StepGuard®

Advanced EL Lighting System.

designed for

LightTape

StepGuard®
Advanced EL Lighting System.

## 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 aero-space and automotive industry, known for reliability and durability in the toughest applications and environments. StepGuard™ sets a new standard for egress lighting.

Made in USA   c ℛℒ US   CE   RoHS   Ⓡ   300KG   IP65   TÜVRheinland CERTIFIED

More than just an Egress System

✔   System Design & Maintenance

✔   Installation guidelines to help your contractors

✔   Training & Support

✔   Delivery to every corner of the world

www.lighttape.com

designed for
LightTape

StepGuard®
Advanced EL Lighting System.
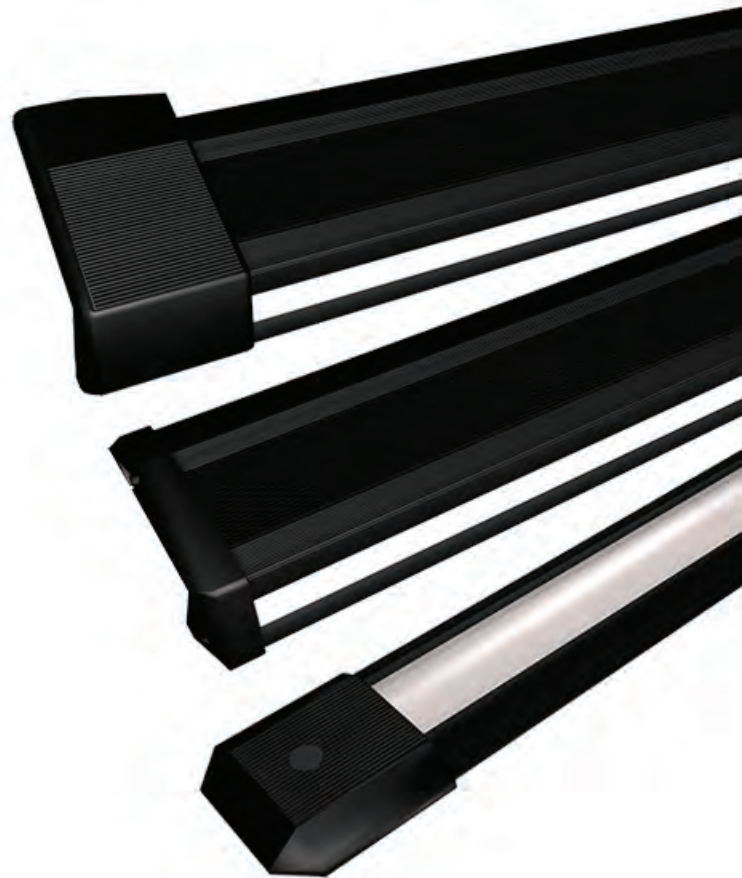
STAIR NOSING ILLUMINATION

designed for
LightTape

www.lighttape.com

Aluminum Profile Color Options

Anodized Silver 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.
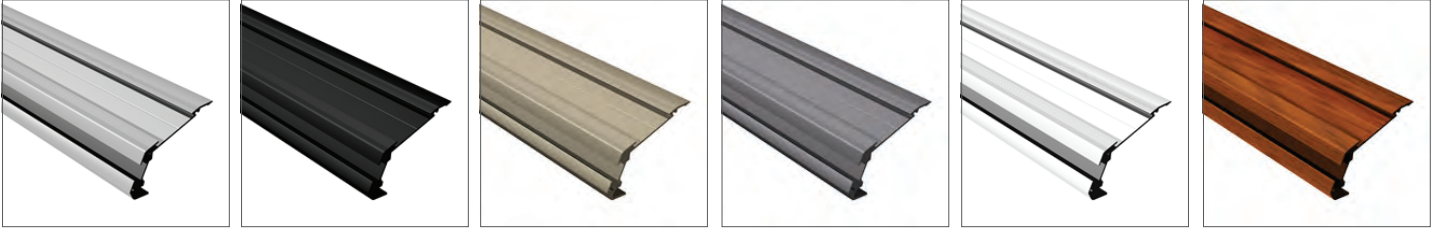
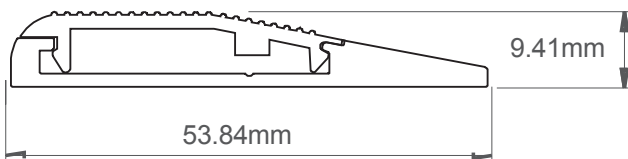| Anodized Silver	Black Semi Matte	Champagne	Brown	White	Wood Finish

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

9.41mm

53.84mm

- "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

"Roof type" cover

Screw cover

Wiring area

Base to carpet

Mounting screw
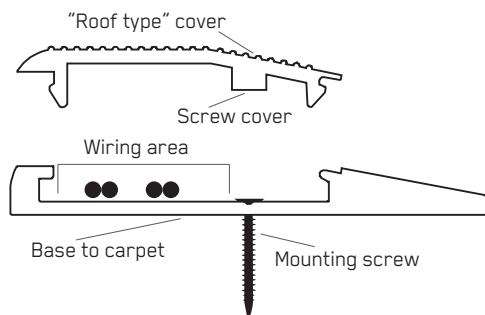
End caps

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.
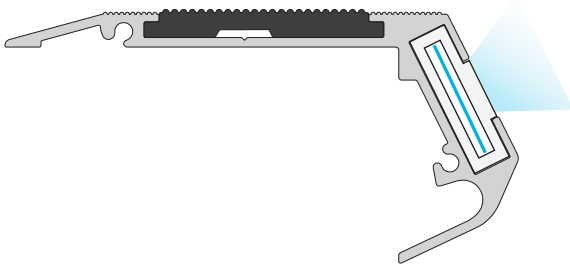
Ebonite rubber end cap with mounting screws
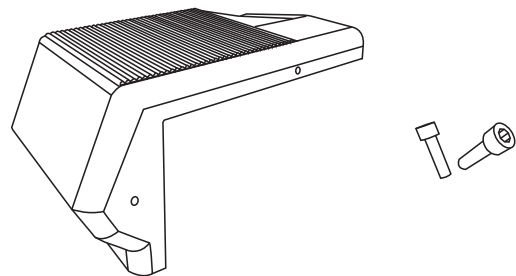
End cap for surface wiring with wireway channels. Made in vulcanized black ebonite.

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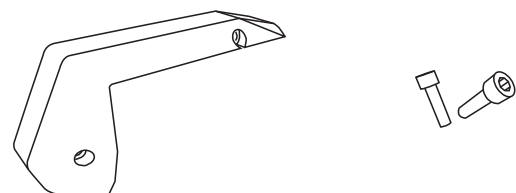
End cap for underground wiring with individual junction boxes. Made in high resistance black PVC.

StepGuard™ 45

SG-45: Our Most Popular Design

The SG45 design uses one Light Tape® lamp visible at a 45 degree angle when walking up and down the steps. When seated, you cannot see illuminated lights in front of you while watching the film. Only when standing as each step illuminates due to viewing angle as you descend, as if they were being turned on for your every step.

Recommended for flat floors or low pile carpet venues.

System and Parts
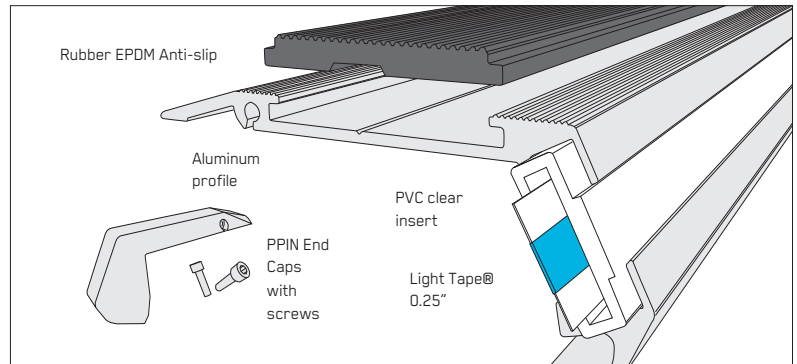
Rubber EPDM Anti-slip

Aluminum profile

PVC clear insert

PPIN End Caps with screws

Light Tape® 0.25"

Design Features

- Arrives Plug & Play ready for installation, IP65 rated
- Illuminated by Light Tape® Electroluminescent lamp
- Aluminum profile length tolerance: +/- 3mm
- Extremely energy efficient: 1 /4 watt per meter
- Fully compliant - TUV IECEE IP65 certified
- Aluminum profile with non-slip insert on top
- Screws into step for quick installation.
- Mechanically fastened end caps, not glued

How to Order:

- Part Number - SG-45
- For a basic quote, we need the number of steps per cinema and average width per step to determine power layout. We also offer a service where we will go through architectural files to determine what is required for the installation.
- For final sign-off we will verify color of Light Tape®, on-site step widths and which side of step for electrical connection based on plan.

Available Colors

- **No glare, completely uniform light with no heat .**
- **1/4 watt per meter. 10% of LEDs at same brightness.**
- **Only 3 milli-amps of current per a linear meter step .**

Rapid Installation

- Always use Heat Shrink Tubing Thin Wall, 2:1 Shrink Ratio to seal connections between profile lead and your main wiring.

- To fix profile on surface, we recommend using 1/4 x 2 1/4 screw with nylon anchor every 10cms / 3.93 inches.
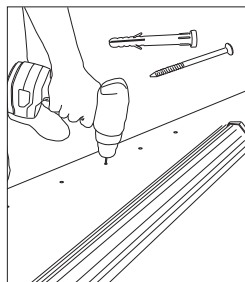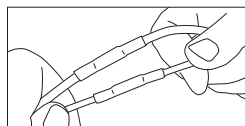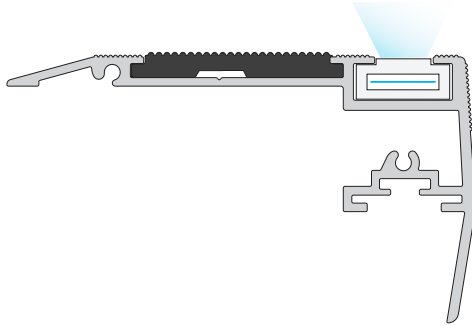
For step by step installation process, please please refer to our installation manual guide.

SG-45 Dimensions

40
35 ±0.60
2.50
5.83
6
10.80 ±0.46
24.80
54.40
1.20
41.85 ±0.36
65.66
R7.50
85.60 ±0.60
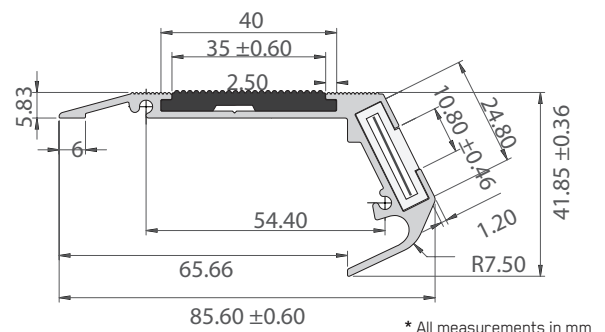
* All measurements in mm

StepGuard™ Classic

SG-AH-OT: One Light Tape® lamp facing up

Our classic series profile is based on a traditional design where the light source was never pointed towards the screen for fear of glare. Historically the standard design was for only up and down illumination.

The AH-OT version utilizes the 'on-top' track for location for a direct view up-light on the top of the step. The Light Tape will not reflect in 3D glasses or cause any glare. Like a laser, the light will be crisp on the step but will not reach the ceiling, nor the patron.

Recommended for flat floors or low pile carpet venues.

Design Features

- Arrives Plug & Play ready for installation, IP65 rated
- Illuminated by Light Tape® Electroluminescent lamp
- Aluminum profile length tolerance: +/- 3mm
- Extremely energy efficient: 1 /4 watt per meter
- Fully compliant - TUV IECEE IP65 certified
- Aluminum profile with non-slip insert on top
- Screws into step for quick installation
- Mechanically fastened end caps, not glued

Systems and Parts

Rubber / PVC Anti slip insert

Light Tape® 1/4"

Aluminum profile
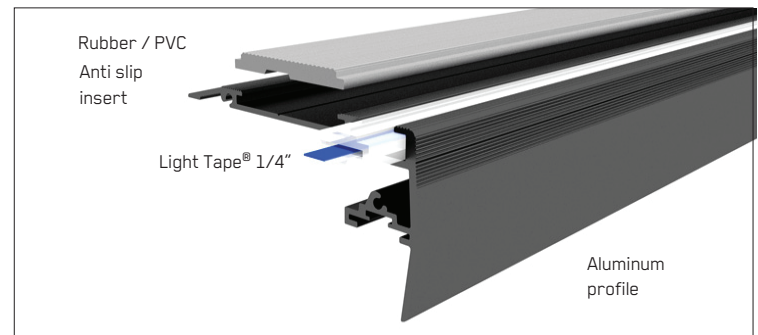
How to Order

- Part Number - SG-AH-OT
- For a basic quote, we need the number of steps per cinema and average width per step to determine power layout. We also offer a service where we will go through architectural files to determine what is required for the installation.
- For final sign-off we will verify color of Light Tape®, on-site step widths and which side of step for electrical connection based on plan.
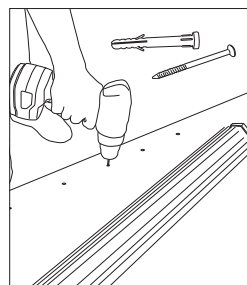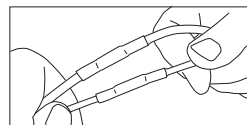
Available Colors

- No glare, completely uniform light with no heat.
- 1/4 watt per meter. 10% of LEDs at same brightness.
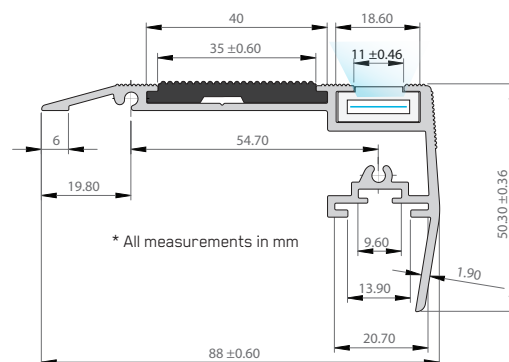- Only 3 milliamps of current per linear meter step.

Rapid Installation

- Always use Heat Shrink Tubing Thin Wall, 2:1 Shrink Ratio to seal connections between profile lead and your main wiring.
- To fix profile on surface, we recommend using 1/4 x 2 1/4 screw with nylon anchor every 10cms / 3.93 inches.

For step by step installation process, please please refer to our installation manual guide.

SG-AH-OT Dimensions

40

18.60

35 ±0.60

11 ±0.46

6

54.70

19.80

50.30 ±0.36

* All measurements in mm

9.60

13.90

1.90

20.70

88 ±0.60

IECEE Made in USA c UL us CE RoHS R 500KG IP40 IP65

StepGuard®

LightTape INSIDE

StepGuard™ Retro Series

SG-RET-OT: One Light Tape® facing up

The Retro Series is designed for retrofits and refurbishments. Older venues that show the wear with dilapidated concrete step nosing and probably sporting plush carpet flooring.

The Retro OT has one Light Tape lamp located on front edge at a 45 degree angle. Protected by a rigid PVC insert.

The anchor point on top of the Retro is purposefully shifted towards the back to ensure anchoring in terra firma. This should enable the installer to screw further back from the nosing.

The underneath of the profile has little "legs" to lift the profile and accommodate plush pile carpets.

Design Features

- Arrives Plug & Play ready for installation, IP65 rated
- Illuminated by Light Tape® Electroluminescent lamp
- Aluminum profile length tolerance: +/- 3mm
- Extremely energy efficient: 1 /4 watt per meter
- Fully compliant - TUV IECEE IP65 certified
- Aluminum profile with non-slip insert on top
- Screws into step for quick installation
- Mechanically fastened end caps, not glued

Systems and Parts

Rubber / PVC Anti slip insert

Light Tape® 1/4"

Rigid PVC insert

Aluminum profile
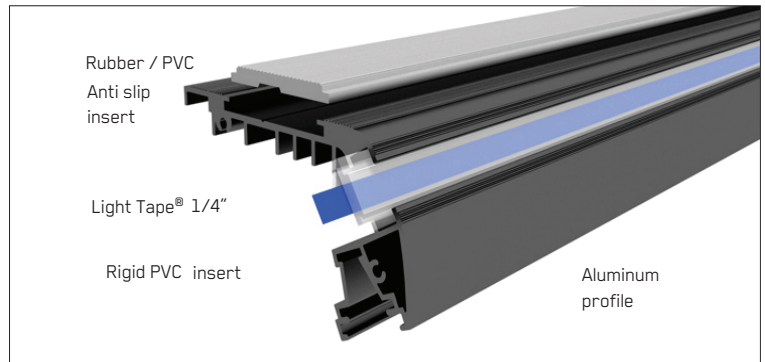
How to Order

- Part Number - SG-RET-OT
- For a basic quote, we need the number of steps per cinema and average width per step to determine power layout. We also offer a service where we will go through architectural files to determine what is required for the installation.
- For final sign-off we will verify color of Light Tape®, on-site step widths and which side of step for electrical connection based on plan.

Available Colors

- No glare, completely uniform light with no heat.
- 1/4 watt per meter. 10% of LEDs at same brightness.
- Only 3 milliamps of current per linear meter step.

Rapid Installation

- Always use Heat Shrink Tubing Thin Wall, 2:1 Shrink Ratio to seal connections between profile lead and your main wiring.
- To fix profile on surface, we recommend using 1/4 x 2 1/4 screw with nylon anchor every 10cms / 3.93 inches.
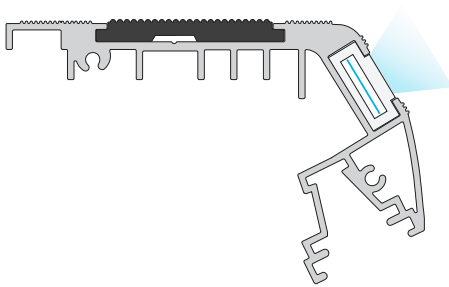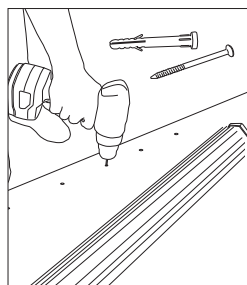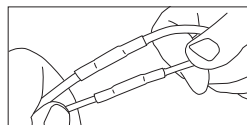
For step by step installation process, please please refer to our installation manual guide.

SG-RET-OT Dimensions

84.98 ±0.60
10.25
39.90
5.97
1.36
34.98
R5.74
18.57
11.07
6.37
R102.13
55.37 ±0.60
R859.08
15.28
19.14
25.82

* All measurements in mm

StepGuard®

LightTape® INSIDE

StepGuard™Max Immersive

SG-MAX-DL: One Light Tape® lamp facing down

Designed with an immersive experience in mind for a visionary customer. Heavily influenced by their top lighting designer to eliminate all direct view lighting. The Max Immersive creates an even glow at the base of each step for navigation with a gray insert on the 45-degree nose for little contrast as you ascend.

One location reported the elimination of glare when switching to Light Tape(r) allowed the visually impaired to navigate the steps they once found blurry and perilous from the haze when using LEDs.

Recommended for flat floors or low pile carpet venues. The most popular immersive design globally.

Design Features:

- Arrives Plug & Play ready for installation, IP65 rated
- Illuminated by two Light Tape® Electroluminescent lamp
- Aluminum profile length tolerance: +/- 3mm
- Extremely energy efficient: 1 /2 watt per meter
- Fully compliant - TUV IECEE IP65 certified
- Aluminum profile with non-slip insert on top
- Screws into step for quick installation
- Mechanically fastened end caps, not glued

System and Parts

Rubber / PVC Anti slip insert

Grey PVC Mini Anti slip insert

Light Tape® 1/2"

Aluminum profile

Acrilyc Lens

How to Order

- Part Number - SG-MAX-DL
- For a basic quote, we need the number of steps per cinema and average width per step to determine power layout. We also offer a service where we will go through architectural files to determine what is required for the installation.
- For final sign-off we will verify color of Light Tape®, on-site step widths and which side of step for electrical connection based on plan.
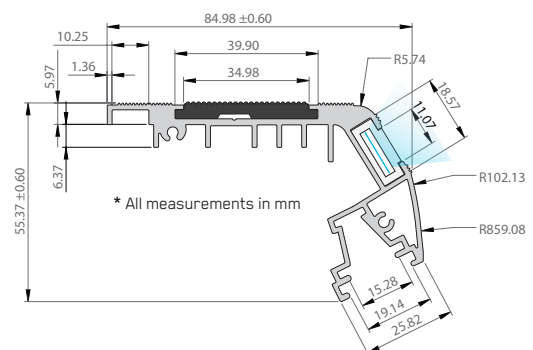
Rapid Installation

- Always use Heat Shrink Tubing Thin Wall, 2:1 Shrink Ratio to seal connections between profile lead and your main wiring.

- To fix profile on surface, we recommend using 1/4 x 2 1/4 screw with nylon anchor every 10cms / 3.93 inches.
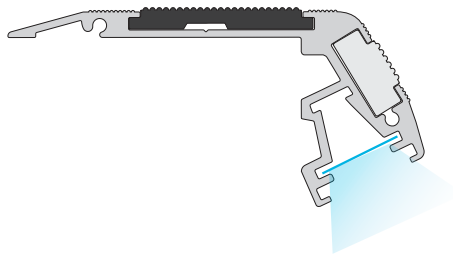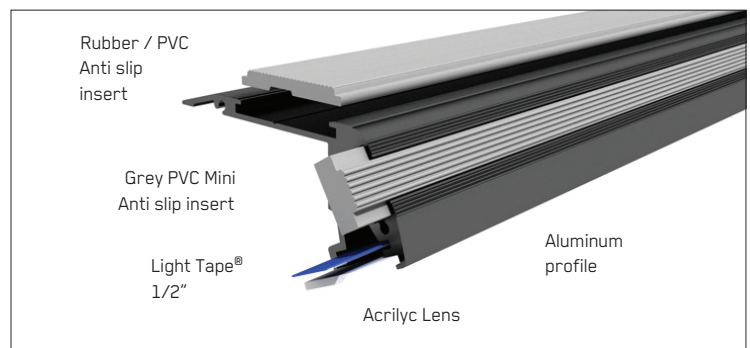
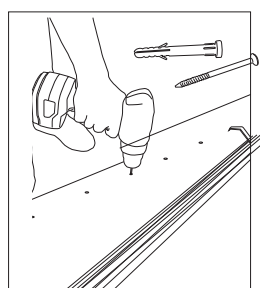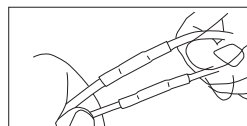 *For step by step installation process, please please refer to our installation manual guide.*

Available Colors

- No glare, completely uniform light with no heat.
- Perfect for high definition laser projection
- 1/2 watt per meter. 10% of LEDs at same brightness.
- Only 6 milliamps of current per linear meter step.

SG-MAX-DL Dimensions

40
35
2.50
1.60
5.83
42.12
19.80
16.70
1.60 ±0.15
18.50
11
9.50
20
23

* All measurements in mm

IECEE | US | c US | CE | RoHS | 300KG | IP40 | IP65

StepGuard®

StepGuard™ Classic Immersive

SG-AH-DL: A Light Tape® lamp facing down

The StepGuard™ Classic design was for an up and down light at the same time. But the Classic can also go immersive and meet the demands of new HD laser projectors. Utilizing only the bottom light source location and extended downlip, Light Tape delivers a very uniform glow on the step.

Many venues are creating an immersive experience with the goal to eliminate all visible light sources, focusing on indirect lighting. Shifting only to dimmable down-lighting. The StepGuard™ Classic can be dimmed to zero without flicker and integrated into projection systems

Recommended for flat floors or low pile carpet venues.

Design Features:

- Arrives Plug & Play ready for installation, IP65 rated

- Illuminated by two Light Tape® Electroluminescent lamp

- Aluminum profile length tolerance: +/- 3mm

- Extremely energy efficient: 1 /2 watt per meter

- Fully compliant - TUV IECEE IP65 certified

- Aluminum profile with non-slip insert on top

- Screws into step for quick installation

- Mechanically fastened end caps, not glued

Systems and Parts

Rubber / PVC
Anti slip insert
Black or Grey

Grey PVC Mini
Anti slip insert

Light Tape® 1/2"

Aluminum profile
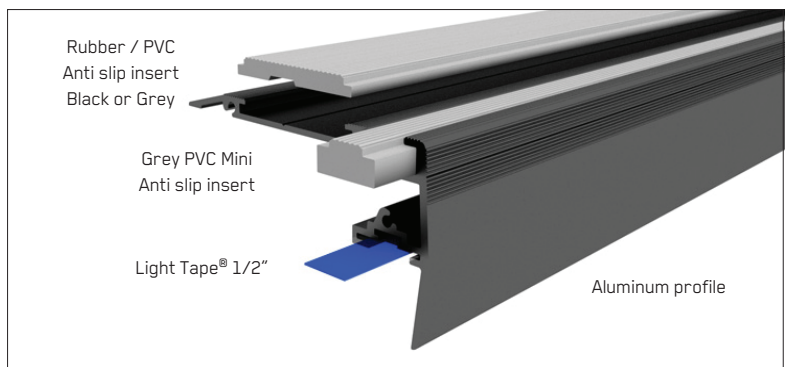
How to Order

- Part Number - SG-AH-DL

- For a basic quote, we need the number of steps per cinema and average width per step to determine power layout. We also offer a service where we will go through architectural files to determine what is required for the installation.

- For final sign-off we will verify color of Light Tape®, on-site step widths and which side of step for electrical connection based on plan.

Available Colors

- **No glare, completely uniform light with no heat.**
- **Perfect for high definition laser projection**
- **1/2 watt per meter. 10% of LEDs at same brightness.**
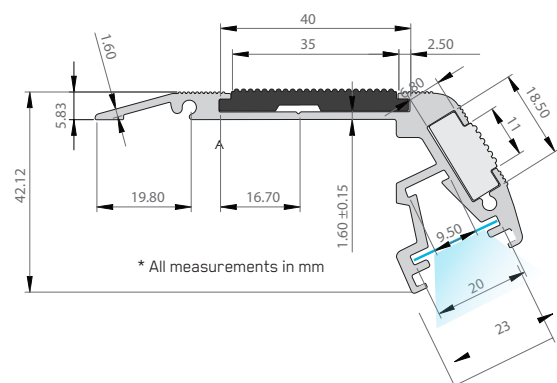- **Only 6 milliamps of current per linear meter step.**

Rapid Installation

- Always use Heat Shrink Tubing Thin Wall, 2:1 Shrink Ratio to seal connections between profile lead and your main wiring.

- To fix profile on surface, we recommend using 1/4 x 2 1/4 screw with nylon anchor every 10cms / 3.93 inches.
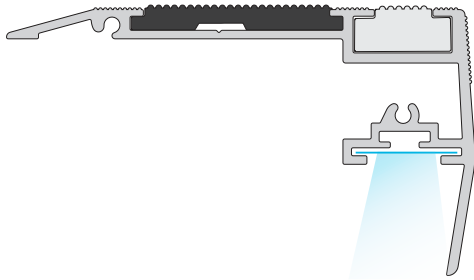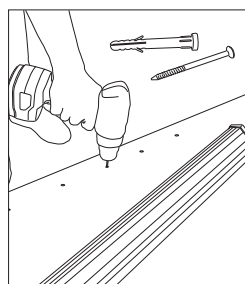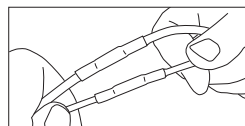
  For step by step installation process, please please refer to our installation manual guide.

SG-AH-DL Dimensions

40
35 ±0.60
18.60
11 ±0.46
6
54.70
19.80
9.60
1.90
13.90
50.30 ±0.36
20.70
88 ±0.60

* All measurements in mm

IECEE | Made in USA | c UL us | CE | RoHS | 300KG | IP40 | IP65

StepGuard®

LightTape® INSIDE

StepGuard™ Max Duo

SG-MAX-DUO: Two Light Tape® lamps

Designed with the Max experience in mind, we added another Light Tape® lamp to the 45-degree track to delineate step edge and add to the downlight glow. While seated, neither light is directly visible, just the wash. The top light is only visible when standing and walking down the stairs, each one appears as if it turns on for you.

The second Light Tape® light source will not be visible when seated due to viewing angle. No glare on your glasses from behind. The DUO utilizes also the downlight for the perfect soft glow on the steps.

Recommended for flat floors or low pile carpet venues.

Design Features

- Arrives Plug & Play ready for installation, IP65 rated
- Illuminated by two Light Tape® Electroluminescent lamp
- Aluminum profile length tolerance: +/- 3mm
- Extremely energy efficient: 1 /2 watt per meter
- Fully compliant - TUV IECEE IP65 certified
- Aluminum profile with non-slip insert on top
- Screws into step for quick installation
- Mechanically fastened end caps, not glued

System and Parts

Rubber / PVC Anti slip insert

Light Tape® 1/4"

Light Tape® 1/2"

Aluminum profile

Acrilyc Lens
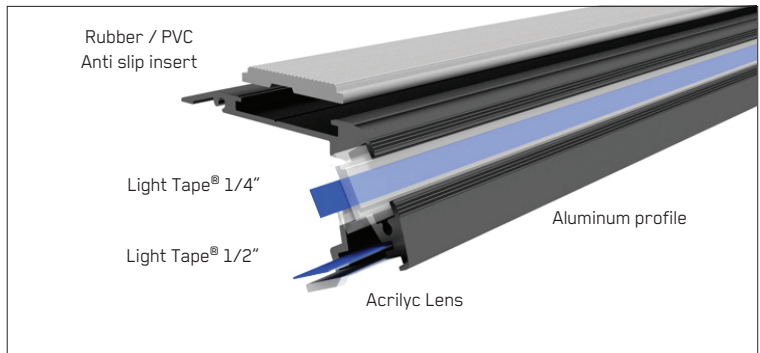
How to Order

- Part Number - SG-MAX-DUO
- For a basic quote, we need the number of steps per cinema and average width per step to determine power layout. We also offer a service where we will go through architectural files to determine what is required for the installation.
- For final sign-off we will verify color of Light Tape®, on-site step widths and which side of step for electrical connection based on plan.

Available Colors

- No glare, completely uniform light with no heat.
- 1/2 watt per meter. 10% of LEDs at same brightness.
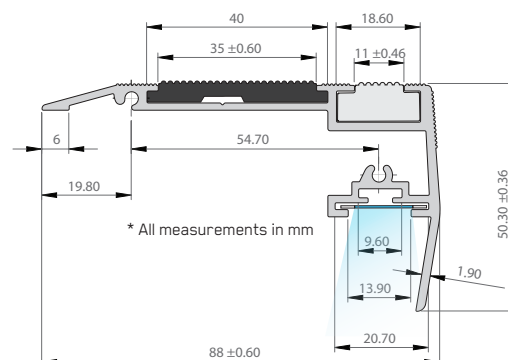- Only 6 milliamps of current per linear meter step.

Rapid Installation

- Always use Heat Shrink Tubing Thin Wall, 2:1 Shrink Ratio to seal connections between profile lead and your main wiring.

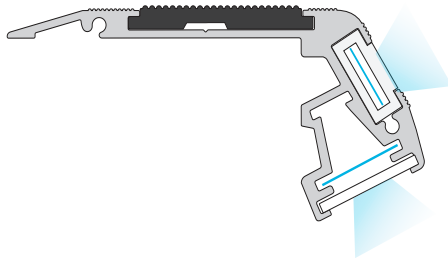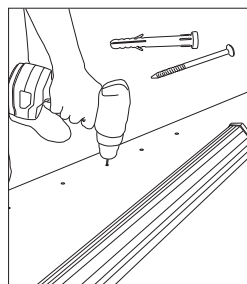- To fix profile on surface, we recommend using 1/4 x 2 1/4 screw with nylon anchor every 10cms / 3.93 inches.

For step by step installation process, please please refer to our installation manual guide.

SG-MAX-DUO Dimensions

* All measurements in mm

StepGuard®

LightTape INSIDE
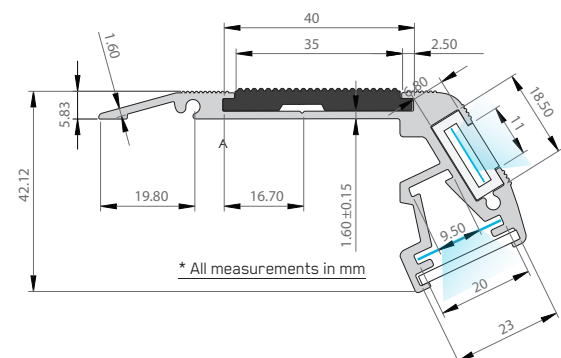
StepGuard™ Classic Duo
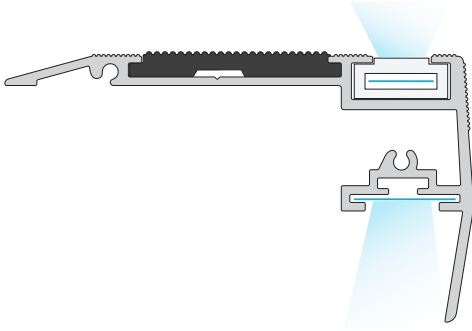
SG-AH-DUO: Two Light Tape® lamps

Our classic series profile is based on a traditional design where the light source was never pointed towards the screen for fear of glare. Historically the standard design was for only up and down illumination.

The AH-DUO version utilizes the 'on-top' and 'down low' track locations for dual illumination. The Light Tape will not reflect in 3D glasses or cause any glare. Like a laser, the light will be crisp on the step but will not reach the ceiling, nor the patron.

Recommended for flat floors or low pile carpet venues.

Design Features

- Arrives Plug & Play ready for installation, IP65 rated
- Illuminated by two Light Tape® Electroluminescent lamp
- Aluminum profile length tolerance: +/- 3mm
- Extremely energy efficient: 1 /2 watt per meter
- Fully compliant - TUV IECEE IP65 certified
- Aluminum profile with non-slip insert on top
- Screws into step for quick installation
- Mechanically fastened end caps, not glued

System and Parts

Rubber / PVC Anti slip insert

Light Tape® 1/4"

Light Tape® 1/2"

Aluminum profile
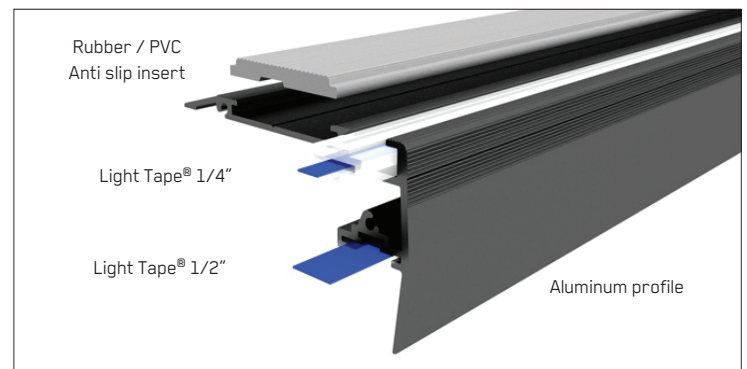
How to Order

- Part Number - SG-AH-DUO
- For a basic quote, we need the number of steps per cinema and average width per step to determine power layout. We also offer a service where we will go through architectural files to determine what is required for the installation.
- For final sign-off we will verify color of Light Tape®, on-site step widths, and which side of step for electrical connection based on plan.
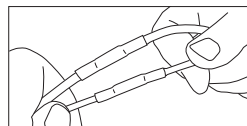
Available Colors

- No glare, completely uniform light with no heat
- 1/2 watt per meter. 10% of LEDs at same brightness
- Only 6 milliamps of current total per one meter step

Rapid Installation

- Always use Heat Shrink Tubing Thin Wall, 2:1 Shrink Ratio to seal connections between profile lead and your main wiring.
- To fix profile on surface, we recommend using 1/4 x 2 1/4 screw with nylon anchor every 10cms / 3.93 inches.

For step by step installation process, please please refer to our installation manual guide.

SG-AH-DUO Dimensions

40
35 ±0.60
18.60
11 ±0.46
6
54.70
19.80
50.30 ±0.36
9.60
* All measurements in mm
13.90
1.90
88 ±0.60
20.70

IECEE · Made in USA · c UL US · CE · RoHS · 300KG · IP40 · IP65

StepGuard®

StepGuard™ Retro Duo

SG-RET-DUO: Two Light Tape® lamps

The Retro Series is designed for retrofits and refurbishments. Older venues that show the wear with dilapidated concrete step nosing and probably sporting plush carpet flooring.

The Retro Duo StepGuard™ is designed for a full illumination experience. With one 1/4" Light Tape® on top and one 1/2" Light Tape(r) illuminating down low.

The anchor point on top of the Retro is purposefully shifted towards the back to ensure anchoring in terra firma.

Design Features

- Arrives Plug & Play ready for installation, IP65 rated
- Illuminated by two Light Tape® Electroluminescent lamp
- Aluminum profile length tolerance: +/- 3mm
- Extremely energy efficient: 1 /2 watt per meter
- Fully compliant - TUV IECEE IP65 certified
- Aluminum profile with non-slip insert on top
- Screws into step for quick installation
- Mechanically fastened end caps, not glued

System and Parts

Rubber / PVC
Anti slip insert

Rigid PVC insert
Light Tape® 1/4"

Light Tape® 1/2"

Acrilyc Lens

Aluminum profile
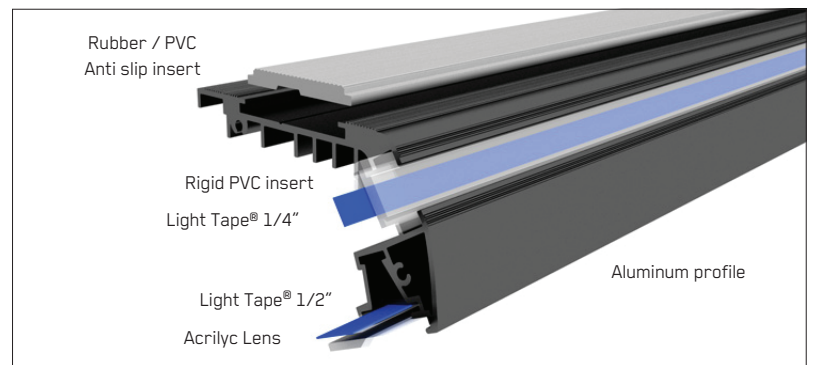
How To Order

- Part Number - SG-RET-DUO
- For a basic quote, we need the number of steps per cinema and average width per step to determine power layout. We also offer a service where we will go through architectural files to determine what is required for the installation.
- For final sign-off we will verify color of Light Tape®, on-site step widths and which side of step for electrical connection based on plan.
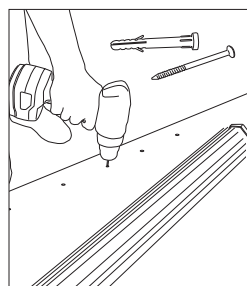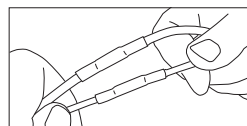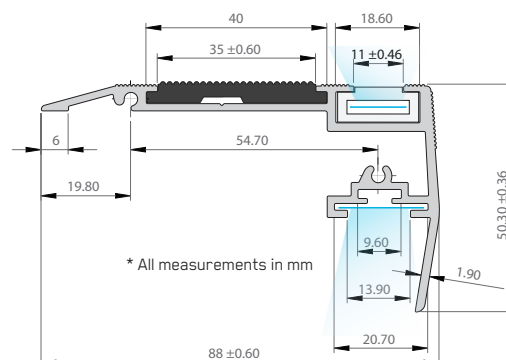
Available Colors

- No glare, completely uniform light with no heat.
- 1/2 watt per meter. 10% of LEDs at same brightness.
- Only 6 milliamps of current per linear meter step.

Rapid Installation

- Always use Heat Shrink Tubing Thin Wall, 2:1 Shrink Ratio to seal connections between profile lead and your main wiring.

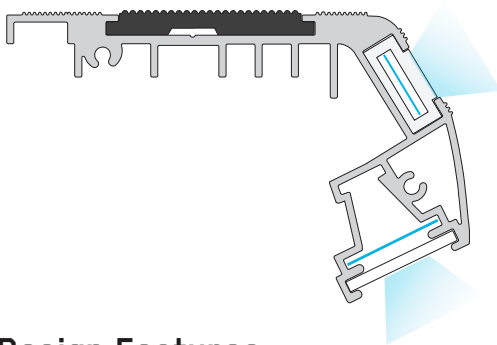- To fix profile on surface, we recommend using 1/4 x 2 1/4 screw with nylon anchor every 10cms / 3.93 inches.

For step by step installation process, please please refer to our installation manual guide.

SG-RET-DUO Dimensions

* All measurements in mm
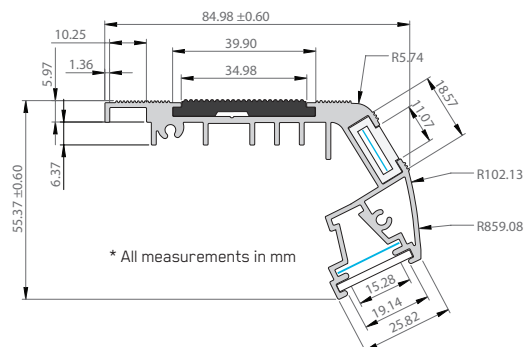
StepGuard™ Max Life Safety

SG-MAX-HB: LED lamps facing down
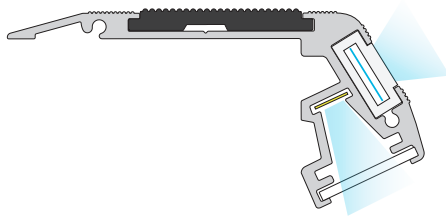
Designed for an immersive experience in mind with another level of safety, especially for public venues or government facilities. It is possible to swap the Light Tape® down light and go with a High Bright LED to illuminate each stair riser.

The MAX Design will help to eliminate the light cast forward with our novel aluminum internal light guide. You will not be able to see the light source while seated.

The illumination from the LEDs will more than meet any life safety illumination codes. The MAX Life Safety design is recommended for flat floors or low pile carpet venues..

Design Features:

- Arrives Plug & Play ready for installation, IP65 rated
- Illuminated by Light Tape® Electroluminescent lamp
- Aluminum profile length tolerance: +/- 3mm
- Extremely energy efficient: 1 /4 watt per meter
- Fully compliant - TUV IECEE IP65 certified
- Aluminum profile with non-slip insert on top
- Screws into step for quick installation.
- Mechanically fastened end caps, not glued

System and Parts

Rubber / PVC Anti slip insert

Grey PVC Mini Anti slip insert

LEDs

Aluminum profile

Acrilyc Lens
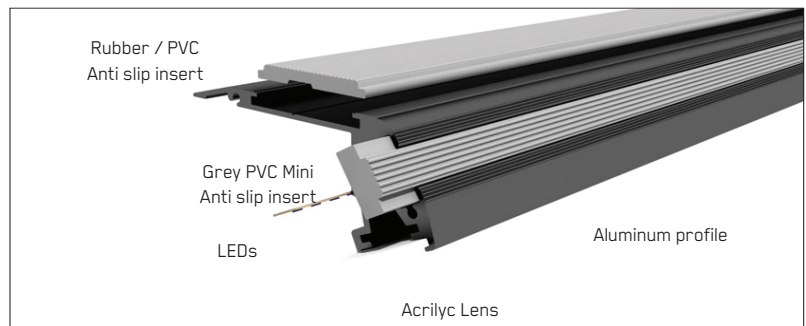
How to Order

- Part Number - SG-MAX-HB

- For a basic quote, we need the number of steps per cinema and average width per step to determine power layout. We also offer a service where we will go through architectural files to determine what is required for the installation.

- For final sign-off we will verify color of Light Tape®, on-site step widths and which side of step for electrical connection based on plan.
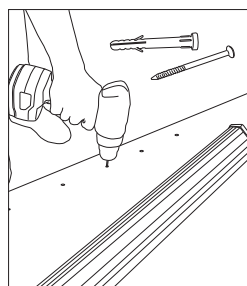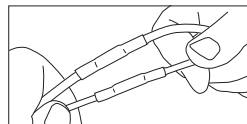
- Designed to exceed 0.2 foot candles for Life Safety Codes
- 4.8 watts per meter. 90% more than Light Tape EL Lamps.
- 200 milliamps of current per linear meter step.

Rapid Installation

- Always use Heat Shrink Tubing Thin Wall, 2:1 Shrink Ratio to seal connections between profile lead and your main wiring.

- To fix profile on surface, we recommend using 1/4 x 2 1/4 screw with nylon anchor every 10cms / 3.93 inches.
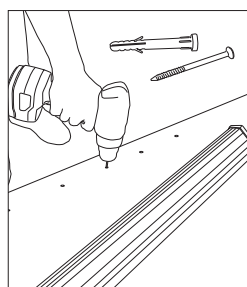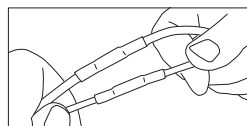
For step by step installation process, please please refer to our installation manual guide.

SG-MAX-HB Dimensions

40
35
2.50
1.60
6.80
5.83
18.50
11
42.12
19.80
16.70
1.60 ±0.15
9.50
20
23
A

* All measurements in mm

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StepGuard®

LightTape® INSIDE

StepGuard™ Max Life Safety Duo

SG-MAX-DUO-HB: Light Tape® up and LEDs down

Designed for an immersive experience in mind with another level of safety, especially for public venues or government facilities. It is possible to swap the Light Tape® down light and go with a High Bright LED to illuminate each stair riser.

The MAX Duo Design has not only a downlight, but also has Light Tape on the nose at a 45 degree angle. The top light sources is not visible when seated.

The illumination from the LEDs will more than meet any life safety illumination codes. The MAX Life Safety design is recommended for flat floors or low pile carpet venues.

Design Features:

- Arrives Plug & Play ready for installation
- Illuminated by one Light Tape® Electroluminescent lamp and also a LED down low.
- Aluminum profile length tolerance: +/- 3mm
- Energy efficient: 5 watt per meter total
- Fully compliant - TUV IECEE IP65 certified
- Aluminum profile with non-slip insert on top
- Screws into step for quick installation
- Mechanically fastened end caps, not glued

System and Parts

Rubber / PVC Anti slip insert

Light Tape® 1/4"

LEDs

Acrilyc Lens

Aluminum profile

How to Order

- Part Number: SG-MAX-DUO-HB
- For a basic quote, we need the number of steps per cinema and total meters of profile to determine power requirements.
- We also offer a service where we will go through architectural files to determine layout and what is required for the installation.
- For final sign-off we will need colour of Light Tape®, each step length and which side of step for electrical connection.

- No glare, completely uniform light with no heat.
- 5 watts per meter.
- Only 203 milliamps of current per linear meter step.

SG-MAX-DUO-HB Dimensions

40
35
2.50
1.60
5.83
42.12
19.80
16.70
1.60 ±0.15
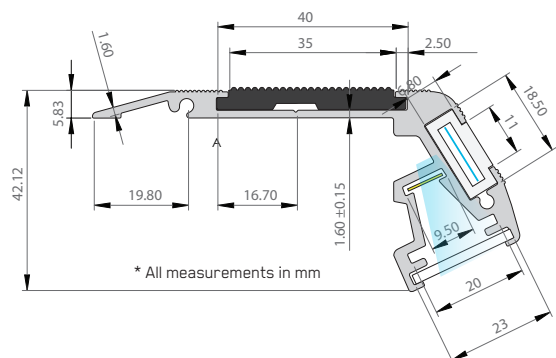18.50
11
9.50
20
23

* All measurements in mm

Rapid Installation

- Always use Heat Shrink Tubing Thin Wall, 2:1 Shrink Ratio to seal connections between profile lead and your main wiring.

- To fix profile on surface, we recommend using 1/4 x 2 1/4 screw with nylon anchor every 10cms / 3.93 inches.
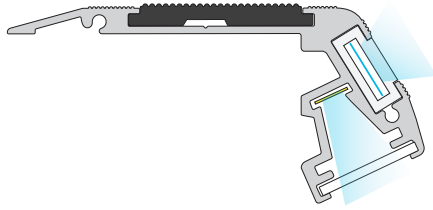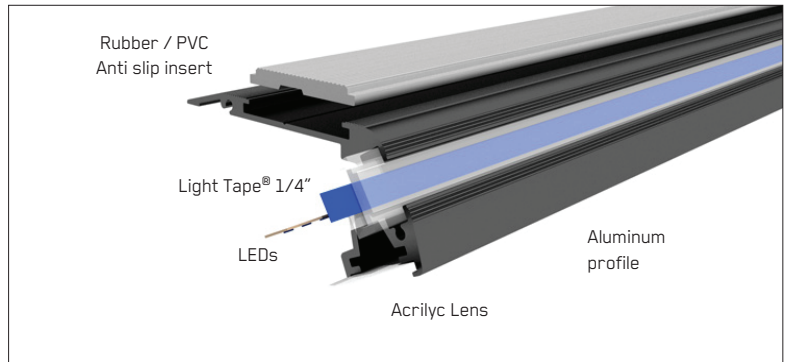
For step by step installation process, please please refer to our installation manual guide.

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StepGuard®

StepGuard™ Classic Life Safety

Design Features

- Arrives Plug & Play ready for installation.
- Illuminated by High Bright LEDs
- Aluminum profile length tolerance +/- 3mm
- Energy efficient: 4.8 watts per meter.
- Fully compliant - UL certified LEDs and other certs.
- Aluminum profile length tolerance: +/- 3mm
- Screws into step for quick installation
- Mechanically fastened end caps, not glued

SG-AH-HB: Downlight only with LEDs

The StepGuard™ Classic design traditionally employed LEDS in the downlight and uplight position. We prefer Light Tape in the top. But we have improved the quality and robustness of traditional profiles with a fully integrated stair tread system.

Many venues are creating an immersive experience with the goal to eliminate all visible light sources, focusing on indirect lighting. Shifting only to dimmable down-lighting. The StepGuard™ Classic can be dimmed but also delivers high brightness sometimes required in public venues.

Recommended for flat floors or low pile carpet venues. The LEDs deliver high focused brightness on the stair face. Easily meeting the 0.2 foot candle codes when required in government facilities.

System and Parts

Rubber / PVC Anti slip insert

Grey PVC Mini Anti slip insert

LEDs

Aluminum profile

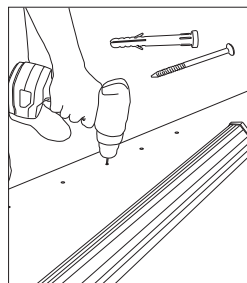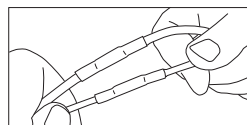## How to Order

- Part Number: SG-AH-HB
- For a basic quote, we need the number of steps per cinema and total meters of profile to determine power requirements.
- We also offer a service where we will go through architectural files to determine layout and what is required for the installation.
- For final sign-off we will need colour of Light Tape®, each step length and which side of step for electrical connection.
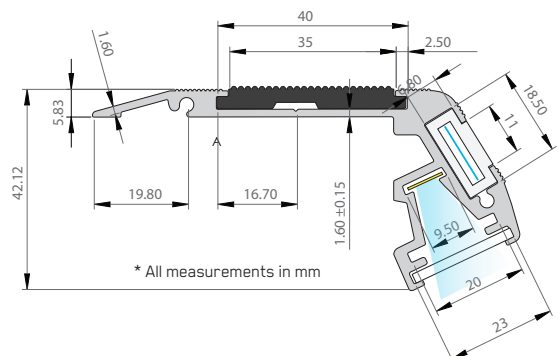
Rapid Installation

- Always use Heat Shrink Tubing Thin Wall, 2:1 Shrink Ratio to seal connections between profile lead and your main wiring.

- To fix profile on surface, we recommend using 1/4 x 2 1/4 screw with nylon anchor every 10cms / 3.93 inches.
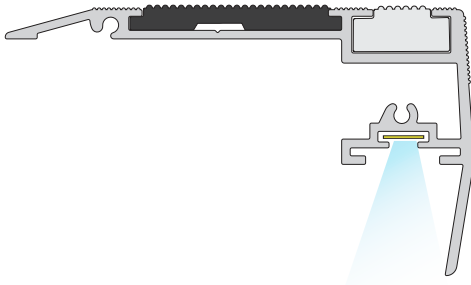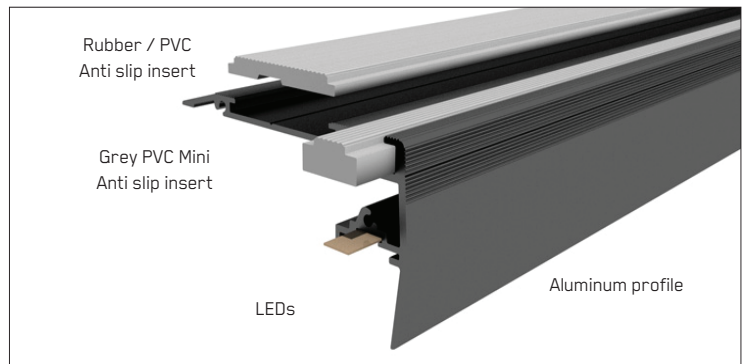

- No glare, completely uniform light with no heat.
- 4.8 watts per meter.
- Only 200 milliamps of current per linear meter step.

SG-AH-HB Dimensions

40
35 ±0.60
18.60
11 ±0.46
6
54.70
19.80
50.30 ±0.36
9.60
1.90
13.90
* All measurements in mm
20.70
88 ±0.60

StepGuard®

LightTape® INSIDE

StepGuard™ Classic Life Safety Duo

Design Features:

- Arrives Plug & Play ready for installation.

- Illuminated by Light Tape EL lamps and High Bright LEDs

- Aluminum profile length tolerance +/- 3mm

- Energy efficient: 5 watts per meter.

- Fully compliant - UL certified LEDs and other certs.

- Aluminum profile length tolerance: +/- 3mm

- Screws into step for quick installation

- Mechanically fastened end caps, not glued

SG-AH-DUO-HB: Light Tape® up and LEDs down

The StepGuard™ Classic design traditionally employed LEDS in the down-light and uplight position. We prefer Light Tape in the top. But we have improved the quality and robustness of traditional profiles with a fully integrated stair tread system.

Many venues are creating an immersive experience with the goal to eliminate all visible light sources, focusing on indirect lighting. Shifting only to dimmable down-lighting. The StepGuard™ Classic can be dimmed but also delivers high brightness sometimes required in public venues.

Recommended for flat floors or low pile carpet venues. The LEDs deliver high focused brightness on the stair face. Easily meeting the 0.2 foot candle codes when required in government facilities.

System and Parts

Rubber / PVC Anti slip insert

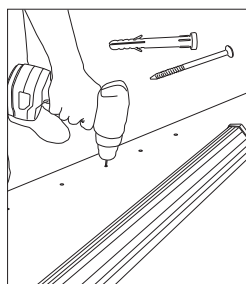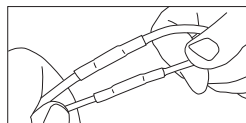Light Tape® 1/4"

LEDs

Aluminum profile

How to Order

- Part Number - SG-AH-DUO-HB

- For a basic quote, we need the number of steps per cinema and total meters of profile to determine power requirements.

- We also offer a service where we will go through architectural files to determine layout and what is required for the installation.

- For final sign-off, we will need color of Light Tape®, each step length and which side of step for electrical connection.
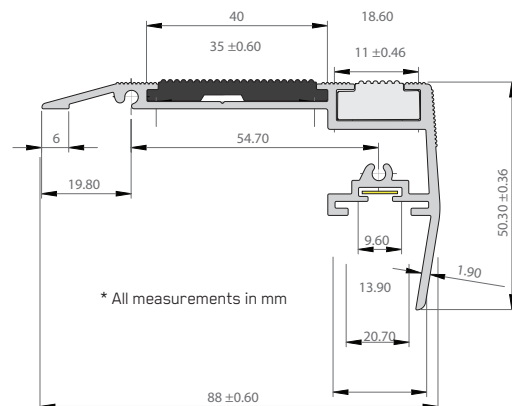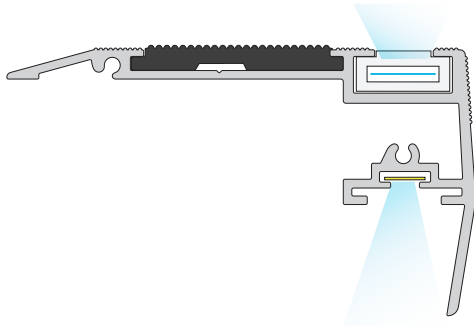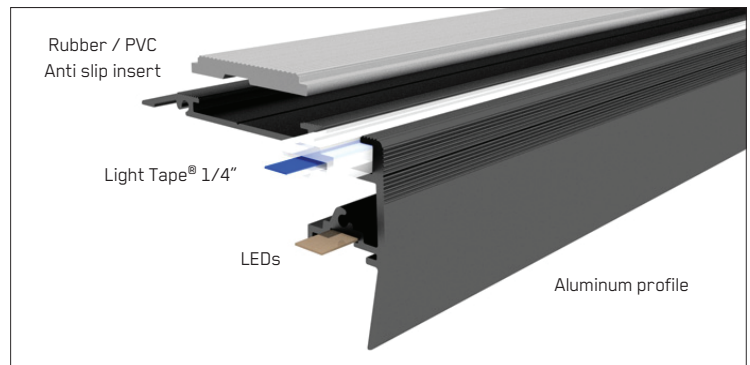
Rapid Installation

- Always use Heat Shrink Tubing Thin Wall, 2:1 Shrink Ratio to seal connections between profile lead and your main wiring.

- To fix profile on surface, we recommend using 1/4 x 2 1/4 screw with nylon anchor every 10cms / 3.93 inches.

For step by step installation process, please please refer to our installation manual guide.

- **High bright down illumination to exceed safety codes**
- **5 watts per meter.**
- **Only 203 milliamps of current per linear meter step.**

SG-AH-DUO-HB Dimensions

40
18.60
35 ±0.60
11 ±0.46
6
54.70
19.80
9.60
50.30 ±0.36
13.90
* All measurements in mm
1.90
88 ±0.60
20.70

IECEE Made in USA cULus CE RoHS 500KG IP40 IP65

StepGuard®
Advanced EL Lighting System.
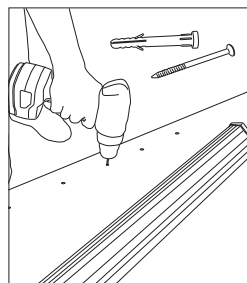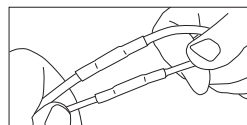
Aisle, Wayfinding, and Accent Illumination

designed for
LightTape

WallGuide™ Direct View

SG-WG-OT: Light Tape® shining up

Our WallGuide™ system is designed to be mounted on the wall to provide navigation illumination for entrance ways and stairs.

WallGuide™ with Light Tape® offers the perfect amount of light for navigation while preserving an immersive environment. With no glare and fully dimmable, Light Tape®, you just have to follow the glowing line.

The SG™ WallGuide™ design is recommended for mounting on walls in sections. Then feeding Light Tape® lamp in a channel specifically designed in long lengths for a continuous illumination.

Design Features

- Profile arrives in sections up to 3 meters in length.

- Illuminated by one Light Tape® Electroluminescent lamp.

- Only one electrical connection required at beginning of profile with no termination connection at other end.

- Aluminum profile length +/-3mm.

- Extremely energy efficient: 1/2 a watt per meter

- Screwed into wall and then hung using rear mount channel.

- End caps as well as corner caps provided for transitions.

System and Parts

Clear PVC insert

Light Tape® 1/4"

Aluminum profile
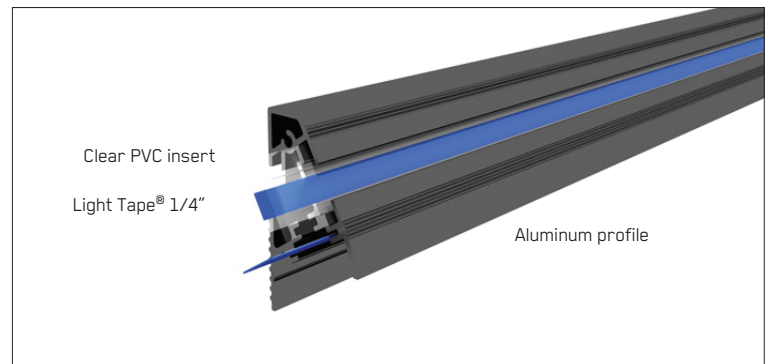
How to Order

- Part Number: SG-WG-OT

- For a basic quote, we need the total length of profile needed per entrance or stairway for us to estimate materials and power.

- We also offer a service where we will go through architectural files to determine layout and what is required for the installation.

Available Colors

- ● **Even glowing light line to follow for navigation**
- ● **1/2 a watt and less than 6 milliamps per meter**
- ● **Absolutely no glare, completely crisp with no light pollution**
- ● **Long lengths of up to 100 feet without a break in light.**
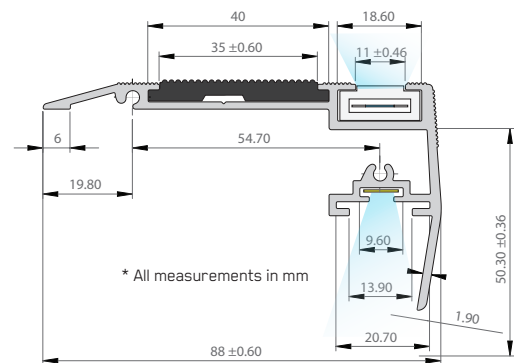
Rapid Installation

- Always use Heat Shrink Tubing Thin Wall, 2:1 Shrink Ratio to seal connections between profile lead and your main wiring.

- To fix profile on surface, we recommend using 1/4 x 2 1/4 screw with nylon anchor every 10cms / 3.93 inches.
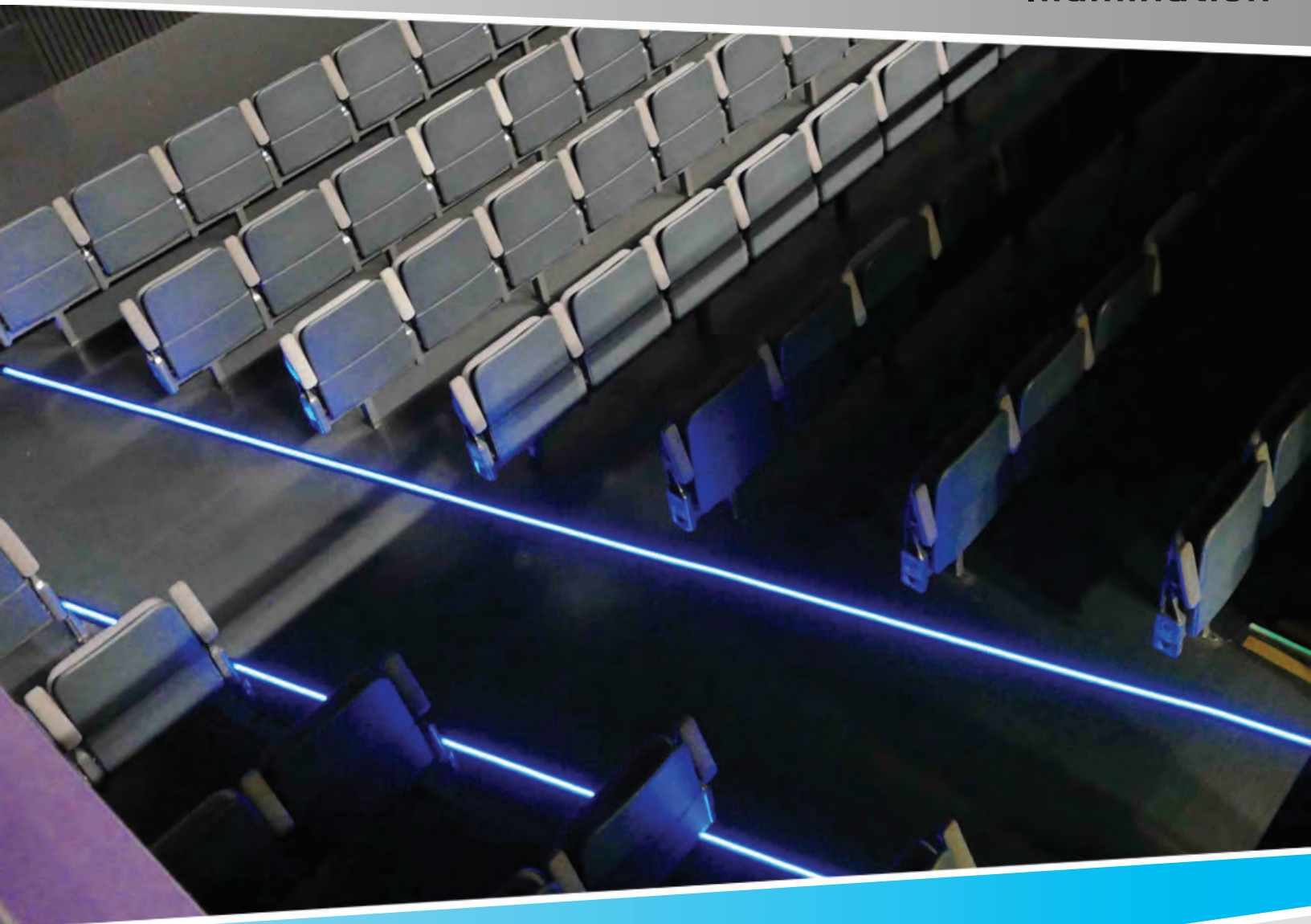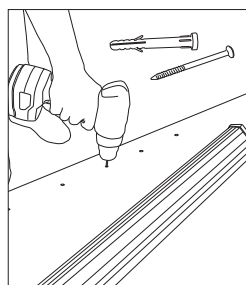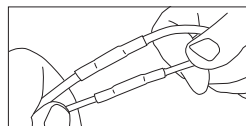
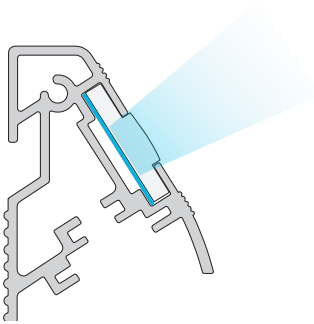*For step by step installation process, please please refer to our installation manual guide.*

SG-WG-OT Dimensions

* All measurements in mm

StepGuard®

LightTape® INSIDE
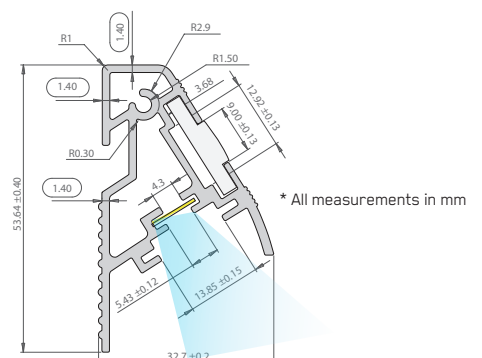
WallGuide™ Immersive
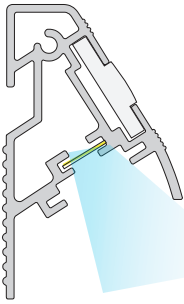
SG-WG-DL: Light Tape® shining down

Our WallGuide™ system is designed to be mounted on the wall to provide navigation illumination for entrance ways and stairs.

WallGuide™ with Light Tape® offers the perfect amount of light for navigation while preserving an immersive environment. With no glare or bounce off the carpet, the viewing screen is protected from the light source. The light illuminates the floor but not the venue.

The SG™ WallGuide™ design is recommended for mounting on walls in sections. Then feeding our Light Tape® in a channel specifically designed in long lengths of continuous illumination.

Design Features

- Profile arrives in sections up to 3 meters in length.

- Illuminated by one Light Tape® Electroluminescent lamp.
- Only one electrical connection required at beginning of profile with no termination connection at other end.

- Aluminum profile length +/-3mm.
- Extremely energy efficient: 1/2 a watt per meter

- Screwed into wall and then hung using rear mount channel.

- End caps as well as corner caps provided for transitions.

System and Parts

Clear PVC insert

Aluminum profile

Light Tape® 1/2"

How to Order

- Part Number: SG-WG-HB

- For a basic quote, we need the total length of profile needed per entrance or stairway for us to estimate materials and power.

- We also offer a service where we will go through architectural files to determine layout and what is required for the installation.

Available Colors

- Completely even floor illumination with no glare
- 1/2 a watt per meter of consumption, less than 6 mAmps
- Insert in top location provides additional navigation guidance

Rapid Installation

- Always use Heat Shrink Tubing Thin Wall, 2:1 Shrink Ratio to seal connections between profile lead and your main wiring.

- To fix profile on surface, we recommend using 1/4 x 2 1/4 screw with nylon anchor every 10cms / 3.93 inches.

For step by step installation process, please please refer to our installation manual guide.

SG-WG-HB Dimensions

* All measurements in mm
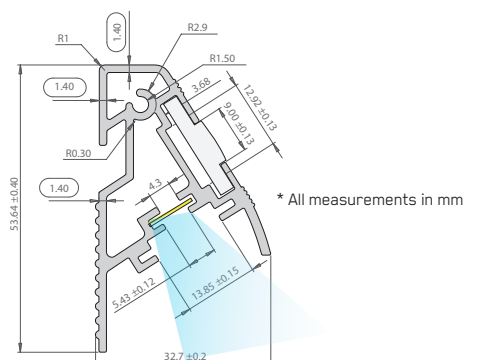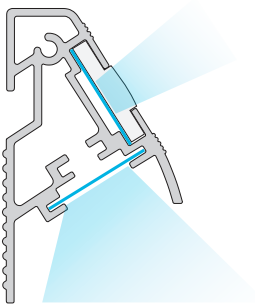
WallGuide™ Duo

SG-WG-DUO: Two Light Tape® lamps

Our WallGuide system is designed to be mounted on the wall to provide navigation illumination for entrance ways and stairs. The system has the ability for direct view and also immersive illumination, as well as dual illumination.

The SG-WG-DUO has one Light Tape® lamp in the bottom slot to provide a long continuous illuminated glow on the floor as a guide into a venue. As well as a Light Tape® top light for a visible guideline. without fear of glare.

The SG-WG-DUO design is recommended for mounting on walls in sections and then feeding one continuous Light Tape® lamp for navigation.

Design Features

- Profile arrives in sections up to 3 meters in length.
- Illuminated by two Light Tape® Electroluminescent lamps.
- Only one electrical connection required at beginning of profile with no termination connection at other end.
- Aluminum profile length +/-3mm.
- Extremely energy efficient: 1 watt per meter
- Screwed into wall and then hung using rear mount channel
- End caps as well as corner caps provided for transitions

System and Parts

Clear PVC insert

Light Tape® 1/4"

Light Tape® 1/2"

Aluminum profile
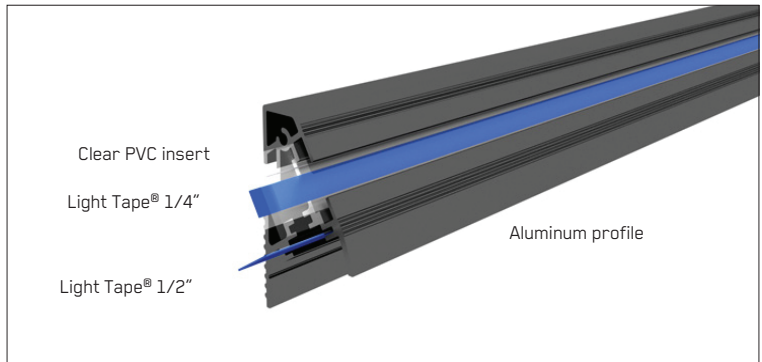
How to Order

- Part Number: SG-WG-DUO

- For a basic quote, we need the total length of profile needed per entrance or stairway for us to estimate materials and power.

- We also offer a service where we will go through architectural files to determine layout and what is required for the installation.

Available Colors

- No glare, completely uniform light with no heat.
- Perfect for high definition laser projection
- 1 watt per meter. 10% of LEDs at same brightness.
- Only 8 milliamps of current per linear meter step.

Rapid Installation

- Always use Heat Shrink Tubing Thin Wall, 2:1 Shrink Ratio to seal connections between profile lead and your main wiring.

- To fix profile on surface, we recommend using 1/4 x 2 1/4 screw with nylon anchor every 10cms / 3.93 inches.

For step by step installation process, please please refer to our installation manual guide.

SG-WG-DUO Dimensions

R1 1.40 R2.9

R1.50

1.40 3.68 12.92 ±0.13

9.00 ±0.13

R0.30

53.64 ±0.40

1.40 4.3

* All measurements in mm

5.43 ±0.12 13.85 ±0.15

32.7 ±0.2

StepGuard®

LightTape® INSIDE

WallGuide™ Life Safety

SG-WG-HB: High Bright LED shining down

Our WallGuide™ system is designed to be mounted on the wall to provide navigation illumination for entrance ways and stairs. The system has the ability for direct view and also immersive illumination.
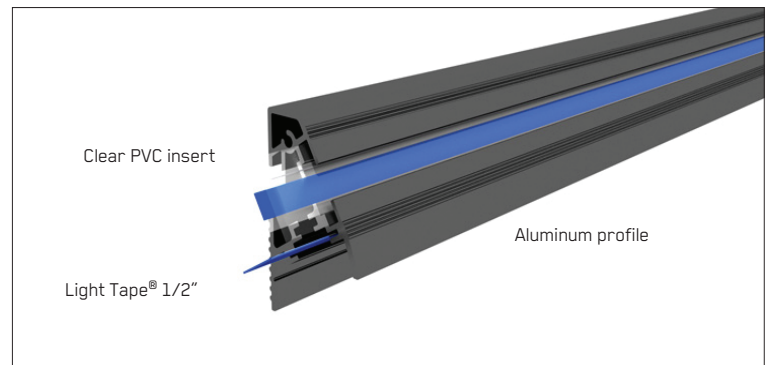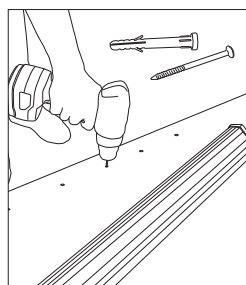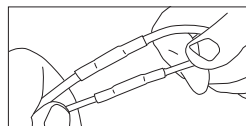
The SG™ WG HB has one row of high bright LEDs in the bottom slot to illuminate entrance way floor to meet local safety codes. Ideal for public or government facilities that require high brightness in entrance and hallways as for Life Safety compliance.

The SG™ WallGuide™ design is recommended for mounting on walls in sections and then feeding LED lamps in a channel specifically designed to house continuous LED strips for navigation.

Design Features

- Profile arrives in sections up to 3 meters in length.
- Illuminated by one Light Tape® Electroluminescent lamp.
- Only one electrical connection required at beginning of profile with no termination connection at other end.
- Aluminum profile length +/-3mm.
- Extremely energy efficient: 1/2 a watt per meter
- Screwed into wall and then hung using rear mount channel.
- End caps as well as corner caps provided for transitions.

System and Parts

Clear PVC insert

Aluminum profile

LEDs

How to Order

- Part Number: SG-WG-HB
- For a basic quote, we need the total length of profile needed per entrance or stairway for us to estimate materials and power.
- We also offer a service where we will go through architectural files to determine layout and what is required for the installation.

Available Colors

- Designed to illuminate walkways and minimize glare
- 5 to 10 watts per meter depending on LED choice
- Insert in top location provides additional navigation guidance
-

Rapid Installation

- Always use Heat Shrink Tubing Thin Wall, 2:1 Shrink Ratio to seal connections between profile lead and your main wiring.
- To fix profile on surface, we recommend using 1/4 x 2 1/4 screw with nylon anchor every 10cms / 3.93 inches.
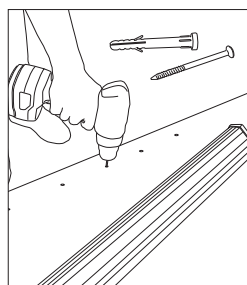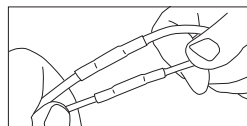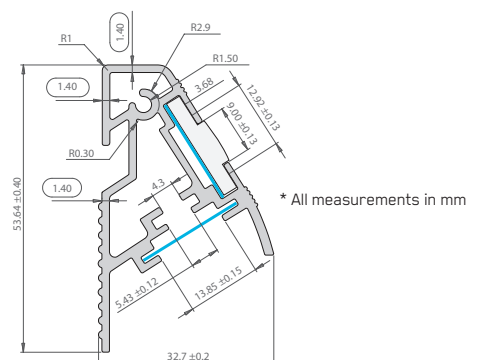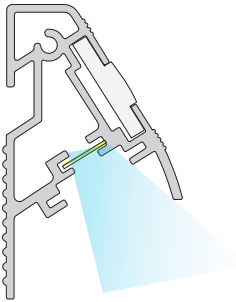
For step by step installation process, please please refer to our installation manual guide.

SG-WG-HB Dimensions

* All measurements in mm

StepGuard®

LightTape® INSIDE

StepGuard™ Max Life Safety Duo

SG-MAX-DUO-HB: Light Tape® up and LEDs down

Designed for an immersive experience in mind with another level of safety, especially for public venues or government facilities. It is possible to swap the Light Tape® down light and go with a High Bright LED to illuminate each stair riser.

The MAX Duo Design has not only a downlight, but also has Light Tape on the nose at a 45 degree angle. The top light sources is not visible when seated.

The illumination from the LEDs will more than meet any life safety illumination codes. The MAX Life Safety design is recommended for flat floors or low pile carpet venues.

Design Features:

- Arrives Plug & Play ready for installation
- Illuminated by one Light Tape® Electroluminescent lamp and also a LED down low.
- Aluminum profile length tolerance: +/- 3mm
- Energy efficient: 5 watt per meter total
- Fully compliant - TUV IECEE IP65 certified
- Aluminum profile with non-slip insert on top
- Screws into step for quick installation
- Mechanically fastened end caps, not glued

System and Parts

Rubber / PVC Anti slip insert

Light Tape® 1/4"

LEDs

Aluminum profile

Acrilyc Lens

How to Order

- Part Number: SG-MAX-DUO-HB
- For a basic quote, we need the number of steps per cinema and total meters of profile to determine power requirements.
- We also offer a service where we will go through architectural files to determine layout and what is required for the installation.
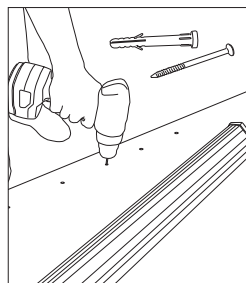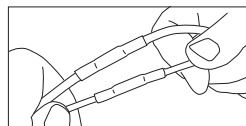- For final sign-off we will need colour of Light Tape®, each step length and which side of step for electrical connection.

- No glare, completely uniform light with no heat.
- 5 watts per meter.
- Only 203 milliamps of current per linear meter step.

Rapid Installation

- Always use Heat Shrink Tubing Thin Wall, 2:1 Shrink Ratio to seal connections between profile lead and your main wiring.

- To fix profile on surface, we recommend using 1/4 x 2 1/4 screw with nylon anchor every 10cms / 3.93 inches.

For step by step installation process, please please refer to our installation manual guide.

SG-MAX-DUO-HB Dimensions

* All measurements in mm

40
35
2.50
1.60
5.83
42.12
19.80
16.70
1.60 ±0.15
18.50
11
9.50
20
23

IECEE · Made in USA · c UL us · CE · RoHS · 300KG · IP40 · IP65

StepGuard®

LightTape® **INSIDE**

StepGuard™ Aisle Light
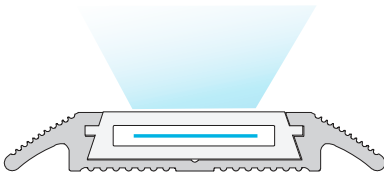
Design Features

- The StepGuard™ Aisle light profiles arrives in sections up to 3 meters in length and a continuous roll of Light Tape® inside a flexible rubber tube.

- IP65 rated to protect from spilled drinks.

- Utilizing our Snap-N-Light technology, a base channel is mounted first and then the roll of lighting inserted.

- Illuminated by one Light Tape® Electroluminescent lamp with only one electrical connection required at beginning of run with no termination at other end.

- Extremely energy efficient: 1/2 watt per meter at 1.25cm wide.

- Screwed into floor with lighting fitted into channel insert.

SG-WFL50: With 1/2" Light Tape®

The StepGuard™ Aisle lighting system is designed to be mounted on the floor and provide long linear accent lighting. A 1.25 cm wide Light Tape® electroluminescent light is utilized with continuous runs up to 20 meters with only one connection.

The SG-FL50 is a two part system with a base that is mounted directly to the floor in sections. Then, one continuous roll of Light Tape® is placed inside a flexible rubber sleeve and then inserted into the base, providing a water tight seal for the entire length.

The SG-FL50 can be dimmed to zero, and one transformer can control up to 200 meters of Light Tape®.

System and Parts

Clear flexible PVC insert

Black PVC profile

Light Tape® 1/2"

How To Order

- Part Number: SG-FL50

- For a basic quote, we need the total length of Light Tape® lighting per aisle that will be controlled together. We can then size the proper power supply to control your layout. It does not matter how many sections per power supply, just the total load.

- We also offer a service where we will go through architectural files to determine layout and what is required for the installation.
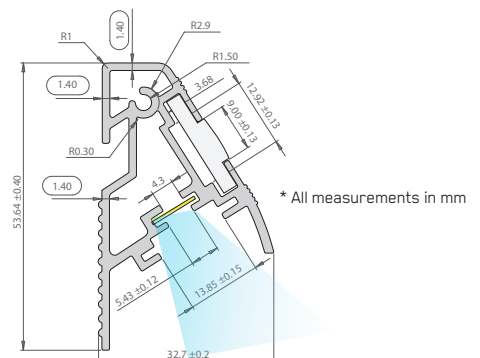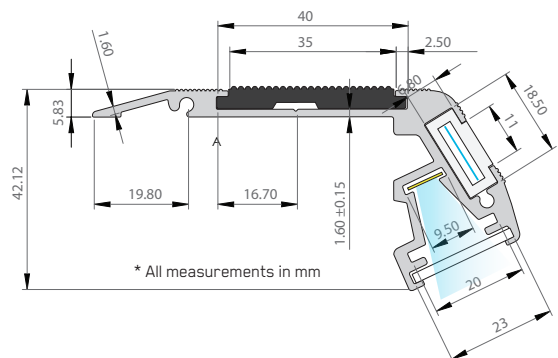
Rapid Installation

- Always use Heat Shrink Tubing Thin Wall, 2:1 Shrink Ratio to seal connections between profile lead and your main wiring.

- To fix profile on floor, we recom-mend using drywall type 10 x 1 1/4 screw with 5/16 nylon anchor every 50cms / 20 inches.

Available Colors

- No glare, completely uniform light with no heat.
- 1/2 watt and 6 miliamp per meter at 1.25cm width.
- Profile with Light Tape® is 6mm tall.

SG-FL50 Dimensions

27.0
24.1
2.0
.4
3.0
7.0
31.8

* All measurements in mm

12.4
31.9
2.0
1.5
7.1
8.7
37.5
56.8

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Single runs up to 25 meters 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)

61.0
11.50
61.0
59.0
11.50
59.0
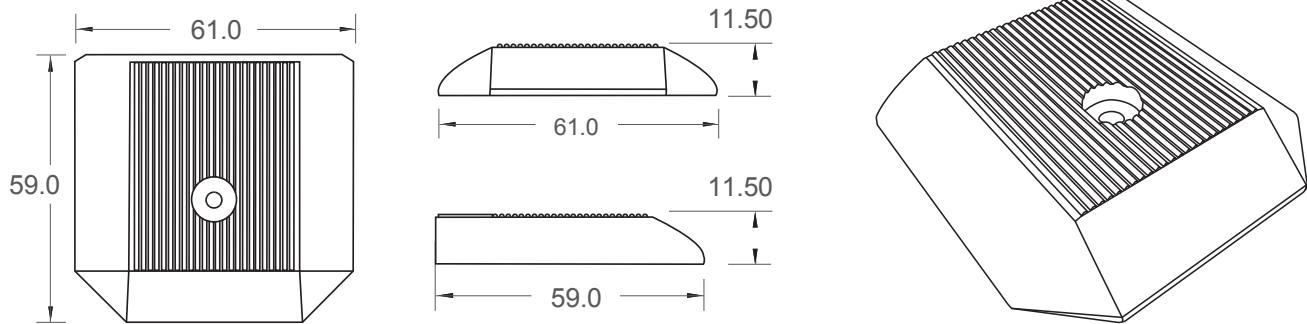
* All measurements in mm

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.

61.0
32.0
11.50
61.0
61.0
11.50
61.0
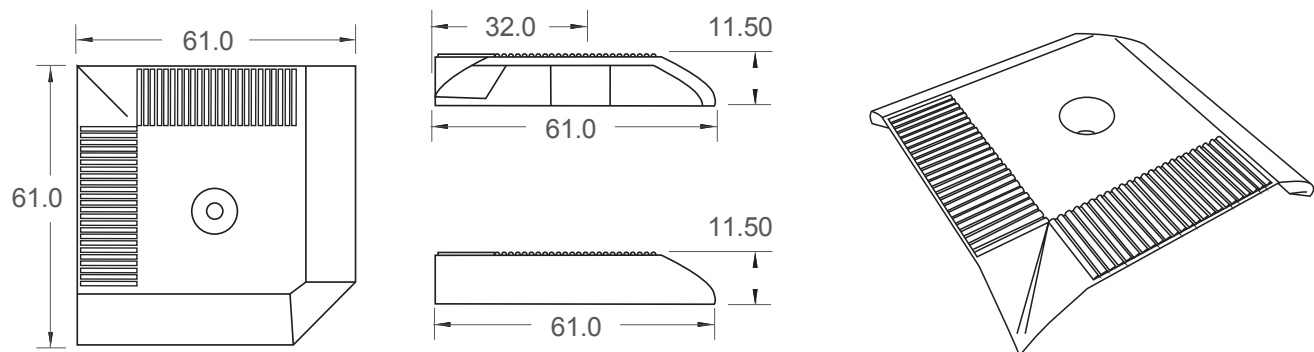
* All measurements in mm

Wiring setup for several segments with 90º angles

Main Wire ·············

Light Tape® Connector ——————

Main line starts along with first conector or first and second

PVC Channel

To Power Supply (Smart Driver™)
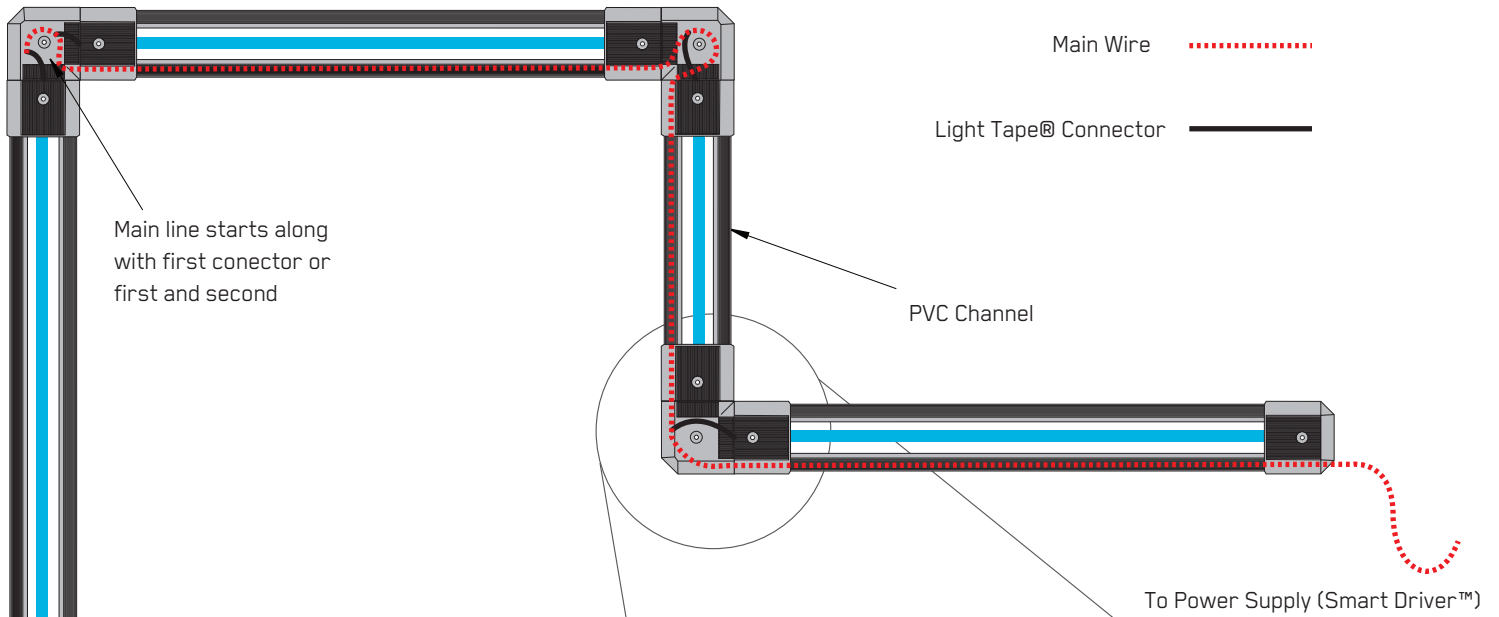
Detailed bottom view of 90º angle connection setup

Main wire goes all the way through channel, connectors should be located preferably at the corner end caps. Connections may vary and should be arranged based on your illumination setup on site.

90° Angle Cap

End Cap

End Cap

PVC Channel

PVC Channel

Channel Front View

Light Tape® Connector

PVC Channel

Main Wire
(May go either side of PVC channel)

StepGuard®
Advanced EL Lighting System.
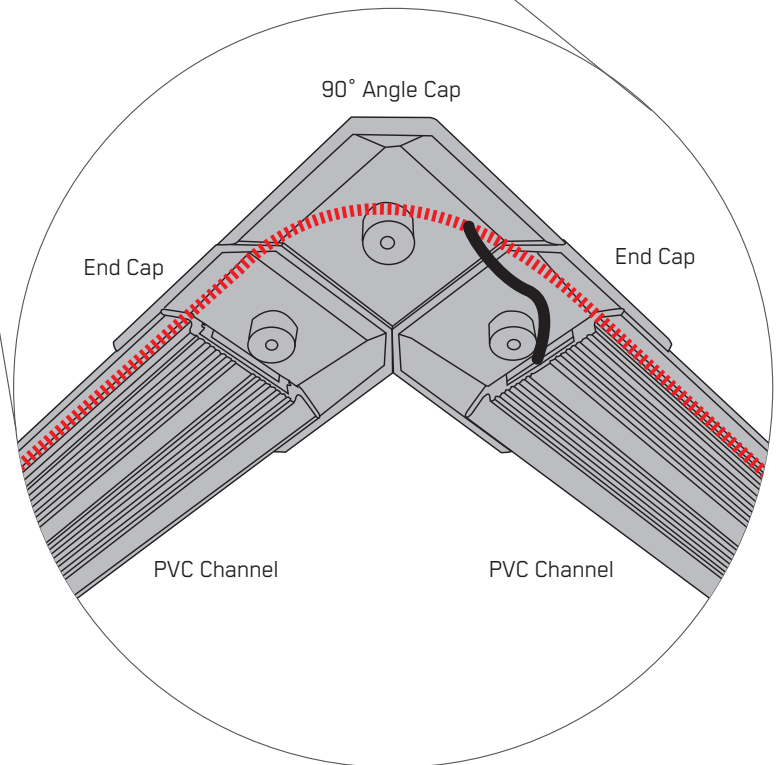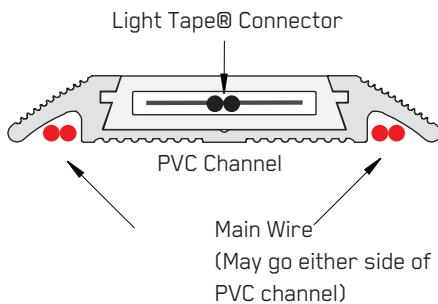
StepGuard™ Ambiance Series
Sleek design, perfect match.

StepGuard®

Light Tape® INSIDE
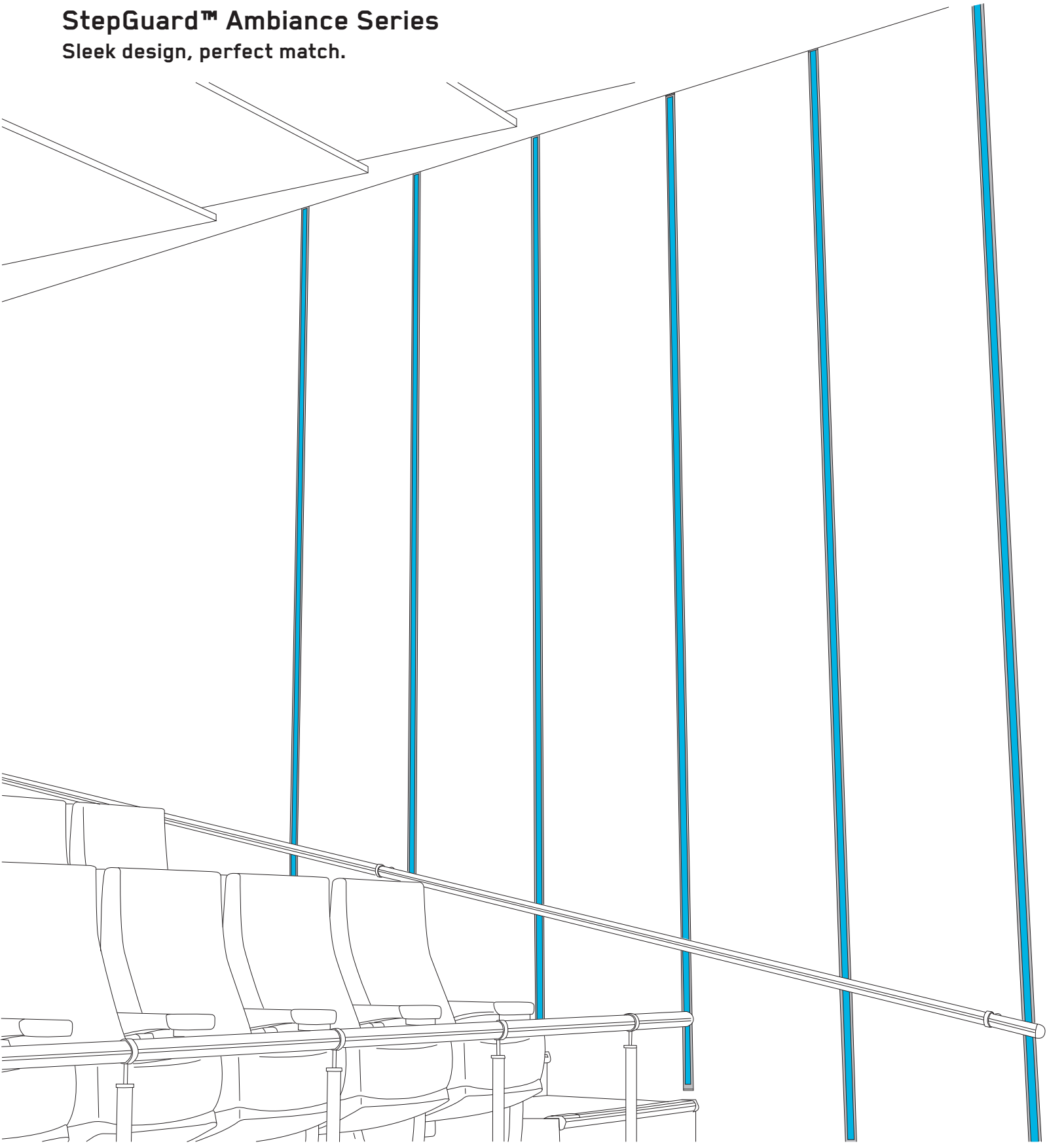
StepGuard™ Ambiance 100

SG-AMB-100: One Light Tape® lamp

The SG-AMB-100 System is designed to be mounted on the wall and provide long linear accent lighting. A 2.50 cm / 1 inch wide Light Tape® lamp is utilized with continuous runs up to 30.5 meters / 100 feet.

The StepGuard™ Ambiance 100 is a two part system with a base that is mounted directly to the wall in sections. Then, one continuous roll of Light Tape® is placed inside the channel with the quick Snap-N-Light™ lens placed over top.

Light Tape® can be dimmed to zero, and one transformer can control up to 100 meters / 330 feet of Light Tape®.
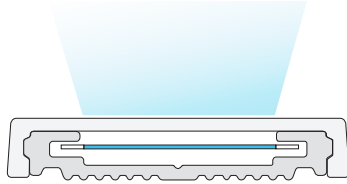
Design Features

- The SG-AMB-100 profile arrives in sections up to 3 meters in length, with a base, lens and end caps.
- Utilizing our Snap-N-Light™ technology, a base channel is mounted with a protective cover that snaps into place.
- Illuminated by one Light Tape® Electroluminescent lamp with only one electrical connection required at beginning of the profile with no termination at other end.
- Extremely energy efficient: 1 watt per meter at 2.50 cm wide.

System and Parts

Clear rigid PVC lens

Light Tape® 1"

Aluminum profile
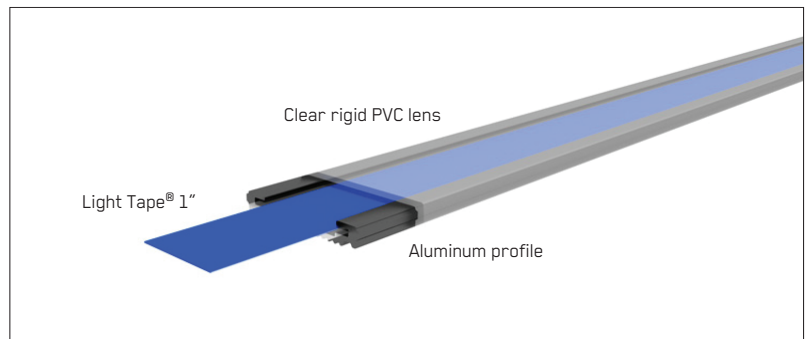
How to Order

- Part Number: SG-AMB-100

- For a basic quote, we need the total length of Light Tape®, and how you would prefer it to be controlled. We can then size proper power supply to control your layout. It does not matter how many sections per power supply, just the total load.

- We also offer a service where we will go through architectural files to determine layout and what is required for the installation.
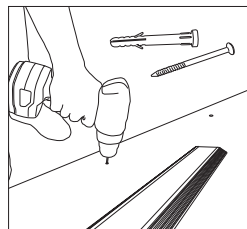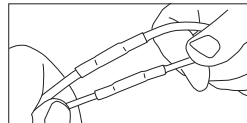
Available Colors
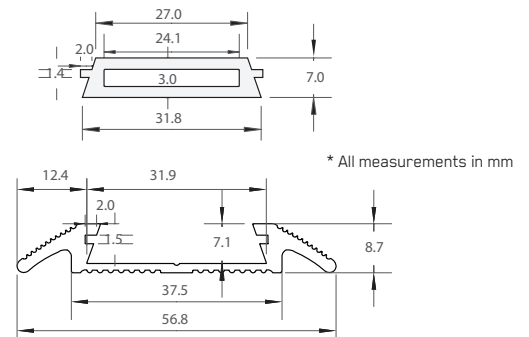

- No glare, completely uniform light with no heat.
- 1 watt and 24 miliamps per meter at 2.50 cm width.
- Profile with Light Tape® inside is less than 8mm tall.

Rapid Installation

- Always use Heat Shrink Tubing Thin Wall, 2:1 Shrink Ratio to seal connections between profile lead and your main wiring.

- To fix profile on wall, we recommend using drywall type 10 x 1 1/4 screw with 5/16 nylon anchor every 50cm TO 1 MT / 20-40 inches.

SG-AMB-100 Dimensions

45.22

7.81

4

26.03

1.42

4.48

2.09

6.39 ±0.20

39.30

40.86 ±0.36

* All measurements in mm

IECEE · TÜV Rheinland CERTIFIED · Made in USA · c UL us · CE · RoHS · 300KG · IP40 · IP65
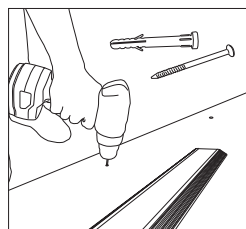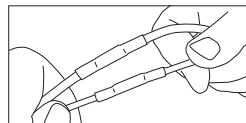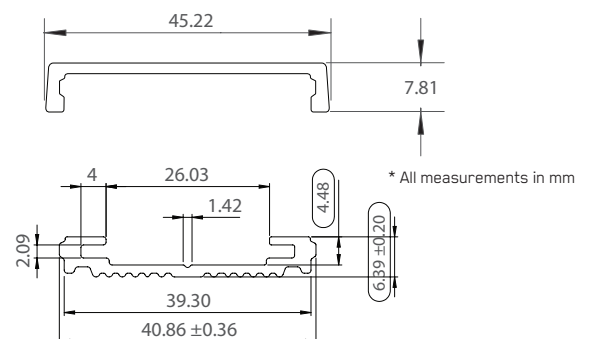
Installing StepGuard™ Ambiance is a SNAP!

Light Tape® is available in rolls of up to 45m for 100 series, and 23m for 200 series. The 2 meter base segments can be mounted side by side to create a continuous run to your specification. The Wall system is simple to install - just screw the base onto your wall, slide in the Light Tape®, push end caps in place and adjust the PVC clear lens on top with a soft push until you hear a click. It is as easy as 1, 2, 3!
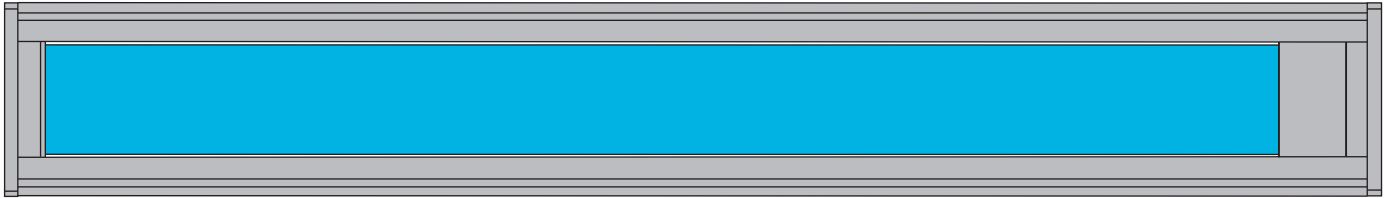
Mounting & Wiring Accesories (Ambiance 100)

Connector end cap

The connector end cap is made of Ebonite rubber and used to hide the connection. It allows cables to pass through the cap for an easy wiring setup (please refer to wiring diagram).

25.7
22.9
32.1
43.5
19.9
7.8
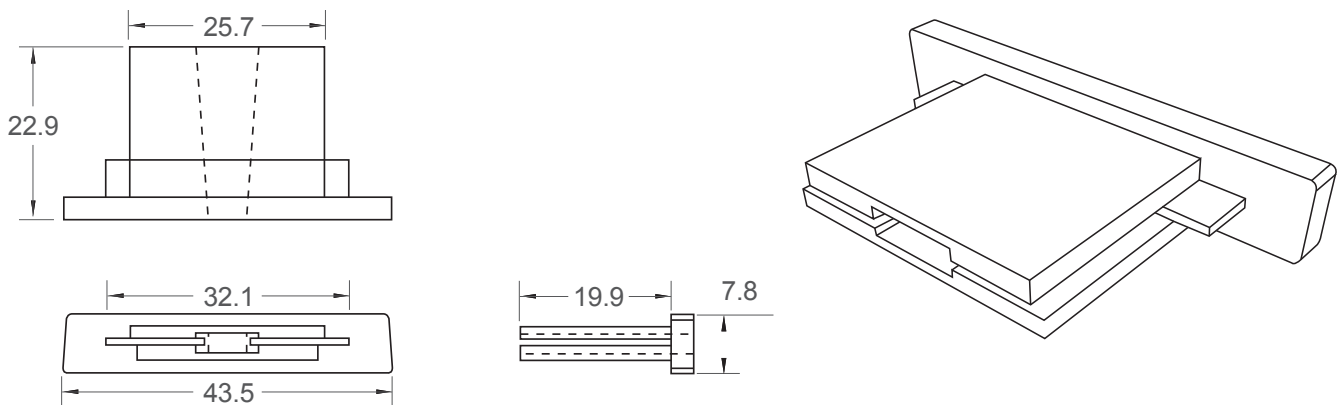
* All measurements in mm

End cap

The end cap is made of Ebonite rubber and used to close a lighting segment. Just push it on end and it is ready (please refer to wiring diagram for more details).

25.7
3.0
32.1
7.8
43.5
3.0
5.0

* All measurements in mm
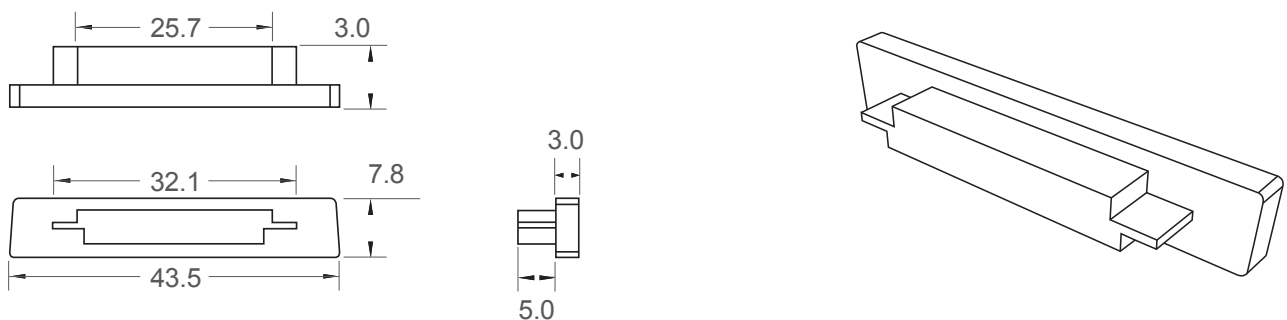
StepGuard®

Light Tape®
INSIDE

StepGuard™ AC1 Aisle / Seat Numbering

Design Features

- StepGuard® is exclusively made for Light Tape®

- Light Tape® Electroluminescent lamp

- Smart Driver™ Light Dimmable & DMX power source

- High Resistance injected PVC case, for heavy duty use.

- OSRAM 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 accessories for indoor use.
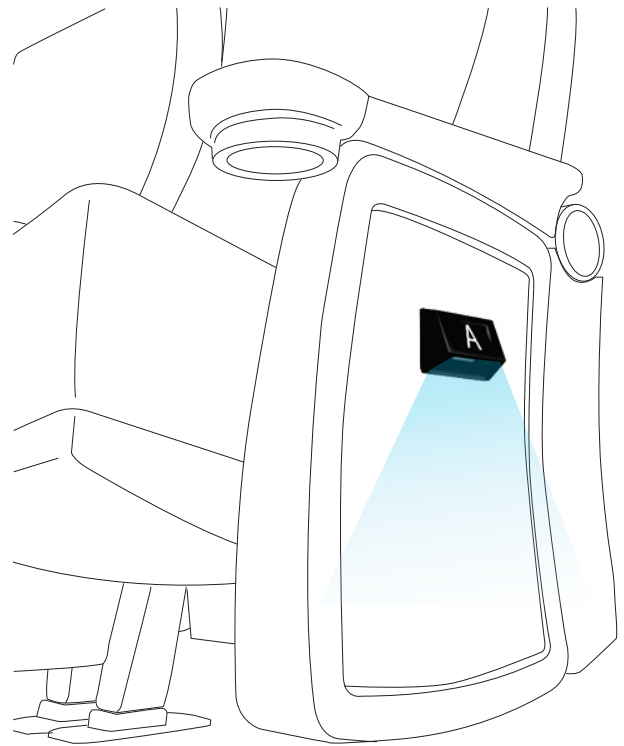
Technical Information

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. 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

Design Options

- StepGuard™ AC1
- StepGuard™ AC2

MADE FOR LIGHT TAPE®
StepGuard®
Advanced EL Lighting System
·QUALITY GUARANTEE·

StepGuard™ is exclusively made for Light Tape®

StepGuard™ SN / Step Row Number

Design 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 accessories for indoor use.

Technical Information

ABS Case / Polycarbonate Cover

- PVC base and cover case.

- Assembled and customized with sign or letter according to specification.

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

Design Options

- StepGuard™ SN

Available for:

- StepGuard™ 45

- StepGuard™ 30

- StepGuard™ Classic

- StepGuard™ Immersion

MADE FOR LIGHT TAPE®
StepGuard®
Advanced EL Lighting System.
• QUALITY GUARANTEE •

StepGuard™ is exclusively made for Light Tape®

StepGuard®
Advanced EL Lighting System.

LightTape®

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

OFF   ON

Natural Blue

OFF   ON

Media White

OFF   ON

Glacier White

OFF   ON

Electric Blue

OFF   ON

Yellow

OFF   ON

Amber
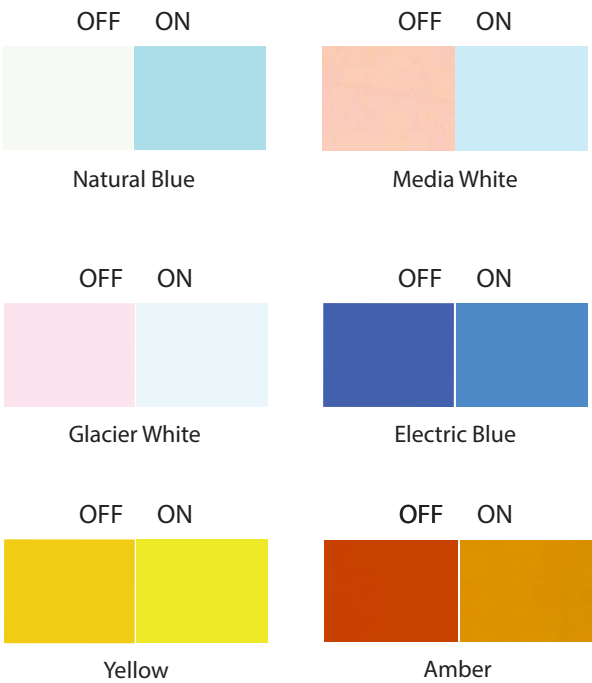
A	B	Inches
6.35mm	19.05mm	0.25
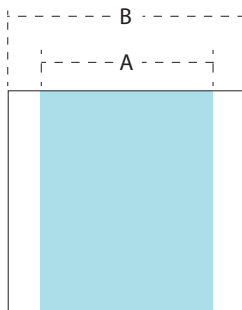
A= Illuminated width
B= Laminated width

Extreme Series

OFF   ON

Blue Green

OFF   ON

Caribbean Blue

OFF   ON

Purple

OFF   ON

Orange

OFF   ON

Rich Red

OFF   ON

International Red

OFF   ON

Pink

OFF   ON

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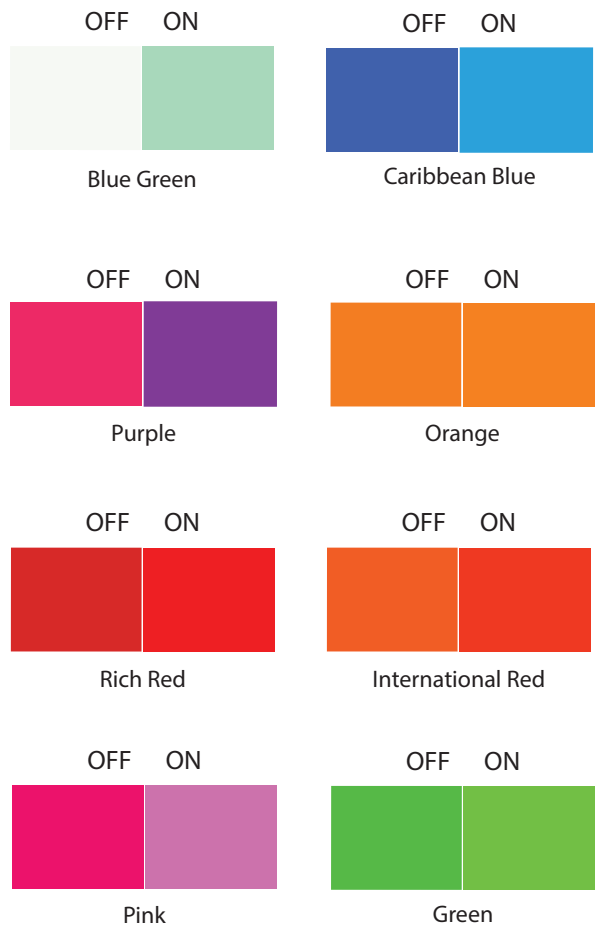
* The colors in this table are simulated and the final product may vary. If an exact color is required, we recommend seeing a physical sample. Custom colors and widths are available, but may be subject to minimum order quantities, set-up fees, and approval testing.

www.LightTape.com

Digital Smart Driver™ Power Supply

Digital Smart Driver™ power supplies are specifically engineered to illuminate Light Tape®. Whether 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.
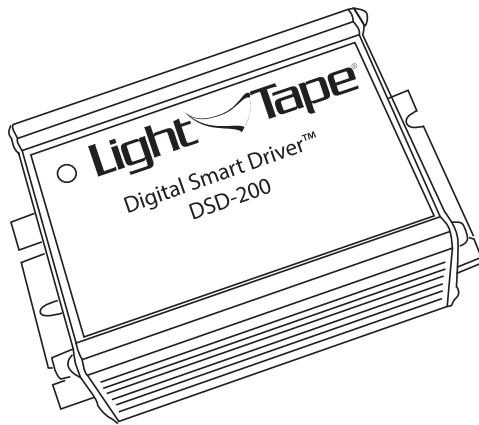
- Quiet
- Stylish compact design
- Rated input voltage 110 / 220 VAC
- Protection Class 1
- IP Degree 2x
- Worldwide voltage capacity
- Blink and Dimmer Switch
- Visual LED system status indicator
- Lightweight
- Short circuit and overload protection
- CE, UL y CSA compliant
- 0-10 dimming

Driver Ranges and Output

	Range		Input		Output
Driver Model	English System	Metric System	Ams	Watts	Max. Current, A
SD-8000	4000 - 8000 in²	25,806 - 51,612 cm²	3.50	420	3.8
BUS-DSD-4000	2000 - 4000 in²	25,806 - 51,612 cm²	3.50	420	3.8
DMX-DSD-4000	2000 - 4000 in²	12,903 - 25,806 cm²	1.5	145	2.1
DMX-DSD-2000	1000 - 2000 in²	6,451 - 12,903 cm²	1.0	110	1.2
DMX-DSD-1000	400 1000 in²	2,580 - 6,451 cm²	0.9	100	1.0
DMX-DSD-200	1 - 200 in²	6,5 - 1,290 cm²	0.5	12	0.15
DSD-200 D	1 - 200 in²	6,5 - 1,290 cm²	0.5	9	0.15
DSD-2000	1000 - 2000 in²	6,451 - 12,903 cm²	2.8	68	0.91
DSD-1000	400 - 1000 in²	2,580 - 6,451 cm²	0.9	97	0.32
DSD-400	200 - 400 in²	1,290 - 2,580 cm²	0.7	17	0.11
DSD-200	1 - 200 in²	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 pa rameters 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 .

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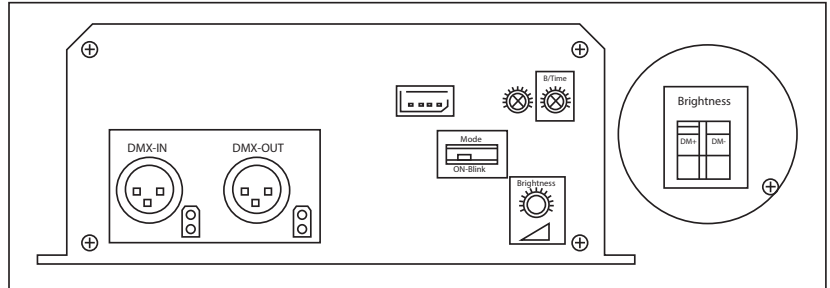
Driver Model	DMX	BLINK	BRIGHTNESS	0-10
SD-8000		X	X	
DSD 200 0-10 DIMMING			X	X
DSD 4000 DMX	X	X	X	X
DSD 1000 DMX	X	X	X	X
DSD 200 DMX	X	X	X	X
DSD 2000			X	X
DSD 1000			X	X
DSD 400			X	X
DSD 200			X	

Power Supply Dimmensions

Driver Model	Length		Width		Height		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
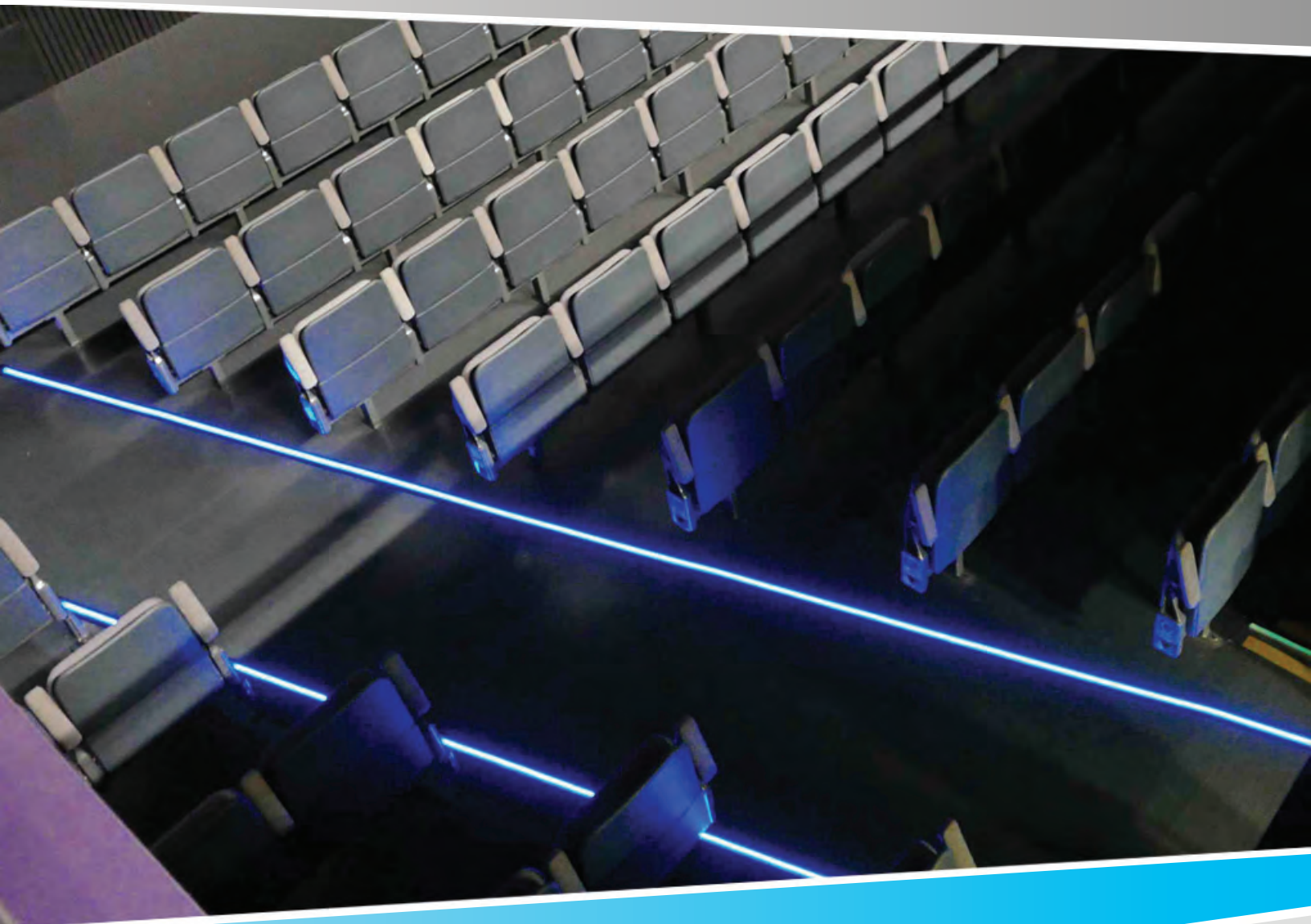
designed for
Light**Tape**

StepGuard® Advanced EL Lighting System.

BLAZE™ 100/200/300
LED Tape Light

Performance and value for everyday projects.
Our most popular tape light, available in a wide range of color temperatures and outputs.

Date

Project Notes

FEATURES

- 90+ CRI
- 12V and 24V platforms
- Can comply with Title 24 Part 6 JA8 requirements
- Heavy-duty copper PCB for long lasting performance
- 100/200/300 lumen outputs
- Precision color rendering with 90+ R9 value
- 7 Year limited warranty
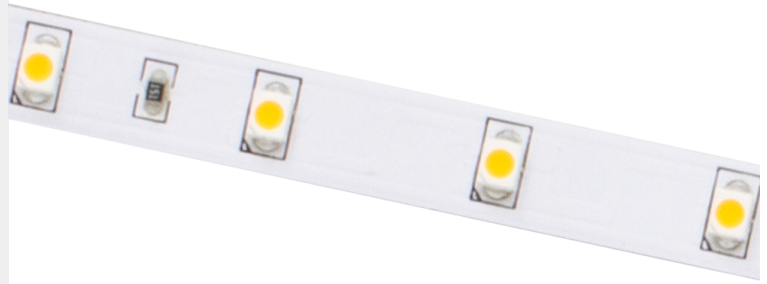
ORDERING CODES
Order spools, and components for field assembly

OPTIONAL ORDERING CODES
Mounting, drivers, and assembly preference

Diode LED	Voltage	Model	CCT		Length	Channels			Finish	Mounting		Drivers		Delivery
DI														
	12V	BLBSC1	20 (2000K)	42 (4200K)	016 (16.4 foot spool)	SL (Slim)	SQ (Square)	MI1 (1-inch Mud-In)	AL (Aluminum)	3M (3M Adhesive)	VC (Vertical Clip)	ELV (Electronic)	O/O (On / Off)	FIELD
	24V	BLBSC2	27 (2700K)	50 (5000K)	100 (100 foot spool)	CA (Canal)	45 (45°)	REC (Recessed)	WH (White)	MC (Mounting Clip)	HNG (Hanging Hardware)	010 (0-10V)	LUT (Lutron)	HYBRID
		BLBSC3	30 (3000K)	63 (6300K)	400 (400 foot spool)	S1 (S1)	45DCO (45° Deco)	SLR (Slim Recessed)	BL (Black)	UC (U-Clip)	RC (Rotating Clip)	MAG (Magnetic)	PoE (Power over Ethernet)	FACTORY
			35 (3500K)			RC10 (10mm Round)	90 (90° Sideview)	GZR (Grazer)				SWX (Switchex)		*See Delivery Options
						SQ10 (10mm Square)	MI1 (1-inch Mud-In)	WF (Waveform)						

Model	12V-BLBSC1	12V-BLBSC2	24V-BLBSC1	24V-BLBSC2	24V-BLBSC3
Voltage	**12V**	**12V**	**24V**	**24V**	**24V**
Wattage	**1.46 W/ft.**	**2.93 W/ft.**	**1.46 W/ft.**	**2.93 W/ft.**	**4.5 W/ft.**
Lumens 2000K	N/A	N/A	N/A	N/A	290/ft.
2700K	117/ft.	212/ft.	113/ft.	233/ft.	338/ft.
3000K	121/ft.	221/ft.	117/ft.	237/ft.	344/ft.
3500K	117/ft.	236/ft.	126/ft.	249/ft.	329/ft.
4200K	131/ft.	252/ft.	133/ft.	265/ft.	344/ft.
5000K	130/ft.	256/ft.	132/ft.	261/ft.	338/ft.
6300K	121/ft.	272/ft.	132/ft.	276/ft.	341/ft.
Cut Points	2 in.	1 in.	4 in.	2 in.	2 in.
Max Run	27 ft.	20 ft.	55 ft.	40 ft.	22 ft.
Max Run (Class 2)	41 ft.	20 ft.	65 ft.	32 ft.	21 ft.
LED Chips	18/ft.	36/ft.	18/ft.	36/ft.	36/ft.
CRI	90+ CRI	90+ CRI	90+ CRI	90+ CRI	90+ CRI
Dimensions	0.31 × 0.1 in (W x H)	0.31 × 0.1 in (W x H)	0.31 × 0.1 in (W x H)	0.31 × 0.1 in (W x H)	0.31 × 0.1 in (W x H)
Environment	Indoor / Damp Location (IP20)	Indoor / Damp Location (IP20)	Indoor / Damp Location (IP20)	Indoor / Damp Location (IP20)	Indoor / Damp Location (IP20)
Ambient Temperature	-4 ~ 122°F (-20 ~ 50°C)	-4 ~ 122°F (-20 ~ 50°C)	-4 ~ 122°F (-20 ~ 50°C)	-4 ~ 122°F (-20 ~ 50°C)	-4 ~ 122°F (-20 ~ 50°C)
Operating Temperature	-4 ~ 176°F (-20 ~ 80°C)	-4 ~ 176°F (-20 ~ 80°C)	-4 ~ 176°F (-20 ~ 80°C)	-4 ~ 176°F (-20 ~ 80°C)	-4 ~ 176°F (-20 ~ 80°C)
Certification	UL Listed 2108	UL Listed 2108	UL Listed 2108	UL Listed 2108	UL Listed 2108
Warranty	7 Year	7 Year	7 Year	7 Year	7 Year

StepGuard®
Advanced EL Lighting System.

BLAZE™ LED Tape Light
Specification Sheet

BLAZE™ 100/200/300
LED Tape Light

Performance and value for everyday projects.
Our most popular tape light, available in a wide range of color
temperatures and outputs.

Date

Project Notes

RECOMMENDED DRIVERS

SKU	WATTAGE	LENGTH	WIDTH	HEIGHT
OMNIDRIVE® X **Compact electronic dimmable (ELV) driver for everyday projects.**				
DI-ODX-24V30W-J	30W	6.5 in.	3.7 in.	1.36 in.
DI-ODX-24V60W-J	60W	7.4 in.	3.7 in.	1.36 in.
DI-ODX-24V96W-J	96W	8.66 in.	3.7 in.	1.36 in.
DI-ODX-24V120W-J	120W	8.66 in.	3.7 in.	1.36 in.
DI-ODX-24V200W-J	200W	10.24 in.	4.92 in.	1.95 in.
SWITCHEX® Driver and Dimmer Switch **LED driver and dimmer switch combined in a single gang box.**				
DI-24V-SE-60W	60W	1.4 in.	2.1 in.	4.1 in.
DI-24V-SE-100W	100W	1.4 in.	2.1 in.	4.1 in.
VLM Series Constant Voltage LED Drivers **Compact constant-voltage LED driver**				
VLM60W-24-LPM	60W	8.19 in.	2.94 in.	1.31 in.
VLM100W-24-LPM	100W	8.19 in.	2.94 in.	1.31 in.
Lutron® Hi-lume™ 1% Dimmable LED Drivers				
DI-DM-24V40W-L3D	40W	4.89 in.	4 in.	2.62 in.
DI-DM-24V40W-LTE	40W	4.89 in.	4 in.	2.62 in.
Lutron® Hi-lume Premier 0.1% LED driver				
DI-DM-24V96W-L3D	96W	5.5 in.	2.2 in.	10.5 in.
PoE **24V constant voltage platform, ready for Power over Ethernet (Inquire)**				

RECOMMENDED CHANNELS

NAME	SKU	DIFFUSION	
Slim (SL) 48", 72", 96" Aluminum, White, Black	DI-CPCHA-SL	dotless	
Canal (CA) 48", 72", 96" Aluminum, White, Black	DI-CPCHB-CAN	dotless	
S1 (S1) 48", 72", 96" Aluminum	DI-CPCHB-S1	dotless	
10mm Round (RC10) 48", 72", 96" Aluminum	DI-CPCHB-RC10	dotless	
10mm Square (SQ10) 48", 72", 96" Aluminum	DI-CPCHB-SQC10	dotless	
Square (SQ) 48", 72", 96" Aluminum, White, Black	DI-CPCHA-SQ	dotless	
45º (45) 48", 72", 96" Aluminum, White, Black	DI-CPCHA-45	dotless	
45º Deco (45DCO) 48", 72", 96" Aluminum	DI-CPCHB-45DCO	dotless	
90º Sideview (90) 48", 72", 96" Aluminum	DI-CPCHB-90SD	dotless	
Rod (ROD) 48", 72", 96" Aluminum	DI-CPCHB-RDCL	dotless	
1-inch Mud-In (MI1) 48", 72", 96" Aluminum	DI-CPCHB-MUD1	dotless	
Recessed (REC) 48", 72", 96" Aluminum	DI-CPCHB-REC	dotless	
Slim Recessed (SLR) 48", 96" Aluminum	DI-CPCHA-SLR	dotless	
Grazer (GZR) 48", 72", 96" Aluminum	DI-CPCHB-GRZRNB	dotless	
Waveform (WF) 48", 72" Aluminum	DI-CPCHB-WF	dotless	

diode led OMNIDRIVE® X   ELV / TRIAC / 0-10V Dimmable Driver
SKU: PART:
INPUT : 100-277Vac 0.9A 50/60Hz
OUTPUT :
Class2 Type HL
Conforms UL8750
Conforms CAN/CSA-C22.2 NO.250.13
MAXIMUM OF 12 AWG THROUGH BRANCH CIRCUIT
CONDUCTOR SUITABLE FOR 105 °C PERMITTED IN BOX
INPUT 100-277VAC
LISTED E499308
info@DiodeLED.com | www.DiodeLED.com
DIM   OUTPUT

StepGuard®
Advanced EL Lighting System.

BLAZE™ 100/200/300
LED Tape Light
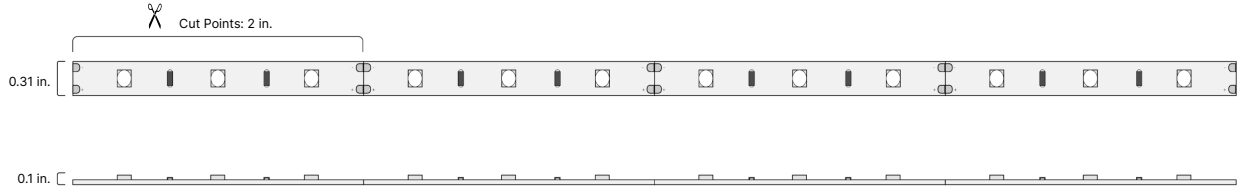
Performance and value for everyday projects.
Our most popular tape light, available in a wide range of color temperatures and outputs.

Date

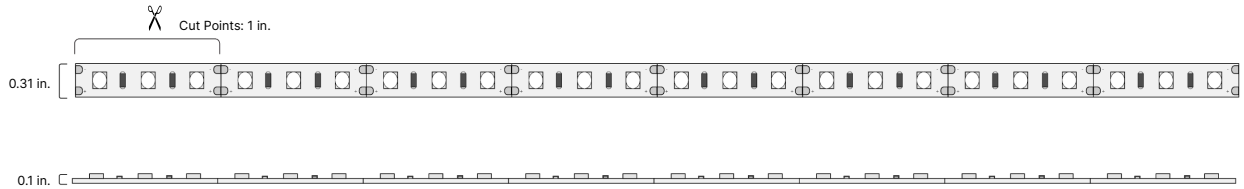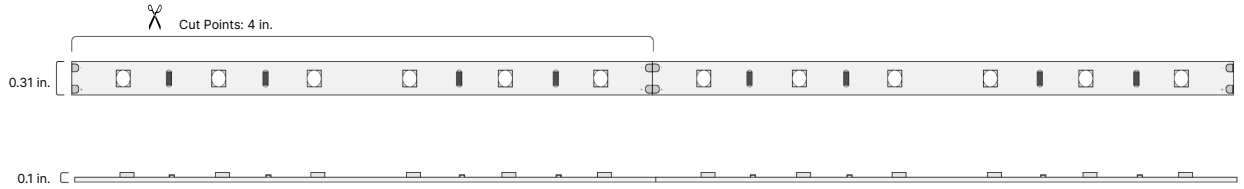Project Notes

MECHANICAL DIAGRAMS

12V-BLBSC1

Cut Points: 2 in.
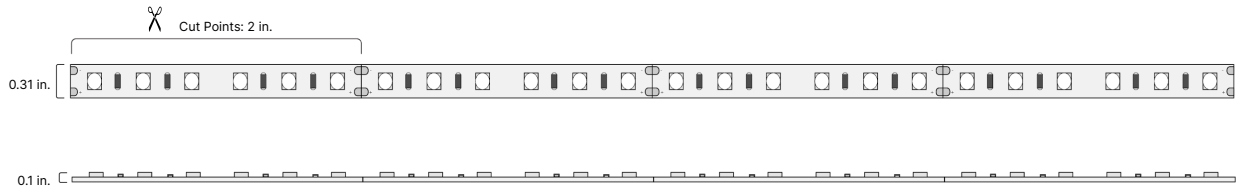
0.31 in.

0.1 in.

12V-BLBSC2

Cut Points: 1 in.

0.31 in.

0.1 in.

24V-BLBSC1

Cut Points: 4 in.

0.31 in.

0.1 in.

24V-BLBSC2
24V-BLBSC3

Cut Points: 2 in.

0.31 in.

0.1 in.

CONNECTIONS

36 in. Bare Lead 20/2 AWG UL 2464 Wire with Strain Relief

36 in. Bare Lead 20/2 AWG UL 2464 Wire with Strain Relief
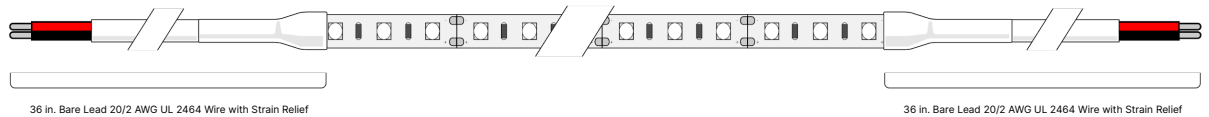
BLAZE™ 100/200/300
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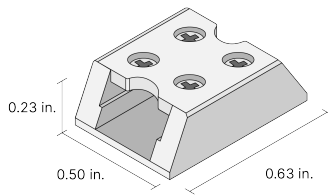
Date

Project Notes

TERMINAL BLOCK CONNECTORS

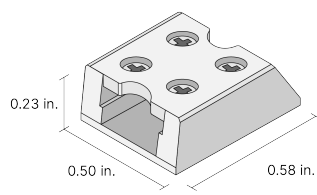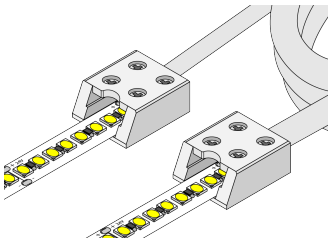### DI-TB8-CONN-TTT
(Tape-to-Tape)
8mm Tape-to-Tape Connector

0.23 in.
0.50 in.
0.63 in.

DI-TB8-CONN-TTW
(Tape-to-Wire)
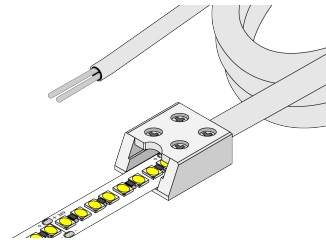8mm Tape-to-Wire Connector

0.23 in.
0.50 in.
0.58 in.

DI-TB8-6JPR (6 in.)
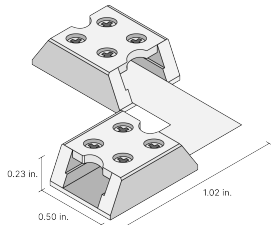### DI-TB8-60JPR (60 in.)
Jumper Cable (Tape-to-Tape)

DI-TB8-60SPL (60 in.)
(Tape-to-Wire)
Splice Wire (Tape-to-Wire)

DI-TB8-90-TTT
(Tape-to-Tape)
8mm 90° Tape-to-Tape Connector

0.23 in.
0.50 in.
1.02 in.

DELIVERY OPTIONS

- **Field Assembly**

  Stock items for in-field assembly. Fastest order fulfillment.

- **Factory + Field**

  Finished lengths of light with leads. Channels either bulk or factory finished. Some field assembly required.

- **Factory Assembly**

  Fastest installation: fixtures fully assembled in the factory.

- Lumen value measured in accordance to IES LM-80-08. LED chips have a luminous flux range with a tolerance of +/- 5%.

- Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length. Max run may exceed Class 2 limit. Actual wattage may differ from calculated wattage due to voltage drop across run.

- Do not install product in an environment outside the listed ambient temperature. Exceeding the maximum ambient temperature may damage LED chips, reduce the total lamp life, lumen output, and/or adversely impact color consistency.

- Actual efficacy value is dependent to specified LED driver (power supply). An estimated efficacy value can be calculated as follows: Lumen value divided by average power consumption per foot.

- Operating temperature is measured according to the minimum and maximum ambient temperature environment.

BLAZE™ 100/200/300
LED Tape Light

Performance and value for everyday projects.
Our most popular tape light, available in a wide range of color temperatures and outputs.

CERTIFICATIONS

Safety

- UL Listed 2108 Low Voltage Lighting System / Low Voltage Luminaire. UL 1598 / CSA 250.0-08, UL 8750. UL 879 / CAN/CSA-C22.2 no. 207-M89. Certified for United States and Canada. File # E469769.

- UL Listed Field Cuttable.

- UL Recognized Component - Sign Accessories. Available in UL Sign Components Manual (SAM Manual). File # E469770.

- CE & EMC Compliant: Verification No. GZEM141200683705V

- Approved for storage areas of clothes closets per NEC 410.16.A.3 and 410.16.C.5

Environmental

- RoHS Compliant: Verification No. CANEC1610091501

Performance

- Can be used to comply with TITLE 24 Part 6 High efficacy LED requirements - JA8-2016-E

- LED chip data measured in accordance to IES LM-80-08.

- Photometric & Colorimetry data measured in accordance to IES LM-79-08, in Elemental LED's Innovation Lab.

Saftey / Warnings / Disclosures

1. Install in accordance with national and local electrical code regulations.

2. This product is intended to be installed and serviced by a qualified, licensed electrician.

3. Only use copper wiring. Use wires rated for at least 176°F (80°C) and certified for use with external connection of electrical equipment.

4. Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.

5. Tape light, attached wire leads, and additional extension cables, connectors, etc., are not rated for in-wall installation unless otherwise noted. Tape light and attached wire leads are field-cuttable.

6. Ensure applicable wire is installed between driver, fixture, and any controls in-between. When choosing wire, factor in voltage drop, amperage rating, and type (in-wall rated, wet location rated, etc.). Inadequate wire installation could overheat wires, and cause fire.

7. Do not install in environment where LED chips are exposed to direct sunlight as damage to the phosphor will occur.

8. Do not install in environment where excessive heat may exist (ex. close proximity to fireplace, etc.) See Ambient Temperature ratings

9. Do not install indoor LED tape light products in outdoor / wet location environments. Only wet location tape light models are rated for outdoor / wet locations.

10. Do not modify product beyond instructions or warranty will be void.

11. Tape light must be handled with care. Excessive handling, bending, and pressure may damage the product, voiding the warranty.

12. Actual color may vary from what is pictured on this sheet and other print materials due to the limitations of photographic processes.

13. We reserve the right to modify and improve the design of our fixtures without prior notice. We cannot guarantee to match existing installed fixtures for subsequent orders or replacements in regards to product appearance, CCT, or lumen output.

WARRANTY

Limited Warranty

- 7 Years

This warranty does not include the additional accessories referenced in this specification sheet. Complete warranty details for fixtures and additional accessories are available at www.diodeled. com/limited-warranty/ within the Policies section. For warranty related questions please contact product support.

Consumer's Acknowledgment

Elemental LED, Inc. stands behind its products when they are used properly and according to our specifications. By purchasing our products, the purchaser agrees and acknowledges that lighting design, configuration and installation is a complex process, wherein seemingly minor factors or changes in layout and infield adjustments can have a significant impact on an entire system. Choosing the correct components is essential. Elemental LED is able to work with the original purchaser to make an appropriate product selection to the extent of the limited information that the customer can provide, but it is virtually impossible for Elemental LED to design a system that foresees every unknown factor. For this reason, this Warranty does not cover problems caused by improper design, configuration or installation issues. Any statement from a Elemental LED employee or agent regarding a customer's bill of goods and/or purchase order is NOT an acknowledgment that the products purchased are designed and configured correctly. The purchase agrees and acknowledges that it is the customer's responsibility to adhere strictly to all information contained in the Product Specification Sheets.

There is often more than one way to design, configure and layout an LED lighting application properly to achieve the same lighting effect. Elemental LED strongly recommends that licensed professionals be used in the design and installation of lighting systems that include Elemental LED products. The specifications include important information that a designer and installer should carefully review and strictly follow. Qualified designers and certified and/or licensed installers, with access to the final installation environment, customer goals, and Elemental LED product specifications can make the requisite decisions appropriate for a successful finished lighting application.

LM-79 Test Report

Relevant Standards

IES LM-79-2008
IES TM-30-2015
CIE 13.3-1995

Product SKU

BLAZE™ 100 LED Tape Light - DI-12V-BLBSC1-30-***

Test Conditions

Test Temperature: 26.5 °C
Luminaire Sample Length: 12 in.
Power Supply: Agilent E3634A DC Power Supply
Voltage: 12 VDC
Current: 0.114 A
Power Consumption: 1.368 W

Test Date

7/3/2018

<table>
<tr><td>Prepared By</td><td>Approved By</td></tr>
<tr><td>*Rachel Backlund*</td><td>*Olivia M Tanguileg*</td></tr>
<tr><td>Rachel Backlund</td><td>Olivia Tanguileg, Electrical Engineer</td></tr>
</table>

Integrating Sphere Test

Metric	Test	Reference	Notes	Metric	Test	Reference	Notes
R_f	91	100	IES TM-30-15 Fidelity Index	CCT	3032	3031	Correlated Color Temperature
R_g	99	100	IES TM-30-15 Gamut Index	D_{uv}	0.0015	0.0000	Distance from the blackbody locus
R_a (CRI)	92	100	CIE Test Color Method General Index	x	0.4369	0.4347	CIE 1931 chromaticity coordinate
R_9	64	100	CIE Test Color Method Sample Nine Score	y	0.4079	0.4033	CIE 1931 chromaticity coordinate
LER	287	164	Luminous Efficacy of Radiation	u	0.2489	0.2495	CIE 1960 chromaticity coordinate
Lumens	116	1852	Luminous Flux	v	0.3486	0.3472	CIE 1960 chromaticity coordinate
$R_{f,skin}$	95	100	Average of CES15 and CES18 (skin)	u'	0.2489	0.2495	CIE 1976 chromaticity coordinate
				v'	0.5229	0.5207	CIE 1976 chromaticity coordinate

COLOR RENDERING INDEX

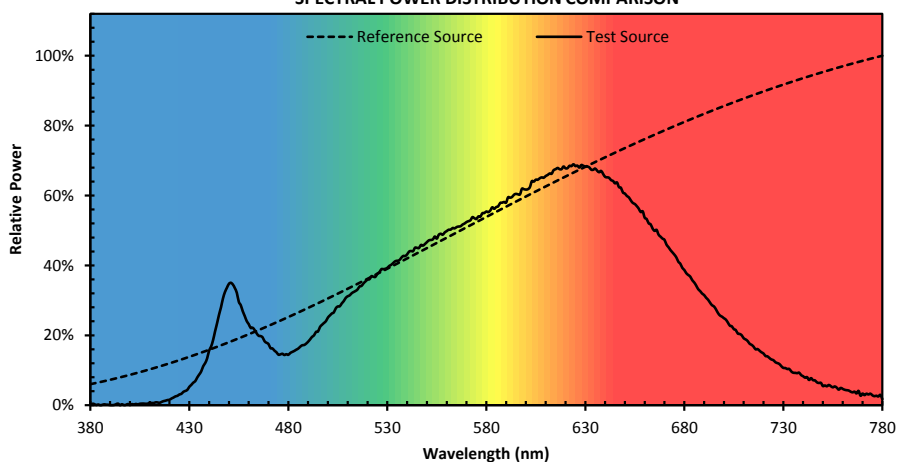| R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R10	R11	R12	R13	R14
92.1	94.3	95.0	92.7	91.1	92.1	94.5	85.1	63.9	85.4	92.4	76.4	92.4	96.4

SOURCE PROPERTIES

SOURCE CHROMATICITY COMPARISON
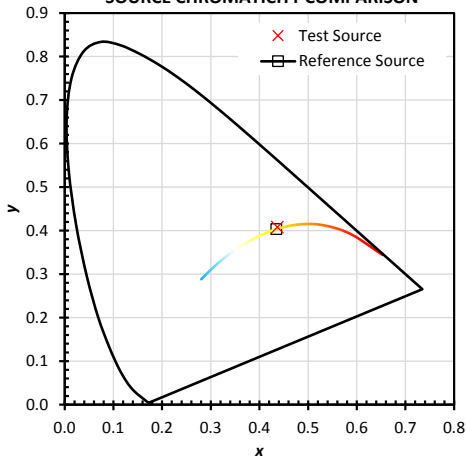
This chart plots the chromaticity of the test and reference sources in the CIE 1931 chromaticity
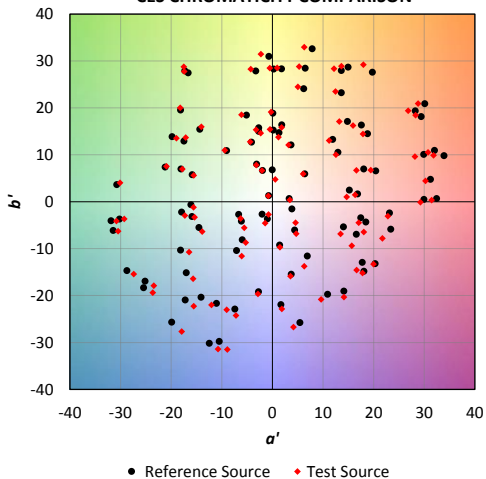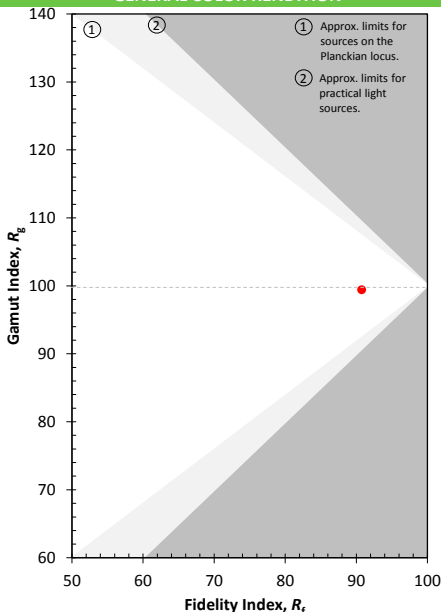
SPECTRAL POWER DISTRIBUTION COMPARISON

This chart displays the spectral power distributions for the test and reference source. Each SPD has been normalized so that the maximum values is 100%.

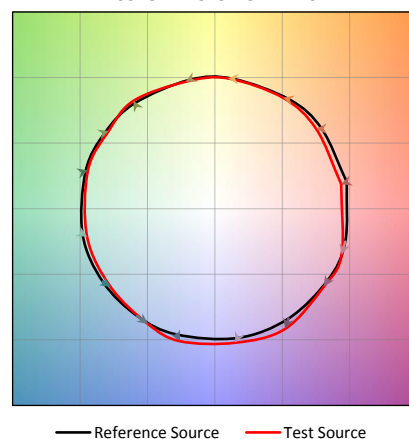### GENERAL COLOR RENDITION

CES CHROMATICITY COMPARISON

This plot shows the shift in chromaticity for each individual CES.

① Approx. limits for sources on the Planckian locus.
② Approx. limits for practical light sources.

This plot shows the R_f and R_g values relative to possible values.

COLOR VECTOR GRAPHIC

This plot shows the average chromaticity shift for the samples within each of 16 hue bins. The values are normalized so that the reference is a circle.

COLOR SAMPLE COMPARISON (APPROXIMATION)

CES 1 Type C	CES 2 Type C	CES 3 Type A	CES 4 Type A	CES 5 Type D	CES 6 Type C	CES 7 Type E	CES 8 Type D
CES 9 Type F	CES 10 Type G	CES 11 Type C	CES 12 Type A	CES 13 Type F	CES 14 Type E	CES 15 Type B	CES 16 Type C
CES 17 Type C	CES 18 Type B	CES 19 Type E	CES 20 Type F	CES 21 Type D	CES 22 Type D	CES 23 Type G	CES 24 Type E
CES 25 Type A	CES 26 Type C	CES 27 Type A	CES 28 Type G	CES 29 Type C	CES 30 Type A	CES 31 Type D	CES 32 Type C
CES 33 Type D	CES 34 Type G	CES 35 Type G	CES 36 Type A	CES 37 Type A	CES 38 Type A	CES 39 Type F	CES 40 Type F
CES 41 Type C	CES 42 Type F	CES 43 Type C	CES 44 Type F	CES 45 Type G	CES 46 Type E	CES 47 Type C	CES 48 Type D
CES 49 Type D	CES 50 Type F	CES 51 Type F	CES 52 Type F	CES 53 Type E	CES 54 Type F	CES 55 Type G	CES 56 Type G
CES 57 Type C	CES 58 Type D	CES 59 Type E	CES 60 Type G	CES 61 Type F	CES 62 Type C	CES 63 Type F	CES 64 Type E
CES 65 Type F	CES 66 Type E	CES 67 Type E	CES 68 Type F	CES 69 Type F	CES 70 Type F	CES 71 Type F	CES 72 Type F
CES 73 Type F	CES 74 Type C	CES 75 Type F	CES 76 Type F	CES 77 Type A	CES 78 Type F	CES 79 Type C	CES 80 Type G
CES 81 Type A	CES 82 Type C	CES 83 Type C	CES 84 Type F	CES 85 Type A	CES 86 Type C	CES 87 Type F	CES 88 Type F
CES 89 Type A	CES 90 Type E	CES 91 Type A	CES 92 Type A	CES 93 Type D	CES 94 Type C	CES 95 Type A	CES 96 Type A
CES 97 Type F	CES 98 Type A	CES 99 Type E					

NOTE: CES stands for "Color Evaluation Sample", these 99 samples are used in place of the 16 R values. The colors shown are approximate and depend on proper monitor calibration. Some colors may be outside of the gamut of the monitor, and will not be displayed accurately. For each sample, the color on the left represents the reference source, and the color on the right represents the test source.

Sample Type:
  A - Nature
  B - Skin
  C - Textiles
  D - Paints
  E - Plastic
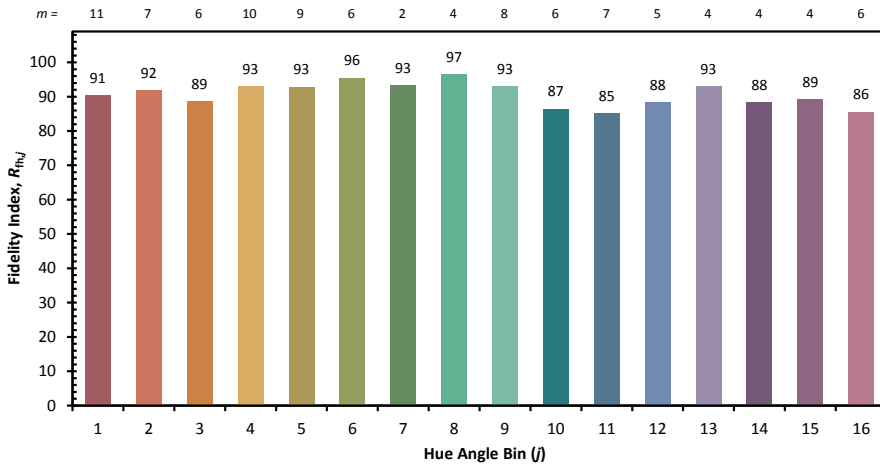
| Ref | Test |

Elemental   Competitor

COLOR RENDITION BY HUE

This chart displays the average Fidelity Index for all samples within the hue bin. The number of samples per bin, which can vary based on the CCT used for the calculation, is shown at the top. The color of the bar is based on the average chromaticity under the 5000 K reference illuminant; the colors may not display accurately depending on the calibration of the monitor, and should be used for orientation only.

j	Hue Angle
1	0.0°–22.5°
2	22.5° - 45.0°
3	45.0° - 67.5°
4	67.5° - 90.0°
5	90.0°-112.5°
6	112.5°-135.0°
7	135.0°-157.5°
8	157.5°-180.0°
9	180.0°-202.5°
10	202.5°-225.0°
11	225.0°-247.5°
12	247.5°-270.0°
13	270.0°-292.5°
14	292.5°-315.0°
15	315.0°-337.5°
16	337.5°-360.0°

m = Samples per Angle Bin
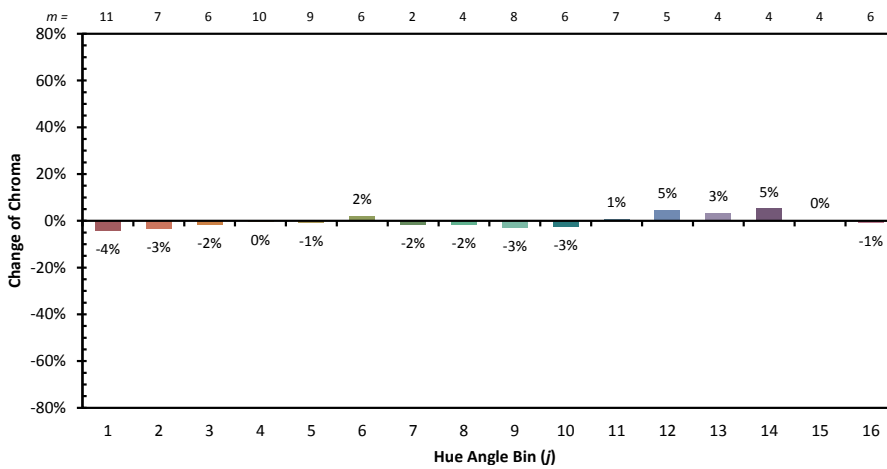
This chart displays the change in chroma for the average sample within each hue bin. The number of samples per bin, which can vary based on the CCT used for the calculation, is shown at the top. The color of the bar is based on the average chromaticity under the 5000 K reference illuminant; the colors may not display accurately depending on the calibration of the monitor, and should be used for orientation only.

COLOR FIDELITY BY SAMPLE
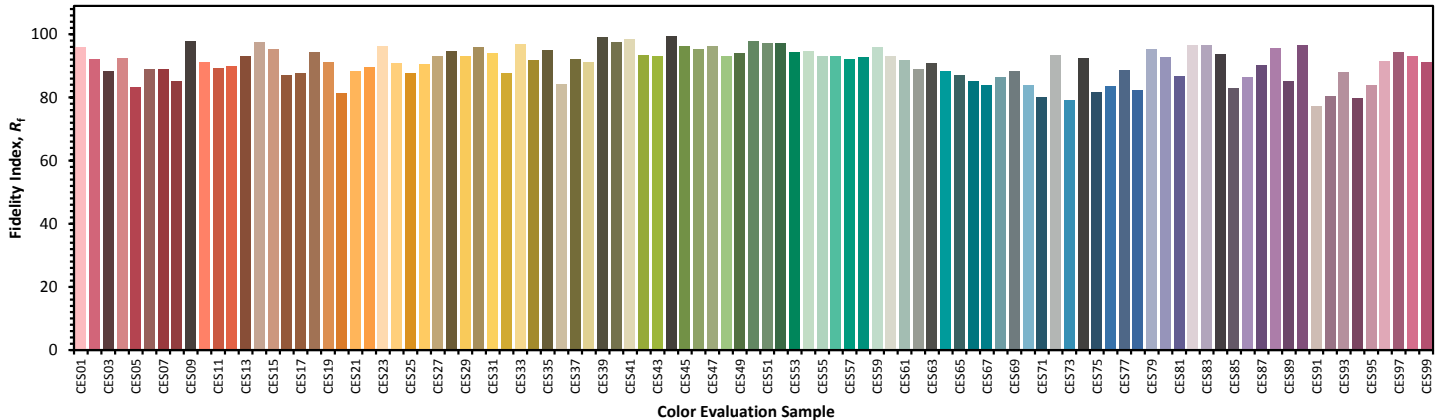
This chart displays the Fidelity Index for each of the 99 CES. The CES are arranged by their hue angle under the 5000 K reference source, which was also used to determine th e color of each bar. The colors are approximate and depend on proper monitor calibration. Some colors may be outside of the gamut of the monitor, and will not be displayed accurately.

Goniophotometer Test

Luminaire: BLAZE™ 100 LED Tape Light
SKU: DI-12V-BLBSC1-30-***
Luminous Flux: 119 Lumens
Power Consumption: 1.368 Watts
Efficacy: 87.0 Lumens/Watt
Spacing Criterion (0-180): 1.28
Spacing Criterion (90-270): 1.26

Graphs below are for reference, full IES files are available via request

DISTRIBUTION CHARTS AND TABLES

Zonal Lumen Data

Zone	Lumens	%Luminaire
0-20	15.27	12.80
0-30	32.45	27.20
0-40	53.24	44.70
0-60	94.38	79.20
0-80	117.09	98.30
0-90	119.14	100.00
20-40	37.97	31.90
20-50	59.60	50.00
40-70	55.82	46.90
60-80	22.71	19.10
70-80	8.03	6.70
80-90	2.04	1.70
90-180	0.00	0.00
0-180	119.14	100.00

Polar Candela Distribution

- ■ - 0° H
- ■ - 90° H
- ■ - 22.5° H
- ■ - 45° H
- ■ - 67.5° H
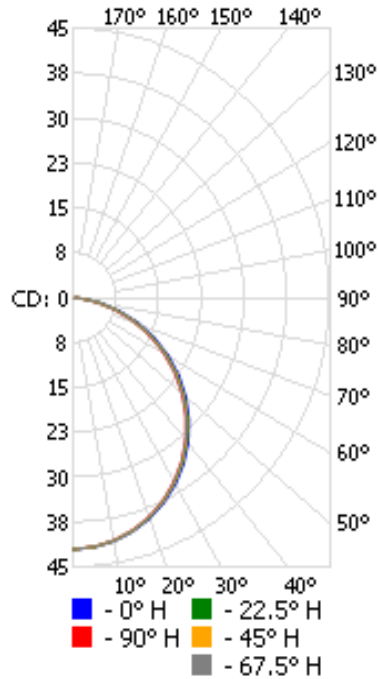
Illuminance at a Distance

	Center Beam fc	Beam Width	
1.5ft	18.6 fc	4.6 ft	4.4 ft
3.0ft	4.65 fc	9.2 ft	8.9 ft
4.5ft	2.07 fc	13.8 ft	13.3 ft
6.0ft	1.16 fc	18.4 ft	17.8 ft
7.5ft	0.74 fc	23.0 ft	22.2 ft
9.0ft	0.52 fc	27.7 ft	26.7 ft

- ■ Vert. Spread: 113.9°
- ■ Horiz. Spread: 112.0°

StepGuard®
Advanced EL Lighting System.

StepGuard®
INSTALLATION GUIDELINES

designed for
LightTape®
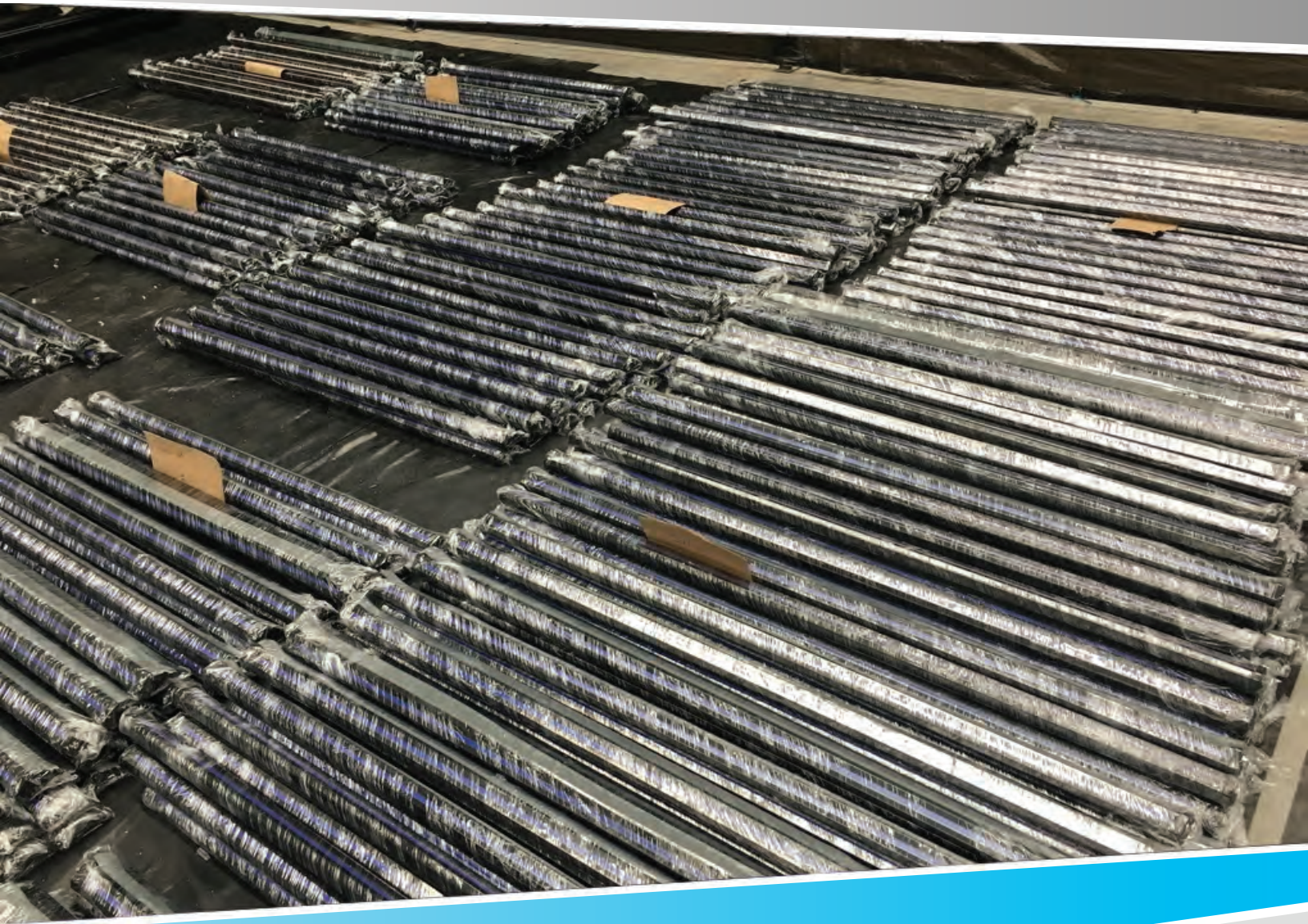
Export Packing

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.
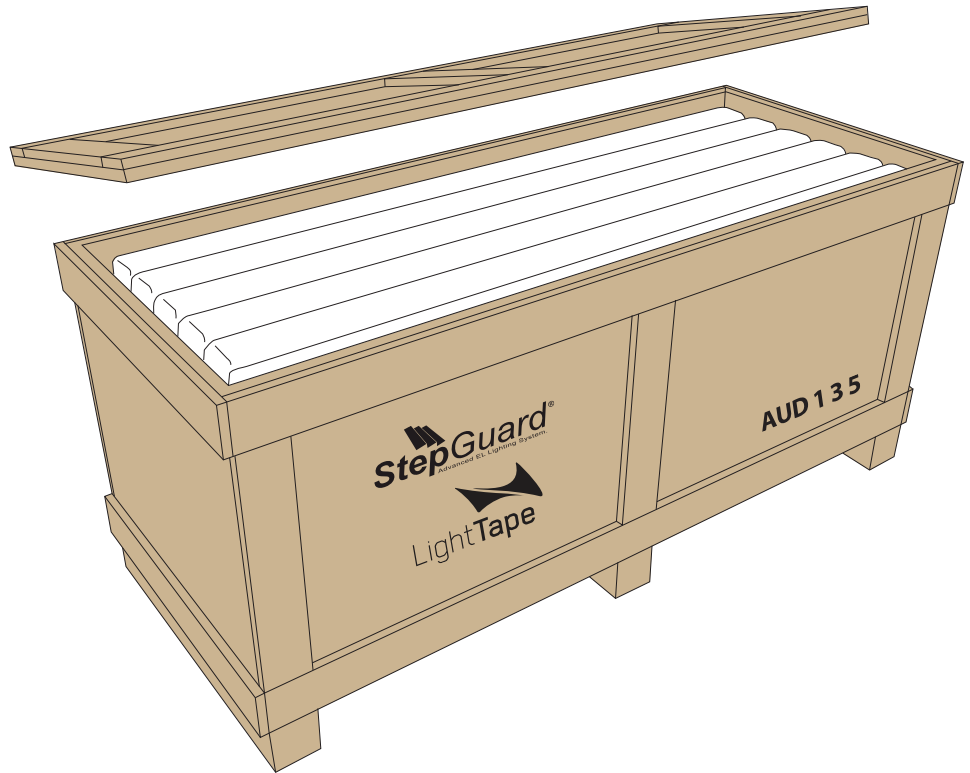
Packing Unit

Units are packed in pairs (as per detail). Box includes also Smart Drivers and spares if requested.
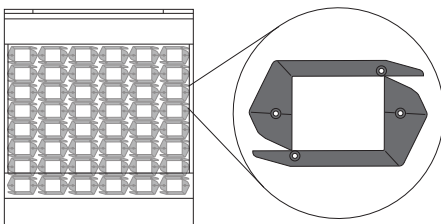
Packing unit
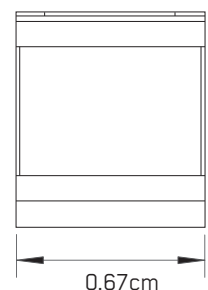(6 x 10 cms)

Box Dimensions

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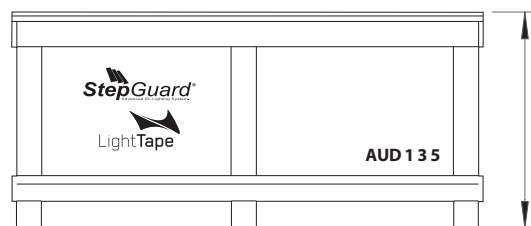
Height of box is calculated by taking the quantity of steps, divided by 12 which is the maximum quantity per row (six pairs).
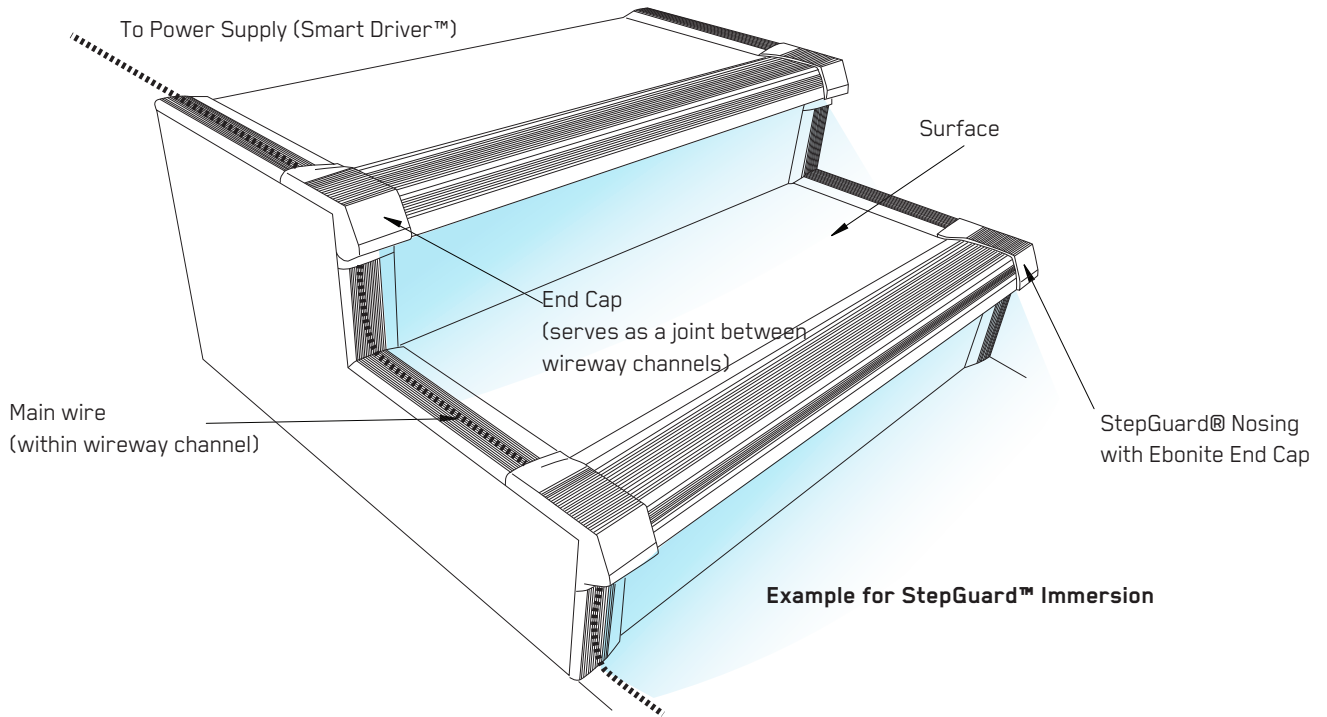Then adding 6 cms to packing unit and 14cms for the skids and box wall.
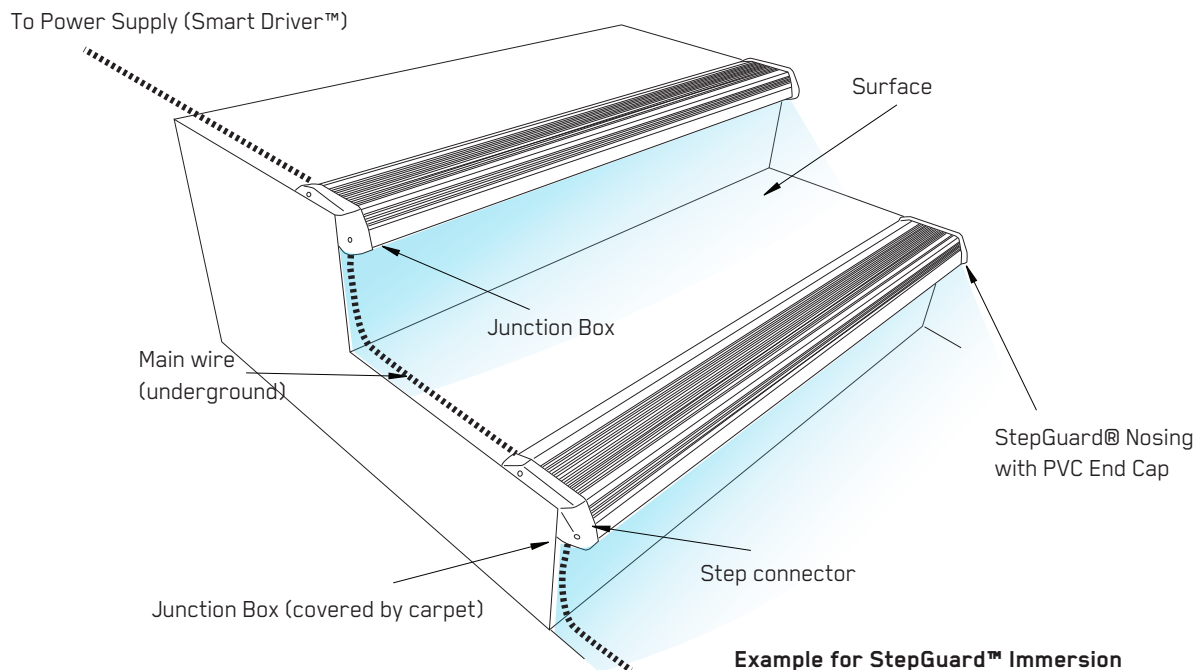
Length (top view)

size of largest step + 10cms

Depth (side view)

0.67cm
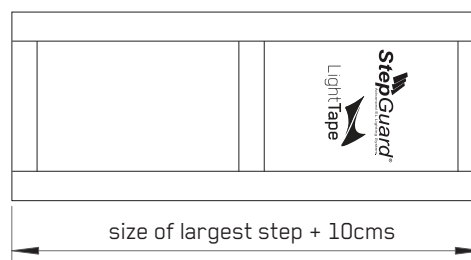
System Configuration for surface wiring

To Power Supply (Smart Driver™)

Surface

End Cap
(serves as a joint between wireway channels)

Main wire
(within wireway channel)

StepGuard® Nosing
with Ebonite End Cap

Example for StepGuard™ Immersion

System configuration for pre-installed underground wiring

To Power Supply (Smart Driver™)

Surface

Junction Box

Main wire
(underground)

StepGuard® Nosing
with PVC End Cap

Step connector

Junction Box (covered by carpet)

Example for StepGuard™ Immersion

Surface and Profile Preparation

1.

10cm / 3.94"
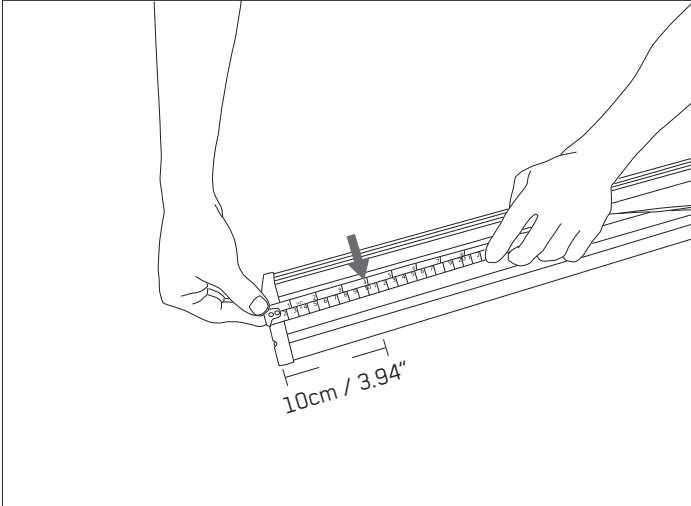
First step is to measure and mark the holes on the profile. We recommend a maximum distance of 10cm on the sides and the other holes should be distributed equally throughout the profile.
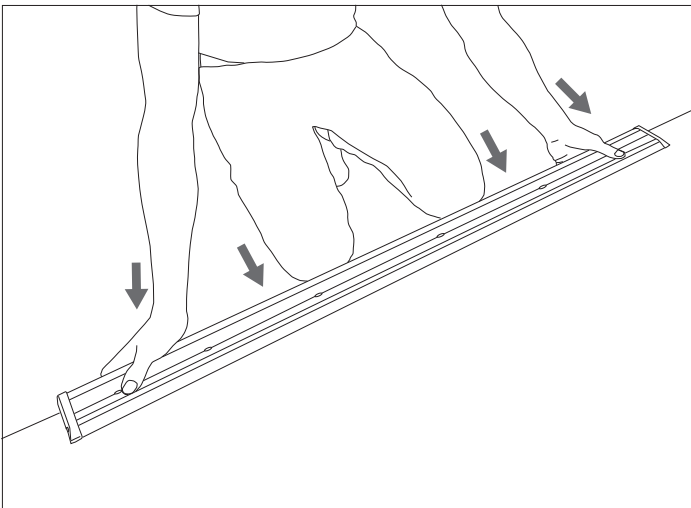**IMPORTANT:** There should be at least 4 screws per linear meter to ensure a proper fix on surface.

2.


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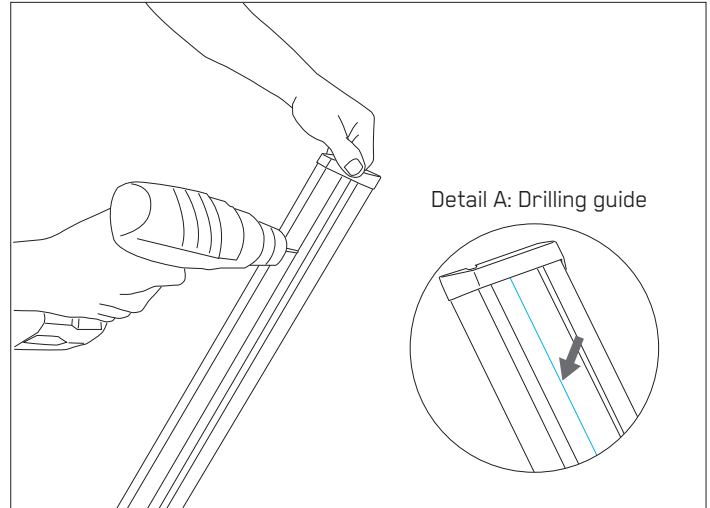
Once you have the marks on the profile, use a metal drill to make the holes. Remember to always use the drilling guide to mark and drill holes as per **Detail A**, because the anti-slip will fit the head of the screws on this area to avoid bumps on it.

3.

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.
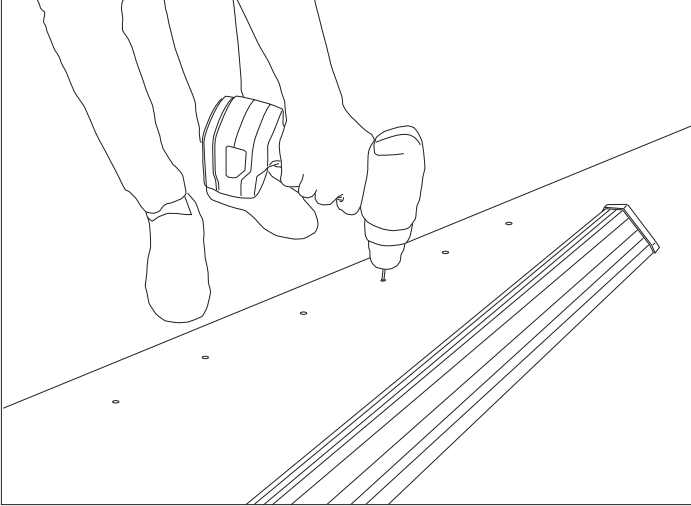
4.
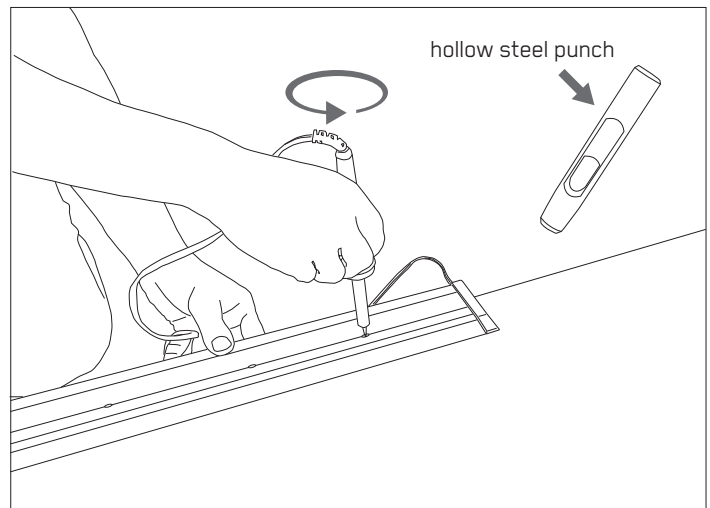
hollow steel punch

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.
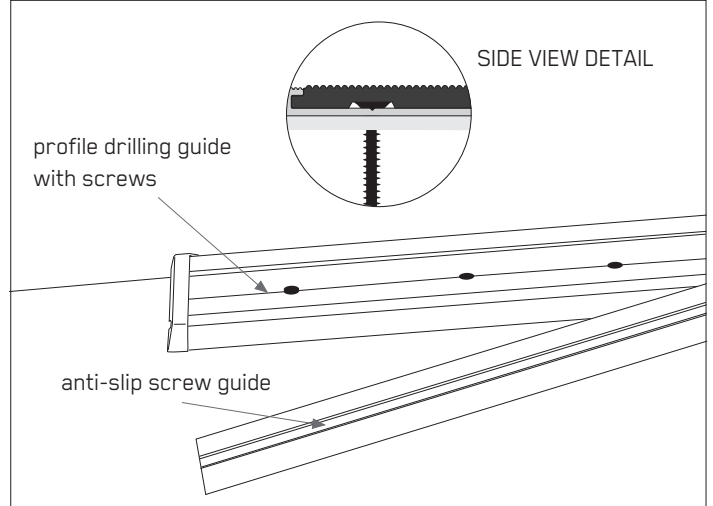
Installing

1.


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

2.

SIDE VIEW DETAIL

profile drilling guide with screws

anti-slip screw guide

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.

3.
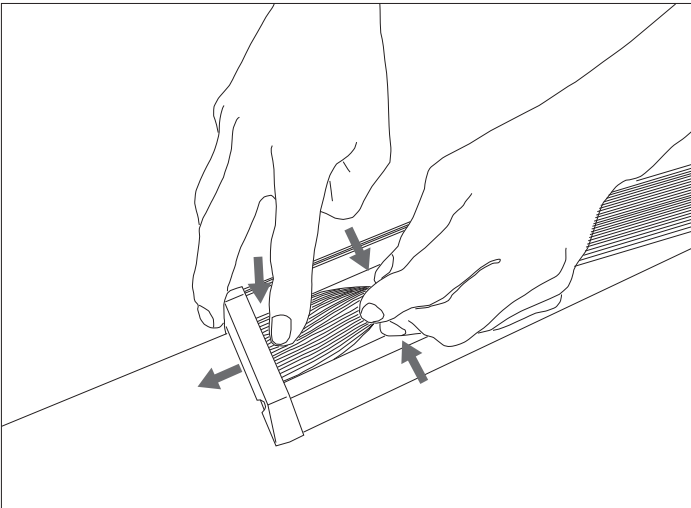
To slide the anti-slip, first push one end underneath the end cap, while pushing the sides. For the rest of the process just push on sides while rubber sits on its position. When finsihing on the other side, cut the excess material making sure you leave an extra length (about 1cm-2cm) to fit under the other cap.

4.

SIDE VIEW DETAIL
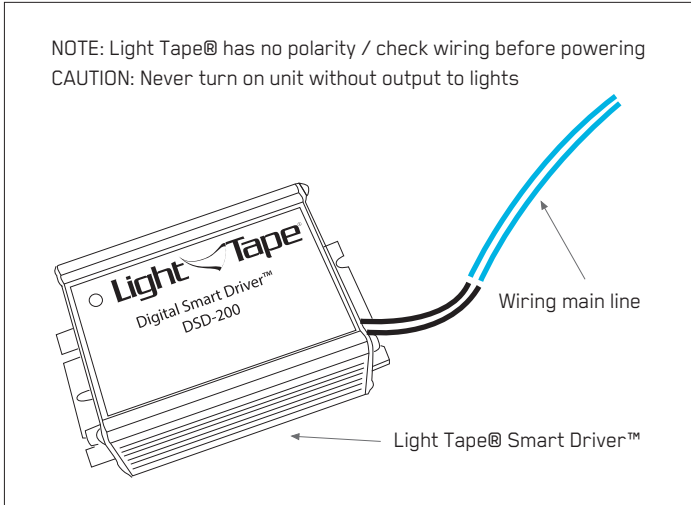Connector inside the profile up to connection point.
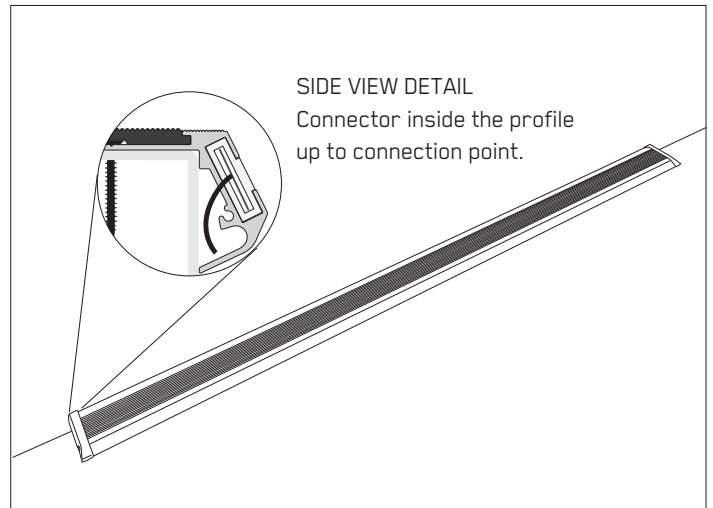
Once unit is installed, do a QC check by stepping on center and sides of the profile, making sure it is fully secured. Also check that connector is hidden inside the profile (see below detail), and there are no loose parts.
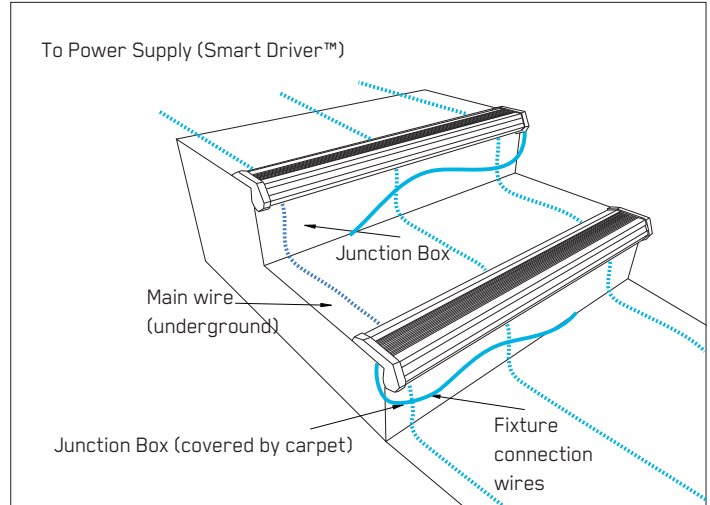
Connecting and Wiring

1.

NOTE: Light Tape® has no polarity / check wiring before powering
CAUTION: Never turn on unit without output to lights

Digital Smart Driver™ DSD-200

Wiring main line

Light Tape® Smart Driver™

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.

2.

To Power Supply (Smart Driver™)

Junction Box

Main wire (underground)

Junction Box (covered by carpet)

Fixture connection wires

The StepGuard™ step system has been pre-wired to the requested exit side (right or left) when assembling the units at the factory. The main wire, however, can be located through either side or center of the step rows.

3.

Fixture connection wires
0.34mm², no polarity
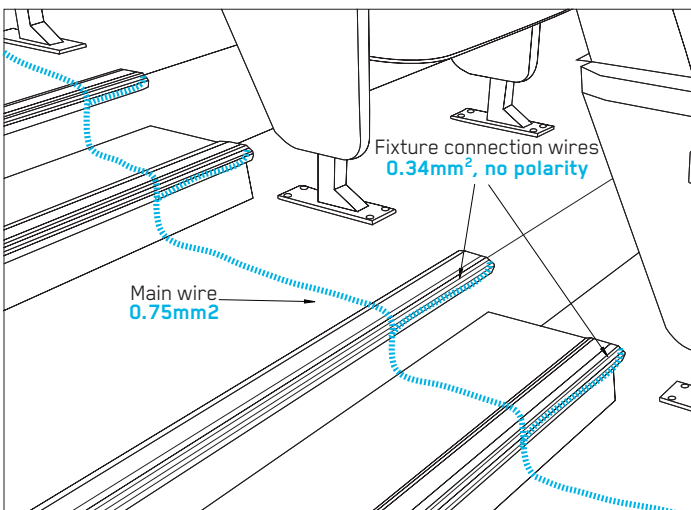
Main wire
0.75mm2

The StepGuard® exit connection wires are supplied with 2x0.34mm² cables.   For the main wiring, we recommend using an 0.75mm² cable.   Follow all electrical codes when wiring and connecting the system.

4.

Projection Room

AC 110/220V

Fixture Connection Wire Points

UPS Unit

Smart Driver™

Main Wiring
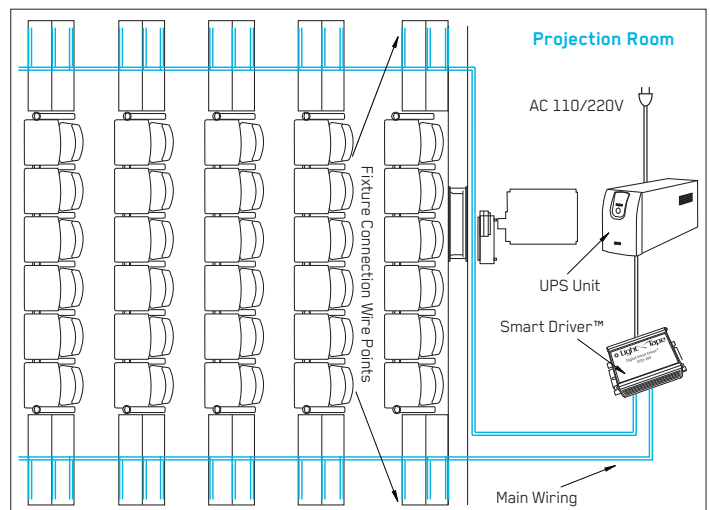
Every step must be properly connected to the main wire following local electrical codes.   Please make sure all wire connections are sealed, and there are no loose or pinched wires. For IP65: Dryconn medium waterproof wirenut (#62225) rated for 600V/5A; For standard installation: Ideal 73B orange wire nut rated for 600V/5A; or local equivalent. There is no polarity on Light Tape®.

Labels and Markings

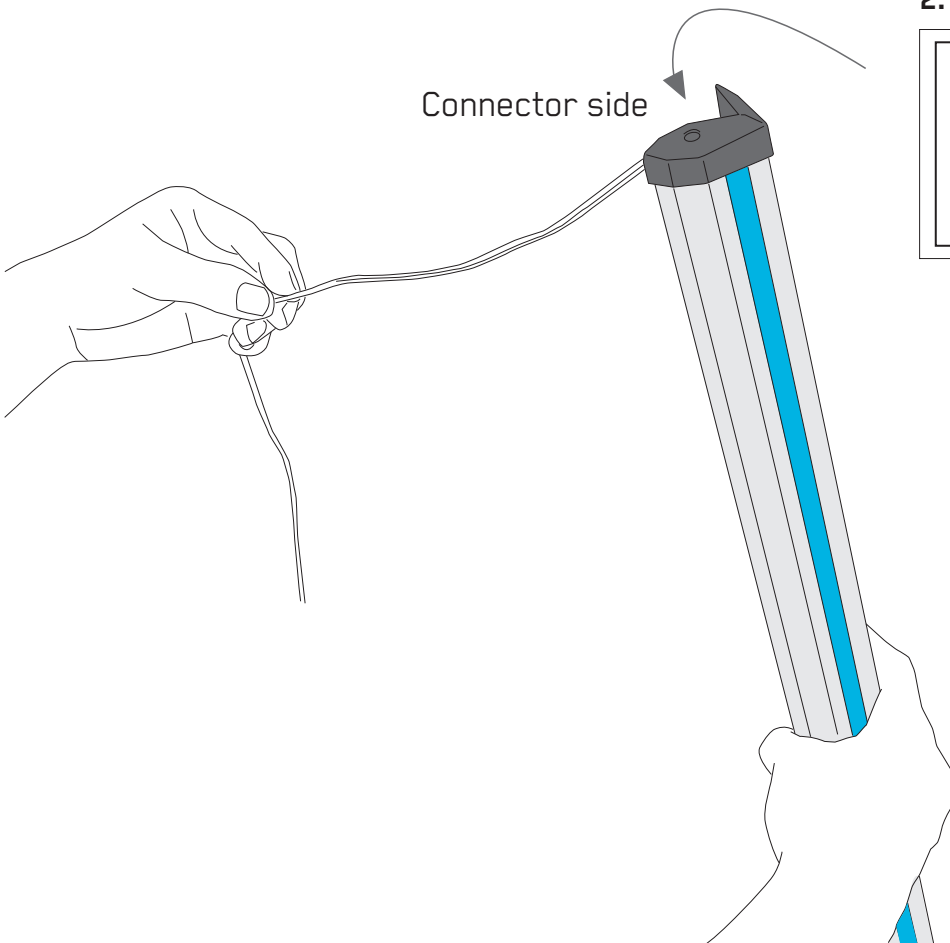## 1. Security label (Printed on Tamper evident paper revealing if removed)

StepGuard®
Advanced EL Lighting System.

c **UL** US

RoHS

AC

IP65
Fixture

Model / Modelo: **StepGuard™ 45**

Total Watts/Potencia Vatios:
0.1 to 0.27 per linear meter
Voltage range/Tension Voltios:
200 to 320 volts AC
Current/Corriente:
5 milliamp per linear meter
Hertz: 750hz

Static strength/Carga nominal:
5,000 Newtons/Min.
Maximum operating Temperature/
Temperatura Ambiente Maxima:
120 Degrees F / 49 degrees C
(Range dependent on high or low
on dimmer setting)

Electro-LuminX Lighting Corp. | www.lighttape.com   Assembled at Zofrandina-El Progreso Free Zone. Km. 55 Via Bogotá-Tunja, Colombia – South America

Connector side

2. Project Identification label

StepGuard®
Advanced EL Lighting System.

Name of Project

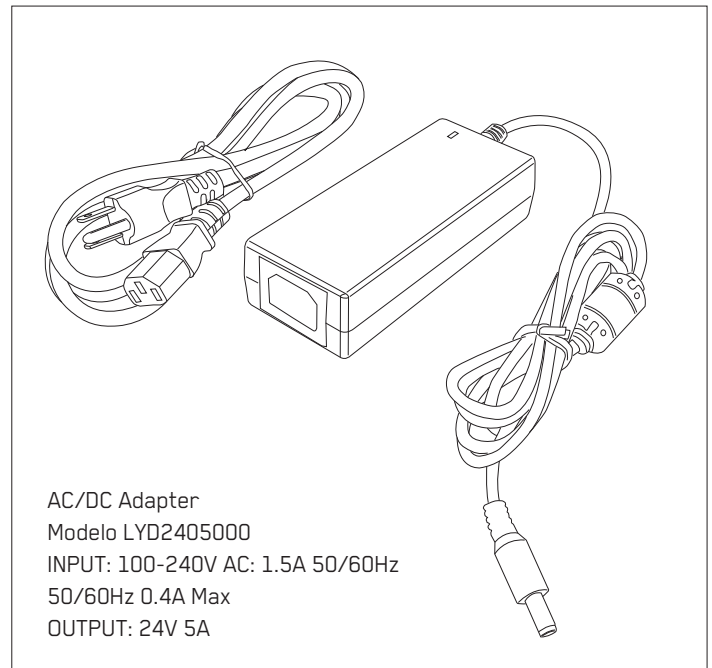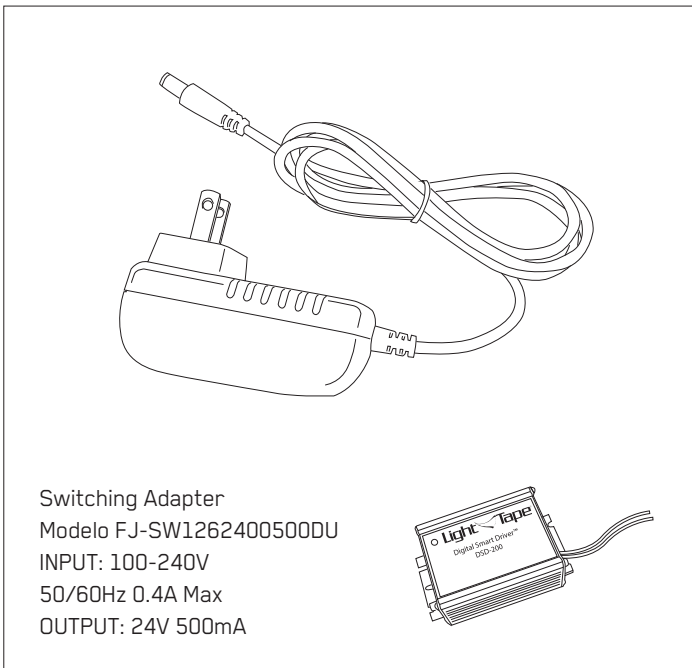**AUD No.   SIZE mm   COLOR**

3. Intenational Bar Code

STEPGUARD 45

7 709199 417486

Type X Connection

The Smart Driver™ Power Supplies, depending on reference, may come with two types of adapters and/or cables to connect to power outlet. In case of damage of cable, this can be easily replaced by user, however the connector or adapter can only be supplied by manufacturer. **To request spares or technical service, please contact: thelighttapeteam@lighttape.com in U.S.A. and rest of the world or : ventas@lighttape.com.co for Colombia and South America.** Please make sure to always include on your request the reference of the Smart Driver™ and/or adapter cable.

Switching Adapter
Modelo FJ-SW1262400500DU
INPUT: 100-240V
50/60Hz 0.4A Max
OUTPUT: 24V 500mA

AC/DC Adapter
Modelo LYD2405000
INPUT: 100-240V AC: 1.5A 50/60Hz
50/60Hz 0.4A Max
OUTPUT: 24V 5A

For Type Y Attachments:

If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or their service agent or similar qualified person in order to avoid a hazard.

For Non-Replaceable Light Source (Light Tape®)

The light source of this luminaire is not replaceable. When the light source reaches its end of life, the whole luminaire shall be replaced.
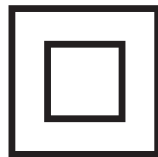
We have a team ready to assist at thelighttapeteam@lighttape.com or +1.804.355.1692

THIS PRODUCT CANNOT BE USED ON INSTALLATIONS OR FLAMMABLE SURFACES
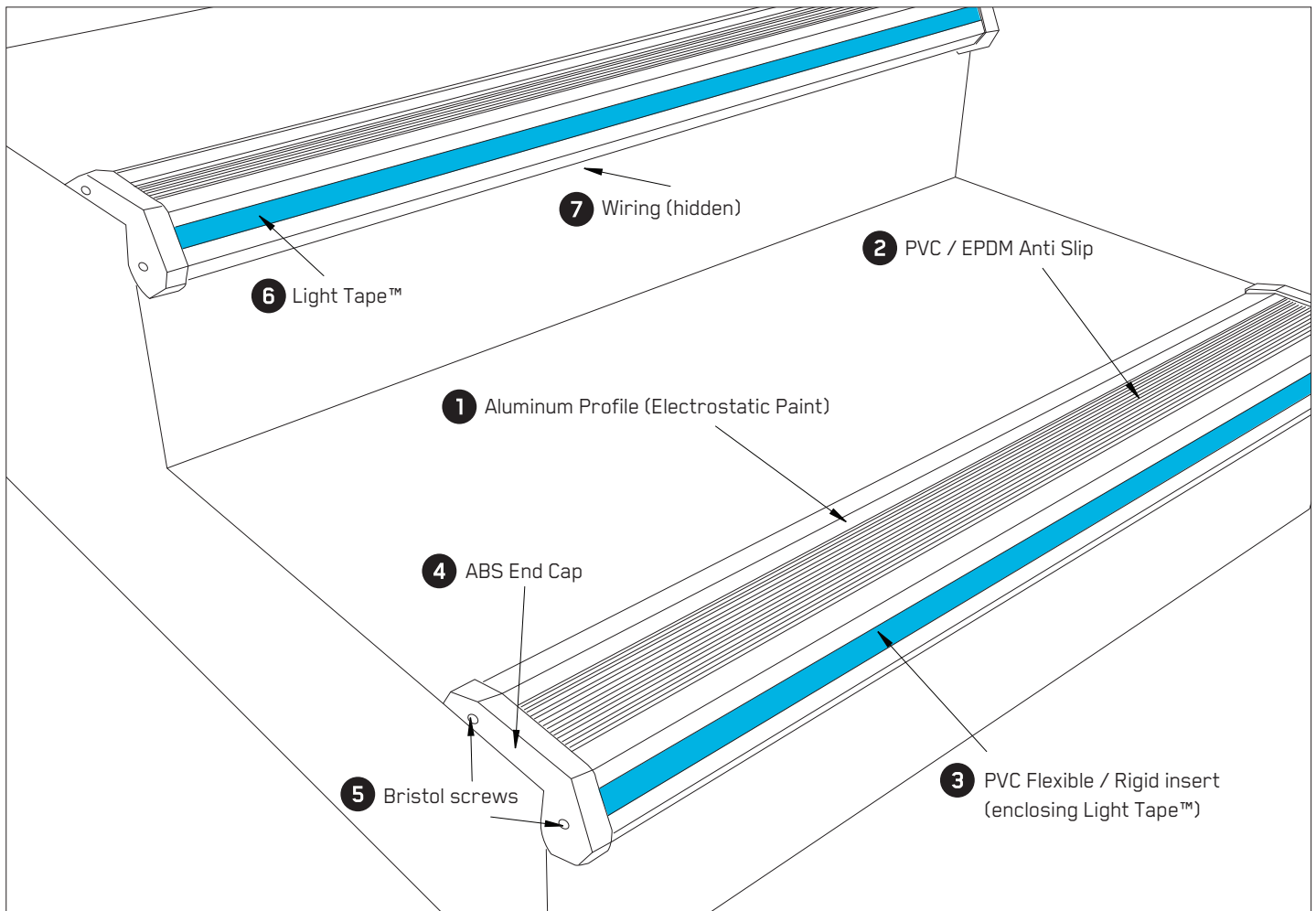
RISK OF ELECTRIC SHOCK

CLASS II

AC CURRENT

INDOOR USE ONLY

Follow all Electrical Codes when installing and wiring

StepGuard Cleaning & Maintenance Information

For external parts of StepGuard™ fixtures

7 Wiring (hidden)

2 PVC / EPDM Anti Slip

6 Light Tape™

1 Aluminum Profile (Electrostatic Paint)

4 ABS End Cap

5 Bristol screws

3 PVC Flexible / Rigid insert (enclosing Light Tape™)

Preventive Maintenance

A visual inspection of the system should be performed regularly. Depending on use but at least once a week the maintenance and/or cleaning personnel should be able to identify that all parts are in place and working properly to run a safe system.

1 Aluminum Profiles

Going down or upstairs will help to make sure all profiles are securely fixed on place. They should not move when stepping on them.

2 PVC / EPDM Anti-slip

Anti-slip should be free of grease and fitted flat on its cavity from end to end.

3 PVC Flexible / Rigid insert

The insert encapsulates the Light Tape™, therefore should be free of cuts or abrasions. No elements should obscured light.

StepGuard Cleaning & Maintenance Information
For external parts of StepGuard™ fixtures

4 **ABS End Caps**
All end caps must be properly secured to profiles with the screws. Missing, lose or broken end caps should be replaced immediately.

5 **Bristol Screws (on end caps)**
Both screws should be secured on each end cap. Missing screws or with signs of rust should be replaced immediately

6 **Light Tape™**
Make sure Light Tape™ lights evenly on its entire length. Lights should not twinkle or blink while on. Light Tape™ should be replaced if signs of humidity, or stains are shown. Please contact Technical Department for more information.

7 **Wiring**
Inspect that no wires are hanging below fixture. All wiring should be hidden and secure underneath the extrusion.

General Cleaning

A regular cleaning should be performed to prevent the build up of dirt and grease, which could compromise the anti-slip properties and the general appearance of the fixture.

Avoid the use of cleaners containing hydrocarbons, bleach or citrus based agents to clean the StepGuard™ fixtures. You should also avoid the use of steam cleaners, power washers or floor sealants to clean the inserts or end caps.

FOR DAILY CLEANING

Brush down the entire fixture using a soft bristled brush and clean the insert and anti-slip using a damp cloth. Do not soak around the caps or connection or wiring areas.

Aluminum profiles

If heavier marks or sticky stains are seen, clean them using a damp cloth with aluminium safe detergent. Light surface scratches on paint can be removed using a fine wire wool and buffed with a soft cloth. Make sure as much water or cleaning solution is removed as possible.

ABS End Caps / PVC Clear inserts

Only soap and water should be used during ABS cleaning as the use of other chemicals such as chlorides, ketones and degreasers accelerates aging and give them a yellowish color. The cleaning should be done with with a soft cloth or paper. Allow the system to be completely dry.

If you have any doubts or questions regarding product maintenance, please contact our Technical Department at:

Electro-LuminX Lighting Corporation

1320 North Arthur Ashe Boulevard
Richmond, Virginia 23230

1.804.355.1692
+44.7860.967410 GMT
thelighttapeteam@lighttape.com

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Advanced EL Lighting System.

designed for
Light**Tape**®

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Richmond, Virginia 23230 | thelighttapeteam@lighttape.com