

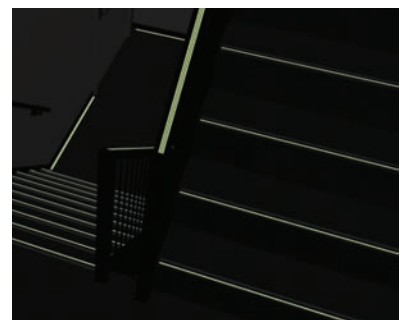
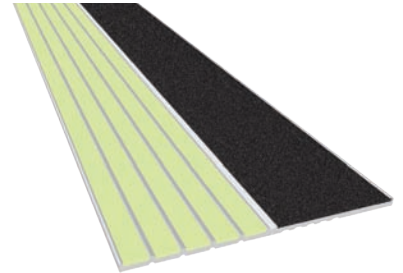
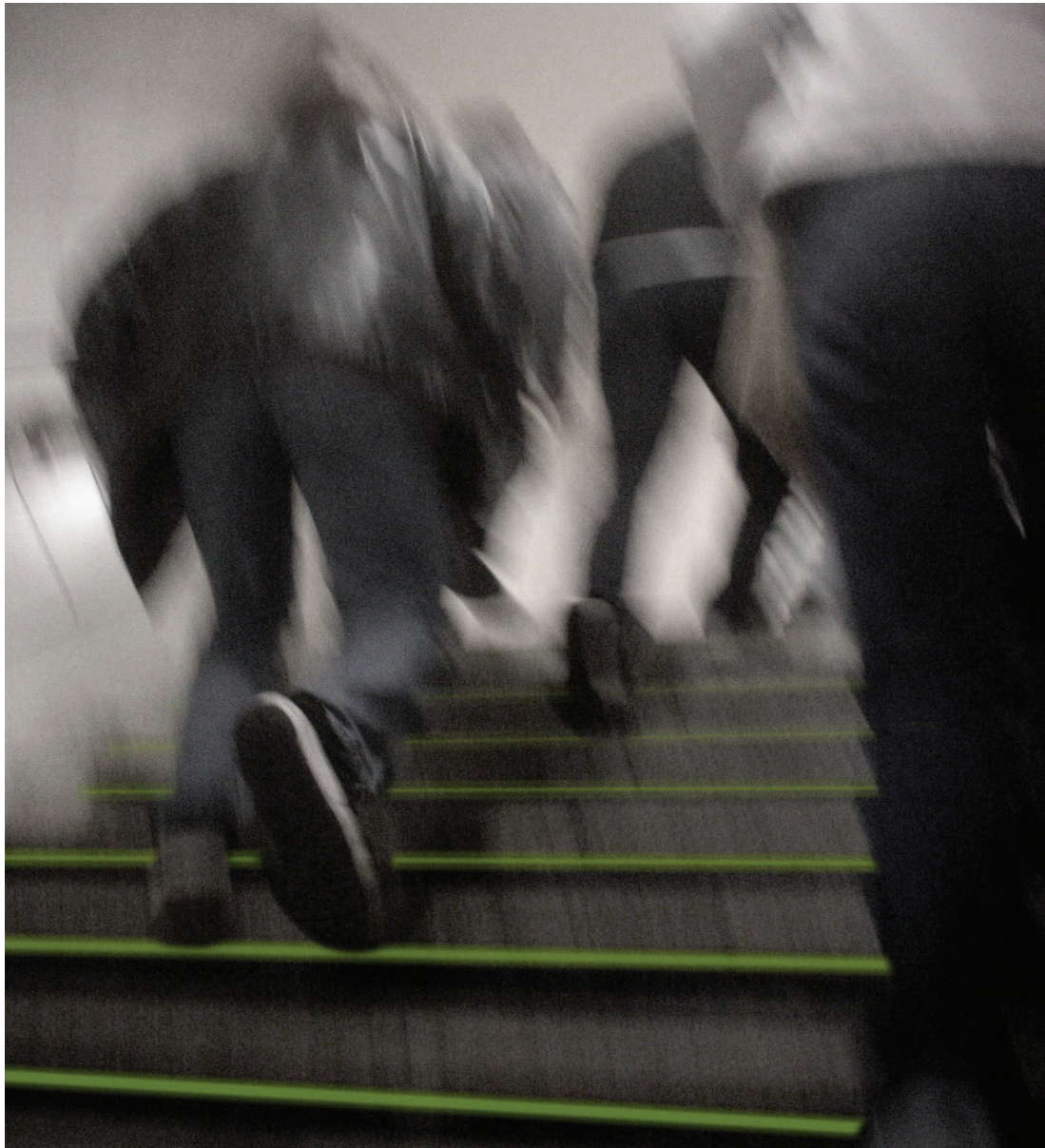


VISIBLY BETTER



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Photoluminescent Step Edge, Path Finding, Handrail and Exit Sign Products for Both Outdoors and Indoors



Reduce Slips and Falls with Recycled Light





ENGINEERED PRODUCTS

## COMPANY MISSION

Kinesik Engineered Products is an innovator of risk management and life safety products. Our mission is to create a safer environment for people of all abilities while reducing liability exposure to our customers. Our core focus of upgrading accessibility routes and infrastructures projects to reduce the potential for trips and falls has been the basis of our success.

## CORPORATE OVERVIEW AND BRANDS

- 40 years as a Manufacturer
- Expansive 400,000 sq. ft. production and manufacturing facility with the capacity for custom fabrication
- 15 compression molding presses with capabilities from 50 to 3000 tons and 20ft + in length
- Headquartered in Mississauga, Ontario with satellite offices in Buffalo, New York and Sacramento, California
- Supplier to 40+ Transit Authorities in North America and around the world

## TACTILE WARNING SYSTEMS

**Access Tile**

**Armor-Tile**<sup>TM</sup>  
Tactile Systems

**Advantage**<sup>TM</sup>  
Tactile Systems

**Armor-Tile**<sup>TM</sup>  
Transit Systems

**Elan**<sup>TM</sup> **TILE**  
porcelain tactile indicators

**ALTUS**<sup>TM</sup> **TILE**

**eon**<sup>TM</sup> **TILE**

## TRANSIT INFRASTRUCTURE BRIDGES AND WALKWAYS

  
**armordeck**<sup>TM</sup>

## PHOTOLUMINESCENCE AND SAFETY STEP EDGE STRIPS

 **ecoglo**<sup>®</sup>

## INSTITUTIONAL FURNITURE

**MAX-SECURE**<sup>TM</sup>  
Detention Products

## SIDEWALK JOINT SYSTEM

**TRIPSTOP**<sup>TM</sup>

## HOW THE ECOGLO SYSTEM WORKS

Ecoglo uses a patented process to produce a range of products that provide a four pronged solution to pathfinding needs:

- step edge contrast
- slip-resistance
- visibility in all light conditions
- resistance to wear

### ROUGH

The hard wearing silicon carbide non-slip material is just what you need to reduce slips and falls in all weather conditions. Your patrons will commend you, not complain to you. With their UV resistance and good looks, you can confidently install Ecoglo products inside and out.

### TOUGH

Our patented process bakes in the photoluminescent powder and non-slip material and you get to savor the results. Thousands of people can walk on these products thousands of times with no wear and tear. And just to make sure, we've put them through extensive testing at internationally accredited laboratories relating to durability, weather resistance, UV resistance, stain resistance, abrasion and cleaning. And they passed with flying colours.

### SEEN

Unlike electrical or battery lighting, Ecoglo products will never let you down. They will glow brightly in the dark for many hours giving your patrons confidence in exiting, even in an emergency. Some steps are just too hard to see, whether it be day or night. With Ecoglo, you can be sure your patrons will see the steps, not fall down them, whatever the light conditions. It's the combination of the photoluminescent strip and the non-slip material that creates such great step edge definition.

### GREEN

Every small step you take to reduce electricity usage helps save our environment. Ecoglo products let you recycle natural sunlight or artificial light. No electricity is required. Ecoglo also goes green by using recycled aluminum. All products are non-toxic and non-radioactive. Designed to last the life of your facility, Ecoglo avoids maintenance costs. Ultimately, Ecoglo is recyclable which avoids the cost of landfill dumping.

### HOW TO SPECIFY ECOGLO PRODUCTS

Ecoglo provides several design file formats for its products in order to make the job of specifying easier than ever. From step edge contrasts, stair nosings, pathway marking, egress signs, and more, you now have more choices when specifying Ecoglo products for your next project.

Whether you need 2D CAD drawings, 3-part specifications, brochures, videos, installation instructions, and now BIM (Revit) objects, Ecoglo has you covered.

### ONLINE RESOURCES

For more information, please visit:

- [www.caddetails.com](http://www.caddetails.com)
- [www.aecdaily.com](http://www.aecdaily.com)





# THE ECOGLO TECHNICAL ADVANTAGE

The Ecoglo Photoluminescent (PL) range of products provide significant benefit during low light conditions and emergency blackout situations. With a proven track record in reducing slips and falls Ecoglo products provide improved health and safety with additional benefits in any smoke hazard situation.

Used for way-marking, step nosings and signage, the products are UV stable and highly durable, lasting for many years. The products are easily installed and have minimal maintenance costs.

## COMPARATIVE ADVANTAGE

### ECOGLO

#### LUMINANCE

Ecoglo products are manufactured using a patented process that is only used by Ecoglo. This tightly controlled application embeds the photoluminescent particles in a clear durable polymer.

The physical nature of the dry powder embedding process and the optical properties of the polymer ensure maximum efficiency of the photoluminescent particles to absorb useful wavelengths from a natural or artificial light source. This light the re-emits from the product towards a viewer's eye.

Ecoglo products use a custom produced photoluminescent pigment which has greater longevity of glow than all the other pigments (over 100) which Ecoglo has sampled since 2001.

Ecoglo uses dry powder for maximum luminance.

#### VISIBILITY

All Ecoglo products are engineered to provide greater visibility than relevant codes and standards currently require. Photoluminescent visibility is affected by more than just brightness ('Luminance'); the other factor is contrast against adjacent surfaces.

Contrast against adjacent surfaces is the critical parameter for visibility on a step edge. Ecoglo step-edge products incorporate a black anti-slip strip that provides excellent luminance contrast and colour contrast to the PL strip, so the step edge is clearly defined in all lighting conditions: dark conditions, light conditions and twilight or dim conditions.

This means the Ecoglo products are visible from a greater distance and for a longer time after the lights go out. Ecoglo incorporates a black anti-slip strip for maximum visibility and edge contrast.

### NON-ECOGLO

A widely used alternative manufacturing process uses liquid formulations that carry the photoluminescent particles.

Liquid formulations can suffer from settling out of the dense photoluminescent particles resulting in inconsistent luminance properties.



*Ecoglo Installation  
Time Warner Center,  
New York City*

# THE ECOGLO TECHNICAL ADVANTAGE

## ECOGLO

### DURABILITY OF PHOTOLUMINESCENCE

The Ecoglo range has been subjected to accelerated UV/weathering exposure, and proven to be highly resistant to the effects of UV/weathering.

Testing has been extended from the usual 1000 hour or 2000 hour test, out to 6000 hours, which can be interpreted to be similar to around 30 years of outdoor exposure.

At 6000 hours exposure, while there is noticeable loss of gloss of the top surface, the loss in PL brightness is less than can be detected by the human eye (measured reduction of 5-8%).

The unique ridges in the photoluminescent strips protect the glowing areas from most abrasive wear, and other incidental abuse.

Ecoglo uses its patented process for maximum durability. Using powder means the polymer we use is "long chain" which forms a strong UV resistant product when bonding.

### INSTALLED DURABILITY

The manufacture of all Ecoglo products involves the integral bonding of the photoluminescent layer to a rigid aluminum substrate, so there is no chance of delamination or peeling. Rigid products spread any applied loads over a greater area of installation adhesive.

Ecoglo signage uniquely incorporates an integrally bonded anti-graffiti protective top coat over the print, which also protects the print from abrasive wear. Because this top layer bonds into the substrate, there is no chance of delamination or peeling.

Ecoglo bonds onto rigid aluminum and applies a protective top coat for greater installed durability.

### SLIP RESISTANCE

The unique ridges in the Ecoglo photoluminescent strips and the integrated anti-slip contrast strips provide all-weather slip resistance.

Ecoglo combines ridges and anti-slip contrast strips for slip resistance.

## NON-ECOGLO

PVC based products have reduced durability, may turn brown during weathering exposure after a short time.

Flexible base products, such as PVC, are more prone to coming loose because the installation adhesive is more highly stressed.

For outdoor use, protective film which is not integrally bonded is only as good as the quality of the adhesive.

Smooth surface PL products do not provide slip resistance.

## THE PRODUCT RANGE INCLUDES:

- Pathmarking guidance strips
- Handrail guidance strips
- Floor marker discs
- Hazard strips
- Signage (including tactile and Braille)
- Seat and aisle identification
- Step edge definition trim
- Step nosings

# ECOGLO VS. TRADITIONAL EMERGENCY LIGHTING BACKUP SYSTEMS

## COMPARATIVE ADVANTAGE

### ECOGLO

#### EFFECTIVENESS

- The energy stored in Ecoglo photoluminescent pigments will continuously exhaust for over 100 hours until it needs to be recharged by re-exposing it to a light source
- PL way-finding systems an image of the pathway is created by outlining elements such as steps, landings, doors, etc. and critical information such as change in floor level or direction
- PL way-finding systems can play a vital life-saving role by showing the safe exit path, even in heavy smoke
- The standard when designing PL way-finding systems for smoky conditions is low-level continuous marking less than 1 meter above the floor level
- Even if in a dark room for a week, can recharge for a 2 hour evacuation in as little as 10 minutes

#### INSTALLATION

- Installation can be completed by any competent handyman

#### MAINTENANCE

- Occasional dusting

#### LIFE SPAN

- 35-year life span

#### ENVIRONMENTAL IMPACT

- Ecoglo is not radioactive or toxic and uses no energy. In 35 years, the aluminum can be recycled

### TRADITIONAL EMERGENCY LIGHTING BACKUP SYSTEMS

#### EFFECTIVENESS

- Experience problems with partial or total failure
- Limited operating time
- Cast insufficient light
- High mounted emergency lights can easily be totally extinguished when there is smoke in the air
- Location of high light casts shadows
- Every model requires a battery or generator system that could provide electricity to the lights during a blackout
- If completely drained an emergency backup battery can take up to 7 days to recharge

#### INSTALLATION

- Requires costly installation by electricians

#### MAINTENANCE

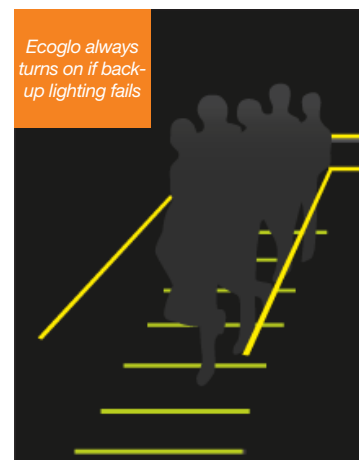
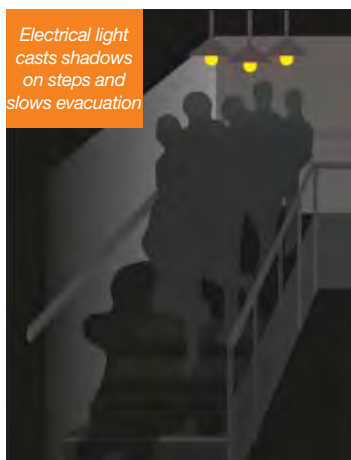
- Annual inspection and regular replacement of bulbs, batteries, or generators

#### LIFE SPAN

- 2 to 7-year life span

#### ENVIRONMENTAL IMPACT

- Emergency lights are not recyclable and over 35 years, up to 7 systems will need to be installed



# LUMINANCE REQUIREMENTS

Around the world standards for PLM pathmarking have increased performance requirements over the years. Today Canada has the highest standard for PLM performance. Ecoglo Pathmarking products meet the tough Canadian standards and exceed all others.

## ULC S572 IN CANADA

ULC S572 is the standard stipulated in the National Building Code and has been adopted by all Provincial Building Codes. Photoluminescent Material used in signs and pathmarking in Canada must be certified as performing at this standard. Each element must be seen at the required distance after two hours.

## ULC S572 LUMINOUS EGRESS PATH MARKING SYSTEMS

ULC S572 is a standard that provides requirements for floor proximity and other egress path marking and lighting systems that provide a visual delineation of the path of egress. These systems are also used to identify significant egress path features such as doors, stair banisters, obstacles or information placards.

Such systems are intended for installation and use as required by building and fire safety codes such as the Life Safety Code, NFPA 101; the Building Construction and Safety Code, NFPA 5000, and the International Building Code sponsored by the International Code Council.

ULC S572 requires each system element to be recognizable from a distance of 25 feet, and also requires all elements that may be applied to a floor or step to meet UL410 Slip Resistance of Floor Surface Materials, and to be tested for the effects of cleaning.

# 2009 IFC/IBC 1024 LUMINOUS EGRESS PATH MARKINGS COMPLIANCE GUIDE

## 1024.1 GENERAL

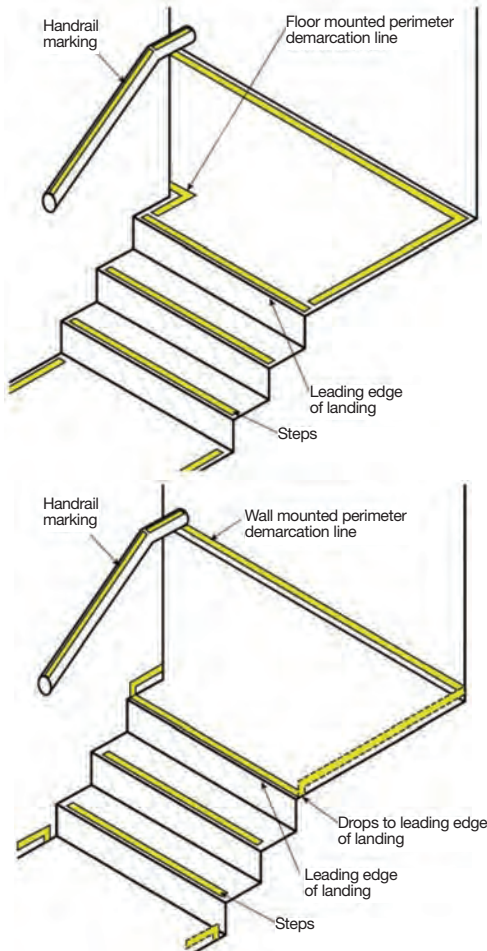
Approved luminous egress path markings delineating the exit path shall be provided in buildings of Groups A, B, E, I, M and R-1 having occupied floors located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access in accordance with Sections 1024.1 through 1024.5.

### Applicable Occupancy Groups:

- A Assembly
- B Business
- E Educational
- R1 Transient Residential
- I Institution
- M Mercantile

## 1024.2 MARKINGS WITHIN EXIT CLOSURES

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 ½ inch (12.7 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.

## STEPS AND LANDINGS PRODUCTS

**E Series:** Photoluminescent contrast strips

**F / RF Series:** Flat aluminum stair nosings with photoluminescent contrast strips

**S Series:** Cast-in-place aluminum stair nosings with photoluminescent contrast strips

**G3001 / G6001:** Photoluminescent guidance strip

## 1024.2.2 LANDINGS

The leading edge of landings shall be marked with a stripe consistent with the dimensional requirements for steps.

**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

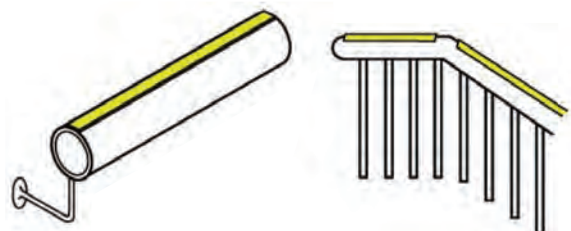
All handrails and handrail extensions shall be marked with a solid and continuous stripe having a minimum width of 1 inch (25 mm). The stripe shall be placed on the top surface of the handrail for the entire length of the handrail, including extensions and newel post caps. Where handrails or handrail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

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

## HANDRAIL PRODUCTS

**H Series:** Handrail strip end caps

**G3001 / G6001:** Photoluminescent guidance strip





# 2009 IFC/IBC 1024 LUMINOUS EGRESS PATH MARKINGS COMPLIANCE GUIDE (CONTINUED)

## 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.

### PERIMETER DEMARCATION LINE PRODUCTS

**T5-G3001 / T8-6001:** Aluminum track and photoluminescent guidance strip

**G3001 / G6001:** Photoluminescent guidance strip

## 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.

## 1024.2.4.2 WALL-MOUNTED DEMARCATION LINES

Perimeter demarcation lines shall be placed on the wall with the bottom edge of the stripe 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.

## 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.

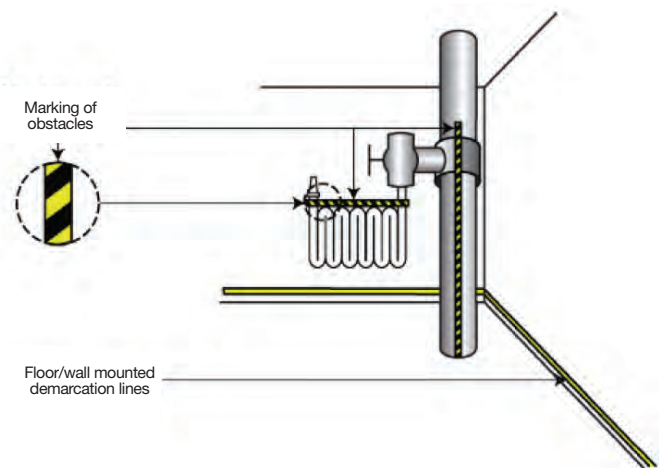
## 1024.2.5 OBSTACLES

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.

### OBSTACLE PRODUCTS

**OB20025:** Photoluminescent obstruction strip

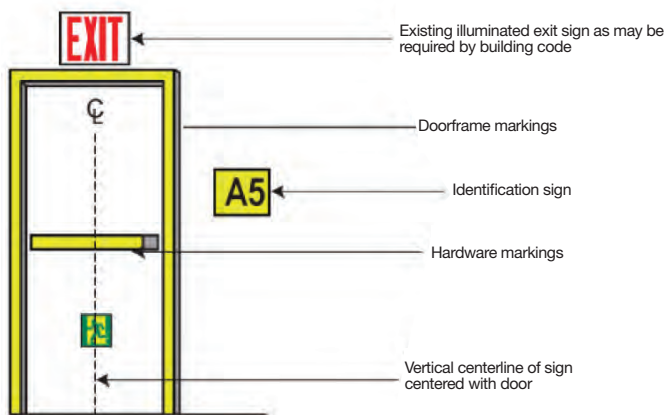
**OB20025-TP:** Photoluminescent obstruction tape



# 2009 IFC/IBC 1024 LUMINOUS EGRESS PATH MARKINGS COMPLIANCE GUIDE (CONTINUED)

## 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.

## EMERGENCY EXIT SYMBOL PRODUCTS

**R Series:** Running man photoluminescent directional and door exit signs

### 1024.2.6.2 DOOR HARDWARE MARKINGS

Door hardware shall be marked with no less than 16 square inches (406 mm<sup>2</sup>) 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.

## DOOR HARDWARE MARKING PRODUCTS

**DHM Series:** Door hardware indicators

### 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.

## DOOR FRAME MARKING PRODUCTS

**G6001:** Photoluminescent guidance strip

## 1024.3 UNIFORMITY

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

# ABOUT THE ACCESSIBILITY FOR ONTARIANS WITH DISABILITIES ACT

The Accessibility for Ontarians with Disabilities Act, 2005 (AODA) became law on June 13, 2005. The purpose of the AODA is to benefit all Ontarians by developing, implementing and enforcing accessibility standards. The goal is to achieve accessibility for Ontarians with disabilities with respect to goods, services, facilities, accommodation, employment, buildings, structures and premises by January 1, 2025.

On December 27, 2013, Ontario Regulation 368/13 was filed to amend the new 2012 Building Code, O.Reg. 332/12.

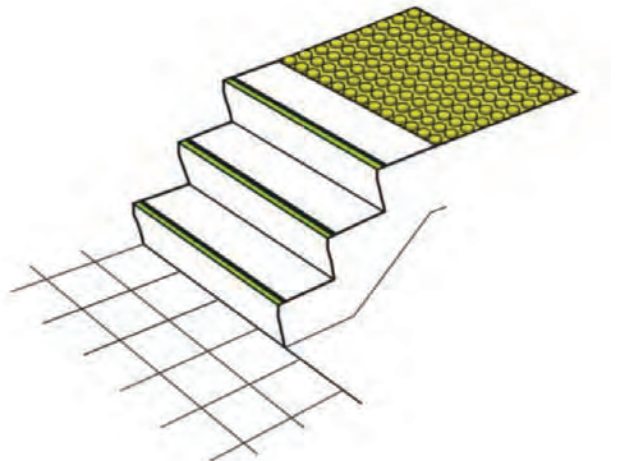
The effective date of the amendment is January 1, 2015.

## AODA STANDARDS FOR STAIRS

### TREADS AND RISERS

A flight of stairs shall:

- A. Have uniform riser heights and tread depths;
- B. Have risers not more than 180 mm high;
- C. Have treads not less than 280 mm deep, measured from riser to riser;
- D. Have no open risers;
- E. Be illuminated to at least 100 lx at the tread; and
- F. **Have a horizontal strip at the edge of the tread that**
  - i. 50 ± 10 mm deep;**
  - ii. Is colour-contrasted with the tread and riser**
  - iii. Extends the full width of the tread; and**
  - iv. Is slip-resistant**



# DEFINITIONS

## CHARGING

Photoluminescent material must receive some light in order to re-emit that light. In most situations 15-30 minutes of light (depending on the light source) will be sufficient to charge photoluminescent material so that it will remain visible for four hours.

Immediately after the charging light has stopped, the luminance (brightness) can be very high (over 2000 mcd/m<sup>2</sup> if the charging light is bright). Luminance rapidly decreases over the next 10-20 minutes, however visibility is still adequate at 5 mcd for emergency egress. It takes 11 hours for fully charged Ecoglo material to reduce to 5 mcd. See *Brightness Decay Graph on page 14*.

If very low light levels exist Ecoglo will be able to advise of the duration of lighting required to charge the strips. See *Typical Charging Tables on page 13*.

## EYE ADAPTATION

There are two main types of detector cells in the retina; cone and rod cells. For approximately the first 5-15 minutes under dark conditions the cone system of detector cells, which operate in bright light, continues to operate. However after this time the rod system of detector cells takes over as it is far more sensitive to light. The detective threshold of cone cells is 1 mcd/m<sup>2</sup>, whereas the detective threshold for rod cells is only 0.001 mcd/m<sup>2</sup>.

Visibility is affected by an individual's ability to see in the dark. In particular older people see significantly less in the dark or in dim light than younger people. It takes approximately 20-30 minutes to fully adapt from bright sunlight to complete darkness. The speed of adaptation is faster than the rate at which the brightness of photoluminescent material reduces. This can lead to the photoluminescent material appearing to get brighter initially.

## PHOTOLUMINESCENCE

The process of photoluminescence allows certain substances to emit a steady luminescent glow after they have absorbed various kinds of energy. Photoluminescence involves the absorption of energy - normally light. This causes the electrons of the atoms of the absorbing material to become excited and jump from the inner orbits of the atoms to the outer orbits. The electrons then fall back to their original state causing photons of light to be emitted.

Ecoglo uses Strontium Aluminate crystals embedded in a clear, durable polymer. These crystals continue to glow for many hours until exhausting the energy they have absorbed, but they can be recharged repeatedly by re-exposure to light. The luminescent ability will not noticeably deteriorate over time.

Ecoglo photoluminescent material is made from strontium aluminate crystals. When exposed to light energy (either natural or artificial) the crystals become excited and undergo a conversion process which enable them to re-emit the energy received as light in the form of a yellow/green glow. The light source can then be cut off and the excitation will continue for many hours. Photoluminescent material can be simply recharged by re-exposing to light. See *Brightness Decay Graph on page 14*.

## VISIBILITY

Visibility of photoluminescent material is measured by millicandelas/m<sup>2</sup>. From international code requirements (NYC and ICC) it is widely accepted that at 5 mcd photoluminescent material is visible. It takes many hours for Ecoglo photoluminescent material to reduce to 5 mcd.

Note that if photoluminescent step edging is used as the only light source for indoor theatre aisles Ecoglo will engineer a solution to provide sufficient visibility as the 5 mcd emergency requirements are not relevant.



# CHARGING TABLES

## FLUORESCENT CHARGING OF ECOGLO PATHMARKING MATERIAL (20 LUX, 4000K) IN A POORLY LIT AREA

### ACTIVATION TIME

### HOURS OF VISIBILITY\*

5 Minutes	0.50 Hours
10 Minutes	1.00 Hour
20 Minutes	2.25 Hours
30 Minutes	3.00 Hours

## FLUORESCENT CHARGING OF ECOGLO PATHMARKING MATERIAL (150 LUX, 4000K) IN A REASONABLY LIT AREA

### ACTIVATION TIME

### HOURS OF VISIBILITY\*

5 Minutes	2.50 Hours
10 Minutes	4.00 Hours
20 Minutes	6.00 Hours
30 Minutes	7.00 Hours

## FLUORESCENT CHARGING OF ECOGLO PATHMARKING MATERIAL (300 LUX, 4000K) IN A WELL LIT AREA

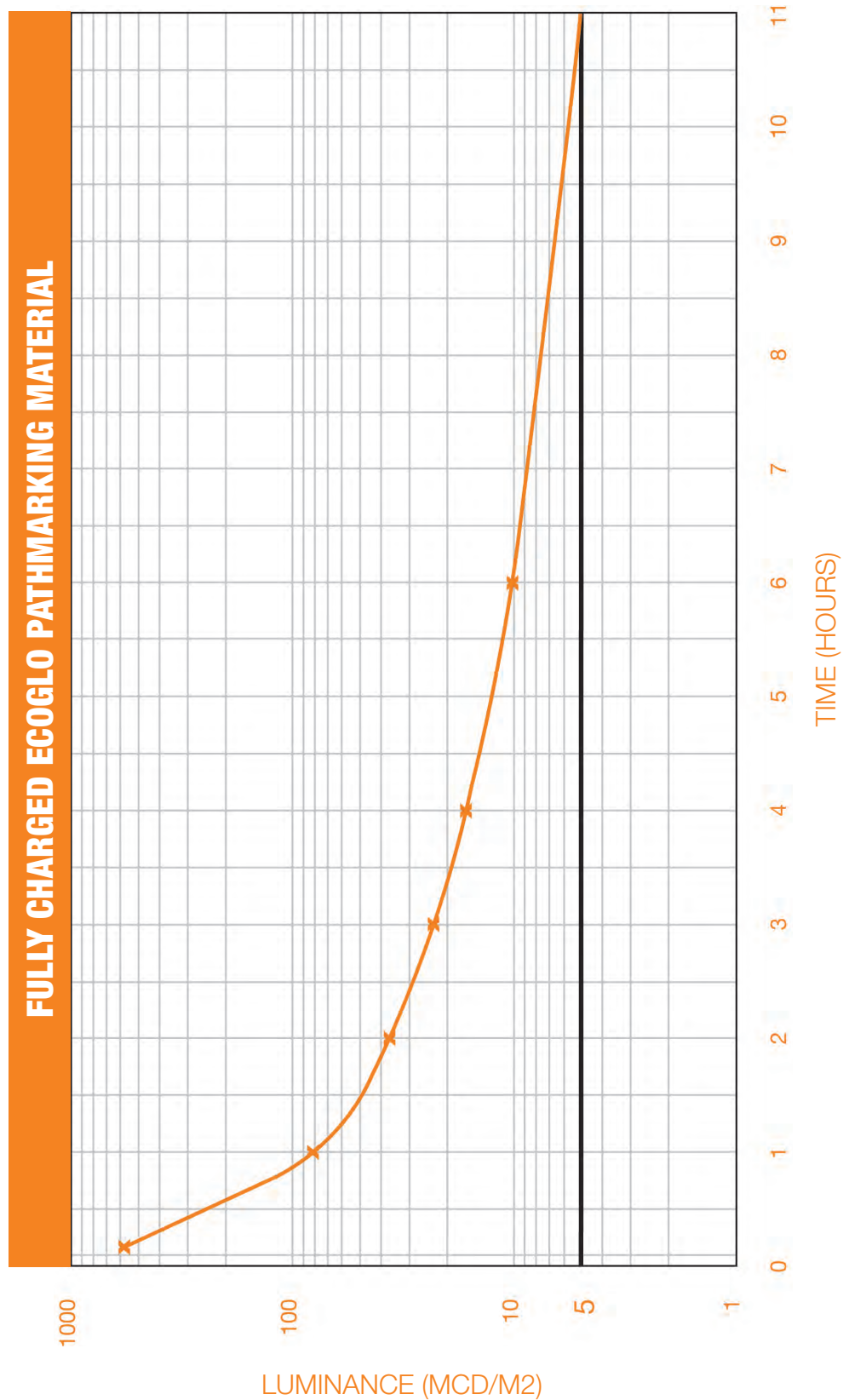
### ACTIVATION TIME

### HOURS OF VISIBILITY\*

5 Minutes	4.00 Hours
10 Minutes	6.00 Hours
20 Minutes	7.00 Hours
30 Minutes	8.00 Hours

\*Each pathmarking element is seen clearly from 25 feet

# ECOGLO BRIGHTNESS DECAY CURVE



# DURABILITY STANDARDS AND TESTS

## BENEFITS AND TECHNICAL DETAILS

Ecoglo products meet or exceed the performance criteria specified in the following tests or standards:

- In Canada, ULC S572
- In United States, UL924

### 1. HIGH VISIBILITY IN DARK OR LIGHT CONDITIONS

#### BRIGHTNESS:

- ASTM E2073, Standard Test Method for Photopic Luminance of Photoluminescent (Phosphorescent) Markings.
- DIN 67510 Part 1, Phosphorescent Pigments and Products: Measurement and identification by the manufacturer.
- ISO 17398:2004 Clause 7.11, Safety Colours and Safety Signs - Classification, Performance and Durability of Safety Signs.

### 2. HIGH DURABILITY INDOORS AND OUTDOORS

#### UV STABILITY:

- ASTM G155-04 Cycle 1 2000hrs, Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-metallic Materials.
- Salt Spray Resistance: ASTM B117-97 500hrs, Standard Practice for Operating Salt Spray (Fog) Apparatus.
- Freeze-Thaw Resistance: ASTM C1026-87(1996), Standard Test Method for Measuring the Resistance of Ceramic Tile to Freeze-Thaw Cycling.

### 3. REDUCES SLIPS

#### SLIP RESISTANCE:

- UL410, Standard for Slip Resistance for Floor Surface Materials.
- AS/NZS 4586-1999, Slip Resistance Classification of New Pedestrian Surface Materials.
- AS/NZ 4586 - 2004, Slip resistance classification of new pedestrian surface materials - Appendix D (oil-wet ramp test).

### 4. HARD WEARING

#### ABRASION RESISTANCE:

- ASTM D1242-95a, Standard Test Methods for Resistance of Plastic Materials to Abrasion.
- ASTM B 244-97, Test Methods for Measurement of Anodic Coatings on Aluminum and other Nonconductive Coatings on Nonmagnetic Basis Metals with Eddy-Current Instruments.
- ASTM B137-95(2000), Test Method for Measurement of Coating Mass per Unit Area of Anodically Coated Aluminum.
- ASTM F510-93(2004), Standard Test Method for Resistance to Abrasion of Resilient Floor Coverings Using an Abrader with a Grit Feed Method.
- JIS H8682-1:1999, Test Methods for Abrasion Resistance of Anodic Oxide Coatings on Aluminium and Aluminium Alloys- Wheel Wear Test.

### 5. EASY CLEANING

#### WASHABILITY:

- ASTM D4828-94(2003), Standard Test Methods for Practical Washability of Organic Coatings.
- ASTM B136-84(1998), Standard Test Method for Measurement of Stain Resistance of Anodic Coatings on Aluminum.

### 6. NO RADIOACTIVITY OR TOXICITY

#### RADIOACTIVITY:

- ASTM D3648-2004, Standard Practices for the Measurement of Radioactivity.
- Toxicity: Bombardier SMP 800-C (2000), Toxic Gas Generation Test.

### 7. DOES NOT BURN

#### FLAMMABILITY:

- ASTM E162-02, Standard Test Method for Surface Flammability of Materials Using a Radiant Heat Energy Source.
- ASTM D635-03, Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position.
- FAA AC 23.2 Paragraph 4.b, Horizontal Burn Test.

# DURABILITY CLEANING AND MAINTENANCE

## CLEANING

Regular cleaning to remove built up dirt and objects on the strips will ensure Ecoglo will continue performing to expectation. Note that the photoluminescence will continue performing even after UV exposure or exposure to moisture. The only reason for degradation in the performance of the photoluminescence is a lack of correct cleaning.

1. Vacuuming or brushing with a stiff bristle head (wet or dry) is often enough to keep the strips clean. The glowing strip can also be wiped clean with a wet or dry sponge or cloth. Observation will determine if cleaning is required, however a regular cleaning every 4 to 6 weeks or after particularly heavy use should ensure correct performance.
2. High-pressure water (but not steam cleaning) can also be used to clean the strips.
3. Do not use highly alkaline or acidic cleaning agents. The pH of the cleaning agents should be between pH 5 and pH 12. If cleaning agents are applied at more than pH 10, the strips should be rinsed with pH neutral (pH 6 to pH 8) solution afterwards.

## MAINTENANCE

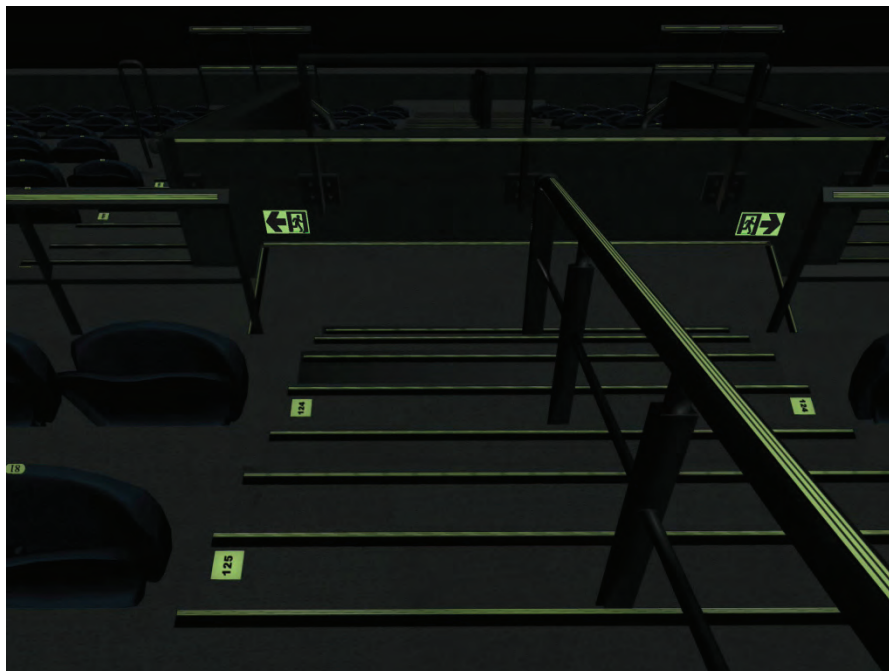
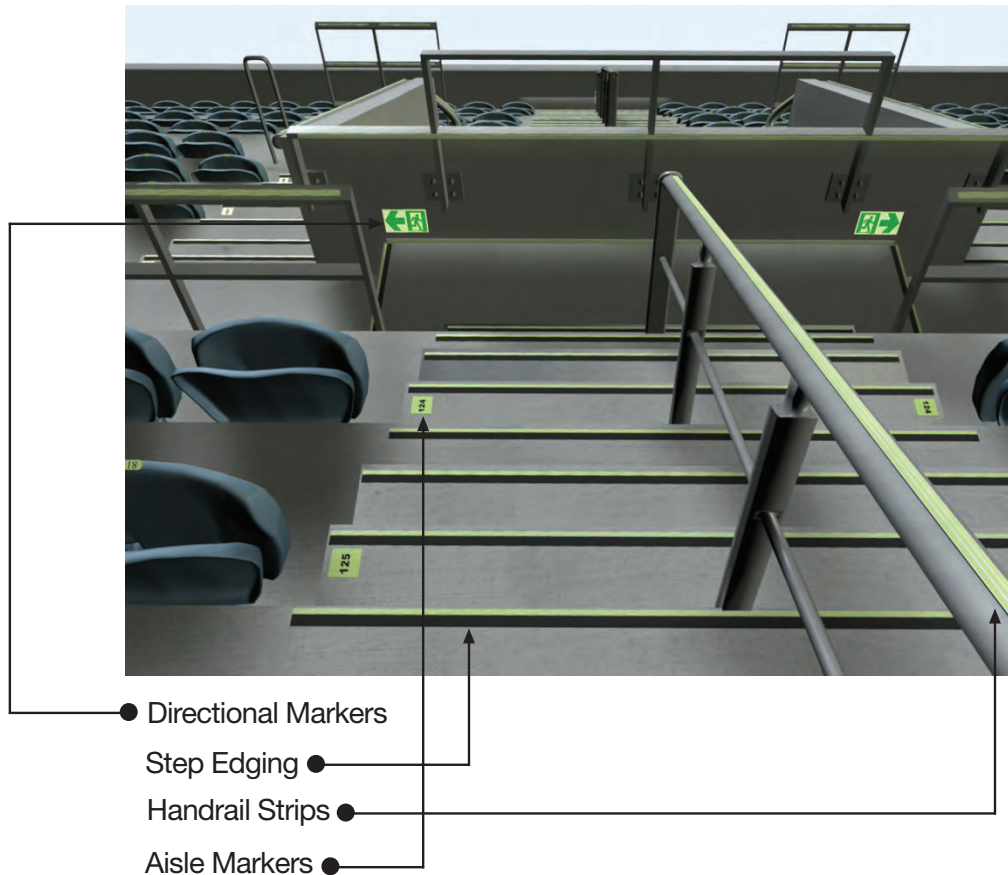
Ecoglo products should be checked annually to ensure the following:

- All products are still in place as at installation and there is no material damage to any of these products
- All products are clean from general dust build up and any other specific obscuring deposits such as gum or tar
- All products are clearly visible and have not been covered by carpet or other materials
- All products mark a clear path and have not been obstructed by physical hazards such as trolleys, machinery etc.
- All products can be used to provide clear escape path marking and there has been no change to the configuration of the building which renders them unusable
- All light required to charge Ecoglo products is operating as designed at installation



# SYSTEM DESIGN

## WHERE TO INSTALL ECOGLO IN ARENAS



# SYSTEM DESIGN

## WHERE TO INSTALL ECOGLO IN THEATRES



Step Edging ●

Handrail Strips ●

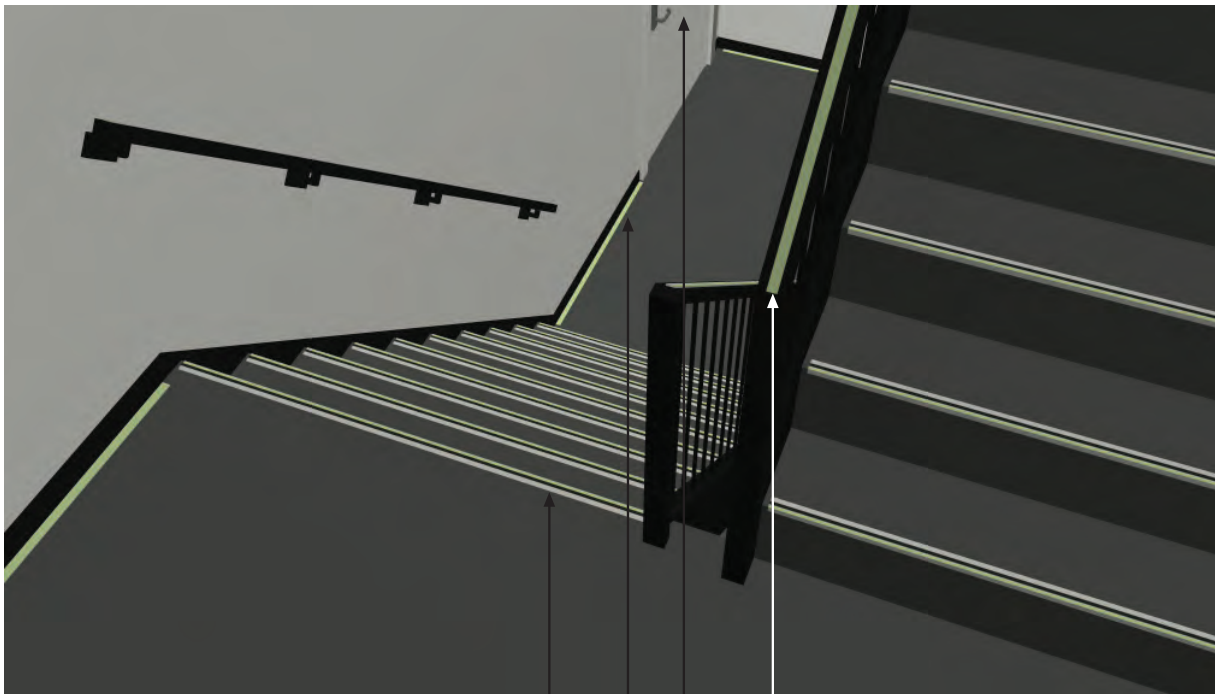
Seat Numbers ●

Aisle Markers ●

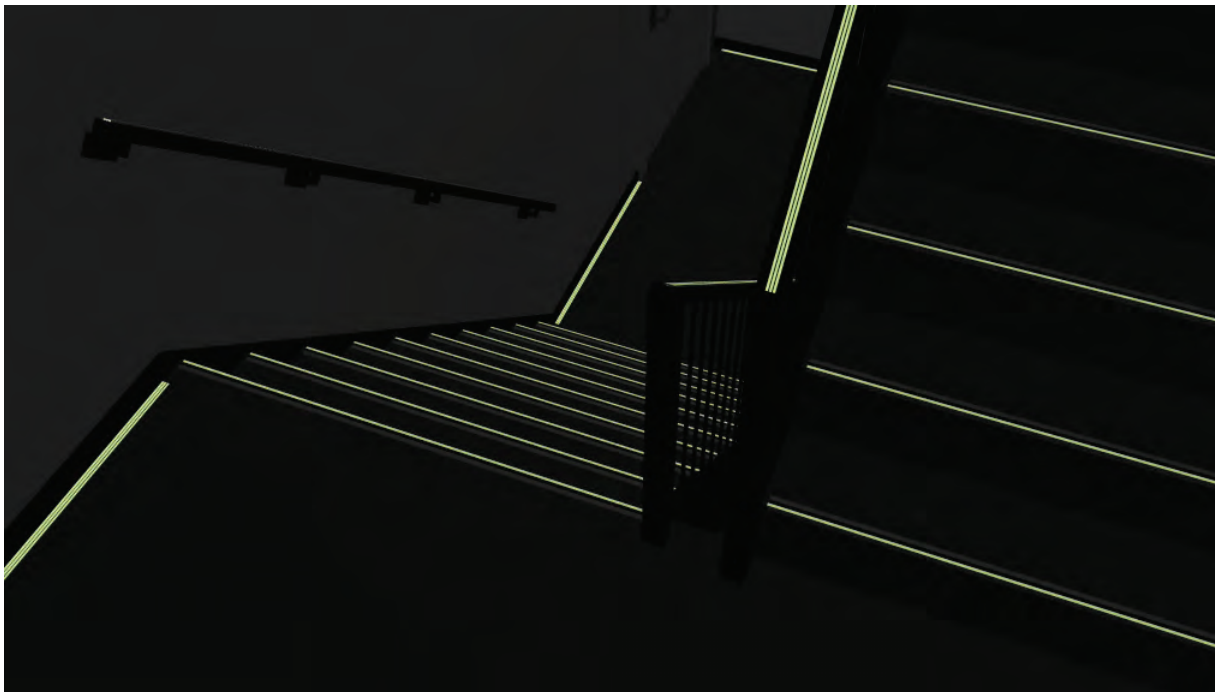


# SYSTEM DESIGN

## WHERE TO INSTALL ECOGLO IN FIRE EXIT STAIRWAYS




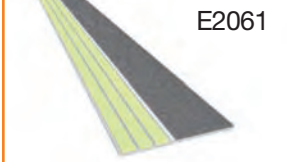

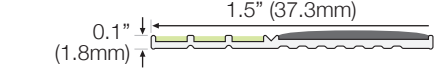

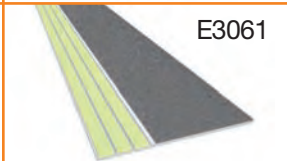
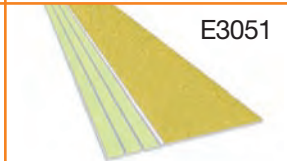
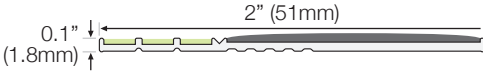



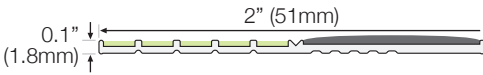
- Demarcation Strip ●
- Step Edging ●
- Handrail Strips ●
- Exit Sign (Above Door) ●



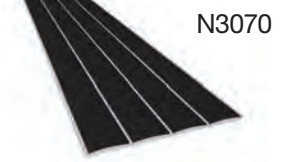

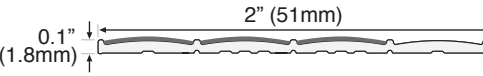
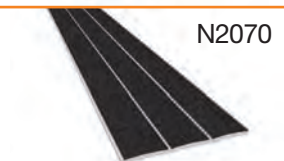
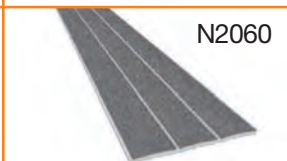



# STEP EDGE CONTRAST STRIPS, NON-SLIP STRIPS, GUIDANCE STRIPS, AND HANDRAIL STRIPS

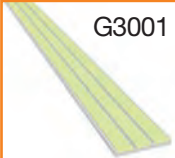
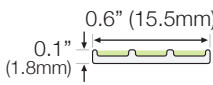

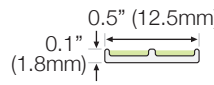
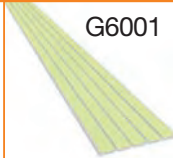
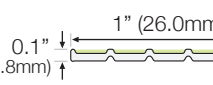
## E SERIES CONTRAST STRIPS - Photoluminescent Leading Edge

 E2071	 E2061	 E2051	 0.1" (1.8mm) height, 1.5" (37.3mm) width
 E3071	 E3061	 E3051	 0.1" (1.8mm) height, 2" (51mm) width
 E4071	 E4061	 E4051	 0.1" (1.8mm) height, 2" (51mm) width

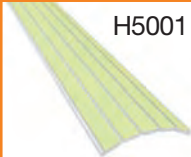
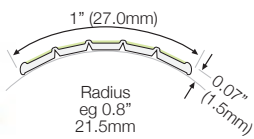

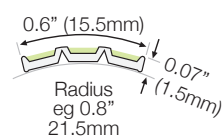
## N SERIES NON-SLIP STRIPS - Not Photoluminescent

 N3070	 N3060	 N3050	 0.1" (1.8mm) height, 2" (51mm) width
 N2070	 N2060	 N2050	 0.1" (1.8mm) height, 1.5" (37.3mm) width

## G SERIES GUIDANCE STRIPS - Photoluminescent

 G3001  0.6" (15.5mm) width, 0.1" (1.8mm) height	 G4001  0.5" (12.5mm) width, 0.1" (1.8mm) height	 G6001  1" (26.0mm) width, 0.1" (1.8mm) height
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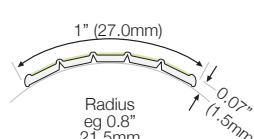

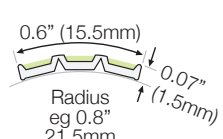
## H SERIES HANDRAIL STRIPS - Photoluminescent

 H5001  1" (27.0mm) width, Radius eg 0.8" 21.5mm, 0.07" (1.5mm) height	 H3001  0.6" (15.5mm) width, Radius eg 0.8" 21.5mm, 0.07" (1.5mm) height
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## GEC FLAT END CAPS



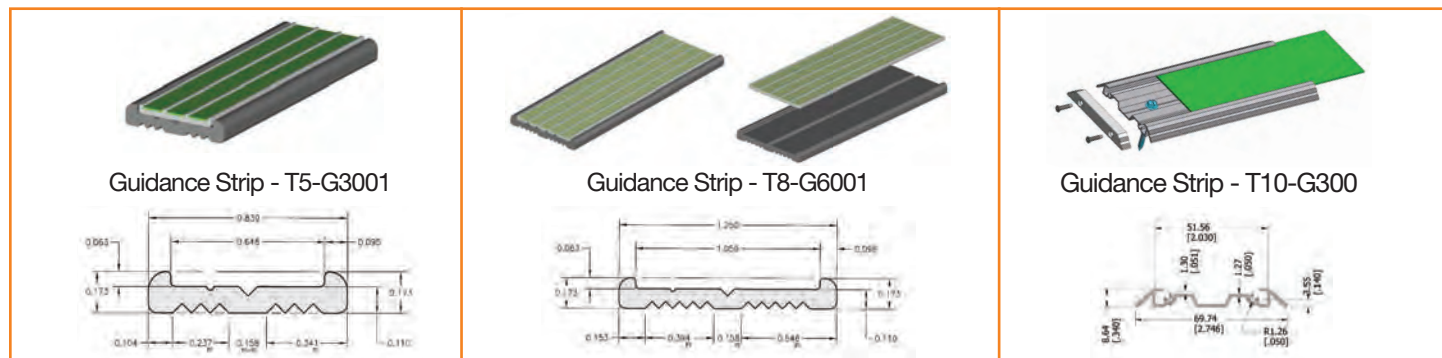
## HANDRAIL END CAPS - Not Photoluminescent

 HEC51  1" (27.0mm) width, Radius eg 0.8" 21.5mm, 0.07" (1.5mm) height	 HEC31  0.6" (15.5mm) width, Radius eg 0.8" 21.5mm, 0.07" (1.5mm) height
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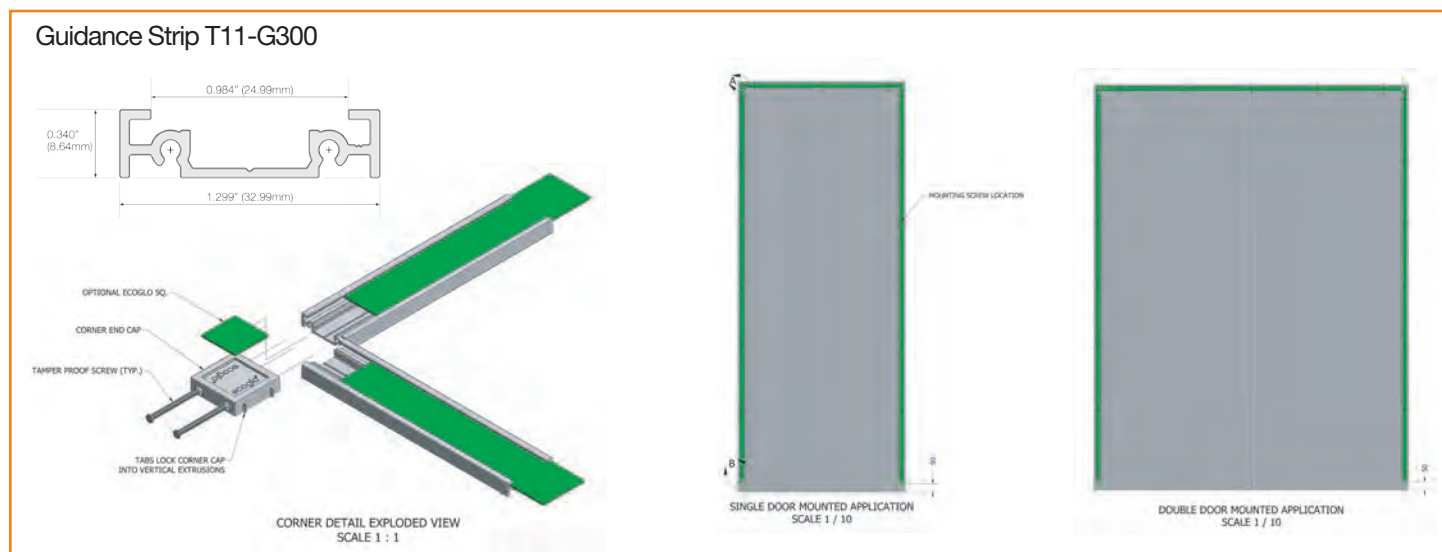


# GUIDANCE STRIPS, DOOR FRAME RAILS, AND FLAT ALUMINUM STAIR NOSINGS

## T SERIES GUIDANCE STRIPS

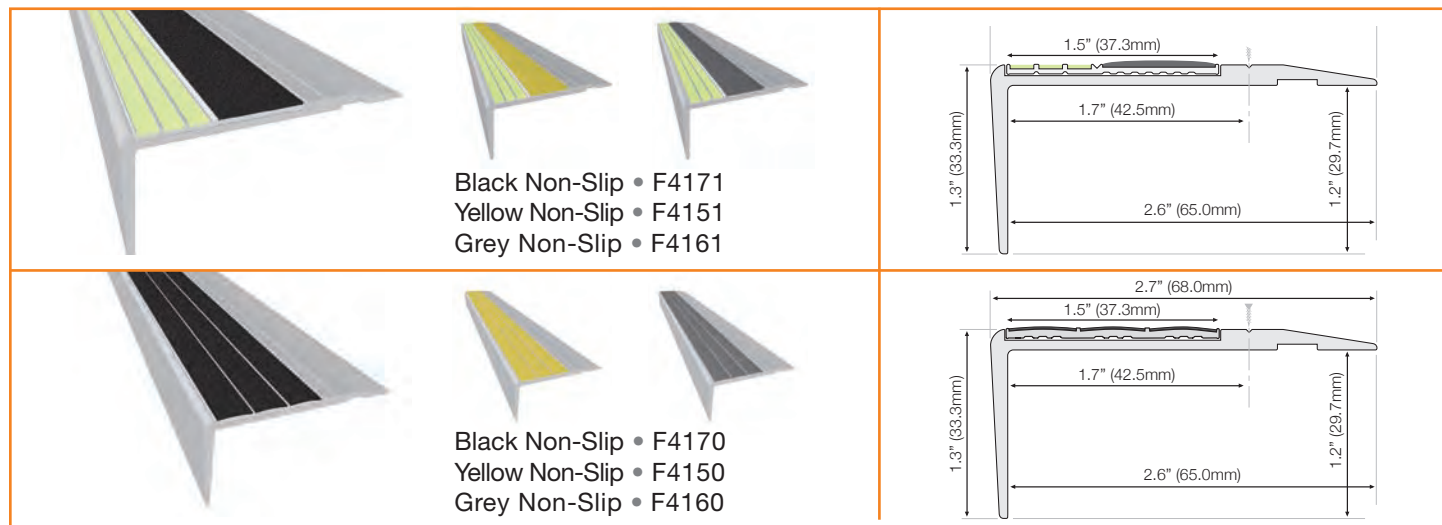


## T SERIES DOOR FRAME RAILS



## F SERIES FLAT STAIR NOSINGS

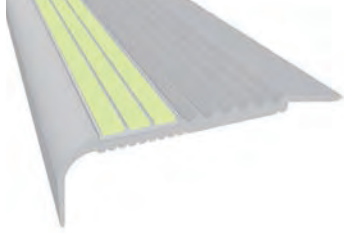
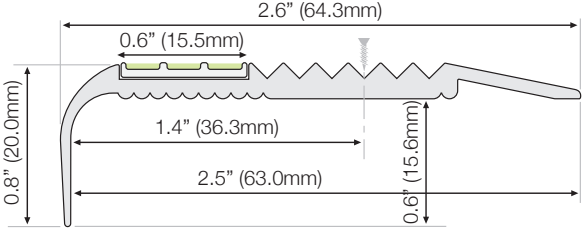

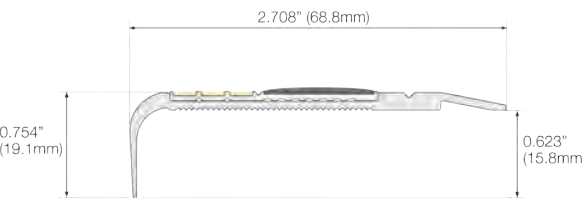
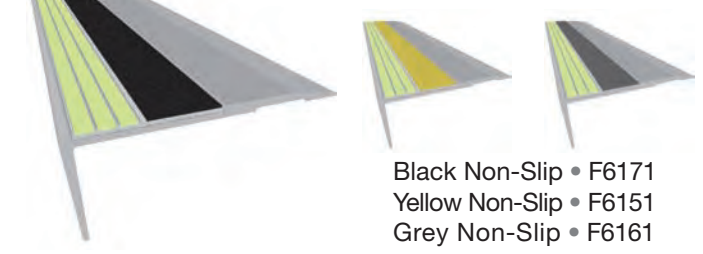
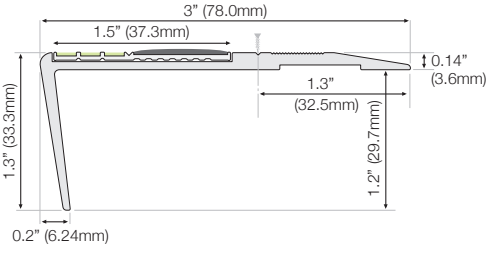

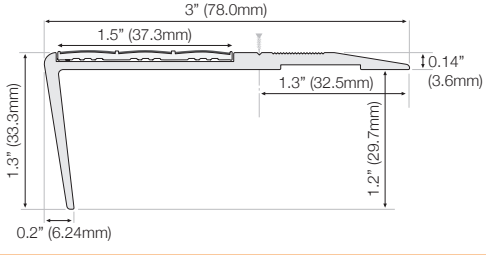
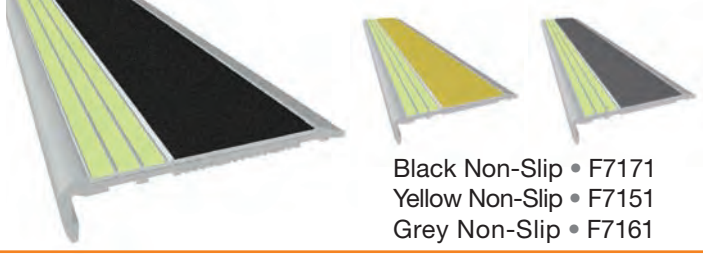
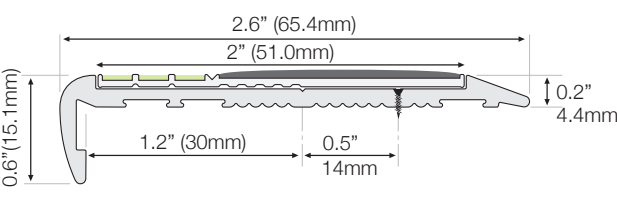
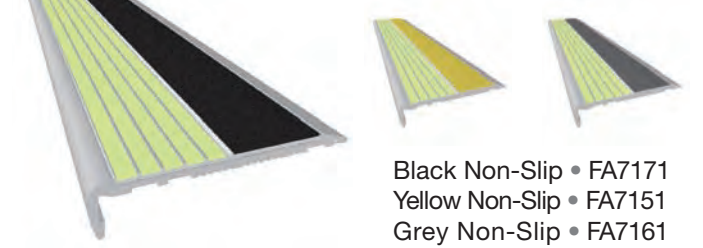
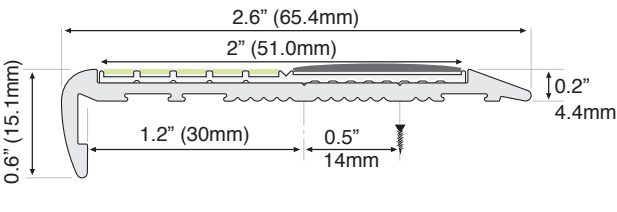
Clear anodized aluminum standard (Type II, Class I), black, bronze, and custom colour anodizing available as a special order.



# FLAT ALUMINUM STAIR NOSINGS

## F SERIES FLAT STAIR NOSINGS

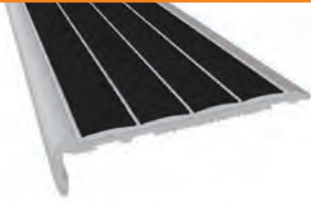
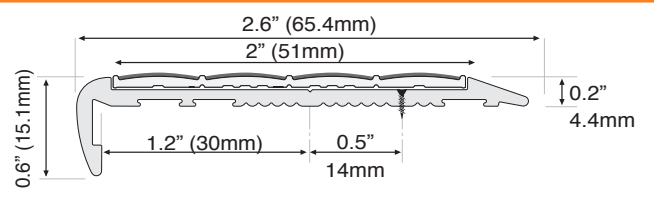
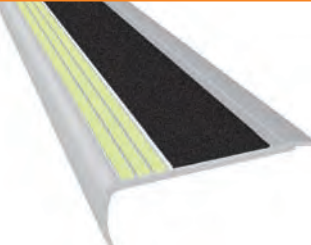
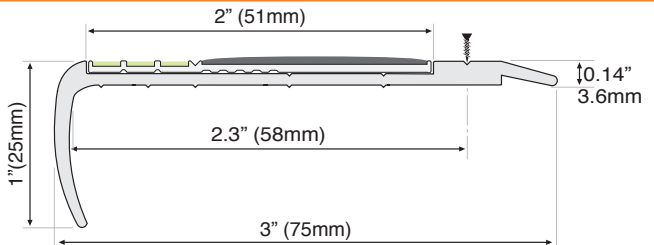
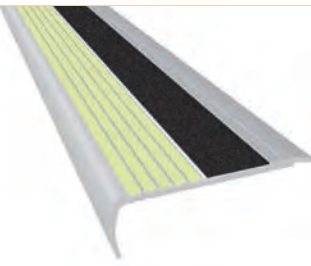
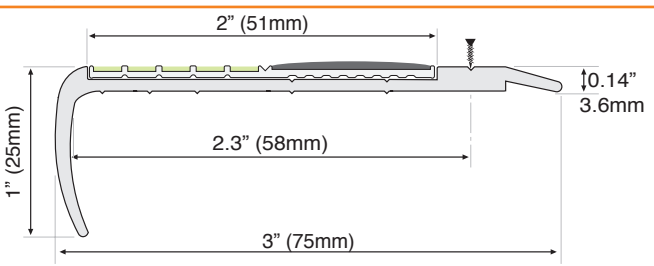
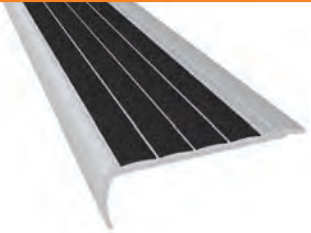
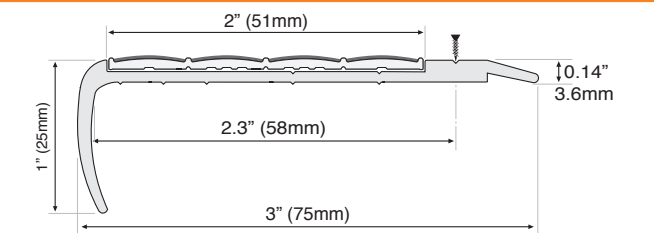
Clear anodized aluminum standard (Type II, Class I), black, bronze, and custom colour anodizing available as a special order.

 <p>F5101</p>	
 <p>Black Non-Slip • F5B171 Yellow Non-Slip • F5B151 Grey Non-Slip • F5B161</p>	
 <p>Black Non-Slip • F6171 Yellow Non-Slip • F6151 Grey Non-Slip • F6161</p>	
 <p>Black Non-Slip • F6170 Yellow Non-Slip • F6150 Grey Non-Slip • F6160</p>	
 <p>Black Non-Slip • F7171 Yellow Non-Slip • F7151 Grey Non-Slip • F7161</p>	
 <p>Black Non-Slip • FA7171 Yellow Non-Slip • FA7151 Grey Non-Slip • FA7161</p>	

# FLAT ALUMINUM STAIR NOSINGS

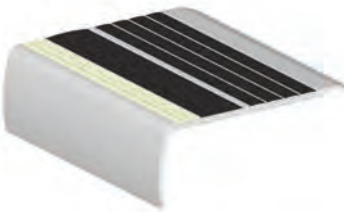
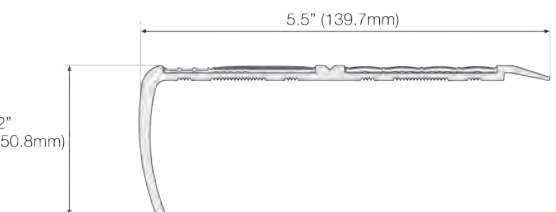
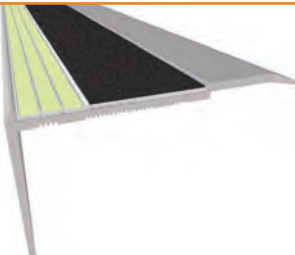
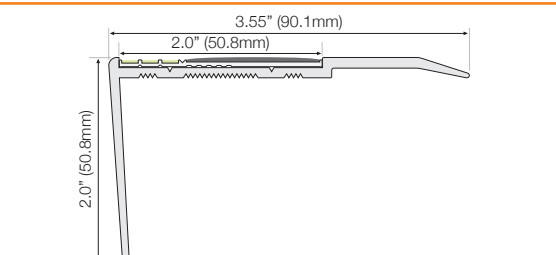
## F SERIES FLAT STAIR NOSINGS

Clear anodized aluminum standard (Type II, Class I), black, bronze, and custom colour anodizing available as a special order.

 <p>Black Non-Slip • F7170 Yellow Non-Slip • F7150 Grey Non-Slip • F7160</p>	 <p>2.6" (65.4mm) 2" (51mm) 0.6" (15.1mm) 1.2" (30mm) 0.5" (12.7mm) 14mm 0.2" (5.1mm) 4.4mm</p>
 <p>Black Non-Slip • F8171 Yellow Non-Slip • F8151 Grey Non-Slip • F8161</p>	 <p>2" (51mm) 1" (25mm) 2.3" (58mm) 3" (75mm) 0.14" (3.6mm)</p>
 <p>Black Non-Slip • FA8171 Yellow Non-Slip • FA8151 Grey Non-Slip • FA8161</p>	 <p>2" (51mm) 1" (25mm) 2.3" (58mm) 3" (75mm) 0.14" (3.6mm)</p>
 <p>Black Non-Slip • F8170 Yellow Non-Slip • F8150 Grey Non-Slip • F8160</p>	 <p>2" (51mm) 1" (25mm) 2.3" (58mm) 3" (75mm) 0.14" (3.6mm)</p>

## RF SERIES FLAT STAIR NOSINGS

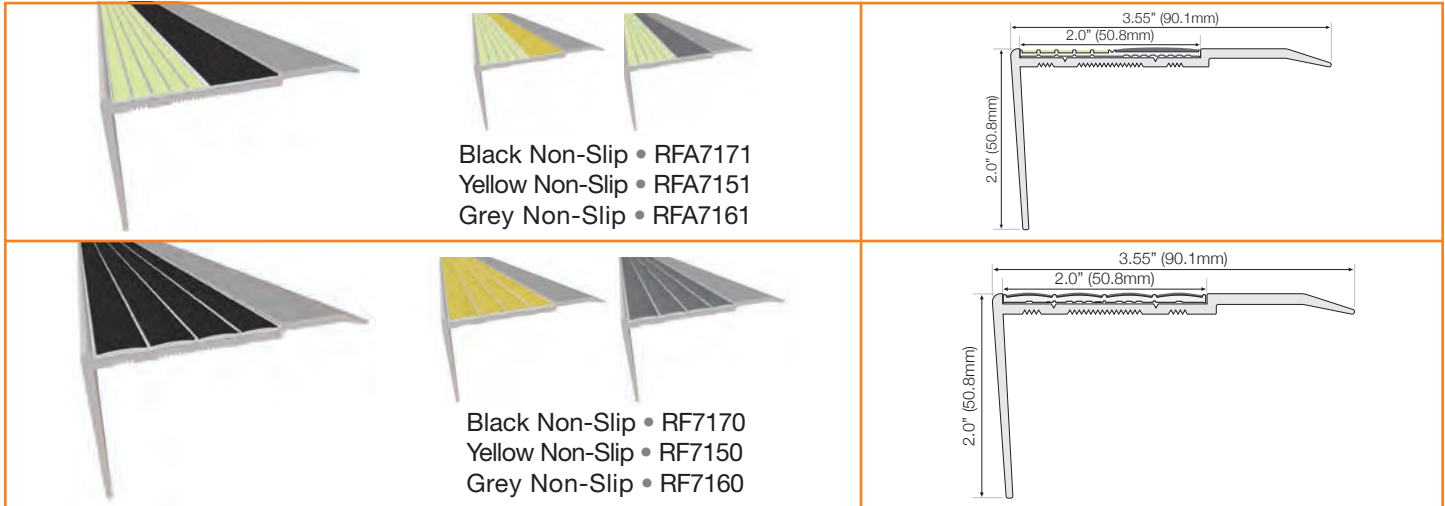
Clear anodized aluminum standard (Type II, Class I), black, bronze, and custom colour anodizing available as a special order.

 <p>Black Non-Slip • RF5171 Yellow Non-Slip • RF5151 Grey Non-Slip • RF5161</p>	 <p>5.5" (139.7mm) 2" (50.8mm)</p>
 <p>Black Non-Slip • RF7171 Yellow Non-Slip • RF7151 Grey Non-Slip • RF7161</p>	 <p>3.55" (90.1mm) 2.0" (50.8mm) 2.0" (50.8mm)</p>

# FLAT AND CARPET ALUMINUM STAIR NOSINGS

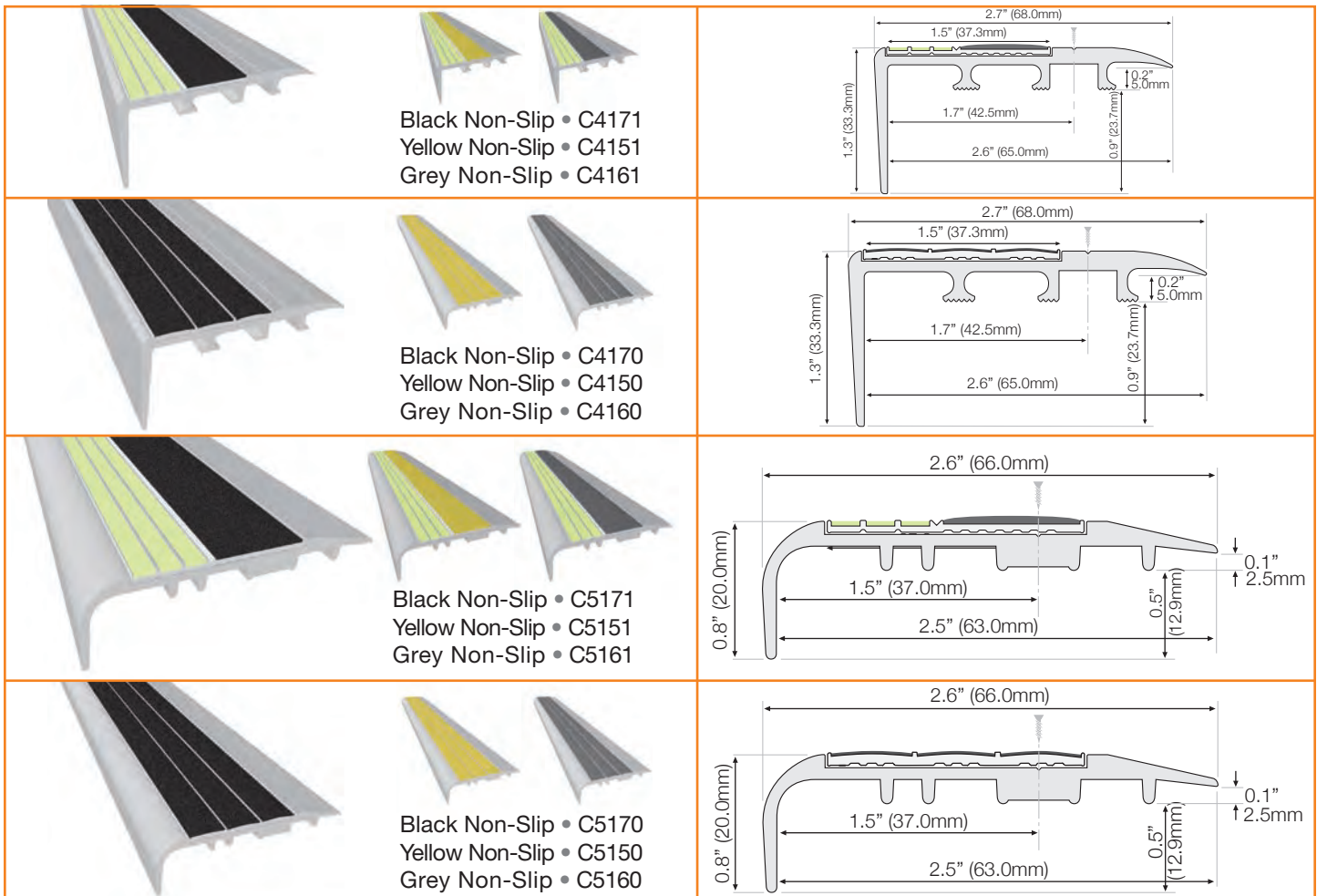
## RF SERIES FLAT STAIR NOSINGS

Clear anodized aluminum standard (Type II, Class I), black, bronze, and custom colour anodizing available as a special order.



## C SERIES CARPET STAIR NOSINGS

Clear anodized aluminum standard (Type II, Class I), black, bronze, and custom colour anodizing available as a special order.

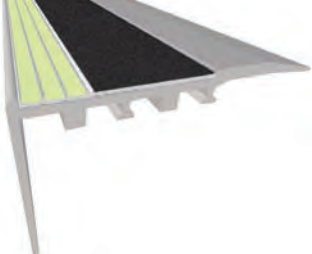
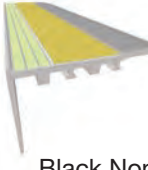
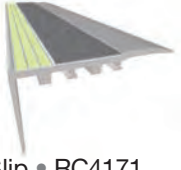
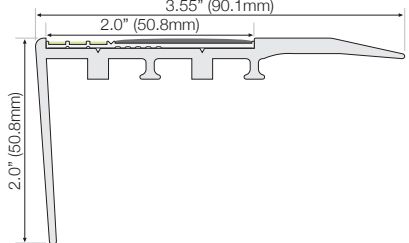
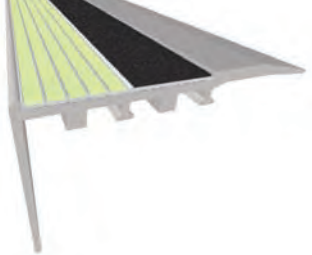

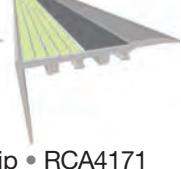
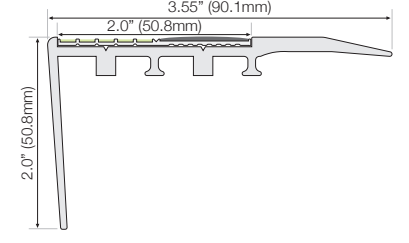
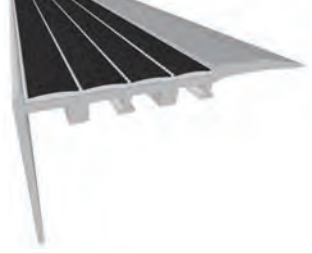

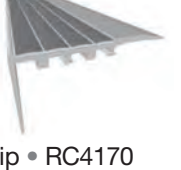
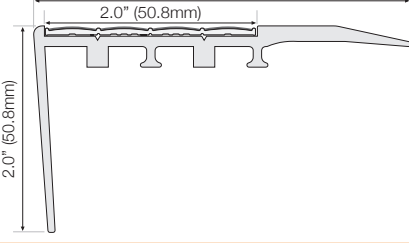

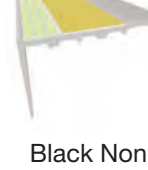

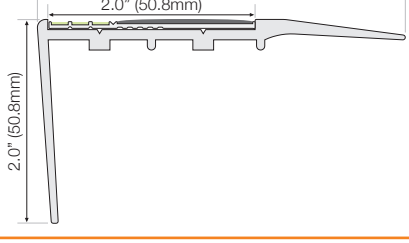



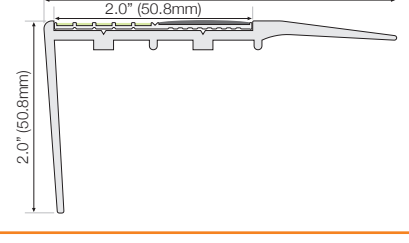
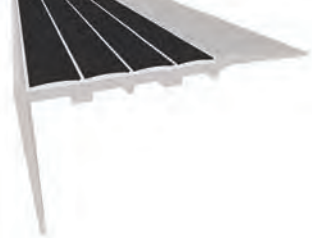


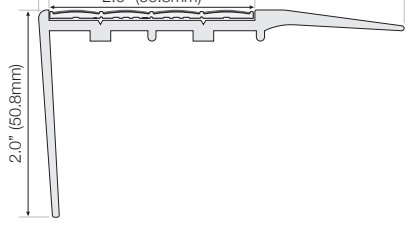




# CARPET ALUMINUM STAIR NOSINGS

## RC SERIES CARPET STAIR NOSINGS

Clear anodized aluminum standard (Type II, Class I), black, bronze, and custom colour anodizing available as a special order.

   <p>Black Non-Slip • RC4171 Yellow Non-Slip • RC4151 Grey Non-Slip • RC4161</p>	 <p>3.55" (90.1mm) 2.0" (50.8mm) 2.0" (50.8mm)</p>
   <p>Black Non-Slip • RCA4171 Yellow Non-Slip • RCA4151 Grey Non-Slip • RCA4161</p>	 <p>3.55" (90.1mm) 2.0" (50.8mm) 2.0" (50.8mm)</p>
   <p>Black Non-Slip • RC4170 Yellow Non-Slip • RC4150 Grey Non-Slip • RC4160</p>	 <p>3.55" (90.1mm) 2.0" (50.8mm) 2.0" (50.8mm)</p>
   <p>Black Non-Slip • RC5171 Yellow Non-Slip • RC5151 Grey Non-Slip • RC5161</p>	 <p>3.55" (90.1mm) 2.0" (50.8mm) 2.0" (50.8mm)</p>
   <p>Black Non-Slip • RCA5171 Yellow Non-Slip • RCA5151 Grey Non-Slip • RCA5161</p>	 <p>3.55" (90.1mm) 2.0" (50.8mm) 2.0" (50.8mm)</p>
   <p>Black Non-Slip • RC5170 Yellow Non-Slip • RC5150 Grey Non-Slip • RC5160</p>	 <p>3.55" (90.1mm) 2.0" (50.8mm) 2.0" (50.8mm)</p>

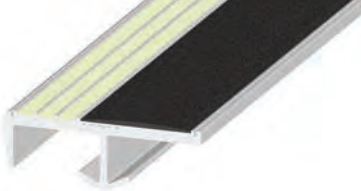

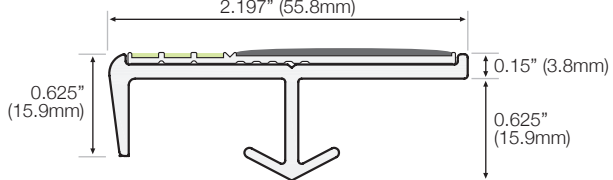
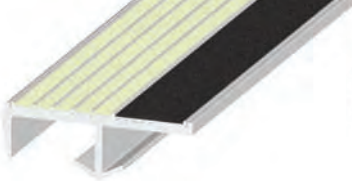
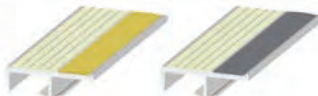
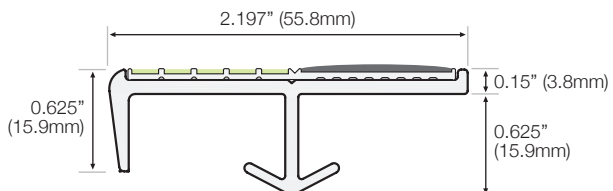
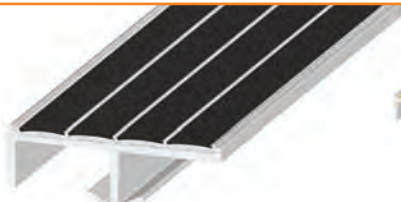
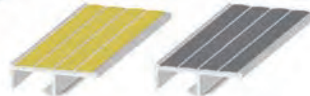
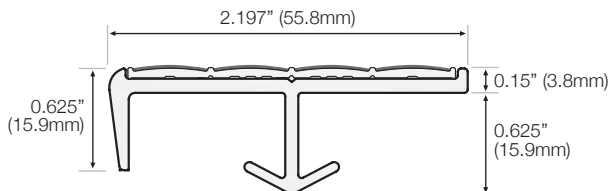
# CAST-IN-PLACE ALUMINUM INSERTS

## S1 SERIES CAST-IN-PLACE INSERTS

  <p>Black Non-Slip • S1171 Yellow Non-Slip • S1151 Grey Non-Slip • S1161</p>	 <p>2.15" (54.6mm) 0.147" (3.7mm) 0.374" (9.5mm)</p>
  <p>Black Non-Slip • SA1171 Yellow Non-Slip • SA1151 Grey Non-Slip • SA1161</p>	 <p>2.15" (54.6mm) 0.147" (3.7mm) 0.374" (9.5mm)</p>
  <p>Black Non-Slip • S1170 Yellow Non-Slip • S1150 Grey Non-Slip • S1160</p>	 <p>2.15" (54.6mm) 0.147" (3.7mm) 0.374" (9.5mm)</p>

# CAST-IN-PLACE ALUMINUM INSERTS

## S2 SERIES CAST-IN-PLACE INSERTS

  <p>Black Non-Slip • S2171 Yellow Non-Slip • S2151 Grey Non-Slip • S2161</p>	 <p>2.197" (55.8mm) 0.625" (15.9mm) 0.15" (3.8mm) 0.625" (15.9mm)</p>
  <p>Black Non-Slip • SA2171 Yellow Non-Slip • SA2151 Grey Non-Slip • SA2161</p>	 <p>2.197" (55.8mm) 0.625" (15.9mm) 0.15" (3.8mm) 0.625" (15.9mm)</p>
  <p>Black Non-Slip • S2170 Yellow Non-Slip • S2150 Grey Non-Slip • S2160</p>	 <p>2.197" (55.8mm) 0.625" (15.9mm) 0.15" (3.8mm) 0.625" (15.9mm)</p>

# EGRESS SIGNAGE, AISLE MARKERS, AND SEAT NUMBERS

## EGRESS SIGNAGE



EXIT SIGN

EX2010  
7.9" x 3.9"  
(200mm x 100mm)



EMERGENCY  
EXIT SIGN

EE2010  
7.9" x 3.9"  
(200mm x 100mm)



ARROW

AR1010H or  
AR1010D  
3.9" x 3.9"  
(100mm x 100mm)



RUNNING MAN

RM1010  
3.9" x 3.9"  
(100mm x 100mm)



FIRE ALARM

FA1010  
3.9" x 3.9"  
(100mm x 100mm)



FIRE  
EXTINGUISHER

FE1010  
3.9" x 3.9"  
(100mm x 100mm)



FIRE HOSE

FH1010  
3.9" x 3.9"  
(100mm x 100mm)

## AISLE MARKERS



LARGE  
RECTANGLE

RE65/45  
2.6" x 1.8"  
(65mm x 45mm)



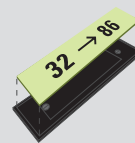
SMALL  
RECTANGLE

RE45/32.5  
1.8" x 1.3"  
(45mm x 32.5mm)



SQUARE

SQ88/88  
3.6" x 3.6"  
(88mm x 88mm)



LONG  
RECTANGLE\*

RE38/161  
1.6" x 6"  
(38mm x 161mm)



60MM ROUND  
AISLE MARKER

DS60  
2.4"  
(60mm Round)



68MM ROUND  
AISLE MARKER

DS68  
2.7"  
(68mm Round)

## SEAT NUMBERS



SQUARE WITH  
ROUNDED  
CORNERS

SQ31.9r  
1.3" x 1.3"  
(31.9mm x 31.9mm)



40MM ROUND  
SEAT NUMBER

DS40  
1.6"  
(40mm Round)



ELIPSE

EL 18.7/56.7  
0.7" x 2.2"  
(18.7mm x 56.7mm)



OBROUND  
LARGE

OR16/44.6  
0.6" x 1.8"  
(15.2mm x 44.6mm)



OBROUND  
SMALL

OR14.7/27.2  
0.6" x 1.1"  
(15.2mm x 27.2mm)

# PATHMARKING SIGNS

## PATHMARKING SIGNS



EXIT TO  
THE RIGHT

RA02012  
8" x 4.6"  
(203mm x  
116.84mm)



EXIT TO  
THE LEFT

RB02012  
8" x 4.6"  
(203mm x  
116.84mm)



EXIT DOWN AND  
TO THE RIGHT

RC02012  
8" x 4.6"  
(203mm x  
116.84mm)



EXIT DOWN AND  
TO THE LEFT

RD02012  
8" x 4.6"  
(203mm x  
116.84mm)



EXIT UP AND  
TO THE RIGHT

RE02012  
8" x 4.6"  
(203mm x  
116.84mm)



EXIT TO  
THE LEFT

RF02012  
8" x 4.6"  
(203mm x  
116.84mm)



EXIT STRAIGHT  
AHEAD AND UP

RG02012  
8" x 4.6"  
(203mm x  
116.84mm)



EXIT STRAIGHT  
AHEAD AND DOWN

RH02012  
8" x 4.6"  
(203mm x  
116.84mm)

## DOOR MOUNTED PATHMARKING DOOR SIGNS



RUNNING  
MAN WITH EXIT

R0E3312  
13" x 4.6"  
(330mm x  
116.84mm)

## WALL MOUNTED PATHMARKING DOOR SIGNS AND INTERMEDIATE PATHMARKING SIGNS



EXIT TO  
THE RIGHT

RAE2122  
8.4" x 8.89"  
(213.36mm x  
226mm)



EXIT TO  
THE LEFT

RBE2122  
8.4" x 8.89"  
(213.36mm x  
226mm)



FINAL EXIT TO  
THE RIGHT

RAF2128  
8.4" x 11.1"  
(213.36mm x  
282mm)



FINAL EXIT TO  
THE LEFT

RBF2128  
8.4" x 11.1"  
(213.36mm x  
282mm)



EXIT TO THE  
"CUSTOM WORDING"

RBY4219  
16.4" x 7.4"  
(416.56mm x  
188mm)

## DOOR MARKING PRODUCTS

**NOT AN EXIT**

NOT AN EXIT  
(TEXT ONLY)

00N1854  
7" x 2.1"  
(177.8mm x  
53.34mm)



DOOR HANDLE  
INDICATOR

DHM1010  
4" x 4"  
(100mm x  
100mm)



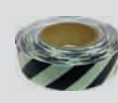
PANIC BAR  
INDICATOR

DHM03YY  
1" x Custom Cut



OBSTRUCTION  
STRIP

OB20025  
1" x Cut to Length



OBSTRUCTION  
TAPE

OB20025-TP  
1" x 60' Roll



## FLOOR IDENTIFICATION MARKERS

Ecoglo photoluminescent floor identification is an important part of egress safety due to the critical information that they provide. Ecoglo floor identification markers provide essential information in case of emergency, visible even after sudden loss of electrical power and lighting.

- Simple “peel and stick” installation with reliable 3M double sided tape pre-applied to signs
- Safe to use - non-toxic and non-radioactive
- Sizes can be altered to accommodate the letter/numbers/circles required
- Circle size is 5 1/2" or 7 1/2"



*Size 4" - 7" W x 4" H  
1-3 characters, no circle*



*Size 5" - 8" W x 5" - 8" H  
1-4 characters*

# ARCHITECTURAL SERIES PHOTOLUMINESCENT EXIT SIGN SYSTEM

## ULC S572 ARCHITECTURAL SERIES PHOTOLUMINESCENT EXIT SIGN SYSTEM

- LEED points qualified for energy conservation and sustainability ULC S572 listed for Photoluminescent and Self-Luminous Exit Signs
- 50/75 foot visibility rating
- No electricity or batteries required
- Indoor installation
- Standard twenty-five year warranty
- Requires exposure to at least 54 lux (5 foot-candles) of fluorescent, metal halide, mercury vapor, or other 4000K light illumination for a minimum of 60 minutes to become fully operational
- Non-toxic and non-radioactive
- ULC testing/listing no. E344049/4RG2

## ECOGLO ARCHITECTURAL SERIES SIGN INSTALLATION

Below, an Ecoglo Architectural Series Exit Sign is easily installed as part of the Union Station Revitalization Project in Toronto



## MODEL SELECTION

### RMA - (DIRECTION) (RATING) (MOUNT)

Example 1: RMA-SA50CEILING

Two-sided, single direction with arrows, 50-foot, ceiling mount kit

Example 2: RMA-LA75WALL

One-sided, left-facing running man with arrow, 75-foot, wall bracket mounting kit

### SIDES AND DIRECTION

#### RD

Right-facing running man with down arrow for installation above exit doors (*one-sided*)

#### BA

Running man with bi-directional arrows to indicate two available exit directions (*one-sided*)

#### LA

Left-facing running man with arrow (*one-sided*)

#### SA

Single direction with arrows (*two-sided*)

#### RA

Right-facing running man with arrow (*one-sided*)

#### RU

Right-facing running man with up arrow to indicate straight-ahead exit direction, or to proceed upstairs to exit (*one-sided*)

#### DA

Bi-directional with arrows to indicate two available exit directions (*two-sided*)

### VISIBILITY (FEET) SIZE

#### 50 FEET

15.1" x 7.6"  
(384mm x 193mm)

#### 75 FEET

18.9" x 10.9"  
(480mm x 278mm)

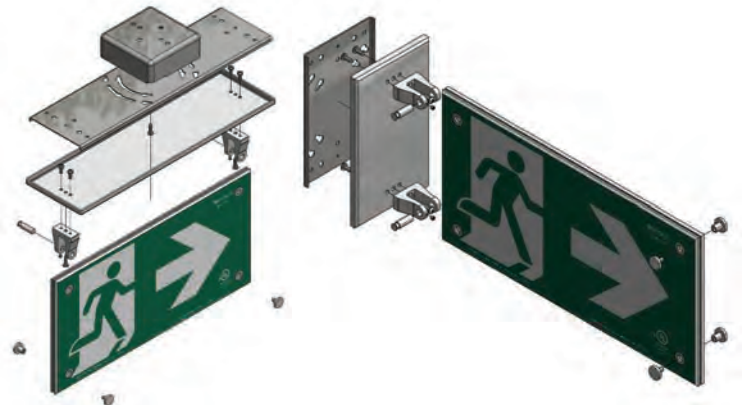
### MOUNTING STYLE

Wall • Ceiling • Flag

# MOUNTING SYSTEMS FOR ECOGLO ARCHITECTURAL SERIES EXIT SIGN SYSTEM

## ULC S572 STANDARD SERIES PHOTOLUMINESCENT EXIT SIGN SYSTEM

- LEED points qualified for energy conservation and sustainability ULC S572 listed for Photoluminescent and Self-Luminous Exit Signs
- 50/75 foot visibility rating
- No electricity or batteries required
- Indoor installation
- Standard twenty-five year warranty
- Requires exposure to at least 54 lux (5 foot-candles) of fluorescent, metal halide, mercury vapor, or other 4000K light illumination for a minimum of 60 minutes to become fully operational
- Non-toxic and non-radioactive
- ULC testing/listing no. E344049/4RG2



From left to right, the mounting styles shown below are: Ceiling One-Sided, Flag One-Sided, Flat, Spacer, Wall Bracket, Ceiling Two-Sided, and Flag Two-Sided



## SEVEN SAFETY BENEFITS OF ECOGLO PHOTOLUMINESCENT SIGNS

Ecoglo Photoluminescent signs offer the following safety advantages over powered EXIT signs:

1. Ecoglo signs are certified visible and legible for 120 minutes operation after a minimal charging period of 1 hour at only 54 lux. That is after a 120 minute black out they are read correctly from the certified distance. However, in real operating conditions Ecoglo signs are charged for far longer in much brighter light and therefore will glow brighter and be legible for much longer periods and greater distances.
2. Ecoglo signs do not require maintenance to ensure operation (other than occasional dusting). Lights near the egress must be maintained and be on when the building is occupied to charge the signs.
3. Ecoglo signs never fail to operate. Whenever the lights go out they must glow. This is a physical reaction that can be repeated an infinite number of times without wear to the product.
4. Ecoglo is essentially a photonic rather than electronic battery. That is, Ecoglo signs store photonic energy when exposed to light, recycling the light from sunlight or hallway or room lighting.
5. Ecoglo signs can reach a period of 2 hour visibility after being exposed to ambient light in only about 5 minutes in areas where there is 150 lux of light. (Most areas in public access buildings have an ambient light in excess of 100 lux).
6. When lighting in hallways burns out, maintenance usually takes care of the problem speedily because the lack of light affects the ambience and working conditions. That means Ecoglo signs are seldom without light to charge them. Powered signs that malfunction are often left for very long periods.
7. Should a building's back-up generator fail, Ecoglo will still function. Powered signs will not.

# STANDARD SERIES PHOTOLUMINESCENT EXIT SIGN SYSTEM

## ULC S572 STANDARD SERIES PHOTOLUMINESCENT EXIT SIGN SYSTEM

- LEED points qualified for energy conservation and sustainability ULC S572 listed for Photoluminescent and Self-Luminous Exit Signs
- 50/75 foot visibility rating
- No electricity or batteries required
- Indoor installation
- Standard twenty-five year warranty
- Requires exposure to at least 54 lux (5 foot-candles) of fluorescent, metal halide, mercury vapor, or other 4000K light illumination for a minimum of 60 minutes to become fully operational
- Non-toxic and non-radioactive
- ULC testing/listing no. E344049/4RG2



Flag Mount



Ceiling Mount



## MODEL SELECTION

### RM - (DIRECTION) (RATING) (FRAME)

Example 1: RM-RD50

One-sided, right-facing running man with down arrow, 50-foot, no frame

Example 2: RM-SA75-CA

Two-sided, single direction with arrows, 75-foot, clear anodized aluminum frame and mounting kit

### SIDES AND DIRECTION

#### RD

Right-facing running man with down arrow (one-sided)

#### LA

Left-facing running man with arrow (one-sided)

#### BA

Running man with bi-directional arrows to indicate two available exit directions (one-sided)

#### SA

Single direction with arrows (two-sided)

#### RA

Right-facing running man with arrow (one-sided)

#### RU

Right-facing running man with up arrow to indicate straight-ahead exit direction, or to proceed upstairs to exit (one-sided)

#### DA

Bi-directional with arrows to indicate two available exit directions (two-sided)

### VISIBILITY (FEET) SIZE FRAMED AND UNFRAMED

#### 50 FEET

Framed • 16.2" x 9.5" (411mm x 241mm)

#### 50 FEET

Unframed • 15.5" x 8.8" (393mm x 223mm)

#### 75 FEET

Framed • 19.6" x 11.6" (498mm x 296mm)

#### 75 FEET

Unframed • 18.9" x 10.0" (480mm x 278mm)

### FRAME AND MOUNTING KIT

#### (BLANK)

No Frame

#### -CA

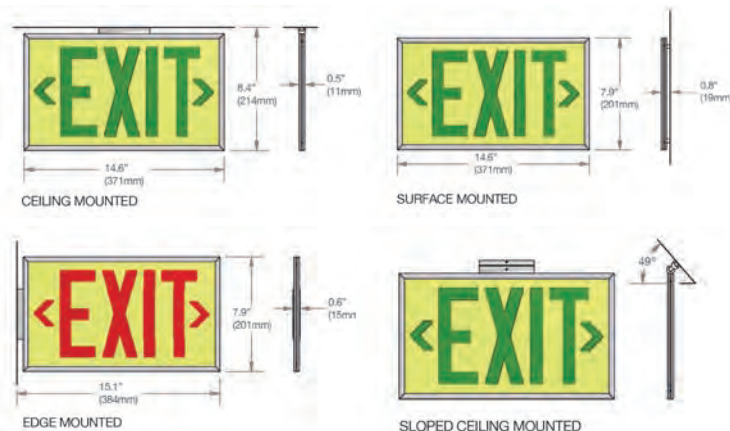
Clear anodized aluminum frame and mounting kit



# PHOTOLUMINESCENT EXIT SIGN SYSTEM

## UL924 EXIT SIGN SYSTEM

- LEED point qualified for energy conservation and sustainability
- Visible for 50 feet
- No electricity or batteries required
- Indoor installation
- Lifetime warranty
- Requires exposure to at least 54 lux (5 foot-candles) of fluorescent, metal halide, mercury vapor light illumination for a minimum of 60 minutes to become fully operational
- Directional arrow labels provided with each sign for on-site application
- Product uses recycled aluminum and is recyclable
- Non-toxic and non-radioactive
- ETL listed for emergency lighting and power equipment according to UL STD 924 and the Canadian Standard for Photoluminescent and Self-Luminous Exit Signs ULC / ORD-C924-02



## SLOPED CEILING ADAPTOR

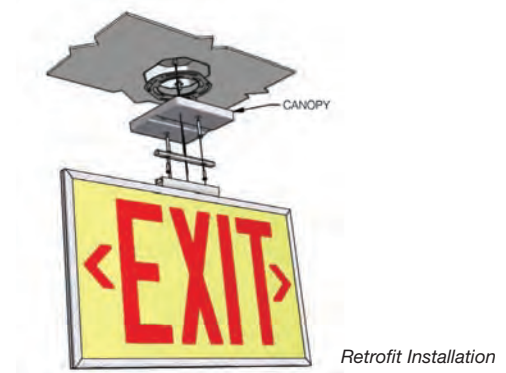
The hinged mounting adaptor accommodates slopes from 0 to approximately 49 degrees and is installed similar to the standard ceiling configuration.

## RETROFIT CANOPY ADAPTER

Ecoglo's accessory cover plate gives you all the benefits of low cost installation and maintenance without the frustrations that other systems have. No special tools are required.

Simply attach a universal mounting bracket to an existing octagon box, fasten the Ecoglo canopy to the mounting bracket as shown in the diagram. Slide the sign into the canopy instead of screwing it directly into a ceiling or wall.

When replacing or removing an electrically-powered exit, the power must be terminated at the source, not in the wall cavity before installing the Ecoglo Exit Sign. Check with the local electrical code requirements first before installation.



## PART NUMBERS, DIMENSIONS, AND DESCRIPTIONS

### EX353183-50G

13.9" x 7.2" (353mm x 183mm)  
Single Photoluminescent Exit Sign - Green Letters

### EX353183-50R

13.9" x 7.2" (353mm x 183mm)  
Single Photoluminescent Exit Sign - Red Letters

### EX371201-50G-CA

14.6" x 7.9" (371mm x 201mm)  
One-Sided Exit Sign EX353183-50G with Clear Anodized Aluminum Frame and Universal Mounting Hardware - Green Letters

### EX371201-50R-CA

14.6" x 7.9" (371mm x 201mm)  
One-Sided Exit Sign EX353183-50R with Clear Anodized Aluminum Frame and Universal Mounting Hardware - Red Letters

### 2X-EX371201-50G-CA

14.6" x 7.9" (371mm x 201mm)  
Two-Sided Exit Sign EX353183-50G with Clear Anodized Aluminum Frame and Universal Mounting Hardware - Green Letters

### 2X-EX371201-50R-CA

14.6" x 7.9" (371mm x 201mm)  
Two-Sided Exit Sign EX353183-50R with Clear Anodized Aluminum Frame and Universal Mounting Hardware - Red Letters

### EX405229-75G

18.9" x 9.8" (481mm x 249mm)  
Single Photoluminescent Exit Sign - Green Letters

### EX405229-75R

18.9" x 9.8" (481mm x 249mm)  
Single Photoluminescent Exit Sign - Red Letters

### EX424246-75G-CA

19.6" x 10.5" (499mm x 267mm)  
One-Sided Exit Sign EX405229-75G with Clear Anodized Aluminum Frame and Universal Mounting Hardware - Green Letters

### EX424246-75R-CA

19.6" x 10.5" (499mm x 267mm)  
One-Sided Exit Sign EX405229-75R with Clear Anodized Aluminum Frame and Universal Mounting Hardware - Red Letters

### 2X-EX424246-75G-CA

19.6" x 10.5" (499mm x 267mm)  
Two-Sided Exit Sign EX405229-75G with Clear Anodized Aluminum Frame and Universal Mounting Hardware - Green Letters

### 2X-EX424246-75R-CA

19.6" x 10.5" (499mm x 267mm)  
Two-Sided Exit Sign EX405229-75R with Clear Anodized Aluminum Frame and Universal Mounting Hardware - Red Letters



# INSTALLED PROJECTS



**BBB STADIUM**

WINNIPEG, MANITOBA



**MCGILL UNIVERSITY**

MONTREAL, QUEBEC



**KENNEDY CENTRE FOR THE  
PERFORMING ARTS**

WASHINGTON, DC



**THE ALAMO DOME**

SAN ANTONIO, TEXAS



**WATERLOO UNIVERSITY**

WATERLOO, ONTARIO



**RIVER RUN THEATRE**

GUELPH, ONTARIO



**1700 MANITOBA STREET**

VANCOUVER, BRITISH COLUMBIA



**EIGHTH AVENUE PLACE**

CALGARY, ALBERTA



**VERIZON CENTRE**

GRAND PRAIRIE, TEXAS



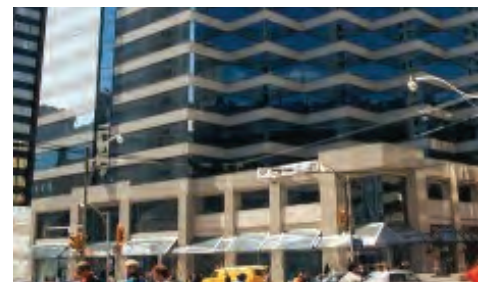
**TEDCO CORUS BUILDING**

TORONTO, ONTARIO



**JUBILEE AUDITORIUM**

CALGARY, ALBERTA



**438 UNIVERSITY AVENUE**

TORONTO, ONTARIO



# INSTALLED PROJECTS



**HONG KONG CONVENTION CENTRE**

HONG KONG



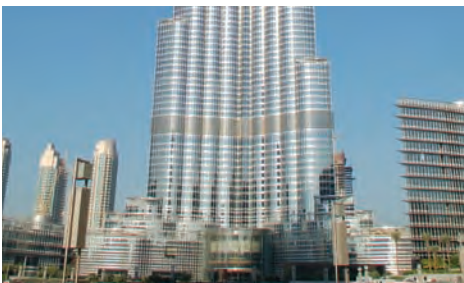
**MELBOURNE CRICKET GROUND**

MELBOURNE, AUSTRALIA



**TIME WARNER CENTRE**

NEW YORK CITY, NEW YORK



**BURJ KHALIFA**

UNITED ARAB EMIRATES



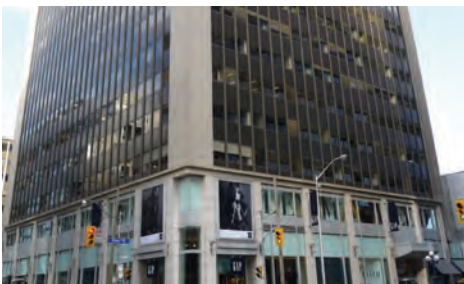
**EATON CENTRE**

TORONTO, ONTARIO



**MARKHAM THEATRE**

MARKHAM, ONTARIO



**BLOOR STREET PROPERTIES**

TORONTO, ONTARIO



**HART HOUSE  
UNIVERSITY OF TORONTO**

TORONTO, ONTARIO



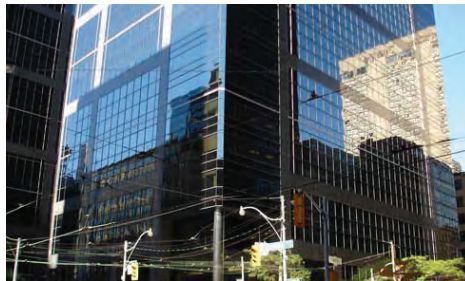
**CREDIT UNION ARENA**

SASKATOON, SASKATCHEWAN



**MEDICINE HAT  
FAMILY LEISURE CENTRE**

MEDICINE HAT, ALBERTA



**150 YORK STREET**

TORONTO, ONTARIO



**VERIZON CENTRE**

WASHINGTON, DC

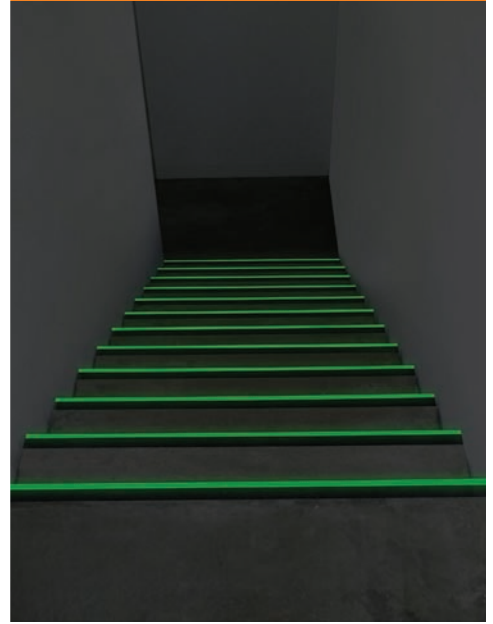
## NO ECOGLO - LIGHTS ON



## ECOGLO - LIGHTS ON



## ECOGLO - LIGHTS OFF



## ECOGLO STRENGTHS

High quality anti-slip material	Reduces slips and falls
High quality photoluminescence	Visible for hours in dark conditions
Baked in process	Hardwearing, no repainting
Step edge contrast	Reduces falls in light or dark conditions
Recycles natural or artificial light	Decrease electricity usage, increased sustainability
UV resistance	Can be installed inside or out
Internationally accredited testing	Specify with confidence
Green attributes	Non-toxic, non-radioactive, made with recycled aluminum and long life

## DELIVER REAL BENEFITS

- 2009 IFC Means of Egress, January 2009
- 2009 IBC Means of Egress, January 2009
- NFPA 101 and 5000, January 2009
- California, Chapter 10, January 2008
- Connecticut, Section 1026, January 2008
- New York City Code, July 2008
- GSA for All Buildings, January 2009

- British & ISO Standards for PL Brightness
- Tokyo Fire Department
- Fire & Disaster Management Agency (Japan)
- Building Code of Australia
- New Zealand Building Code
- ULC 572

## KINESIK ENGINEERED PRODUCTS



7`Umhc b`< Uggy`ž'5 Wwci bh'A Ub U[ Yf