Explanatory Policy – Luminous Egress Path Markings

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<th>SUBJECT:</th>
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<td>Requirements for Luminous Egress Path Markings</td>
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<th>EFFECTIVE DATE:</th>
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<td>July 19, 2019</td>
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<td>July 2024</td>
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<th>APPROVED:</th>
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<td>John Mertens, Fire Marshal</td>
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Scope:
This policy covers the Phoenix Fire Code requirements for luminous path markings in high-rise buildings. This includes the requirements for newly constructed high-rise buildings and existing buildings.

New Construction:
All newly constructed high-rise buildings (Group A, B, E, I-1, M or R-1 occupancies) shall have luminous egress path markings installed in accordance with the 2018 Phoenix Fire Code Section 1025. This will be a condition of the issuance of a final Certificate of Occupancy by the Planning and Development Department.

Existing Buildings:
All existing high-rise buildings (Group A, B, E, I-1, M or R-1 occupancies) shall have luminous egress path markings installed in accordance with the 2018 International Fire Code Section 1104.25. It shall be up to owners to install egress path markings. In the event of a power outage any liability for injury would fall upon the owner. This requirement is retroactive and therefore compliance shall be completed by January 1, 2023. A permit is required for this installation from the Planning and Development Department, or Annual Facilities Program Fire Inspectors.

The following illustrations reference the 2012 PFC. The requirements are the same in the 2018.
Code revisions to 2018 PFC from 2012 PFC illustrations for exit door to exterior options:

- Exit sign requirement: Section 1013.1
- Door hardware markings: Section 1025.2.6.2
  - Panic hardware on exit door marking
  - Door hardware marking (minimum 16 square inches)
- Door frame markings: Section 1025.2.6.3
  - Luminescent stripe
  - Photoluminescent stripe
- Emergency exit symbol required on bottom middle of exit door: Section 1025.2.6.1
- No perimeter floor demarcation line at door: Section 1025.2.4.1
- No perimeter wall demarcation line at door: Section 1025.2.4.2
Figure 1024.2.4.3
PERIMETER DEMARCATION LINES—
OPTIONS AT DOORS INTO EXIT ENCLOSURES
Emergency Exit Symbol: Section 1025.2.6.1 (2018 PFC):

- Luminous emergency exit symbol shall comply with NFPA 170.
- The exit symbol shall be not less than 4” in height and shall be mounted on the door.
- The exit symbol shall be centered horizontally.
- The top of the symbol shall not be higher than 18” above the finished floor.
For SI: 1 inch = 25.4 mm.

Figure 1024.2.4.1
PERIMETER DEMARCATION LINES—
FLOOR-MOUNTED OPTION
Perimeter Demarcation Lines – Wall and Floor – Mounted Options:

Sections for the 2018 PFC are the same by substituting 1024 for 1025
For SI: 1 inch = 25.4 mm.

Figure 1024.2.3
HANDRAIL MARKINGS

Handrail Markings: Section 1025.2.3 (2018 PFC)
Leading Edge of Step/Landing Markings: Sections 1025.2.1 and 1025.2.2 (2018 PFC)
Obstacle Markings: Section 1025.2.5 (2018 PFC)

General Requirements:

- Luminous egress path markings shall not be required on the level of exit discharge in lobbies that serve as a part of the exit path in accordance with Section 1028.1, Exception 1 (Section 1025.1, 2018 PFC).

- Luminous egress path markings shall be permitted to be made of any material, including paint, provided that an electrical charge is not required to maintain the required luminance. Such materials shall include, but not limited to, self-luminous materials and photoluminescent materials. Materials shall comply with either of the following standards (Section 1025.4, 2018 PFC):
- UL 1994
- ASTM E2072, except that the charging source shall be 1 footcandle (11 lux) of fluorescent illumination for 60 minutes, and the minimum luminance shall be 30 milicandela per square meter at 10 minutes and 5 milicandela per square meter after 90 minutes.

- Where photoluminescent exit path markings are installed, they shall be provided with not less than 1 footcandle (11 lux) of illumination for not less than 60 minutes prior to periods when the building is occupied and continuously during the building occupancy (Section 1025.5, 2018 PFC).

- Placement and dimensions of markings shall be consistent and uniform throughout the same enclosure (Section 1025.3, 2018 PFC).

- For floor and wall mounted demarcation lines (Sections 1025.2.4.1 and 1025.2.4.2, 2018 PFC), lines shall not extend in front of exit discharge doors that lead out of an exit and through which occupants must travel to complete the exit path.

- For steps, handrails, perimeter demarcation lines, and obstacles, the following exception applies (Sections 1025.2.1, 1025.2.3, 1025.2.4, and 1025.2.5, 2018 PFC): the minimum width of 1” shall not apply to markings listed in accordance with UL 1994.