only entrance to the below-grade area is inside the building (as is often the case with cellars and almost always the case with sub-cellars), the first line will have to be advanced down the interior stairs. The second line will then be used to hold a position at the top of the stairs to protect the personnel assigned to the first line and limit fire extension.

Below-grade fires may also permit an exception to using the front door for stretching and advancing the first handline. It may be more expedient to utilize a side door if it provides ready access to the basement or cellar stairs. A proper size-up and knowledge of the residential buildings in your area will provide this information. Generally, the front entrance is still preferable.

Other situations in which the first line would not be immediately advanced to the seat of the fire are rare. One involves a civilian trapped at a window or on a fire escape and the immediate application of water from the outside is required to prevent him from jumping or burning to death. Another is when the fire building is well involved and an exposed building is severely threatened or already on fire. If the original fire has developed beyond the point of safe control by handlines, the first line should be advanced into the most critical exposure. If interior operations are possible in the original fire building, the first line should be brought inside to control the fire. Extinguishing a fire is still the best means of protecting exposures. Even when an interior fire attack is employed, taking a moment or two while still outside and applying water on an exposed building (or even the original fire building, if a severe autoexposure problem exists), will "buy time" until additional handlines can be placed in service. This is a particularly effective tactic when a fire involves one or more closely spaced, wood-frame buildings and handline stretches are short.