



Standard Guide for Recommended Uses of Photoluminescent (Phosphorescent) Safety Markings¹

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This standard has been approved for use by agencies of the U.S. Department of Defense.

1. Scope

1.1 This guide describes recommended uses and information on installation of photoluminescent safety markings. This guide does not establish a standard practice to follow. Required markings shall be installed in accordance with applicable building codes.

1.2 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*²

E284 Terminology of Appearance

E2072 Specification for Photoluminescent (Phosphorescent) Safety Markings

E2238 Guide for Evacuation Route Diagrams

2.2 *ICC/ANSI Standard:*³

ICC/ANSI A117.1 Standard on Accessible and Usable Buildings and Facilities

3. Terminology

3.1 Definitions of terms in Terminology E284 are applicable to this guide.

¹ This guide is under the jurisdiction of ASTM Committee E12 on Color and Appearance and is the direct responsibility of Subcommittee E12.13 on Photoluminescent Safety Markings.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from International Code Council (ICC), 500 New Jersey Ave., NW, 6th Floor, Washington, DC 20001-2070, <http://www.iccsafe.org>.

4. Significance and Use

4.1 Photoluminescent safety markings may be used to indicate the direction of the means of egress (escape route).

NOTE 1—Specification E2072 covers photometric requirements for photoluminescent (phosphorescent) safety materials.

4.2 Photoluminescent safety markings can be divided into the following categories:

4.2.1 *Floor Mounted Markings*—These markings include floor tiles, stair treads, stair nosings, floor inserts, tactile warning strips, coatings, epoxy casting resins, and other markings attached to the floor.

4.2.2 *Wall Mounted Markings*—These markings include coatings, wall bases, tapes, corner guards, signage, evacuation route diagrams, guidance strips, and other markings attached to walls, doors, handrails, columns, and other obstructions.

5. Recommended Applications

5.1 *Floor Proximity Egress Path Marking*—This provides a continuous delineation of the means of egress (escape route) from the occupied area to any exit doors that lead directly to the public way, except as interrupted by intersecting corridors. Floor proximity egress path markings should be at least 4-in. (100-mm) wide in all locations. If narrower widths are used, the luminance shall increase, as indicated in Specification E2072, section on Installation Site, On-Site Luminance. Floor proximity egress path markings should be applied to the floor surface or installed on the wall, close to the floor (see Figs. 1-5).

5.2 *Continuous Wall and Floor Markings in Corridors:*

5.2.1 Corridors 78¾-in. (2000-mm) or wider should be marked on both sides.

5.2.2 In dead end corridors only, the direction of travel should be indicated by directional indicators pointing in the direction of the means of egress (escape route). The maximum spacing between the individual directional indicators should be 39⅜-in. (1000-mm).

5.3 *Marking of Exit Doors and Emergency Exits*—Exit doors and emergency exits in the course of the egress path should be marked with high and floor proximity exit signs. On fire rated doors, the floor proximity exit sign should be placed