

Fire Engineering®

Breaching Walls

Article and photos by Gregory Havel

August 12, 2008

Some of the forcible entry skills we learn during our Firefighter I classes involve breaching walls. These skills could be used to bypass security devices on the doors or windows that we would normally use for entry, firefighter rescue, or self-rescue.

A word of caution, especially when working in residential and light commercial buildings: Not all walls are well-suited for entry or exit through breached openings.



Don't try to breach a curved wall framed with either steel or wood studs. Curved walls have studs spaced more closely than the 16-inch, 18-inch, or 24-inch centers that are common in straight walls to provide support for the multiple layers of drywall board that will be used. Photo 1 shows a curved wall framed with wood studs on six-inch centers that will be covered with at least two layers of ¼-inch drywall board, which is more flexible and can

conform better to the curvature of the wall. Although it is possible to break drywall board and displace a single stud to make an entry or exit opening in a wall, it becomes extremely difficult and time-consuming to break layers of drywall board screwed to studs every six inches, and to displace several studs to make an opening large enough for a firefighter. Look for an easier way.

In addition, curved walls often conceal void spaces created by the shape of the room on the other side, as in Photo 1.



Breaching a straight wall may not create a usable opening. Photo 2 shows a wood-frame wall in a new home, with studs on 16-inch centers. Only two of the stud spaces shown might be usable for entry or exit openings. The rest contain electric cables and boxes, steel dryer vent pipe, steel ducts, steel gas pipe, and plastic drain-waste-vent pipe. Unless we are very familiar with the building, we won't know this until we have spent

a lot of energy and SCBA air in discovery. In addition, we might find that the other side of the wall has a set of cabinets screwed to it, or a row of 250-pound file cabinets sitting against it.

If we become trapped or disoriented and low on air on the second or third floor of a residence or commercial building, we can create an additional problem for ourselves. Although the wall we choose might be easily breached, we might create our escape opening in an exterior wall at a height too great to jump, or in a place that can't be reached with a ladder.

We do need to know how breach walls to gain entry to difficult structures. Sometimes we need to breach walls to escape from them—but this must be our last resort, since there is no guarantee of results, and our SCBA air supply will not give us a second chance. Better options are personnel, task, and location accountability; maintaining team integrity; marking our entry route with a hoseline or rope for use in exiting; and establishing secondary (emergency) exits. If we use these options, we are less likely to need to breach a wall for self-rescue or to perform a rescue.

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