

**Photoluminescent Egress Path Markings** 

#### **Purpose**

Recognizing the need for egress path markings that are visible in the event of emergency and during backup power failures, the 2009 edition of the International Building Code was the first to mandate photoluminescent products for exit enclosures. The requirement has since been repeated in the 2012, 2015 and 2018 editions of IBC. This educational opportunity presents the requirements for compliant use and placement along egress paths and explains the benefits of non-electrical, non-radioactive photoluminescent markings that are long-lasting, easy to understand and highly visible to help occupants exit high-rise buildings effectively and efficiently.

#### **Learning Objectives**

- Describe the importance and benefits of using photoluminescent egress path markings
- Explain how photoluminescence works
- · Factors that influence luminance
- Apply the IBC/IFC Code requirements to high-rise building projects
- Discuss the differences between a UL 1994 Listed product and one that is ASTM E2072 compliant

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**IBC/IFC Requirements** 

**UL 1994 Listing vs ASTM Compliance** 



### **IBC** and **IFC**

The IBC pertains to new construction and major alterations and is updated and published on a three-year cycle. As noted earlier, the 2009 edition was the first to include requirements for photoluminescent products under Section 1024, "Luminous Egress Path Markings."

The IFC is for existing construction. As with the IBC, 2009 was the first year that requirements for photoluminescent egress path markings were included, also in Section 1024. Fire marshals often do NOT enforce retroactive installation of photoluminescent egress path markings in existing high-rise buildings that do not undergo any major renovations or alterations.

While both the 2009 and 2012 editions of the IBC and IFC have the "Luminous Egress Path Markings" in Section 1024, they are covered in Section 1025 of the 2015 and 2018 editions. In this course, Section 1025 paragraphs are cited. In the 2018 edition of the IBC, the requirement for Type I (Institutional) occupancies has been weakened.





#### IBC Section 1025.1

Buildings of the occupancy types listed below and having occupied floors located more than 75 feet above the lowest level of fire department vehicle access must have approved luminous egress path markings delineating the exit path.

- A = Assembly (gathering places for civic, social or religious functions)
- **B** = Business (offices, banks, civic administration, professional services)
- **E** = Educational (through 12th grade)
- I = Institutional (places where people are cared for on a 24-hour basis, ranging from hospitals and nursing homes to rehabilitation facilities)
- I-1 in the 2018 IBC (assisted living, rehab centers)
- **M** = Mercantile (display of merchandise, e.g., department stores)
- **R1** = Residential (hotels, motels)

Luminous egress path markings are **not required in Type R2 occupancies**, where the occupants are primarily permanent, e.g., apartments and condominiums in high-rise buildings, dormitories, fraternities, sororities or convents and monasteries. Yet more and more architects write **PEPM** (**Photoluminescent Egress Path Markings**) into their specifications for R2 occupancies as their **Standard of Care**, since R2 occupancies are homes where families, students and more are spending their nights.





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