**SECTION 10 1443 photoluminescent (luminous) egress path markings**

REV May 19

1. GENERAL
	* + 1. SUMMARY
				1. General: Provide photoluminescent egress marking system. The work of this section includes:

Stair and Leading Edge Nosing Markings

Handrail Markings

Demarcation Way Finding Strips

Obstacle Marking

Door and Directional Markings

Exit Signs

Floor Identification Signs

* + - * 1. RELATED SECTIONS

Section 05 5500 Photoluminescent Stair Treads and Nosings

Section 10 4500 Photoluminescent Exit Specialties

Section 26 5213 Emergency and Exit listing for illuminated exit signage

* + - 1. reference standards
				1. American Society for Testing and Materials (ASTM):

ASTM E2072 – Standard Specification for Photoluminescent (Phosphorescent) Safety Systems

ASTM E2073 – Standard Test Method for Photopic Luminance of Photoluminescent (Phosphorescent) Markings

* + - * 1. Underwriters Laboratories (UL) 1994 Luminous Egress Path Markings

Compliance to New York City Building Code is used for New York City Projects. Verify with manufacturing compliance to specific labeling requirements.

* + - * 1. New York City Building Code

Standard RS 6-1, Photoluminescent Exit Path Markings

Standard RS 6-1A, Additional Standards as Required by Reference Standard RS 6-1 for Photoluminescent exit path.

* + - 1. action SUBMITTALS
				1. Product Data: Manufacturer’s technical data.
				2. Shop Drawings: For photoluminescent egress path markings.

Include plans, elevations, and details.

* + - * 1. Samples: For each exposed product and for each color and texture specified, 6 inches (150 mm) long or full size.
			1. informational submittals
				1. Installation Instructions: Manufacturer’s recommendations for installation of luminous egress patch markings
			2. closeout submittals
				1. Operation and Maintenance data for luminous egress path markings to include in maintenance manuals.
			3. Quality Assurance
				1. Sole Source Responsibility: Obtain each type of photoluminescent egress marking system from one source of a single manufacturer.
				2. Provide directional and egress markings in accordance with **[NFPA 101] [Building Code] [Fire Code]**
			4. DELIVERY, STORAGE, and HANDLING
				1. Deliver materials to Project site ready use.
				2. Exercise proper care in handling of Work so as not to disrupt finished surfaces.
				3. Store materials under cover in a dry and clean location off the ground.
			5. WARRANTY
				1. Provide manufacturer's standard warranty. Product shall be free from manufacturing defects in materials and fabrication for a period of 1 year from the date of shipment. Should a product fail to function in normal use within this period, manufacturer shall furnish a replacement or new part at Nystrom’s discretion.

1. PRODUCTS
	* + 1. MANUFACTURER
				1. **[Basis of Design]** Products: Provide products **[specified][indicated on Drawings]** or Architect approved substitutions. Manufacturers of photoluminescent egress path markings include but are not limited to:
				2. Nystrom [Basis of Design],

 9300 73rd Ave N

Minneapolis, MN 55428

PH: 800-547-2635

www.Nystrom.com

* + - 1. components
				1. Basis-of-Design Product: Subject to compliance with requirements, provide Nystrom Safe-T-Lume

Retain Type paragraphs below if not indicated on Drawings; for more than one type or size, indicate locations on Drawings or by inserts.

Stair and Leading Edge Nosing Markings

Two-Part Short Tipped Ribbed Bar Abrasive Nosing 3-3/8 inch (86 mm) with 1 inch (25 mm) Translucent Resin Photoluminescent Strip. Cast-in, continuous extruded anchor attachment method. Nystrom Model: STTM-P3.375E

Ribbed Abrasive Short Tipped Nose: 3 inches (75 mm) wide with 1 inch (25 mm) Translucent Resin Photoluminescent Strip. Cast-in, continuous extruded anchor attachment method. Nystrom Model: STSM-P3E.

Photoluminescent Tapered Edge Translucent Resin Extrusion for Perimeter landing, exit path, door hardware, & door frame, Self-Adhesive 1 inch by 100 feet (25mm x 30.4 Meters). Nystrom Model: EM-DS1-100.

Handrail Markings

Pre-curved Plastic Extrusion Handrail Marking Strip, Self-Adhesive 1 inch by 10 feet (25mm x 3.04 Meters). Nystrom Model: EM-DHS1-10.

Photoluminescent Tape Perimeter landing, exit path, door hardware, & door frame, Self-Adhesive 1 inch by 150 feet (25mm x 45.7 Meters). Nystrom Model: EM-DT1-150.

Demarcation Way Finding Strips

Photoluminescent Tapered Edge Translucent Resin Extrusion for Perimeter landing, exit path, door hardware, & door frame, Self-Adhesive 1 inch by 100 feet (25mm x 30.4 Meters). Nystrom Model: EM-DS1-100.

Photoluminescent Tape Perimeter landing, exit path, door hardware, & door frame, Self-Adhesive 1 inch by 150 feet (25mm x 45.7 Meters). Nystrom Model: EM-DT1-150.

Obstacle Markings

Obstacle Marking Tape Roll with alternating diagonal bands of black and photoluminescent material, Self-Adhesive, 1 inch by 100 feet (25mm x 30.4 Meters) Nystrom Model: EM-DTO1-100.

Obstacle Marking Aluminum Strip 1 inch by 60 feet (25mm x 18 Meters). Nystrom Model: EM-DSO1-60

Door and Directional Markings

Photoluminescent Tape Perimeter landing, exit path, door hardware, & door frame, Self-Adhesive 1 inch by 150 feet (25mm x 45.7 Meters). Nystrom Model: EM-DT1-150.

Photoluminescent Tapered Edge Translucent Resin Extrusion for Perimeter landing, exit path, door hardware, & door frame, Self-Adhesive 1 inch by 100 feet (25mm x 30.4 Meters). Nystrom Model: EM-DS1-100.

Door Hardware Markings

Door Latch Marking, Self-Adhesive, 4 inch by 4 inch (102 mm x 102 mm). Nystrom Model: EM-DLM-4X4

NOT AN EXIT, Self-Adhesive, 5.5 inch by 6.5 inch (114 mm x 165 mm). Nystrom Model: EM-SNE-5.5X6.5

Running Man Sign, Adhesive Tape, 8 inch by 8 inch (203 mm x 203 mm).

Left Sign, Nystrom Model: EM-SRR-8X8.

Right Sign, Nystrom Model: EM-SRL-8X8.

Running Man Arrow Sign, Adhesive Tape, 8 inch by 4.5 inch (203 mm x 114 mm)

Arrow Up. Nystrom Model EM-SRAU-8X4.5

Arrow Up Right. Nystrom Model EM-SRAUR-8X4.5

Arrow Up Left. Nystrom Model EM-SRAUL-8X4.5

Arrow Down. Nystrom Model EM-SRAD-8X4.5

Arrow Down Right. Nystrom Model EM-SRADR-8X4.5

Arrow Down Left. Nystrom Model EM-SRADL-8X4.5

Arrow Right. Nystrom Model EM-SRAR-8X4.5

Arrow Left. Nystrom Model EM-SRAL-8X4.5

Running Man Exit Final Sign, Adhesive Tape. 8 inch by 11 inch (203 mm x 279 mm).

Arrow Right, Nystrom Model: EM-SREFAR-8X11

Arrow Up Right, Nystrom Model: EM-SREFAUR-8X11

Arrow Left, Nystrom Model: M-SREADL-8X11

Arrow Up Left, Nystrom Model: EM-SREFAUL-8X11

Running Man Exit Sign, Adhesive Tape, 8 inch by 9 inch (203 mm x 228 mm)

Arrow Right, Nystrom Model: EM-SREAR-8X9

Arrow Up Right, Nystrom Model: EM-SREAUR-8X9

Arrow Down Right, Nystrom Model: EM-SREADR-8X9

Arrow Left, Nystrom Model: EM-SREAL-8X9

Arrow Up Left, Nystrom Model: EM-SREAUL-8X9

Arrow Down Left, Nystrom Model: EM-SREADL-8X9

Running Man, Exit Lobby Sign, Adhesive Tape, 16 inch by 7 inch (406 mm x 178 mm)

Arrow Right, Nystrom Model: EM-SRELAR-16X7

Arrow Up Right, Nystrom Model: EM-SRELAUR-16X7

Arrow Left, Nystrom Model: EM-SRELAL-16X7

Arrow Up Left, Nystrom Model: EM-SRELAUL-16X7

Exit Signs

100 feet Sign, bracket and screw mount, 15.5 inch by 8.75 inch (394mm x 222 mm)

Green, One sided, Nystrom Model: EM-SE100G1-15.5X8.75

Green, Double sided, Nystrom Model: EM-SE100G2-15.5X8.75

Red, One sided, Nystrom Model: EM-SE100R1-15.5X8.75

Red, Double Sided, Nystrom Model: EM-SE100R2-15.5X8.75

Black, One sided, Nystrom Model: EM-SE100B1-15.5X8.75

Black, Double Sided, Nystrom Model: EM-SE100B2-15.5X8.75

Running Man Exit Sign 13 inch by 4.5 inch (330 mm x 114 mm)

Right, Nystrom Model EM-SRER-13X4.5

Left, Nystrom Model EM-SREL-13X4.5

Floor Identification Custom Signs, Adhesive Tape 13 inch by 18 inch (330 mm x 457 mm), Nystrom Model: EM-SFI-13X18.

1. EXECUTION
	* + 1. EXAMINATION
2. Verification of Conditions: Examine areas and conditions under which Work is to be performed and identify conditions detrimental to proper or timely completion.
3. Verify tolerances and correct improper condition
4. Identify conditions detrimental to providing proper quality and timely completions of work.
5. Do not proceed with installation until detrimental conditions have been corrected.
	* + 1. Installation
6. Comply with manufacturer's recommendations.
7. Clean and prepare surfaces to achieve a smooth, dry, clean surface free of flaking, unsound coatings, cracks, defects, projections, depressions, and substances that could impair bond between photoluminescent egress path markings and wall or floor surfaces.

END OF SECTION