

EGRESS LIGHTING PRODUCT GUIDE







EGRESS LIGHTING

Introducing StepGuard[™] The Egress Lighting Solution.

The StepGuard[™] System was methodically developed for Light Tape® after years of field testing. The only solution in the world where the manufacturer not only makes the profile but also the light, resulting in a complete lighting solution that is not only elegant, but a tremendous value. Ideal for cinemas, auditoriums or any venue where safety is paramount.

Light Tape® has over a decade of performance in the aerospace and automotive industry, known for reliability and durability in the toughest applications and environments. StepGuard™ sets a new standard for egress lighting.



More than just an Egress System

- ✓ System Design & Maintenance
- ✓ Installation guidelines to help your contractors
- ✓ Training & Support
- ✓ Delivery to every corner of the world







EGRESS LIGHTING









StepGuard[™] Stair Nose Lighting

Features

- StepGuard™ is exclusively made for Light Tape®
- Light Tape® Electroluminescent lamp
- Smart Driver™ dimmable & DMX power source
- Anodized or Electrostatic painted aluminum, for heavy duty use.
- EPDM rubber anti-slip for maximum comfort and safety.
- Two type of end caps, depending on wiring requirements. End caps are secured to profile with screws, assuring they won't come off with use or traffic.

Warranty

5 Year Limited Warranty on profile and accesories for indoor use.

Technical Information

Profile

- Aluminum profile available up to 4 meter length.
- Pre-cut and assembled according to specification.

Light Source

- Light Tape® EL tapes. Over 12 colors to choose from.
- Illuminated width 0.25" (0.635mm)
- Area/Length reference: 1 linear meter
- Illumination source: 100% Phosphors
- Current / amps: 0.0025
- Total Watts: 0.25
- Illumination coverage: 100% even

Design Options

4 profile designs to choose from:

- StepGuard[™] 45
- StepGuard[™] 30
- StepGuard™ Immersion
- StepGuard™ Classic



StepGuard[™] is exclusively made for Light Tape®







Aluminum Profile Color Options

Anodized White Matte and Electrostatic Black paint are our standard line colors. Other below colors available upon request. Pricing may vary based on color option and minimum quantities may also apply when ordering.













Anodized Silver

Black Semi Matte

Champagne

Brown

White

Wood Finish

Mounting & Wiring Accesories for StepGuard™ 45

Wireways

Base and covers are made from high resistant black PVC, especially designed to fit our end caps, join and run the wiring between steps. Available in 2 or 3 meter lengths.

Main Wireway channel



- "Roof type" cover design to prevent liquid entrance.
- Top on mounting screw area to avoid short circuit by contact or mix with wires.
- Designed to perfectly fit our ebonite rubber end cap.

Mounting and wiring



End caps

Two options of end caps available, depending on the wiring system required or available. Both end caps are joined to aluminum profile with hexagonal socket screws (x2) for maximum security. No more loose or missing end caps.

Ebonite rubber end cap with mounting screws



End cap for surface wiring with wireway channels. Made in vulcanized black ebonite.

PVC end cap with mounting screws



End cap for underground wiring with individual junction boxes. Made in high resistance black PVC.





General dimensions and configurations

Available Colors

* All measurements in mm



StepGuard[™] 45



Aluminum extrusion available up to 4 meter length. Pre-cut and assembled according to specification.

For use only with 0.25" Light Tape® on a 45 degree angle on front.



IP40

300KG

IP65





General dimensions and configurations

* All measurements in mm







System Configuration for surface wiring (StepGuard[™] 30/45)

Part description



Wiring installation with individual junction boxes







General dimensions and configurations

* All measurements in mm







General dimensions and configurations

* All measurements in mm







Wide range of configurations







General dimensions and configurations

* All measurements in mm



StepGuard™ Classic



Aluminum extrusion available up to 4 meter length. Pre-cut and assembled according to specification.

For use with 0.25" Light Tape® on top or combined with LED tape on bottom for tread illumination. Space on bottom fits 0.25" or 0.5" Light Tape®.







System Configuration for surface wiring



System configuration for pre-installed underground wiring







Labels and Markings







EGRESS LIGHTING Wayfinding









Light Guide[™] Aisle and Ramp Lighting

Features

- StepGuard® is exclusively made for Light Tape®
- Light Tape® Electroluminescent lamp
- Smart Driver™ dimmable & DMX power source
- High Resistance extruded PVC Channel, for heavy duty use.
- "Flat hose" type clear PVC insert, to further encapsulate the Light Tape®
- Ebonite End Cap to close segments. They also allow cable to continue to other segments if required.
- 90 degree angle cap for corner configurations

Warranty

3 Year Limited Warranty on channel and accesories for indoor use.

Technical Information

PVC Channel

- PVC or Aluminum channel available up to 3 meter length.
- Pre-cut and assembled according to specification.

Light Source

- Light Tape® EL tapes. Over 12 colors to choose from.
- Illuminated width 0.25" (0.635mm)
- Area/Length reference: 1 linear meter
- Illumination source: 100% Phosphors
- Current / amps: 0.0025
- Total Watts: 0.25
- Illumination coverage: 100% even

Design Options

4 profiles to choose from:

- StepGuard[™] FL
- StepGuard[™] WS
- StepGuard[™] Snap-N-Light wall system
- StepGuard™ Light Rails

StepGuard[™] is exclusively made for Light Tape®







General dimensions and configurations

* All measurements in mm

Light Guide™ FL



Light Tape® 0.25 or 0.5"





Single runs up to 25 meter long

Light Tape® is available in long continuous runs, longer than 25 meters. However, the sealed PVC insert comes in 25 meters rolls. That would be the upper limit on the maximum length of a single run for a sealed system. For longer runs or other configurations, please refer to wiring instruction diagram.



Mounting & Wiring Accesories

End cap

The end cap made with ebonite rubber is used to hide the connection and allows cables to pass through one segment to another, closing and sealing the end of each segment. (please refer to wiring diagram)



90° angle cap

90 degree angle caps can be used as a cable junction box and allow you to connect multiple segments to main wire, as well as join two end caps into a 90 degree angle.



* All measurements in mm







Wiring setup for several segments with 90° angles







General dimensions and configurations

Base 2.80 ſ 55 ± 0.60 2.20 R1.50 20.80 20 IP40 IP65 150KG Available Colors Cover 61.68 40.60 .50 50.90 6.70 N.12 37.20

* All measurements in mm

Light Guide™ WS-U



PVC or Aluminum channel available from 2 - 4 meter length.

Usually assembled on site, but can be delivered as per required lenghts.

Can be used with 0.25" Light Tape ${\rm I\!\!B}$ on top.

Light Guide[™] WS-D



PVC or Aluminum channel available from 2 - 4 meter length.

Usually assembled on site, but can be delivered as per required lenghts.

For downlight can be used with either 0.25" or 0.50" Light Tape® or LED tape.





Wide range of configurations







General dimensions and configurations

* All measurements in mm







StepGuard[™] SN / Step Row Number

Features

• StepGuard® is exclusively made for Light Tape®

electroluminescent lamps.

- Smart Driver™ Dimmable & DMX power source
- High Resistance ABS case for heavy duty use.
- Polycarbonate enclosure for total protection of light.
- Separated wiring: Unit can be connected to stair Light directly or on a single wiring setup.
- Units are delivered pre-assembled for easy installation.

Warranty

3 Year Limited Warranty on case and accesories for indoor use.

Technical Information

ABS Case / Polycarbonate Cover

- PVC base and cover case.
- Assembled and customized with sign or letter according to specification.



Design Options

1 unit design:

StepGuard[™] SN

Available for:

- · StepGuard™ 45
- · StepGuard™ 30
- StepGuard[™] Classic
- · StepGuard[™] Immersion



Light Source

- Light Tape® EL tapes with over 12 colors to choose from
- Illuminated width 3/4" (19.63mm) Area/
- Length reference: 9cms Illumination source
- 100% Phosphors
- Current / amps: 0.01 (meter)
- Total Watts: 1.00 (meter)
- Illumination coverage: 100% even

StepGuard[™] is exclusively made for Light Tape®





StepGuard[™] SN - General dimensions and configuration

* All measurements in mm







StepGuard[™] SN



ABS cover / Polycarbonate enclosure unit for row step numbering or signage system. For use with 3/4" Light Tape®.

Customized with any sign or number in black adhesive vinyl.







StepGuard[™] SN Aisle / Seat Numbering

Features

- StepGuard® is exclusively made for Light Tape®
- Light Tape® Electroluminescent lamp
- Smart Driver™ dimmable & DMX power source
- High Resistance injected PVC case for heavy duty use.
- OSRAM LED Module for tread ilumination.
- Separated wiring: black for Light Tape® and polarized for LED Module for easy configuration and setup.
- Units are delivered pre-assembled for easy installation.

Warranty

3 Year Limited Warranty on case and accesories for indoor use.

Technical Information

PVC Case

- PVC base and cover case.
- Assembled and customized with sign or letter according to specification.

Light Source

- Light Tape® EL tape with over 12 colors to choose from, or OSRAM LED Module.
- Illuminated width 1.00" (25.4mm)
- Area/Length reference: 7cms
- Illumination source: 100% Phosphors
- Current / amps: 0.01 (meter)
- Total Watts: 1.00 (meter)
- Illumination coverage: 100% even



2 unit designs:

- StepGuard[™] SN
- StepGuard[™] SNL



StepGuard[™] is exclusively made for Light Tape®







StepGuard[™] SN - General dimensions and configuration

* All measurements in mm







StepGuard[™] SNL Aisle / Seat Numbering

Features

- StepGuard® is exclusively made for Light Tape®
- Light Tape® Electroluminescent lamp
- Smart Driver™ dimmable & DMX power source
- High Resistance injected PVC case, for heavy duty use.
- Allo LED Module for tread illumination.
- Separated wiring: black for Light Tape® and polarized for LED Module for easy configuration and setup.
- Units are delivered pre-assembled for easy installation.

Warranty

3 Year Limited Warranty on case and accesories for indoor use.

Technical Information

PVC Case

- PVC base and cover case.
- Assembled and customized with sign or letter according to specification.

Light Source

- Light Tape® EL tapes. Over 12 colors to choose from. Generic A110 LED Module.
- Illuminated width 2.00" (50.8mm)
- Area/Length reference: 6 cms
- Illumination source: 100% Phosphors
- Current / amps: 0.01 (meter)
- Total Watts: 1.00 (meter)
- Illumination coverage: 100% even



Design Options

2 unit designs:

- StepGuard[™] SN
- StepGuard[™] SNL



StepGuard[™] is exclusively made for Light Tape®





StepGuard[™] SNL - General dimensions and configuration

* All measurements in mm







Export Packing

Features

- Sturdy Palletized Wooden Crate made of Certified Wood as per International Standard for Phytosanitary Measures (ISPM15 or NIMF15).
- Sealed with screws and secured with plastic bands and two security labels with consecutive numbering or code.
- Every box is stenciled with logos and description of content.
- Interior of crate is protected with kraft paper and bubble wrap for extra protection.
- Every Box is made to size according to customer's order.



Packing Unit

Units are packed in pairs (as per detail). Box includes also Smart Drivers and spares if requested.



Packing unit (6 x 10 cms)

Box Dimmensions

Height (front view)



Length (top view)



Height of box is calculated by taking the quantity of steps, divided by 12 which is the maximum quantity per row (six pairs). Then adding 6 cms to packing unit and 14cms for the skids and box wall.

Depth (side view)







Color Options

Our base colors are Classic Natural Blue and Extreme Blue-Green. These colors appear white when off and colored when illuminated. We then add a filter to producece specic color options. All other colors will remain that color when not illuminated. Please check our website for updated and new colors.

Classic Series



А	В	Inches		
6.35mm	19.05mm	0.25		



A= Illuminated width B= Laminated width





* The colors in this table are simulated and the final product may vary. If an exact color is required, we recommend seeing a physical sample. Custom colors and widths are available, but may be subject to minimum order quantities, set-up fees, and approval testing.





Digital Smart Driver™ Power Supply

Digital Smart Driver[™] power supplies are specifically engineered to illuminate Light Tape®. Wheter it is one segment or 80, it is possible to do it all with one Smart Driver[™]. There are a variety of models to choose from offering a variety of useful features. A factory representative will advise which model to use based on the total illuminated area, zones, and location.



- Quiet
- Stylish compact design
- Rated input voltage 110 / 220 VAC
- Protection Class 1
- IP Degree 2x
- Worldwide voltage capacity
- Blink and Dimmer Switch
- Visual LED system status indicator
- Lightweight
- Short circuit and overload protection
- CE, UL y CSA compliant
- 0-10 dimming

	Range		Input		Output	
Driver Model	English System	Metric System	Ams	Watts	Max. Current, A	
SD-8000	4000 - 8000 pulg²	25,806 - 51,612 cm²	3.50	420	3.8	
BUS-DSD-4000	2000 - 4000 pulg²	25,806 - 51,612 cm²	3.50	420	3.8	
DMX-DSD-4000	2000 - 4000 pulg²	12,903 - 25,806 cm²	1.5	145	2.1	
DMX-DSD-2000	1000 - 2000 pulg²	6,451 - 12,903 cm²	1.0	110	1.2	
DMX-DSD-1000	400 1000 pulg²	2,580 - 6,451 cm²	0.9	100	1.0	
DMX-DSD-200	1 - 200 pulg²	6,5 - 1,290 cm²	0.5	12	0.15	
DSD-200 D	1 - 200 pulg²	6,5 - 1,290 cm²	0.5	9	0.15	
DSD-2000	1000 - 2000 pulg²	6,451 - 12,903 cm²	2.8	68	0.91	
DSD-1000	400 - 1000 pulg²	2,580 - 6,451 cm²	0.9	97	0.32	
DSD-400	200 - 400 pulg²	1,290 - 2,580 cm²	0.7	17	0.11	
DSD-200	1 - 200 pulg²	6,5 - 1,290 cm²	0.5	9	0.15	

*Max Vac is 320v at 750hz

Smart Driver™ Safety & Handling

It is important that you operate Light Tape® and Smart Driver Power Supplies within their parameters. Changes to parameters that result in over current will damage the Light Tape® lamp and power supplies.

- Always attach Light Tape 🛽 load before powering .
- 250 volts is mid -range and recommended set point.
- The external dimmer switch on Smart Driver[™] controls the output voltage and frequency.
- Use a voltage meter to determine volts /hertz from Smart Driver™ to Light Tape®.
- Always set power supply output voltage per factory recommended setting.
- Low: 200 volts I Medium: 250 volts I High: 300 volts
- We DO NOT recommend exceeding 300 volts. Contact us if the Smart Driver™ is operating outside of range.

- Red LED indicates the following :
 - a. Short Circuit Protection : Check wiring if light is on.b. Overload Protection: Verify that lamp area is acceptable, or for possible damage to lamp.
 - Always treat Light Tape
 and Smart Driver
 with care
 and respect as one would with any device where electrical
 current is present
 - Please store in appropriate NEMA enclosure for outdoor/ damp location.
- Please follow local electrical codes .

Driver Ranges and Output





Digital Smart Driver™ Power Supply

Features

- StepGuard® is exclusively made for Light Tape®
- DMX Mode- 512 Supplies are fully DMX controllable, allowing for integration into complicated stage and light show.
- Blink Mode- Allows for on/off pulse control with fine turning knob.
- Brightness Control- luminosity adjustment to appropriately match installation environment.
- 0-10 Dimming- Optional function to remotely control Light Tape® brightness using standard 0-10v dimmers. Compatible with Lutron Dimmers.



Driver Model	DMX	BLINK	BRIGHTNESS	0-10
SD-8000		Х	Х	
DSD 200 0-10 DIMMING			Х	х
DSD 4000 DMX	Х	Х	Х	х
DSD 1000 DMX	Х	Х	Х	х
DSD 200 DMX	Х	Х	Х	Х
DSD 2000			Х	
DSD 1000			Х	
DSD 400			Х	
DSD 200			Х	

Power Supply Dimmensions

Driver Model	Ler	ngth	W	ïdth	He	ight	Wheight
SD-8000	9 7/8 in	2.5 cm	4 3/4 in	12 cm	2 1/4 in	5.7 cm	4.15 lb
BUS-DSD 4000	8 3/4 in	22 cm	6 1/4 in	15.8 cm	3 in	7.6 cm	5.15 lb
DMX-DSD 4000	8 6/8 in	22 cm	7 1/4 in	18.5 cm	2 3/4 in	7 cm	4.9 lb
DMX-DSD 2000	8 6/8 in	22 cm	7 1/4 in	18.5 cm	2 3/4 in	7 cm	4.9 lb
DMX-DSD 1000	7 3/4 in	19.5 cm	3 3/8 in	8.5 cm	2 in	5 cm	1.85 lb
DSD 200 DMX	6 in	15.5 cm	2 5/8 in	6.75 cm	1.5 in	4 cm	0.85 lb
DSD 200 D	6 in	15.5 cm	2 5/8 in	6.75 cm	1.5 in	4 cm	0.8 lb
DSD 2000	8 3/8 in	22.5 cm	3 3/8 in	8.5 cm	2 in	5 cm	2.05 lb
DSD 1000	7 3/4 in	19.5 cm	3 3/8 in	8.5 cm	2 in	5 cm	1.85 lb
DSD 400	6 5/8 in	16.5 cm	2 5/8 in	6.75 cm	1.5 in	4 cm	1.05 lb
DSD 200	4 7/16 in	11.3 cm	2 3/4 in	7.0 cm	1 5/8 in	4.1 cm	0.70 lb



STEPGUARD®









Surface and Profile Preparation



First step is to measure and mark the holes on the profile. We recommend a maximum distance of 10cm on the sides and the other holes should be distributed equally throughout the profile.

IMPORTANT: There should be at least 4 screws per linear meter to ensure a proper fix on surface.



Once you have the marks on the profile, use a metal drill to make the holes. Remember to always use the drilling guide to mark and drill holes as per **Detail A**, because the anti-slip will fit the head of the screws on this area to avoid bumps on it.

З.



Locate the profile on its position and push it against the stair with both hands and knees to make sure drilling holes are as far possible from corner of step. Make sure profile is secure in its final position.



With the help of your knees, keep the profile in its position and burn holes on the carpet with a circular motion on the carpet through the pre-drilled holes of profile. You can also mark the holes on the carpet and use a hollow steel punch or gasket punch (as shown). Now you are ready to drill on concrete without damaging the carpet.





SIDE VIEW DETAIL

Installing



To finalize, drill the holes on concrete or surface and place your screw sledges on place with a hammer. Align profile and screw or hammer on place

Make sure you place the anti-slip in the correct position matching the screw guide of both parts. No you can begin sliding the anti-slip as explain on next step.

profile drilling guide with screws

anti-slip screw guide

4.

SIDE VIEW DETAIL Connector inside the profile up to connection point.

To slide the anti-slip, first push one end underneath the end cap, while pushing the sides. For the rest of the process just push on sides while rubber sits on its position. When finsihing on the other side, cut the excess material making sure you leave an extra length (about 1cm-2cm) to fit under the other cap.

Once unit is installed, do a QC check by stepping on center and sides of the profile, making sure it is fully secured. Also check that connector is hidden inside the profile (see below detail), and there are no loose parts.

3.







Connecting and Wiring



2.

4.



The Digital Smart Driver™ is required to power the Light Tape®. Please make sure you are using the right type of Driver and that is on its illumination range. The driver comes with a dimming button and it should be turned to minimum before powering (if dimming button is included on unit). Once turned on, you can adjust dimmer slowly to desire brightness.

The connector of the StepGuard[™] step system has been pre-wired to the requested side when assembling the units at the factory. The main wire however, can be located through either side or center of the step rows. If for some reason the step connector is on the wrong side and there is not enough cable to reach it, you can just add more cable to the connector. This adjustment is suggested to avoid dissasembling the unit and changing the connector side.



Projection Room

The StepGuard® connectors are supplied with 2x22 gauge cables. For the main wiring, we recommend using an 18 gauge cable. Follow all electrical codes when wiring and connecting.

Every step must be properly connected to the main wire. Please make sure all connections are sealed and there are not no loose or pinched wires. There is no polarity on Light Tape® so you can connect either side of the cables.



PROJECT HIGHLIGHTS







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Cineland - Centro Comercial Mayales, Valledupar - 7 Cinemas





PROJECT HIGHLIGHTS
Global projects



Pontificia University Javeriana - Cali, Colombia



Cape Town Conference Center, Cape Town, South Africa





PROJECT HIGHLIGHTS Global projects



IMAX Dome Theater, Richmond, Virginia

Additional Projects Installed or Specified:

- Novo Cinemas at SEEF Mall, Muharaq District, Bahrain Art Vision for Boulevard 57, Lahore, Pakistan IMAX Theater at the Smithsonian's National Air and Space Museum,
- Washington, DC Centennial Planetarium, Calgary, AB, Canada
- CenterStage, Richmond, VA
- University of Ljubljana, Slovenia
- Boujis Night Club, London, UK

- Investors Bank Performing Arts Center, Sewell, New Jersey Cineco JV/Vox, Manama City Center, Bahrain
- Vox Cinemas, Al Qasr Mall and Roof Mall Areic, Riyadh, Kingdom of Saudi Arabia
- Vox Cinemas, Sohar Mall, Sohar City, Oman
- Vox Cinemas, Red Sea Mall, Jeddah, Kingdom of Saudi Arabia







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