

SECTION 10 45 00

PHOTOLUMINESCENT EXIT SPECIALTIES

This section includes editing notes to assist the user in editing the section to suit project requirements. These notes are included as hidden text, and can be revealed or hidden by the following method in Microsoft Word:

Display the FILE tab on the ribbon, click OPTIONS, then DISPLAY. Select or deselect HIDDEN TEXT.

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - Photoluminescent exit specialties:
 - a. Handrail markings.
 - b. Exit path/perimeter markings.
 - c. Obstruction markings.
 - d. Door frame and hardware markings.
 - e. Directional signs.
 - f. Stair identification signs.
 - g. Evacuation map signs.
- B. Related Requirements:
 - 1. Division 01 General Requirements: Administrative, procedural, and temporary work requirements.
 - 2. Section 05 55 19 Photoluminescent Stair Nosings.
 - Section 26 52 13 Photoluminescent Exit Signs.

1.2 REFERENCES

- A. ASTM International (ASTM) E2072 Standard Specification for Photoluminescent (Phosphorescent) Safety Markings.
- B. International Code Council (ICC):
 - 1. International Building Code (IBC).
 - 2. International Fire Code (IFC).
- C. National Fire Protection Association (NFPA) 101 Life Safety Code.
- D. Underwriters Laboratories, Inc. (UL) 1994 Standard for Luminous Egress Path Marking Systems.
- E. United States Department of Justice (USDOJ) ADA Standards for Accessible Design (SAD).

1.3 SUBMITTALS

- A. Action Submittals:
 - 1. Shop Drawings: Indicate locations, content, mounting heights, and attachments.
 - 2. Product Data: Include product description, materials, finishes, and performance characteristics.
 - 3. Samples:
 - a. Handrail markings: Minimum [8] [__] inches long.
 - b. Exit path/perimeter markings: Minimum [8] [__] inches long.
 - c. Obstruction markings: Minimum [1 x 8] [__ x __] inches.
 - d. Door hardware markings: [Full size.] [Minimum [1 x 8] [__ x __] inches.]
 - e. Directional signs: [Full size.] [Minimum [5 x 5] [__ x __] inches.]

- f. Stair identification signs: [Full size.] [Minimum [12 x 18 [__ x __] inches.]
- g. Evacuation map signs: [Full size.] [Minimum [8 x 10] [__ x __] inches.]
- B. Informational Submittals:
 - 1. Certificates of Compliance: Show product compliance with reference standards.
- C. Closeout Submittals:
 - I. Maintenance Data: Include recommendations for cleaning and routine maintenance.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum [2] | 1 years experience in work of this Section.
- B. Provide exit specialties in accordance with [NFPA 101.] [ICC IBC.] [ICC IFC.]
- C. Meet requirements of [USDOJ ADA.] [applicable accessibility code.]

1.5 DELIVERY, STORAGE AND HANDLING

A. Store exit specialties in cool, dry location in original packaging until installed.

1.6 WARRANTIES

- A. Provide manufacturer's warranty against loss of photoluminescence for following periods:
 - 1. Handrail markings: [5] [25] years.
 - 2. Path markings: [5] [25] years.
 - 3. Obstruction markings: 5 years.
 - 4. Panic bar door hardware markings: 25 years.
 - 5. Directional signs: 5 years.
 - 6. Stair identification signs: 5 years.
 - 7. Evacuation map signs: 5 years.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Contract Documents are based on products by Safe-T-Nose LLC. (www.safetnose.com)
- B. Substitutions: [Refer to Division 01.] [Not permitted.]

2.2 MATERIALS

- A. Photoluminescent Area Luminance Properties: ASTM E2072 and UL 1994.
 - 1. From test sample activation: 10.76 lx (1.000 fc) for 60.0 minutes:
 - a. For 10 minutes after lights go out: Minimum 30 mcd per square meter.
 - b. For 60 minutes after lights go out: Minimum 7 mcd per square meter.
 - c. For 90 minutes after light go out: Minimum 5 mcd per square meter.

2.3 MANUFACTURED UNITS

- A. Handrail Markings:
 - 1. Model: STNH.
 - 2. Description: Peel-and-stick photoluminescent contoured dome strip, curved profile to fit round railings, industrial grade solid polymer strip similar to golf ball cover material, color throughout thickness, washable and easily sanitized.
 - 3. Material: Photoluminescent pigment embedded in ionomer resin polymer.
 - 4. Listed to UL 1994.
 - 5. Size: 1 inch wide x 10 feet long.
 - 6. Adhesive: Factory-applied acrylic foam adhesive.

**** OR ****

- B. Handrail Markings:
 - 1. Model: S9203.
 - 2. Description: Peel-and-stick photoluminescent acrylic tape.
 - 3. Listed to UL 1994.
 - 4. Width: 1 inch.

**** OR ****

- C. Handrail Markings:
 - 1. Model: S9203P.
 - 2. Description: Peel-and-stick photoluminescent acrylic tape.
 - 3. Listed to UL 1994.
 - 4. Width: 1 inch.
 - 5. Protection: Temporary protective cover.
- D. Exit Path/Perimeter Markings:
 - Model: STNF.
 - 2. Description: Peel-and-stick photoluminescent industrial grade solid polymer strip, color throughout thickness, similar to golf ball cover material, washable and easily sanitized.
 - 3. Material: Photoluminescent pigment embedded in ionomer resin polymer.
 - Listed to UL 1994.
 - 5. Width: 1 inch.

**** OR ****

- E. Exit Path/Perimeter Markings:
 - 1. Model: S9203.
 - 2. Description: Peel-and-stick photoluminescent acrylic tape for smooth surfaces.
 - Listed to UL 1994.
 - 4. Width: 1 inch.

**** OR ****

- F. Exit Path/Perimeter Markings:
 - 1. Model: S9203P.
 - 2. Description: Peel-and-stick photoluminescent acrylic tape for smooth surfaces.
 - 3. Listed to UL 1994.
 - 4. Width: 1 inch.
 - 5. Protection: Temporary protective cover.
- G. Obstruction Markings:
 - 1. Model: 0150.
 - 2. Description: Peel-and-stick photoluminescent striped acrylic tape with alternating black and glow diagonal strips.
 - 3. Width: 1 inch.
- H. Panic Bar Door Hardware Markings:
 - 1. Model: LPB
 - 2. Description: Peel-and-stick photoluminescent industrial grade solid polymer strip, color throughout thickness, similar to golf ball cover material, washable and easily sanitized.
 - 3. Size: 1 inch x 16 inches.
- I. Directional Signs:
 - 1. Model: [DRML.] [DRMR.] [DAS.] [DAD.]
 - 2. Description: Peel-and-stick acrylic photoluminescent square.

- 3. Size: 5 x 5 inches.
- 4. Content: [Running man left.] [Running man right.] [Straight arrow.] [Diagonal arrow.] [As indicated in Schedule at end of Section.] [As indicated on Drawings.]
- J. Stair Identification Signs:
 - 1. Model: ISID.
 - 2. Description: Non-flexible photoluminescent sign with tactile raised numbers and Braille markings.
 - 3. Listed to UL 1994.
 - 4. Size: 12 x 18 inches.
 - 5. Content: [As indicated in Schedule at end of Section.] [As indicated on Drawings.]
 - 6. Conform to [USDOJ SAD] [applicable accessibility code] [] for sign design and content.
- K. Evacuation Map Signs:
 - 1. Model: [FLT.] [FLB.]
 - 2. Description: Non-flexible photoluminescent sign.
 - 3. Size: [8.5 x 10] [11 x 17] inches.
 - 4. Content: [As indicated in Schedule at end of Section.] [As indicated on Drawings.]

PART 3 EXECUTION

3.1 INSTALLATION

A. Install specialties in accordance with [NFPA 101,] [ICC IBC,] [ICC IFC,] [____,] manufacturer's instructions, and approved Shop Drawings.

3.2 EXIT SPECIALTIES SCHEDULE

LOCATION	MARKING TYPE	LOCATIONS
Escape Route	Escape Route Left and Right	Walls in exit corridors at directional changes
Handrails	Handrail Marking	Entire length of each handrail within exit enclosures, located on top surface
Panic Bars	Panic Bar Marking	Each panic device on exit doors within exit enclosures
Door Latches	Door Latch Marking	Each door handle on exit doors within exit enclosures
Door Frames	Path Marking	Head and jambs of each exit door frame within exit enclosures
Stair Identification	Stair Identification Sign	Each floor landing within exit enclosures
Elevator Lobbies	Evacuation Map Sign	Each elevator lobby

END OF SECTION