

## PROVIDE/MAINTAIN EXIT SIGN/EMERGENCY LIGHTING

Violation #11

### CODE SECTIONS

*International Fire Code 2012 Edition*

**1011.1 Where required.** *Exits and exit access doors shall be marked by an approved exit sign readily visible from any direction of egress travel. The path of egress travel to exits and within exits shall be marked by readily visible exit signs to clearly indicate the direction of egress travel in cases where the exit or the path of egress travel is not immediately visible to the occupants. Intervening means of egress doors within exits shall be marked by exit signs. Exit sign placement shall be such that no point in an exit access corridor or exit passageway is more than 100 feet (30 480 mm) or the listed viewing distance for the sign, whichever is less, from the nearest visible exit sign.*

**Exceptions:**

1. *Exit signs are not required in rooms or areas that require only one exit or exit access.*
2. *Main exterior exit doors or gates that are obviously and clearly identifiable as exits need not have exit signs where approved by the fire code official.*
3. *Exit signs are not required in occupancies in Group U and individual sleeping units or dwelling units in Group R-1, R-2 or R-3.*
4. *Exit signs are not required in dayrooms, sleeping rooms or dormitories in occupancies in Group I-3.*
5. *In occupancies in Groups A-4 and A-5, exit signs are not required on the seating side of vomitories or openings into seating areas where exit signs are provided in the concourse that are readily apparent from the vomitories. Egress lighting is provided to identify each vomitory or opening within the seating area in an emergency.*

**1011.2 Floor-level exit signs in Group R-1.** *Where exit signs are required in Group R-1 occupancies by Section 1011.1, additional low-level exit signs shall be provided in all areas serving guestrooms in Group R-1 occupancies and shall comply with Section 1011.5.*

*The bottom of the sign shall be not less than 10 inches (254 mm) nor more than 12 inches (305 mm) above the floor level. The sign shall be flush mounted to the door or wall. Where mounted on the wall, the edge of the sign shall be within 4 inches (102 mm) of the door frame on the latch side.*

**1011.3 Illumination.** *Exit signs shall be internally or externally illuminated.*

**Exception:** *Tactile signs required by Section 1011.4 need not be provided with illumination.*

**1011.4 Raised character and Braille exit signs.** *A sign stating EXIT in raised characters and Braille and complying with ICC A117.1 shall be provided adjacent to each door to an area of refuge, an exterior area for assisted rescue, an exit stairway, an exit ramp, an exit passageway and the exit discharge.*

**1011.5 Internally illuminated exit signs.** *Electrically powered, self-luminous and photoluminescent exit signs shall be listed and labeled in accordance with UL 924 and shall be installed in accordance with the manufacturer's instructions and Chapter 27 of the International Building Code. Exit signs shall be illuminated at all times.*

**1011.6 Externally illuminated exit signs.** *Externally illuminated exit signs shall comply with Section 1011.6.1 through 1011.6.3.*

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**1011.6.1 Graphics.** Every *exit* sign and directional *exit* sign shall have plainly legible letters not less than 6 inches (152 mm) high with the principal strokes of the letters not less than  $\frac{3}{4}$  inch (19.1 mm) wide. The word "EXIT" shall have letters having a width not less than 2 inches (51 mm) wide, except the letter "I," and the minimum spacing between letters shall not be less than  $\frac{3}{8}$  inch (9.5 mm). Signs larger than the minimum established in this section shall have letter widths, strokes and spacing in proportion to their height.

The word "EXIT" shall be in high contrast with the background and shall be clearly discernible when the means of *exit* sign illumination is or is not energized. If a chevron directional indicator is provided as part of the *exit* sign, the construction shall be such that the direction of the chevron directional indicator cannot be readily changed.

**1011.6.2 Exit sign illumination.** The face of an *exit* sign illuminated from an external source shall have an intensity of not less than 5 footcandles (54 lux).

**1011.6.3 Power source.** *Exit* signs shall be illuminated at all times. To ensure continued illumination for a duration of not less than 90 minutes in case of primary power loss, the sign illumination means shall be connected to an emergency power system provided from storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Section 604.

**Exception:** *Approved exit* sign illumination means that provide continuous illumination independent of external power sources for a duration of not less than 90 minutes, in case of primary power loss, are not required to be connected to an emergency electrical system.

**1006.1 Illumination required.** The *means of egress*, including the *exit discharge*, shall be illuminated at all times the building space served by the *means of egress* is occupied.

**Exceptions:**

1. Occupancies in Group U.
2. *Aisle accessways* in Group A.
3. *Dwelling units* and *sleeping units* in Groups R-1, R-2 and R-3.
4. *Sleeping units* of Group I occupancies.

**1006.2 Illumination level.** The *means of egress* illumination level shall not be less than 1 footcandle (11 lux) at the walking surface.

**Exception:** For auditoriums, theaters, concert or opera halls and similar assembly occupancies, the illumination at the walking surface is permitted to be reduced during performances to not less than 0.2 footcandle (2.15 lux), provided that the required illumination is automatically restored upon activation of a premises' fire alarm system where such system is provided.

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**1006.3 Emergency power for illumination.** The power supply for *means of egress* illumination shall normally be provided by the premises' electrical supply.

In the event of power supply failure, an emergency electrical system shall automatically illuminate all of the following areas:

1. *Aisles* and unenclosed egress stairways in rooms and spaces that require two or more *means of egress*.
2. *Corridors*, interior *exit stairways* and *ramps* and *exit passageways* in buildings required to have two or more *exits*.
3. Exterior egress components at other than their *levels of exit discharge* until exit discharge is accomplished for buildings required to have two or more *exits*.
4. Interior *exit discharge* elements, as permitted in Section 1027.1, in buildings required to have two or more *exits*.
5. Exterior landings as required by Section 1008.6.1 for *exit discharge* doorways in buildings required to have two or more *exits*.

The emergency power system shall provide power for a duration of not less than 90 minutes and shall consist of storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Section 604.

**1006.3.1 Illumination level under emergency power.** Emergency lighting facilities shall be arranged to provide initial illumination that is at least an average of 1 footcandle (11 lux) and a minimum at any point of 0.1 footcandle (1 lux) measured along the path of egress at floor level. Illumination levels shall be permitted to decline to 0.6 footcandle (6 lux) average and a minimum at any point of 0.06 footcandle (0.6 lux) at the end of the emergency lighting time duration. A maximum-to-minimum illumination uniformity ratio of 40 to 1 shall not be exceeded.

### EXPLANATION

#### **MEANS OF EGRESS IDENTIFICATION:**

Whenever two or more exits from a room or a building are required each exit must have an exit sign over each exit. Also, exit signs indicating a route to an exit are required if the exit door is not easily seen from all points in the room or building.

Any time an exit sign is required, it must be illuminated. This can be accomplished either through light bulbs inside the sign, by light bulbs shining on the sign from above or by a self-illuminating sign. Except for the self-illuminating sign, back-up power must be provided to illuminate the exit sign in the event of a power outage.

Exit signs shall be visible at all times and shall not be obstructed.

#### **MEANS OF EGRESS ILLUMINATION:**

Whenever a building is occupied, the means of egress shall be illuminated. This illumination is normally provided by the light fixtures already in the building or by natural light during daylight hours. Additional lighting shall be installed if the means of egress is not clearly visible.

### RATIONALE

Illuminated exit signs and directional arrows assist occupants in locating the exit. The exit path and door must also be illuminated so people can easily find the way to the exit and out to a public way without having to find their way in the dark.