

AMERICAN PERMALIGHT®



UL 1994 Listed

new New York City Building Code

Local Law 141 compliant

**Photoluminescent Egress Path Markings
with NYC required Labeling**



Dear Customer

In 1994, following the first terrorist bomb attack in the World Trade Center basement parking garage, the Port Authority of New York and New Jersey installed PERMALIGHT® photoluminescent markings on the steps, landings and handrail top bars of their emergency staircases.

During the 9/11/2001 World Trade Center New York City evacuation, 33% of survivors in WTC Tower 1 and 17% of survivors in WTC Tower 2 were aided by the PERMALIGHT® photoluminescent markings on the steps, landings and handrails. (see NIST study at <http://wtc.nist.gov/NCSTAR1/PDF/NCSTAR%201-7.pdf>) Based on the NIST findings, the New York City Department of Buildings developed a range of improvements, enforced by **Local Law 26 of 2004**, which included MEA-listed photoluminescent exit path markings for existing high-rise office buildings.

Please contact us for our Local Law 26/ NYC MEA-certified Exit Path Markings PDF Catalog.

Since then, both NFPA (National Fire Protection Association) and ICC (International Code Council) have added photoluminescent egress path markings to their domestic codes.

Please contact us for our nationwide IBC compliance Catalog.

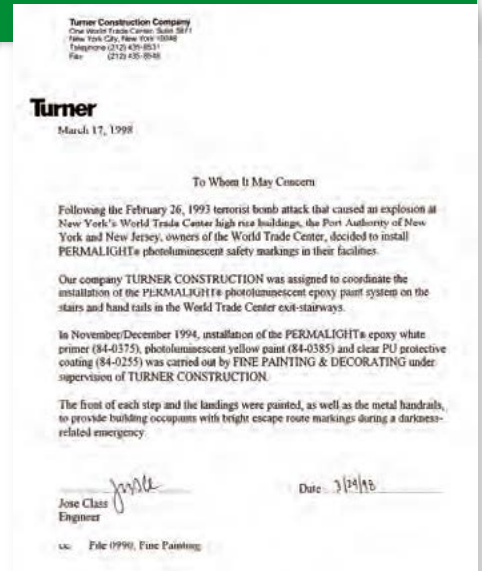
From January 2015 on, New York City has **Local Law 141** as its new building code with certain NYC specific requirements for NYC photoluminescent egress path markings.

This NYC Local Law 141 compliance Catalog introduces you to the PERMALIGHT® UL 1994 listed Photoluminescent Egress Path Markings with NYC-required Labeling. This NYC Catalog is applicable for NEW construction and Major Alterations in high-rises.

Follow the lead of the Code-writing organizations and improve life safety in your buildings, using PERMALIGHT® UL1994-listed photoluminescent egress path markings. Take precautions now! Once the emergency occurs, it is too late! Browse through the following pages. Contact our Customer Service team for a complimentary consultation, more detailed product information or a customized price quote. You may place your order by phone, fax or email. Order online at www.AmericanPermalight.com

Your American PERMALIGHT® Team

In 2014, PERMALIGHT® Photoluminescent Exit Path Markings were again installed at the World Trade Center site in Lower Manhattan: in the emergency staircases of One World Trade Center (formerly dubbed „Freedom Tower“).



NYC Local Law 26 - MEA certified versus NYC Local Law 141 – UL 1994 listed

ICC (International Code Council) is a US membership association committed to fire prevention, building safety and energy efficiency. ICC develops a wide range of codes and standards used to construct residential and commercial buildings, including homes and schools. These I-Codes (International Codes) enable safety, health and welfare for people at home, at school, in the workplace and in public assemblies. Most US states, counties and cities choose the I-codes for their building safety. New York City developed its Local Law 141 on the basis of the 2009 IBC – International Building Code.

NYC Local Law 141 applies to NEW high-rise construction and major renovations of existing high-rises.

NYC Local Law 141 photoluminescent requirements are **more stringent than** the **NYC Local Law 26 MEA**-requirements:

NYC Local Law 26 MEA-certified Exit Path Markings	NYC Local Law 141 UL 1994-listed Egress Path Markings	IBC - International Building Code UL 1994-listed Egress Path Markings
Activation by 2 foot-candles	Activation by only 1 foot-candle	Activation by only 1 foot-candle
Activation for 120 minutes	Activation for only 60 minutes	Activation for only 60 minutes

NYC Local Law 141-required UL 1994-listed Photoluminescent Egress Path Markings have to accomplish their bright luminance with only HALF the activating lighting and only HALF the length of activation!

If your project falls under the Local Law 26 of 2004 requirements with MEA (Material and Equipment Acceptance)-certified Exit Path Markings, please request our NYC Local Law 26/ MEA-certified Exit Path Markings PDF Catalog.

For your NYC new high-rise construction projects and major alterations of your existing high-rise buildings, you may download **Local Law 141** here: <http://www1.nyc.gov/site/buildings/codes/local-laws.page> Below and on the following pages, you see extracted Sections out of Local Law 141 and our UL 1994-listed Egress Path Markings with the NYC required Labeling described below the Code Sections. This is NOT the complete Code text: just a few extracts ...

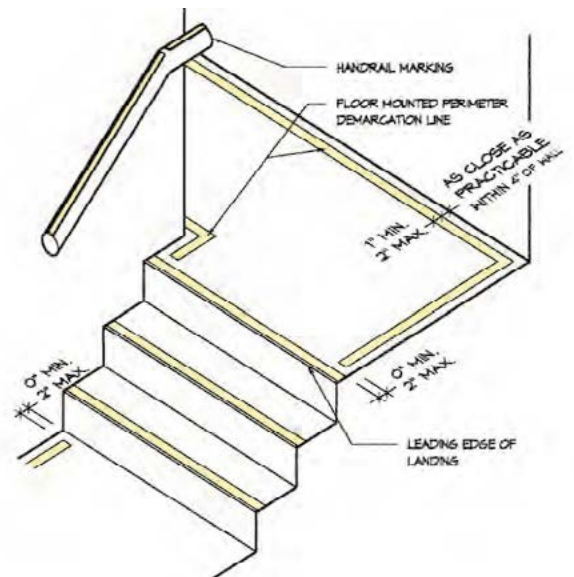
Local Law 141 of 2013 New York City

SECTION BC 1024 LUMINOUS EGRESS PATH MARKINGS

1024.1 General. Approved luminous egress path markings delineating the exit path shall be provided in all high-rise buildings subject to Section 403.5 having occupied floors located more than 75 feet (22 860 mm) above the lowest level of Fire Department vehicle access in accordance with Sections 1024.1

Exceptions:

1. Luminous egress path markings shall not be required on the level of exit discharge in lobbies that serve as part of the exit path in accordance with Section 1027.1, Exception 1.
2. Luminous egress path markings shall not be required in areas of open parking garages that serve as part of the exit path in accordance with Section 1027.1, Exception 3.



» GO GREEN – save energy!

Gain valuable LEED project points!

LEED, the Leadership in Energy and Environmental Design Green Building Rating System™ is the nationally accepted benchmark for the design, construction and operation of high performance green buildings. Please visit: www.usgbc.org

Possible LEED project credits are categories EA1, MR4 and ID1.1.

Photoluminescent Requirements per Local Law 141 of 2013

New York City

Occupancy Types

403.5.5 Luminous egress path markings. Luminous egress path markings shall be provided in accordance with Section 1024 and Appendix S.

Exceptions:

Egress paths serving Group R-2 (residences where occupants are primarily permanent, like condos/ apartments)



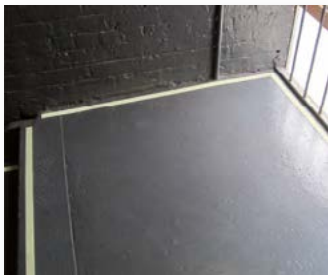
» Steps

marking applied to
horizontal leading edge
page 5



» Perimeter

demarcation lines
page 6 + 7



» Landings

Marking consistent
with step marking
page 5



» Obstacles

within the egress path
page 7



» Handrails

marking on top of
handrails
page 6



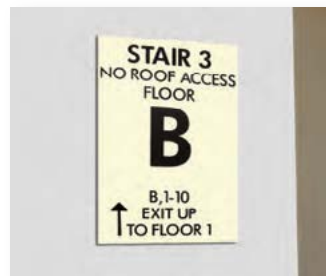
» Signage

page 8



» Doors

door frames
door hardware
page 9



» Floor Identification Signs

page 10

You will find extracts from the NYC Local Law 141 on the following pages. For a complete set of NYC Local Law 141 requirements, please visit <http://www1.nyc.gov/site/buildings/codes/local-laws.page>

1024.2 Required Markings.

Local Law 141 of 2013

New York City



Egress path markings shall be provided in exit enclosures, including vertical exit enclosures, horizontal exits, and exit passageways, in accordance with Sections 1024.2.1 through 1024.2.9. Entrances to exit enclosures shall be provided with exit signs in compliance with Section 1024.2.6.1.

1024.2.1 Steps. A solid and continuous stripe shall be applied to the horizontal leading edge of each step and shall extend for the full length of the step. Outlining stripes shall have a minimum horizontal width of 1 inch (25 mm) and a maximum width of 2 inches (51 mm). The leading edge of the stripe shall be placed at a maximum of ½ inch (13 mm) from the leading edge of the step and the stripe shall overlap the leading edge of the step by not more than ½ inch (13 mm) down the vertical face of the step. Outlining stripes on steps shall comply with Figure S101.1(2) of Appendix S.

Exception:

The minimum width of 1 inch (25 mm) shall not apply to outlining stripes listed in accordance with UL 1994.

1024.2.2 Landings. The leading edge of landings shall be marked with a stripe consistent with the dimensional requirements for steps. Stripes on landings shall comply with Figure S101.1(3) of Appendix S.

PERMALIGHT® Step and Landing Markings, Floor-mounted Demarcation Markings



	Model No.	Item No.	Dimensions	Description
	CC-ALU	83-60207	1" x 48"	Photoluminescent aluminum* strip with foamy adhesive backing. (* Not a thin, flimsy foil but a durable, semi-stiff aluminum metal). Floor-suitability tested by Underwriters Laboratories Inc.
	CC-NOSING	83-40447L	2-5/8" x 1-1/8" x 48"	90° angled aluminum stair nosing (silver-color anodized) with photoluminescent, anti-slip gritty aluminum strip and black, anti-slip gritty insert. Floor-suitability tested by Underwriters Laboratories Inc. Custom-lengths available – Call us!

The right accessories are important for durable, fast and efficient installations. Here are the most important ones at a glance.....



3M Safety-Walk™ Primer 901

One quart covers approximately 35 square feet.

Description	Size	Item No.
Primer	1 Quart	83-0781



Edge Sealing Acrylic

Lacquer, This 0.528 pint (250 ml) bottle yields approx. 150 linear feet.

Description	Size	Item No.
Acrylic Lacquer	0.528 pint	83-0783

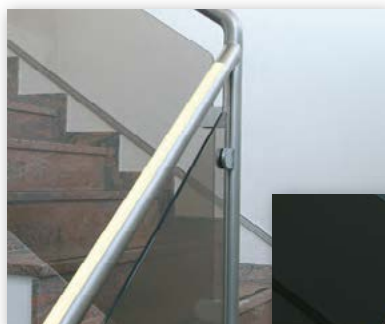
Pressure roller

To firmly press-apply self-adhesive tapes for a firm bond:



Description	Item No.
1-3/4" Roller Width	86-7006

1024.2.3 Handrails



1024.2.3 Handrails. All handrails and handrail extensions shall be marked with a solid and continuous stripe having a minimum width of 1 inch (25 mm). The stripe shall be placed on the top surface of the handrail for the entire length of the handrail, including extensions and newel post caps. Where handrails or handrail extensions bend or turn corners, the stripe shall not have a gap of more than 4 inches (102 mm). Strips on handrails shall comply with Figure S101.1(4) of Appendix S.

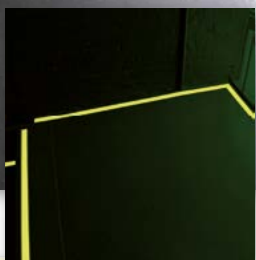
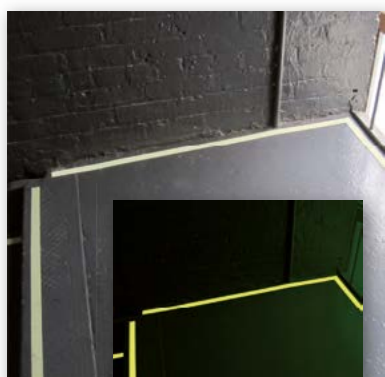
Exception:

The minimum width of 1 inch (25 mm) shall not apply to outlining stripes listed in accordance with UL 1994.



Model No.	Item No.	Dimensions	Description
CC-TAPE	82-40708-NYC	1" x 82 ft.	Photoluminescent Polyester Tape
CC-TAPE	82-40708L-NYC	1" x 164 ft.	with NYC Labeling, self-adhesive

1024.2.4.1 Floor-mounted demarcation lines



1024.2.4 Perimeter demarcation lines.

Stair landings and other floor areas within exit enclosures, with the exception of the sides of steps, shall be provided with solid and continuous demarcation lines on the floor or on the walls or a combination of both. The strips shall be 1 to 2 inches (25 mm to 51 mm) wide with interruptions not exceeding 4 inches (102 mm). **Exception:** The minimum width of 1 inch (25 mm) shall not apply to outlining strips listed in accordance with UL 1994.

1024.2.4.1 Floor-mounted demarcation lines.

Perimeter demarcation lines shall be placed within 4 inches (102 mm) of the wall and shall extend to within 2 inches (51 mm) of the markings on the leading edge of landings. The demarcation lines shall continue across the floor in front of all doors. Perimeter demarcation lines shall comply with Figure S101.1(5) of Appendix S.

Exceptions: 1. Demarcation lines shall not extend in front of exit doors that lead out of an exit enclosure and through which occupants must travel to complete the exit path.

2. Demarcation lines shall be continuous but need not extend into an area such as a dead end or an obstruction that is selected not to be outlined because it is not part of the egress path.

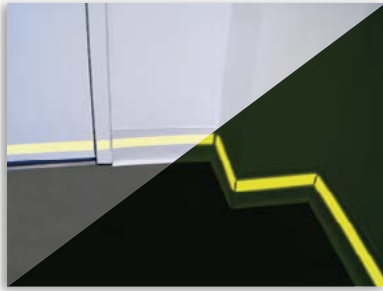


PERMALIGHT® floor-mounted demarcation markings

Model No.	Item No.	Dimensions	Description
CC-ALU	83-60207	1" x 48"	Photoluminescent aluminum* strip with foamy adhesive backing. (* Not a thin, flimsy foil but a durable, semi-stiff aluminum metal).



1024.2.4.2 Wall-mounted demarcation lines and 1024.2.4.3 Transition

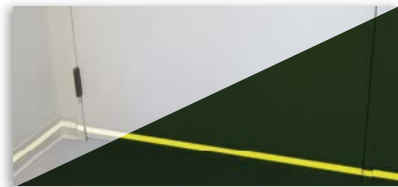


1024.2.4.3 Transition.

Where a wall-mounted demarcation line transitions to a floor-mounted demarcation line, or vice versa, the wall-mounted demarcation line shall drop vertically to the floor to meet a complementary extension of the floor-mounted demarcation line, thus forming a continuous marking. Transitioning demarcation lines shall comply with Figure S101.1(7) of Appendix S.

1024.2.4.2 Wall-mounted demarcation lines.

Perimeter demarcation lines shall be placed on the wall with the bottom edge of the strip no more than 4 inches (102 mm) above the finished floor. At the top or bottom of the stairs, demarcation lines shall drop vertically to the floor within 2 inches (51 mm) of the step or landing edge. Demarcation lines on walls shall transition vertically to the floor and then extend across the floor where a line on the floor is the only practical method of outlining the path. Where the wall line is broken by a door, demarcation lines on walls shall continue across the face of the door or transition to the floor and extend across the floor in front of such door. **Exception:** Demarcation lines shall not extend in front of exit doors that lead out of an exit enclosure and through which occupants must travel to complete the exit path.... continued...



Model No.	Item No.	Dimensions	Description
CC-TAPE	82-40708-NYC	1" x 82 ft.	Photoluminescent Polyester Tape with NYC Labeling, self-adhesive
CC-TAPE	82-40708L-NYC	1" x 164 ft.	
CC-ALU	83-60207	1" x 48"	Photoluminescent aluminum* strip with foamy adhesive backing. (* Not a thin, flimsy foil but a durable, semi-stiff aluminum metal)

1024.2.5 Obstacles



1024.2.5 Obstacles.

Obstacles at or below 6 feet 6 inches (1981 mm) in height and projecting more than 4 inches (102 mm) into the egress path shall be outlined with markings no less than 1 inch (25 mm) in width comprised of a pattern of alternating equal bands, of luminescent luminous material and black, with the alternating bands no more than 2 inches (51 mm) thick and angled at 45 degrees (0.79 rad).

Obstacles shall include, but are not limited to, standpipes, hose cabinets, wall projections and restricted height areas. However, such markings shall not conceal any required information or indicators including, but not limited to, instructions to occupants for the use of standpipes.

Markings on obstacles shall comply with Figure S101.1(6) of Appendix S.



PERMALIGHT® obstacle markings

Model No.	Item No.	Dimensions	Description
CC-TAPE	82-44151	1" x 82 feet	Photoluminescent / Contrast black obstacle marking polyester thin tape with self-adhesive backing
CC-TAPE	82-44151L	1" x 164 feet	Photoluminescent / Contrast black obstacle marking polyester thin tape with self-adhesive backing
CC-ALU	82-44151ALU	1" x 48"	Photoluminescent / Contrast black Aluminum obstacle marking, self-adhesive

New York City Law 141 special Signage requirements für New York City high-rise buildings

1024.2.6 Doors from exit enclosures. Doors through which occupants within an exit enclosure must pass in order to complete the exit path, and doors serving horizontal exits, shall be provided with markings complying with Sections 1024.2.6.1 through 1024.2.6.3 of this chapter and Figures S101.1(11) and S101.1(12) of Appendix S. Exit discharge doors shall further comply with Section 1024.2.6.1.2.

1024.2.6.1 Emergency exit symbol. The doors shall be identified by a low-location luminous emergency exit symbol complying with Section 1024.6.1. The exit symbol shall be a minimum of 4 inches (102 mm) in height and shall be mounted on the door itself in accordance with Section 1024.2.6.1.1. Such signs shall be no higher than 18 inches (457 mm) above the finished floor.

1024.2.6.1.1 Mounting location. The vertical centerline of the sign shall be centered with the door, or shall be in that half of the door, either the right or left, that contains the latch. In case of double-doors, both doors shall be marked and the signs shall be centered with the doors. Arrows may be omitted on door-mounted signs. Door-mounted signs shall comply with Figure S101.1(1) in Appendix S.



Signs in 4.5" x 9.5"



86-60287-IBC



86-60547-IBC

Signs in 8" x 14"



86-60437-IBC



86-60427-IBC

Signs in 8" x 18"



86-60217-IBC



86-60327-IBC

1024.2.6.1.2 Exit discharge doors. At doors serving as exit discharge, a sign in compliance with Section 1024.2.6.1.1 shall contain supplemental directional text such as "FINAL EXIT", "EXIT THROUGH LOBBY", or "EXIT TO STREET" in sans serif letters one-half as high as the word EXIT. Exit discharge door sign shall comply with Figure S101.1(13) in Appendix S.

1024.2.7 Directional signage upon entering an exit enclosures. Luminous directional signs designed in compliance with Section 1024.6.1 shall be placed in the exit enclosure at every entrance thereto such that they are readily visible when the doors are in the open and closed positions. Such directional sign shall include an arrow indicating the direction of travel. The word "EXIT" shall not be required. The signs shall be located such that their top edge is within 18 inches (457 mm) above the finished floor. Directional signs shall comply with Figure S101.1(9) in Appendix S.

1024.2.8 Directional signage at transfer levels and where egress direction is not clear. Luminous directional signs designed in compliance with Section 1024.6.1 and installed at heights indicated in Section 1024.2.7 shall be placed on the wall at transfer levels and wherever egress direction is not clear including at turns along horizontal extensions; at transitions from vertical to horizontal direction and at a "T" intersection. These directional signs shall include arrows indicating the direction of travel. The word "EXIT" shall not be required. Directional signs at transfer levels shall comply with Figure S101.1(9) in Appendix S.

Signs in 4.5" x 8"



86-60117-IBC



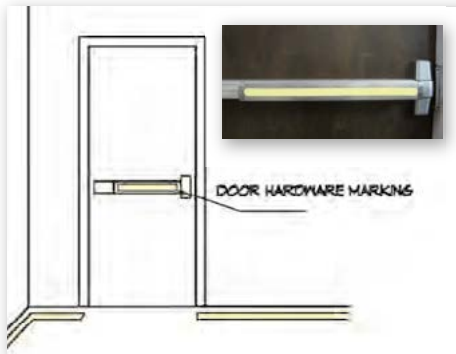
86-60127-IBC

1024.2.9 "No Exit" sign. Luminous signs shall be placed on doors along the egress path that lead to dead ends (mechanical rooms, storage closets, etc.). Such signs shall contain sans serif lettering at least 1 inch (25 mm) high reading "NO EXIT", with the "NO" centered above the "EXIT". The "NO" may be a larger size than the "EXIT" for clarity. The nonluminous portion of such signs shall not be green. No-exit signs shall comply with Figure S101.1(10) in Appendix S.






Model No.	Item No.	Dimensions	Description
CC-RIGIDX	600098HIF	5" x 5"	self-adhesive NO EXIT sign, rigid PVC
CC-ALU	600098-IBC	5" x 5"	self-adhesive NO EXIT sign, aluminum

1024.2.6.2 Door hardware markings



1024.2.6.2 Door hardware markings. Door hardware shall be marked with no less than 16 square inches (406 mm²) of luminous material. This marking shall be located behind, immediately adjacent to or on the door handle and/or escutcheon. Where a panic bar is installed, such material shall be no less than 1 inch (25 mm) wide for the entire length of the actuating bar or touchpad. Additional hardware markings may include ANSI Z 535.1 safety green graphics such as arrows indicating door handle turning directions, or emergency egress symbols as per NFPA 170, the word "EXIT", the word "PUSH", and similar egress-related symbols provided the minimum 16 square inches (406 mm²) of luminous materials is maintained.

1024.2.6.3 Door frame markings. The top and sides of the door frame shall be marked with a solid and continuous 1 inch to 2 inch (25 mm to 51 mm) wide stripe. Where the door molding does not provide sufficient flat surface on which to locate the stripe, the stripe shall be permitted to be located on the wall surrounding the frame.

	Model No.	Item No.	Dimensions	Description
	CC-TAPE	82-40708-NYC	1" x 82 ft.	Photoluminescent Polyester Tape with NYC Labeling, self-adhesive for Push Bars and Door Frames
	CC-TAPE	82-40708L-NYC	1" x 164 ft.	
	CC-ALU	83-60207	1" x 48"	Photoluminescent Aluminum with NYC Labeling, self-adhesive for Door Frames (not on Push Bars)
	CC-ALU	82-60107-IBC	4" x 4"	Photoluminescent Aluminum with NYC Labeling, self-adhesive for doors with door knobs

1024.3 Uniformity. Placement and dimensions of markings shall be consistent and uniform throughout the same exit enclosure.

1024.3.1 Solid and continuous. For the purposes of this section, solid and continuous means without gaps or interruption, except as required for the control of expansion and contraction. A series of dashes, chevrons, dots, or other similar patterns is not solid and continuous. Luminous materials shall be considered solid and continuous if they occasionally contain the following safety green (ANSI Z 535.1) symbols or text: 1. The word "EXIT"; 2. Egress symbol as per NFPA 170; 3. Direction arrows as per NFPA 170; or 4. Other text or symbols as approved by the commissioner.

1024.4 Self-luminous and photoluminescent. 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 are not limited to, self-luminous materials and photoluminescent materials. Materials shall comply with either: 1. UL 1994; or 2. ASTM E 2072, except that the charging source shall be 1 foot-candle (11 lux) of fluorescent illumination for 60 minutes, and the minimum luminance shall be 30 millicandelas per square meter at 10 minutes and 5 millicandelas per square meter after 90 minutes.

1024.4.1 Labeling. All approved materials shall be labeled and identified with the manufacturer's name, model number and the name of the approved agency in a minimum of 6 point type with at least one such identification on each piece of material installed. However, labeling is not required for pieces of material less than 1 foot in length that are placed in immediate proximity of an identical model that is labeled. Materials may include supplemental identifying information such as the trade name or "NYC".

... continued ... Please continue reading at <http://www1.nyc.gov/site/buildings/codes/local-laws.page>

Section 1022.8 Floor identification signs and 1022.8.1 Signage requirements



EXTRACT – not complete:

1022.8 Stairway [floor number and] identification and floor level signs. Signs identifying stairways and floor levels shall comply with Sections 1022.8.1 through 1022.8.4.

1022.8.1 Stairway identification signs. A stairway identification sign indicating each stair by alphabetic letter shall be posted on both sides of each stair door.

1022.8.2 Floor identification signs. A floor identification sign shall be provided at each floor landing [in interior vertical] within exit enclosures connecting more than three stories. Such sign shall designate:

1. The floor level;
2. The terminus of the top and bottom of the [stair] exit enclosure; and
3. The identification of the stair or ramp. The signage shall also state
4. The story of and the direction to the exit discharge; and
5. The availability of roof access from the [stairway] enclosure for the Fire Department.

The signs shall be located 5 feet above the floor landing in a position that is readily visible when the doors are in the open and closed positions.

1022.8.3 Tactile floor level identification signs. Floor level identification signs in tactile characters complying with ICC A117.1 shall be located at each floor level landing adjacent to the door on the stair side.

1022.8.4 Signage requirements. Stairway and floor identification signs required by Sections 1022.8.1 and 1022.8.2 shall comply with all of the following requirements:

1. The signs shall be a minimum size of 18 inches (457 mm) by 12 inches (305 mm).
2. The alphabetic letters designating the identification of the stair enclosure shall be a minimum of 1½ inches (38 mm) in height.
3. The number designating the floor level shall be a minimum of 5 inches (127 mm) in height and located in the center of the sign.
4. All other lettering and numbers shall be a minimum of 1 inch (25 mm) in height.
5. Characters and their background shall have a nonglare finish. Characters shall contrast with their background, with either light characters on a dark background or dark characters on a light background.

6. When signs required by Section 1022.8 are installed in interior exit enclosures of buildings subject to Section 1024, the signs shall be made of the same luminous materials as required by Section 1024.4.



PERMALIGHT® floor identification signage

Model No.	Item No.	Dimensions	Description
CC-RIGIDX	86-18128	min. 18" x 12"	Custom fabricated floor identification sign in minimum 18" x 12" with tactile floor level designation. Made of rigid PVC with adhesive backing.
CC-ALU	86-18127	min. 18" x 12"	Custom fabricated floor identification sign in minimum 18" x 12" with tactile floor level designation. Made of aluminum with adhesive backing.

PERMALIGHT® - Your Custom Signage Specialist

American PERMALIGHT®, Inc. can custom-produce photoluminescent signage

- » On various substrates (adhesive film, rigid PVC, aluminum)
- » In a range of luminance performances (from standard to high-performance *power*)
- » In a variety of contrast colors
- » With your site-specific text, in any language, with a graphic image of your choice



Self-adhesive Film



Rigid PVC



Aluminum



ADA Signs

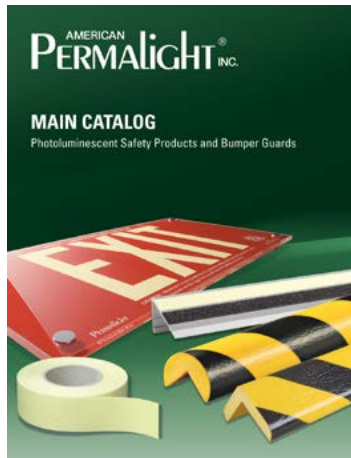


Floor Identification Signs

Contact us!
Phone: 888-737-6254

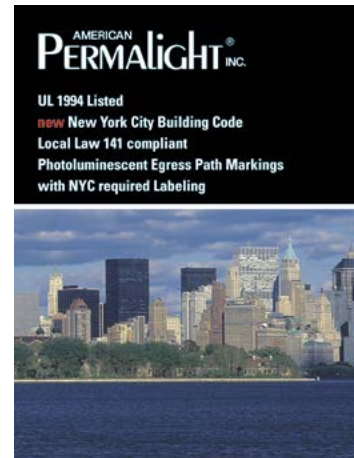
Click to download the catalog that addresses your safety marking needs

*Different jurisdictions have specific photoluminescent safety requirements.
Please contact us to request the PDF catalog that addresses your specific marking needs.*



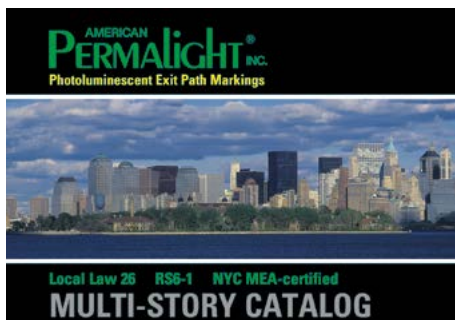
PERMALIGHT® Main Catalog

featuring our Photoluminescent Exit Signs, luminous Egress Path Markings and foamy cushioned Polyurethane Wall and Corner Guards



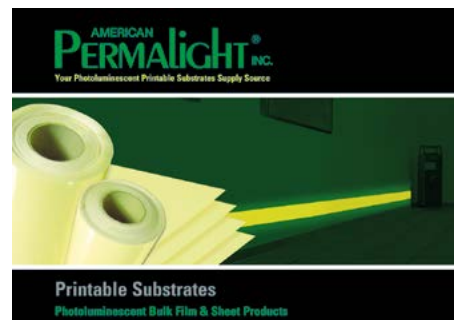
PERMALIGHT® NYC Local Law 141

UL 1994 listed Photoluminescent Egress Path Markings with NYC-required UL 1994 labeling



PERMALIGHT® NYC Local Law 26

Reference Standard RS 6-1 and RS 6-1A MEA-certified Photoluminescent Exit Path Markings with MEA-Labeling



PERMALIGHT® Photoluminescent Printable Substrates for sign making businesses

(ADA signage, digital/screen print, plotter cutting)



AMERICAN
PERMALIGHT®

2570 W 237th Street, Suite C, Torrance, CA 90505

Toll-Free: 888-737-6254 • Phone: 310-891-0924

E-Mail: info@AmericanPermalight.com

www.AmericanPermalight.com

Sales based on our Terms of Delivery and Payment (Subject to material changes. Version: 2020.07.08)