**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.

This guide specification section has been prepared by Safe-T-Nose for use in the preparation of a project specification section covering photoluminescent exit specialties, including handrail markings, path markings, obstruction markings, door hardware markings, directional signs, identification signs, and evacuation map signs.

The following should be noted in using this specification:

Hypertext links to specific websites are included after manufacturer names and names of organizations whose standards are referenced within the text, to assist in product selection and further research. Hypertext links are contained in parenthesis and shown in blue, e.g.:

 [(www.astm.org](http://(www.astm.org))

Items requiring user input are enclosed within brackets and included as red text, e.g.:

 Section [09 00 00] [\_\_ \_\_ \_\_.]

Optional paragraphs are separated by an "OR" statement included as red text, e.g.:

\*\*\*\* OR \*\*\*\*

For assistance on the use of the products in this section, contact Safe-T-Nose LLC by calling 855-723-6673, by email at sales@safetnose.com, or visit their website at [www.safetnose.com](http://www.safetnose.com).

This specification has been prepared based on SimpleSpecs™-Specs specification templates. The SimleSpecs™ Specs Master Guide Specification system comprises a full architectural master specification that can be used to specify all project requirements. For additional information on SimpleSpecs™ Specs products visit the ZeroDocs.com website at www.zerodocs.com

1. **GENERAL**
	1. SUMMARY

Edit the following to include only those items specified in this section.

* + 1. Section Includes:
			1. Photoluminescent exit specialties:
				1. Handrail markings.
				2. Exit path/perimeter markings.
				3. Obstruction markings.
				4. Door frame and hardware markings.
				5. Directional signs.
				6. Stair identification signs.
				7. Evacuation map signs.

Coordinate the following with other sections in the Project Manual.

* + 1. Related Requirements:
			1. Division 01 - General Requirements: Administrative, procedural, and temporary work requirements.
			2. Section 05 55 19 - Photoluminescent Stair Nosings.
			3. Section 26 52 13 - Photoluminescent Exit Signs.
	1. REFERENCES

Edit the following to include only those references used elsewhere in this section.

* + 1. ASTM International (ASTM) [(www.astm.com)](http://www.astm.com) E2072 - Standard Specification for Photoluminescent (Phosphorescent) Safety Markings.
		2. International Code Council (ICC) [(www.iccsafe.com)](http://www.iccsafe.com):
			1. International Building Code (IBC).
			2. International Fire Code (IFC).
		3. National Fire Protection Association (NFPA) [(www.nfpa.org](http://www.nfpa.org)) 101 - Life Safety Code.
		4. Underwriters Laboratories, Inc. (UL) [(www.ul.com)](http://www.ul.com) 1994 - Standard for Luminous Egress Path Marking Systems.
		5. United States Department of Justice (USDOJ) [(www.ada.gov](http://www.ada.gov)) - ADA Standards for Accessible Design (SAD).
	1. SUBMITTALS

Retain the following for submittals requiring the Design Professional’s review.

* + 1. 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:
				1. Handrail markings: Minimum [8] [\_\_] inches long.
				2. Exit path/perimeter markings: Minimum [8] [\_\_] inches long.
				3. Obstruction markings: Minimum [1 x 8] [\_\_ x \_\_] inches.
				4. Door hardware markings: [Full size.] [Minimum [1 x 8] [\_\_ x \_\_] inches.]
				5. Directional signs: [Full size.] [Minimum [5 x 5] [\_\_ x \_\_] inches.]
				6. Stair identification signs: [Full size.] [Minimum [12 x 18 [\_\_ x \_\_] inches.]
				7. Evacuation map signs: [Full size.] [Minimum [8 x 10] [\_\_ x \_\_] inches.]

Retain the following for submission of informational submittals. These submittals are for the Owner's record purposes only.

* + 1. Informational Submittals:
			1. Certificates of Compliance: Show product compliance with reference standards.

Retain the following for closeout submittals for the Owner's record purposes.

* + 1. Closeout Submittals:
			1. Maintenance Data: Include recommendations for cleaning and routine maintenance.
	1. QUALITY ASSURANCE

Retain the following if required; edit to suit project requirements.

* + 1. Installer Qualifications: Minimum [2] [\_\_] years experience in work of this Section.

IFC applies to more than renovation projects. The design professional will need to determine the applicable code.

* + 1. Provide exit specialties in accordance with [NFPA 101.] [ICC IBC.] [ICC IFC.] [\_\_\_\_.]
		2. Meet requirements of [USDOJ ADA.] [applicable accessibility code.]
	1. DELIVERY, STORAGE AND HANDLING
		1. Store exit specialties in cool, dry location in original packaging until installed.
	2. WARRANTIES

Edit the following to include only those exit specialties required for each project.

* + 1. Provide manufacturer’s warranty against loss of photoluminescence for following periods:

Models with acrylic tape have a 5 year warranty; models with solid polymer strips have a 25 year warranty.

* + - 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.
1. **PRODUCTS**

* 1. MANUFACTURERS
		1. Contract Documents are based on products by Safe-T-Nose LLC. www.safetnose.com

Edit the following to indicate whether or not substitutions will be permitted for the products in this section.

* + 1. Substitutions: [Refer to Division 01.] [Not permitted.]
	1. MATERIALS
		1. Photoluminescent Area Luminance Properties: ASTM E2072 and UL 1994.
			1. From test sample activation: 10.76 lx (1.000 fc) for 60.0 minutes:
				1. For 10 minutes after lights go out: Minimum 30 mcd per square meter.
				2. For 60 minutes after lights go out: Minimum 7 mcd per square meter.
				3. For 90 minutes after light go out: Minimum 5 mcd per square meter.
	2. MANUFACTURED UNITS

Retain the following for a premium handrail marking. Includes golf ball facing, curved design, is washable and offers superior adhesion.

* + 1. 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 \*\*\*\*

Retain the following for a basic handrail marking

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

\*\*\*\* OR \*\*\*\*

Retain the following for a basic handrail marking with a temporary protective cover that allows markings to be installed before painting occurs.

* + 1. 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.

Retain the following for premium markings for floors, landings, and walls. Includes golf ball facing, is washable and offers superior adhesion.

* + 1. Exit Path/Perimeter Markings:
			1. 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.
			4. Listed to UL 1994.
			5. Width: 1 inch.

\*\*\*\* OR \*\*\*\*

Retain the following for basic path markings markings for floors, landings, and walls.

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

\*\*\*\* OR \*\*\*\*

Retain the following for basic path markings markings for floors, landings, and walls with a temporary protective cover that allows markings to be installed before painting occurs.

* + 1. 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.

Retain the following for marking of obstacles that project into egress path by 4 inches or more.

* + 1. 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.

Retain the following for marking of final exit door push bar.

* + 1. 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.

Retain the following for marking of exit doors. Running man facing in direction of travel is mandatory; straight and diagonal arrows are optional.

* + 1. 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.]
		2. 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.
		3. Evacuation Map Signs:
			1. Model: [FLT.] [FLB.]
			2. Description: Non-flexible photoluminescent sign.

FLT is 8.5 x 10.5 inches. FLB is 11 x 17 inches.

* + - 1. Size: [8.5 x 10] [11 x 17] inches.
			2. Content: [As indicated in Schedule at end of Section.] [As indicated on Drawings.]
1. **EXECUTION**
	1. INSTALLATION
		1. Install specialties in accordance with [NFPA 101,] [ICC IBC,] [ICC IFC,] [\_\_\_\_,] manufacturer’s instructions, and approved Shop Drawings.
	2. EXIT SPECIALTIES SCHEDULE

Include the following for a schedule listing the products in this section; edit to suit project requirements. Coordinate with Part 2 - Products and with drawing designations. The following may assist in developing a 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