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High and low exit signage

# Stairway Signage Demystified

Means of Egress and Accessibility Requirements  
(References are 2015 International Building Code and 2009 ICC A117.1 Accessible and Usable Building and Facilities)

**E**xit signs let occupants know how to get out of a building. They are extremely important for fire evacuation and occupant safety. In spaces or floors with two or more ways out required, you will find these lighted beacons over exit doors and at least every 200 feet in a corridor pointing where to go (Section IBC 1013.1).

These high exit signs have to be above doors or high enough to not be an obstruction (greater than 80 inches). In hotels, exit signs also are required close to the floor, so if the corridor is obscured by smoke and the high-exit signs are obscured, they can find the exit door (bottom of the sign 10 to 18 inches above the floor). The letters on both high and low signs have to be at least 6 inches tall, and internally or externally illuminated.

High and low exit signs are visual indicators, so for the safety for all occupants, you also have to provide the same information for persons who cannot see those signs. At exit doors leading to an interior or exterior exit stairway or exit doors leading to the outside where an exit sign is located at that door, a second sign that has visual and raised letters

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and braille is required next to the door. For brevity, let's call these signs VRB signs.

There are non-typical scenarios where this VRB sign is also required: 1) where there is an area of refuge outside the stair enclosure so occupants can move through the area of refuge to the exit enclosure; 2) into an exit passageway, which may look like a corridor, but it is a protected path; 3) within a stairway enclosure at the door leading to the exit discharge. The latter is necessary because there usually are a couple of doors on the ground floor of the stairway. Since there is the option of going through a lobby or vestibule (Section 1028.1) into an exit passageway (Section 1024) through a horizontal exit (Section 1026) as well as directly to the outside, which door to use is important information for everyone using that stairway for evacuation.

The VRB sign always should say "EXIT" at the very least; however, signs often have additional information, such as "EXIT STAIR." The intent is so a person would know about the steps before they went through the door, reducing the chance or tripping of falling. Additional location information and how the VRB sign is made is in ICC A117.1 Section 703.

VRB signs are placed adjacent to the door with a "standing box" in front of the sign, at least 18 inches by 18 inches, and centered on the sign. When the standing box is on the pull side of the door, the box and sign must be placed so someone opening the door will not hit another person standing still to read the sign. A visually impaired person typically searches for the sign next to the latch, so the sign needs to stay close to the edge of the door. For placement one also needs to consider

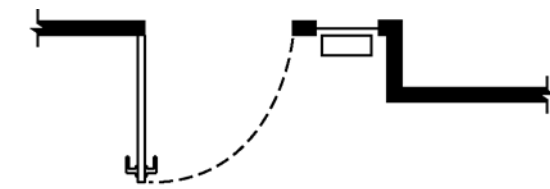
how someone is moving down the corridor toward the exit door, and where they can best find the VRB sign. See the figure (right) on sign placement for alternatives.

For best visibility, the visual and raised letters have to be between 5/8" and 2" tall. The color and finish should provide low glare, with dark letters on a light background, or light letters on a dark background. The sign can be colors, but the tonal quality should be markedly different. Keep in mind people may be looking for these signs with only emergency lighting and smoke in the corridors. The same information provided in words must be repeated below those in braille. To determine the correct height, look at both the bottom of the braille and the bottom of the top line of visual/raised letters. Both lines must be between 48" and 60" above the floor. If the letters are 2" high, that would put all the word and the braille between 48" and 62" above the floor.

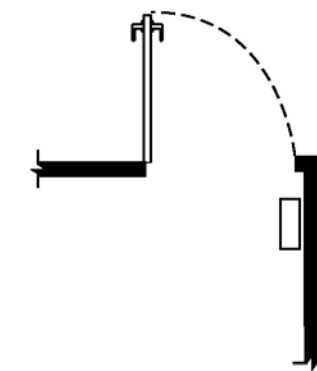
Once building occupants are inside the stairway, there is additional signage required.

Let's first look at overhead visual exit signs inside the stairway. While exit passageways are most commonly found as an extension of an exit stairway on the ground floor, sometimes exit stairways have levels where the vertical shafts shift over, using an exit passageway in the middle of the stairway. Studies have shown this can confuse occupants who have not used the stair tower before, and slow down evacuation at this intersection, so directional exit signage is required to guide people evacuating within these unusual stairway configurations (IBC Section 1013.1).

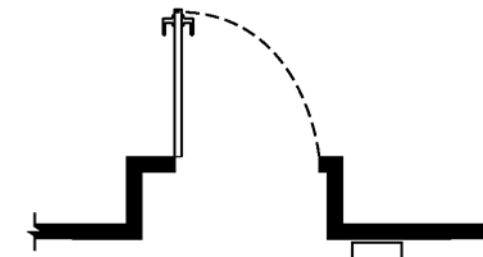
Stairway identification signage (see photo, right) is required at each floor landing in all exit stairways connecting more than three stories (IBC Section 1023.9).



(a) NO EXCEPTION FOR SIGN AT WINDOWS OR SIDELITES



(b) WHERE NO WALL SPACE IS AVAILABLE ADJACENT TO DOOR PLACE ON ADJACENT WALL – END OF CORRIDOR OR CORNER



(c) WHERE NO WALL SPACE IS AVAILABLE ADJACENT TO DOOR PLACE ON ADJACENT WALL – ALCOVE

Examples of VSB signage placement option.



Stairway identification signage.



The stairway identification signage is mostly for emergency responders, but it also can be viewed by crowds moving down the stairway. The sign is placed in an obvious location for someone to see it when they enter the stairway. The height of the bottom of the sign at 5 feet (1,524 mm) sets the sign around eye level, but would be visible above the heads of people if there is a crowd on the stairway. Information on the signs should include:

- Which level you are on—this information is the largest item on the sign (see Section 1023.9 Item 3);
- Which floor is the level of exit discharge and which direction—this could be an arrow and information such as “Exit at Level 1”;
- What stairway are you in—designations typically are something like “North Stair” or “Stair A”;
- The extent of the stairway—such as “Basement to 5th floor”;
- Notice of roof access directly from the stairway enclosure—this is for emergency responders, if they need to get onto the roof to vent the fire (for where roof access is required, see IBC Section 1011.12).

How the stairway identification sign should be constructed is in IBC Section 1023.9.1. The sign has to be at least 18" by 12". The floor designation is the largest item on the sign (5 inches [127 mm] minimum), so this information is immediately apparent. What stairway you are in has to be at least 1½" high. Other information required by IBC Section 1023.9 has to be in letters large enough to be legible from a distance. One inch-high letters are viewable by most people from a distance of about 10 feet (3050 mm). It is recommended the information be in all capitals and the style of letters be conventional in form—not italic, oblique, script or highly decorative. The requirements for high-contrast (dark on light) and non-glare finish are to provide increased readability of the sign in low-light situations, including when the stairway is illuminated only with emergency lighting.

In addition, if the building is a high-rise and luminous egress path markings are required (see IBC Sections 403.5.5 and 1025.1), the stairway identification signage also must be self-luminous or photoluminescent. To also meet the contrast requirements in Item 5, typically the sign will have dark letters on a glow-in-the-dark background. These stairway identification signs are not required to use raised letters or braille. The raised letters and braille is intentionally a different sign in a different location.

- To aid people with vision impairments that are moving within the stairway, the floor

designation also must be available on a VRB adjacent to each door on the latch side. This is so persons with vision impairments can find out what floor they are on without leaving the stairway enclosure. The reference to ICC A117.1 requires these signs to have the same VRB signs as the exit sign on the outside of the stairway.

- Fire service access elevators are required where a building has an occupied floor more than 120 feet (3,048 mm) above the street (IBC Section 403.6.1). The elevator lobby is required to have direct access to an exit stairway (IBC Section 3007.6.1). In addition, that same exit enclosure has to have access to the floor without going back through the elevator lobby (IBC Section 3007.9.1). This leads to two doors at each floor landing. Elevator lobby signs identify the correct door though which firefighters should access the floor to maintain lobby smoke protection. While these signs are required to be adjacent to the door leading to the lobby, they are not required to use raised letters and braille. These signs are information for emergency responders.

If there were an area of refuge within the stairway, there would be requirements for an “AREA OF REFUGE” sign on the outside of the stairway, both a high exit sign and a VSB sign (see photos 1 and 2). Directional and information signage would be required inside the stairway at the area of refuge (IBC Section 1009.9). However, since areas of refuge are not required in sprinklered buildings, and most buildings four stories and higher are sprinklered, the provisions for most of the signage inside the stairway and areas of refuge information typically would not apply in the same stairway.

The high visual exit sign must include the wheelchair symbol (see photo 1), otherwise, it follows the rules for regular exit signs. The directional information—typically on a map similar to what you see for the means of egress plan near the elevators—indicates other areas of refuge on the floor. The other information is to explain the plan for assisted evacuation and how to use the two-way communication system in the area of refuge to let emergency responders know that you are there and need their help to evacuate (IBC Sections 1009.8.2, 1009.10, 1009.11). All this information must meet the visual signage requirements in ICC A117.1—so this sign should be between 40" and 70" above the floor, with print at least ⅝" high, with low glare and high contrast. This sign is not required to meet any of the raised-letter or braille requirements.

IBC Section 1111 includes a list of signs related to accessible elements which references

Stairway Signage Demystified *continued*

Photo #1 (left):  
Overhead visual exit  
and area of rescue  
signs



Photo #2 (right): VSB  
signage adjacent to  
the door leading to  
the area of refuge

many of the sections specifically addressed in this discussion, but it does not include all the information needed for other signs, so we have pulled them together for you here.

I hope I have demystified the signage requirements a bit. This did remind me of a song I often hear by Ace of Base “I saw the sign and it opened up my eyes, I saw the sign. Life is demanding without understanding.” **BSJO**