

JESSUP®
GloBrite®
Photoluminescent Systems

IBC/IFC Egress Path Marking System Compliance Manual



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Since 1956, Jessup Manufacturing Company has been focused on one simple goal: To provide our customers with superior solutions through the application of coating and converting technologies. We have consistently lived up to that commitment through the dedication of superior people, a continued investment in the most modern converting equipment, and a passion for constantly exceeding our customers' expectations.

Throughout the years, Jessup Manufacturing has grown steadily, and today is recognized as the leading manufacturer of slip prevention and photoluminescent evacuation solutions. As the only vertically integrated domestic manufacturer of these technologies, we have firmly led the market, and have grown from our initial "headquarters" - a small garage in McHenry, Illinois - to multiple U.S. manufacturing facilities and sales subsidiaries throughout the world.

Let Jessup Manufacturing Company be your "Total Solution" provider for all of your non-slip, photoluminescent, and custom coating/converting requirements.

2009 INTERNATIONAL CODES

International Building Code & International Fire Code

In order to protect the health, safety and welfare of communities large and small, the industry adheres to a system of model codes that regulate the construction of residential and commercial buildings. These codes are created by the International Code Council (ICC), an association dedicated to building safety and fire prevention. The International Building Code (IBC) and International Fire Code (IFC) are two of the most widely accepted codes in North America; all 50 states have adopted a version of the IBC and at least 42 states have adopted a version of the IFC.

To ensure the regulations remain up-to-date, the ICC revises the codes every three years to include new and innovative design ideas and technologies, new materials and methods of construction, and fire safety, life safety and structural stability. In 2009, the ICC introduced the latest editions of the IBC and IFC, both of which contained significant code changes and additions, particularly in regards to the means of egress.

- **IBC covers new construction**
- **IFC covers new construction and existing buildings**

IBC/IFC Egress Regulations

The 2009 ICC states that luminous egress path markings shall be required in all IBC and IFC institutional, educational, business, hotel, public assembly and R-1 residential buildings having occupied floors that are located more than 75 feet above the lowest level of fire department vehicle access. According to Chapter 10 of the 2009 IBC and IFC (means of egress), luminous markings are required for all doors, steps, landings, handrails, perimeters, and obstacles. The IBC and IFC regulations are enforced by building inspectors and fire code officials.

AFFECTED Occupancy Groups:

- **A**-Assembly
(For Public Events)
- **B**-Business
- **E**-Education
- **R1***- Hospitality/ Hotels
- **I**-Institutional/ Hospital
- **M**-Mercantile

*R-1 Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including hotels, motels and boarding houses.



IBC/IFC Egress Path Markings & Perimeter Demarcation Lines

Path Markings - Demarcation Lines & Obstacles



AFFECTED Occupancy Groups:

- **A**-Assembly (For Public Events)
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*R-1 Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including hotels, motels and boarding houses.

IBC/IFC Section 1024: Luminous Egress Path Markings

1024.1 General. *Approved* luminous egress path markings delineating the exit path shall be provided in buildings of groups A, B, E, I, M and R-1 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 through 1024.5.

1024.2 Markings within Exit Enclosures

Egress path markings shall be provided in *exit enclosures*, including vertical *exit enclosures* and *exit passageways*, in accordance with Sections 1024.2.1 through 1024.2.6.

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 1/2 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 1/2 inch (13 mm) down the vertical face of the step.

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.

- | | |
|--------------------------|--|
| 1024.2.1 Steps | 7800-TREAD-1 Aluminum Stair Tread
Specs: 2.375" x 48" with 1" #7812 rigid insert
40 pieces per case |
| 1024.2.2 Landings | 7800-NOSING-X
Specs: 3" x length of stair nosing with 1" strip of #7812 rigid insert |

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* and *handrail* extensions bend or turn corners, the stripe shall not have a gap more than 4 inches (102 mm).

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

- | | |
|---------------------------|--|
| 1024.2.3 Handrails | 7760-1 Tamper Proof Photoluminescent Film
Specs: 1" by 100'
12 rolls per case |
|---------------------------|--|

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 stripes 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 stripes *listed* in accordance with UL 1994.

Demarcation Lines, Cont.

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.

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.

1024.2.4 Perimeter Demarcation

- | | | |
|---|--|---|
| A 7500-EXT-2x8 Aluminum Extrusion to be used with 7760-2 Film
Specs: 2" x 8'
10 pieces per case | B EXT-2 to be used with 7760-1 Tamper Proof Film Plastic Extrusion
Specs: 1" x 8'
10 pieces per case | C 7800-EXT-1-ALM Aluminium Extrusion to be used with 7812SR-1.5
Specs: 2.5" x 96"
10 pieces per case
7812SR-1.5 Semi-Rigid Strip
Specs: 1.5" x 50'
8 rolls per case
7800-ECAP-1 Plastic Extrusion Endcap
For 7800-EXT-1-ALM
20 pieces per bag |
| A 7760-2 Film Tamper Proof Photoluminescent Film Insert
Specs: 2" x 100'
6 rolls per case | B 7760-1 Tamper Proof Photoluminescent Film Insert
Specs: 1" x 100'
12 rolls per case | D 7812R-1x48-32 Rigid PVC Photoluminescent Strip
Specs: 1" x 48" with 1/32" foam tape backing
10 pieces per case |

1024.2.4.2 Wall-mounted Demarcation Lines: Perimeter demarcation lines shall be placed on the wall with the bottom edge of the stripe no more than within 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.

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.

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 degree (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.

1024.2.5 Obstacles

- | | |
|--|---|
| A 7760-1-STP Film Tamper Proof Black Stripe Photoluminescent Tape
Specs: 1" x 100'
12 rolls per case | B 7760-2-STP Film Tamper Proof Black Stripe Photoluminescent Tape
Specs: 2" x 100'
6 rolls per case |
|--|---|



Obstacles and Door Markings Path Specifications

Door Markings

1024.2.6 Doors from Exit Enclosures: Doors through which occupants within an *exit* enclosure must pass in order to complete the exit path shall be provided with markings complying with Sections 1024.2.6.1 through 1024.2.6.3.

1024.2.6.1 Emergency Exit Symbol: The doors shall be identified by a low-location luminous emergency exit symbol complying with NFPA 170. The exit symbol shall be a minimum of 4 inches (102 mm) in height and shall be mounted on the door, centered horizontally, with the top of the symbol no higher than 18 inches (457 mm) above the finished floor.

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.

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 strip shall be permitted to be located on the wall surrounding the frame.

1024.2.6.1 Emergency Exit Symbol

Right Facing Running Man
ICC-7812-009

Left Facing Running Man
ICC-7812-010

1024.2.6.2 Door Hardware Markings

**7760-DH 4x4
Tamper Proof Decal**
Specs: 4" x 4"
50 pieces per case

**7760-1 Tamper Proof
Photoluminescent Film**
Specs: 1" x 100'
12 rolls per case

7812R-DH Rigid PVC Photoluminescent
Specs: 4" x 4" with
1/32" mounting tape

**7812R-2x48-32
Rigid PVC Photoluminescent Strip**
Specs: 2" x 48" with
1/32" foam tape backing
10 pieces per case

1024.2.6.3 Door Frame Markings

**7760-1 Tamper Proof
Photoluminescent Film**
Specs: 1" x 100'
12 rolls per case

**7812R-1x48-32 Rigid Strip
with Foam Tape**
Specs: 1" x 48" with 1/32" foam
tape backing 10 pieces per case

Specifications

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

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:

Floor Identification Signs



Floor Identification Signs

Every floor landing in exit enclosures that connect more than three stories must have signage designating:

- The identification of the stair or ramp
- The floor level
- Braille floor identifier
- The terminus of the top and bottom of the exit enclosure
- The availability of roof access from the enclosure (for the fire department)
- The story of and direction to the exit discharge

7812 Rigid Floor Identification Sign
ICC-7812-004-C
Specs: 18" x 13"

1022.8 Floor Identification Signs

A sign shall be provided at each floor landing in *exit enclosures* connecting more than three stories designating the floor level, the terminus of the top and bottom of the *exit enclosure* and the identification of the *stair* or *ramp*. The signage shall also state the *story* of, and the direction to, the *exit discharge* and the availability of roof access from the enclosure for the fire department. The sign shall be located 5 feet (1524 mm) above the floor landing in a position that is readily visible when the doors are in the open and closed positions. Floor level identification signs in tactile characters complying with ICC A117.1 shall be located at each floor level landing adjacent to the door leading from the enclosure into the corridor to identify the floor level.

1022.8.1 Signage Requirements: *Stairway* identification signs 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 letters designating identification of the stair enclosure shall be a minimum of 1-1/2 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 materials as required by Section 1024.4.

Specifications, Cont.

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.

1024.5 Illumination: *Exit enclosures* where photoluminescent exit path markings are installed shall be provided with the minimum *means of egress* illumination required by Section 1006 for at least 60 minutes prior to periods when the building is occupied.



Fire Safety Signage



ICC-7812-001
Fire Hose and Standpipe (Rigid Glo Brite)
 Specs: 8.75" x 12" - .5 lb

ICC-7812-002
Fire Extinguisher (Rigid Glo Brite)
 Specs: 8.75" x 12" - .5 lb

ICC-7812-003
Fire Hose (Rigid Glo Brite)
 Specs: 8.75" x 12" - .5 lb

ICC-7812-005
Exterior Area for Assisted Rescue (Rigid Glo Brite)
 Specs: 11.25" x 12" - .5 lb

ICC-7812-006
Area of Refuge (Rigid Glo Brite)
 Specs: 11.25" x 12" - .5 lb

ICC-7812-007
Push Until Alarm Sounds - 15 Sec (Rigid Glo Brite)
 Specs: 11.25" x 10" - .5 lb

ICC-7812-008
Push Until Alarm Sounds - 30 Sec (Rigid Glo Brite)
 Specs: 11.25" x 10" - .5 lb

ICC-7812-009
Running Man - Right (Rigid Glo Brite)
 Specs: 8" x 8" - .5 lb

ICC-7812-010
Running Man - Left (Rigid Glo Brite)
 Specs: 8" x 8" - .5 lb

ICC-7812-011
Push to Exit (Rigid Glo Brite)
 Specs: 11.25" x 5" - .5 lb



ICC-7812-001
 ICC Reference 905.7.1



ICC-7812-002
 ICC Reference 905.7.1



ICC-7812-003
 ICC Reference 905.7.1



ICC-7812-005
 ICC Reference 1007.9



ICC-7812-006
 ICC Reference 1007.9



ICC-7812-007
 ICC Reference 1008.1.9.7



ICC-7812-008
 ICC Reference 1008.1.9.7



ICC-7812-010
 ICC Reference 1024.2.6.1



ICC-7812-009
 ICC Reference 1024.2.6.1



ICC-7812-011
 ICC Reference 1008.1.4.4

2009 IBC/IFC Components

1024.2.1 Steps and Landings 1024.2.2

- 7800-TREAD-1 (Aluminum stair tread - 2.375" x 48" with 1" wide #7812 rigid insert) 40 pcs/case
- 7800-NOSING-X (3" x length of stair nosing with 1" wide #7812 rigid insert)

1024.2.3 Handrails

- 7760-1 (1" x 100' roll of tamper proof PL film) 12 rolls/case

1024.2.4 Perimeter Demarcation Lines (Landings)

- 7500-EXT-2x8 to be used with 7760-2 film (Aluminum extrusion 2" x 8') 10 pcs/case
7760-2 tamper proof PL film insert 6 rolls/case - items sold separately
- EXT-2 to be used with 7760-1 Film (Plastic extrusion 1" x 8') 10 pcs/case
7760-1 tamper proof PL film insert 12 rolls/case - items sold separately
- 7800-EXT-1-ALUM to be used with 7812SR-1.5 and 7800-ECAP-1 (Aluminum extrusion 2.5" x 96") 10 pcs/case
7812SR-1.5 (1.5" x 50' rolls of 7812 semi-rigid) 8 rolls/case
7800-ECAP-1 (Plastic endcaps for 7800-EXT-1-ALUM) 20 pcs/bag
- 7812R-1x48-32 (Rigid PVC PL strip 1" x 48" with 1/32" foam tape backing) 10 pcs/case

1024.2.5 Obstacles

- 7760-1-STP Film (1" x 100' roll of tamper proof black stripe PL tape) 12 rolls/case
- 7760-2-STP Film (2" x 100' roll of tamper proof black stripe PL tape) 6 rolls/case

1024.2.6.1 Emergency Exit Symbol

- ICC-7812-009 Running Man Right
- ICC-7812-010 Running Man left

1024.2.6.2 Door Hardware Markings

- 7760-DH (4" x 4" tamper proof decal)
- 7760-1 Film (1" x 100' roll of tamper proof PL film) 12 rolls/case
- 7812R-DH (4"x 4" Rigid PVC PL with 1/32" mounting tape)
- 7812R-1x48-32 (Rigid PVC PL strip 1" x 48" with 1/32" foam tape backing)

1024.2.6.3 Door Frame Marking

- 7760-1 Tamper Proof Film
- 7812R-1x48-32 (Rigid strip with foam tape)

1022.8 Floor Identification Signs (Custom)

- ICC-7812-004-C Floor Identification Sign (Braille/Tactile)

905.7.1 Signs

- ICC-7812-001 Fire Hose and Standpipe
- ICC-7812-002 Fire Extinguisher
- ICC-7812-003 Fire Hose

1007.9 Signs

- ICC-7812-005 Exterior Area of Assisted Rescue
- ICC-7812-006 Area of Refuge

1008.1.9 Signs

- ICC-7812-007 Push Until Alarm Sounds-15 seconds
- ICC-7812-008 Push Until Alarm Sounds-30 seconds

1008.1.4.4 Signs

- ICC-7812-011 Push to Exit



All components
listed to UL 1994

Glo Brite® | ecōexit®
zero energy exit signs

Leading the Green Revolution in
Next Generation Exit Sign Technology.

Emergency Lighting Industries First
100 foot Listed Photoluminescent
Exit Sign Now Listed for
Outdoor and Wet Locations.



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