LED Neon Light
Flat 4.57 Watt RGBW

SGi
LIGHTING INC.

Project

Type

Specification
SERIES

c(UL)us

SGi
LIGHTING INC.

LED Neon Light • Flat 4.57 Watt RGBW

HORIZONTAL BEND

Standard Snap Connector shown.
Dimensions in millimeters.

Length	Custom Length[1] cuttable every 3.25"
Operating Voltage (ov)	24V DC
Finish (fin)	WHT White
Light Colour (lc) **Correlated Colour Temperature (CCT)**	RGBW2700K Colour Changing with 2700K RGBW3000K Colour Changing with 3000K RGBW4000K Colour Changing with 4000K RGBW5000K Colour Changing with 5000K Also available in Whites and Single Colours. Pease see individual product spec sheets
Bend (bnd)	HB Horizontal Bend
Connection (con) [1]	**Snap connectors:**[2] **Injection molded:** IN_AE-CST-OUT_AE-CST IN_E-30-OUT_E-30 IN_AE-CST-OUT_ENDCAP IN_E-30-OUT_ENDCAP IN_AL-CST-OUT_AR-CST IN_SL-30-OUT_SR-30 IN_AL-CST-OUT_ENDCAP IN_SL-30-OUT_ENDCAP IN_AR-CST-OUT_AL-CST IN_SR-30-OUT_SL-30 IN_AR-CST-OUT_ENDCAP IN_SR-30-OUT_ENDCAP IN_AB-CST-OUT_AB-CST IN_B-30-OUT_B-30 IN_AB-CST-OUT_ENDCAP IN_B-30-OUT_ENDCAP
Beam Angle (ba) Degrees	160°
Light Output Lumens	RGBW4000K 302.9 per foot
IP Rating	IP67
Dimensions with snap connector **Width, Height, Length**	W 0.76" 19.5 mm H 1.08" 27.5 mm L Specify maximum length in inches[1]
Watts	4.57 Watts per foot

See connections page for alternative connector types and dimensions.

Part Number Configuration

NEON	FLT_4.57W	HB	24VDC	WHT		

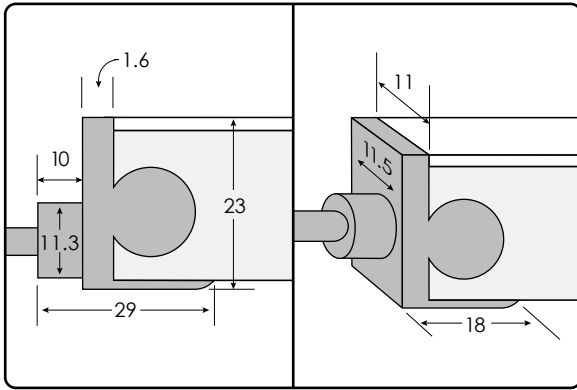| Category	Family	Bend (bnd)	Operating Voltage (ov)	Finish (fin)	Light Colour (lc)	Connection (con)	
NEON	FLT_4.57W	HB Horizontal Bend	24VDC	WHT	RGBW2700K RGBW3000K RGBW4000K RGBW5000K	**Snap Connectors**[2]: IN_AE-CST-OUT_AE-CST IN_AE-CST-OUT_ENDCAP IN_AL-CST-OUT_AR-CST IN_AL-CST-OUT_ENDCAP IN_AR-CST-OUT_AL-CST IN_AR-CST-OUT_ENDCAP IN_AB-CST-OUT_AB-CST IN_AB-CST-OUT_ENDCAP	**Injection Molded:** IN_E-30-OUT_E-30 IN_E-30-OUT_ENDCAP IN_SL-30-OUT_SR-30 IN_SL-30-OUT_ENDCAP IN_SR-30-OUT_SL-30 IN_SR-30-OUT_ENDCAP IN_B-30-OUT_B-30 IN_B-30-OUT_ENDCAP

[1] See Connections page(s) for more details. [2] Can be Field Installed.

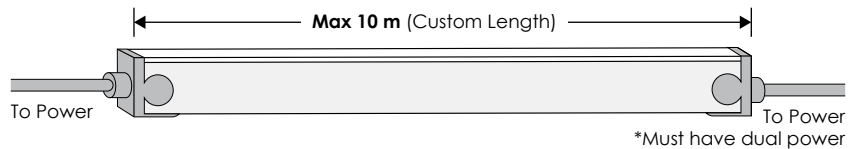# LED Neon Light • Flat 4.57 Watt RGBW Injection Molded Options
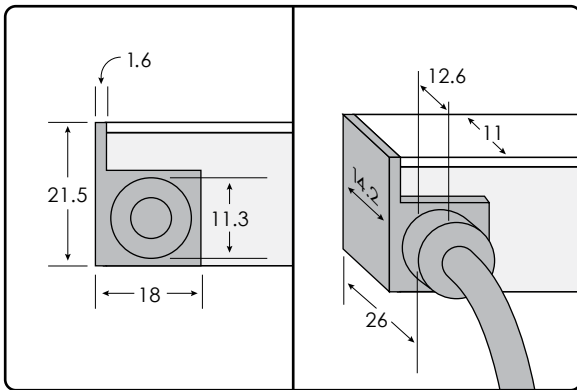
End Connector
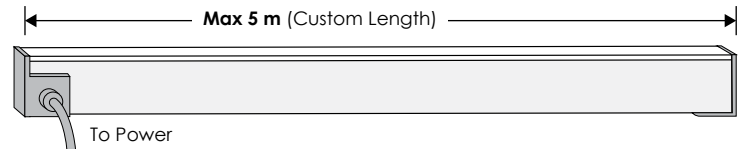

IN_E-30-OUT_ENDCAP

Max 5 m (Custom Length)

To Power

IN_E-30-OUT_E-30

Max 10 m (Custom Length)

To Power

To Power
*Must have dual power

Side Connector

IN_SL-30-OUT_ENDCAP / IN_SR-30-OUT_ENDCAP

Max 5 m (Custom Length)

To Power

IN_SL-30-OUT_SR-30 / IN_SR-30-OUT_SL-30

Max 10 m (Custom Length)

To Power

To Power
*Must have dual power
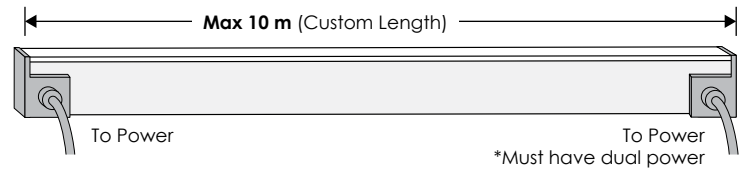
Bottom Connector

IN_B-30-OUT_ENDCAP

Max 5 m (Custom Length)

To Power

IN_B-30-OUT_B-30
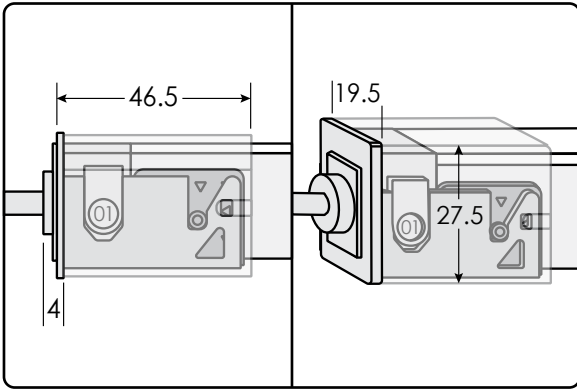

Max 10 m (Custom Length)
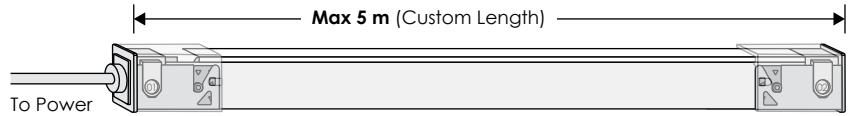
To Power

To Power
*Must have dual power
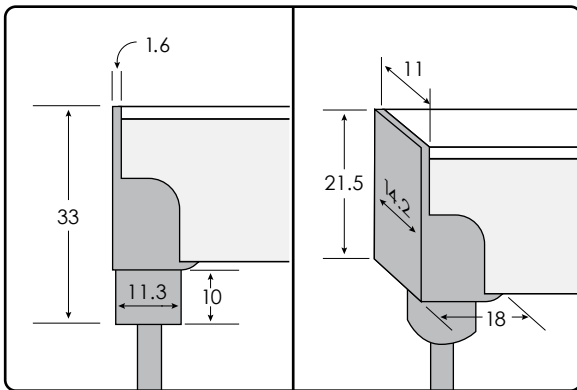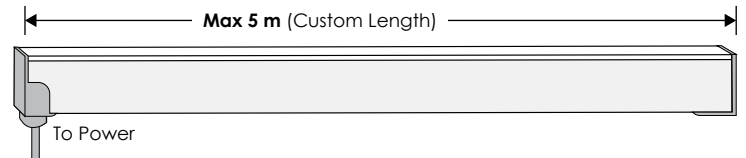
LED Neon Light • Flat 4.57 Watt RGBW
Snap Connection Options

End Connector

IN_AE-CST-OUT_ENDCAP

Max 5 m (Custom Length)

To Power

IN_AE-CST-OUT_AE-CST

Max 10 m (Custom Length)

To Power

To Power
*Must have dual power
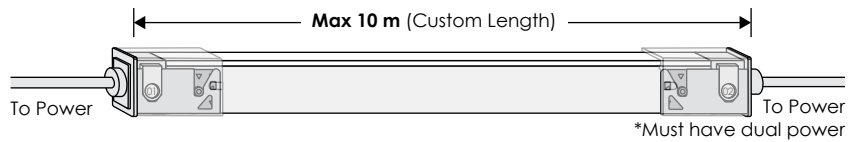
Side Connector

IN_AL-CST-OUT_ENDCAP / IN_AR-CST-OUT_ENDCAP

Max 5 m (Custom Length)

To Power
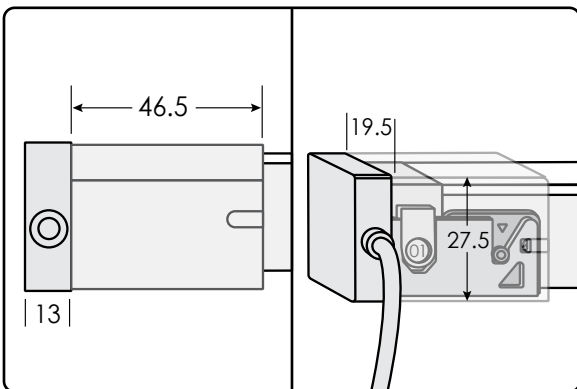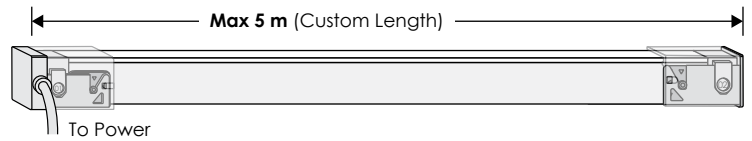
IN_AL-CST-OUT_AR-CST / IN_AR-CST-OUT_AL-CST

Max 10 m (Custom Length)

To Power

To Power
*Must have dual power
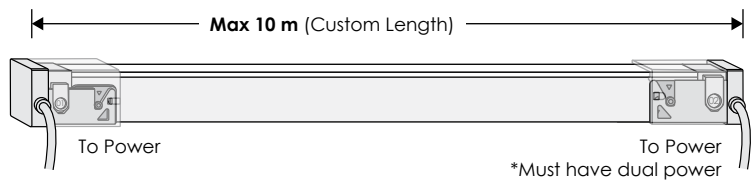
Bottom Connector

IN_AB-CST-OUT_ENDCAP

Max 5 m (Custom Length)

To Power

IN_AB-CST-OUT_AB-CST

Max 10 m (Custom Length)

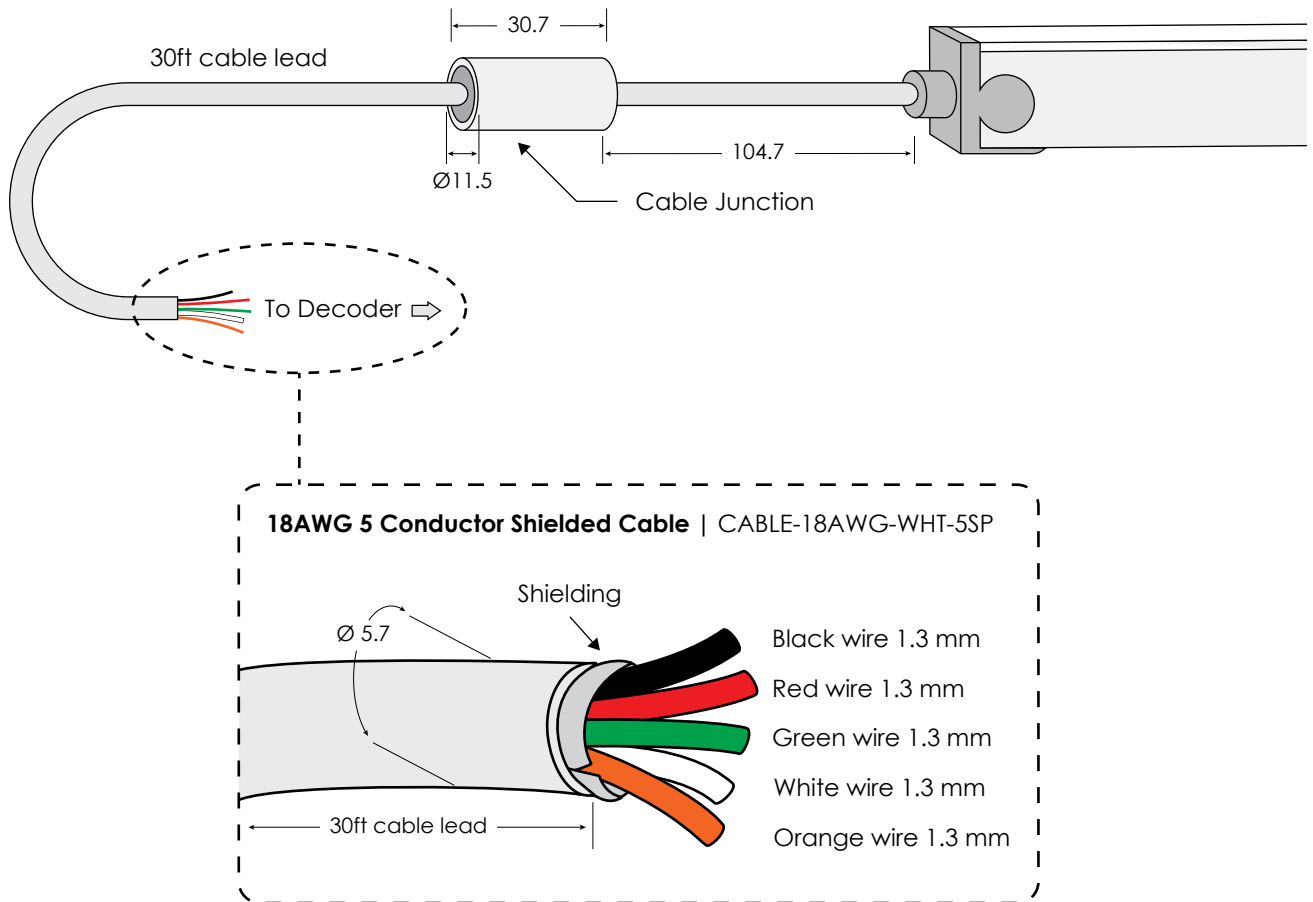To Power

To Power
*Must have dual power
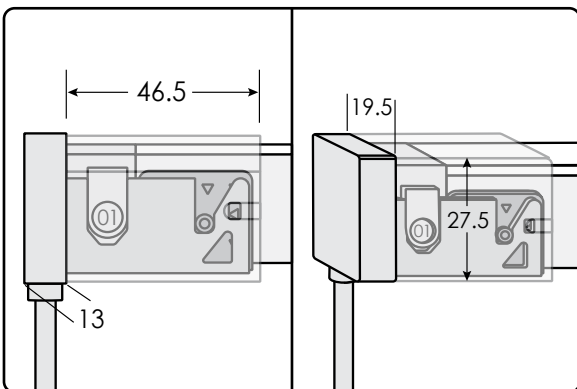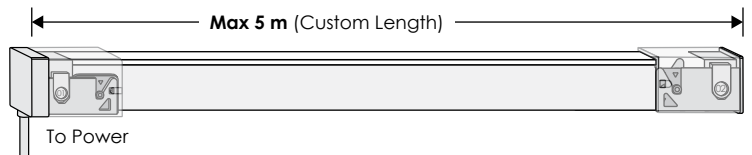
LED Neon Light • Flat 4.57 Watt RGBW
Cable Options for Injection Molded Connection

Hardwire

With standard 30ft cable.

30.7

30ft cable lead
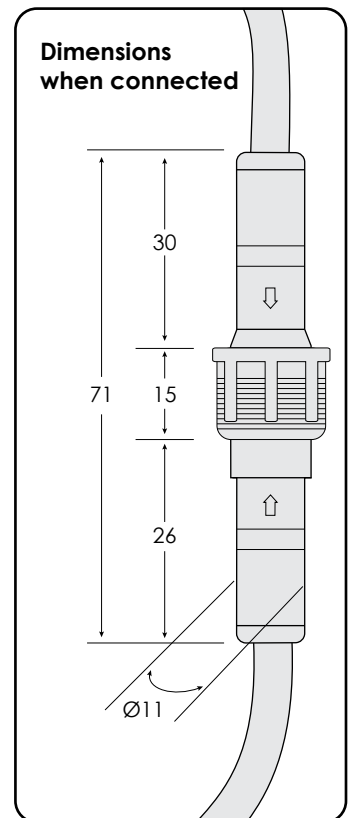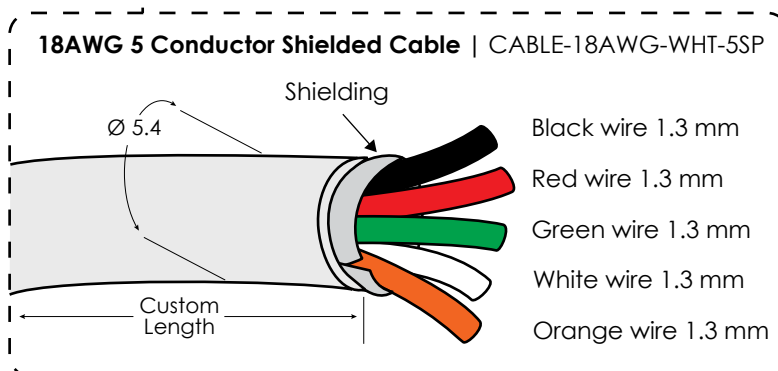
Ø11.5

Cable Junction

104.7

To Decoder ⇨

18AWG 5 Conductor Shielded Cable | CABLE-18AWG-WHT-5SP

Shielding

Ø 5.7

Black wire 1.3 mm

Red wire 1.3 mm

Green wire 1.3 mm

White wire 1.3 mm

30ft cable lead

Orange wire 1.3 mm

cULus

LED Neon Light • Flat 4.57 Watt RGBW
Cable Options for Snap Connection

Male Quick Connect*
Choose between 5ft, 10ft, 15ft, or 30ft cable leads.

Female Quick Connect
Light comes with Female Quick Connect.

Male*

Ø13 Ø11.6

39

15

Ø17

To Decoder ⇨

Female

Ø14

40

To Lights

Demensions in milimeters

Dimensions when connected

30

71   15

26

Ø11

Demensions in milimeters

18AWG 5 Conductor Shielded Cable | CABLE-18AWG-WHT-5SP

Shielding

Ø 5.4

Custom Length

Black wire 1.3 mm
Red wire 1.3 mm
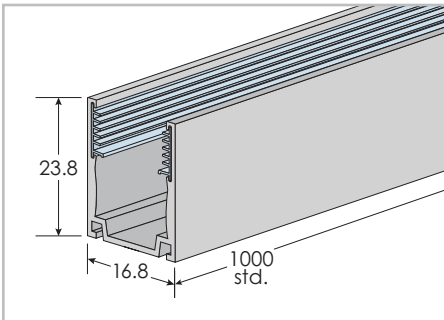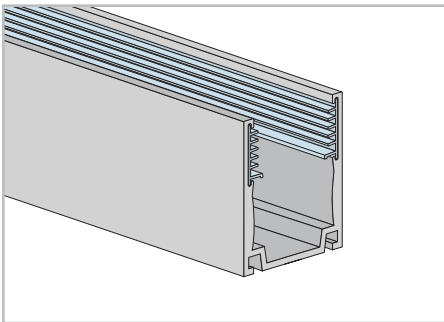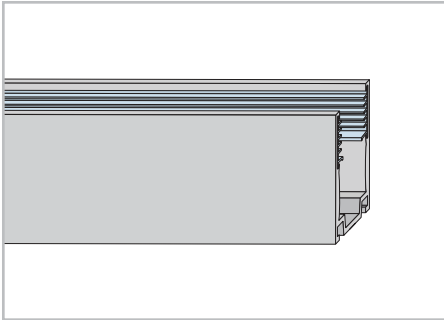Green wire 1.3 mm
White wire 1.3 mm
Orange wire 1.3 mm
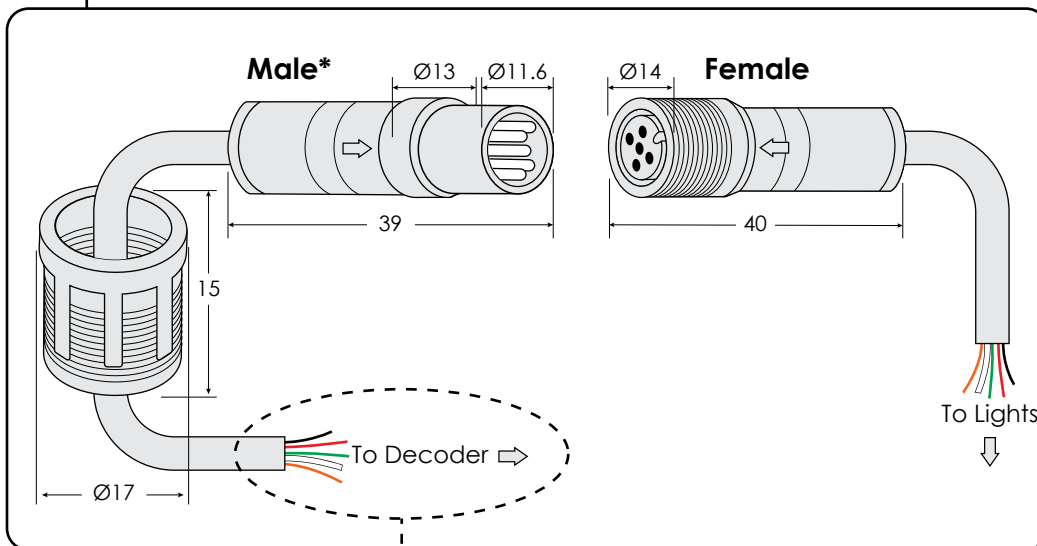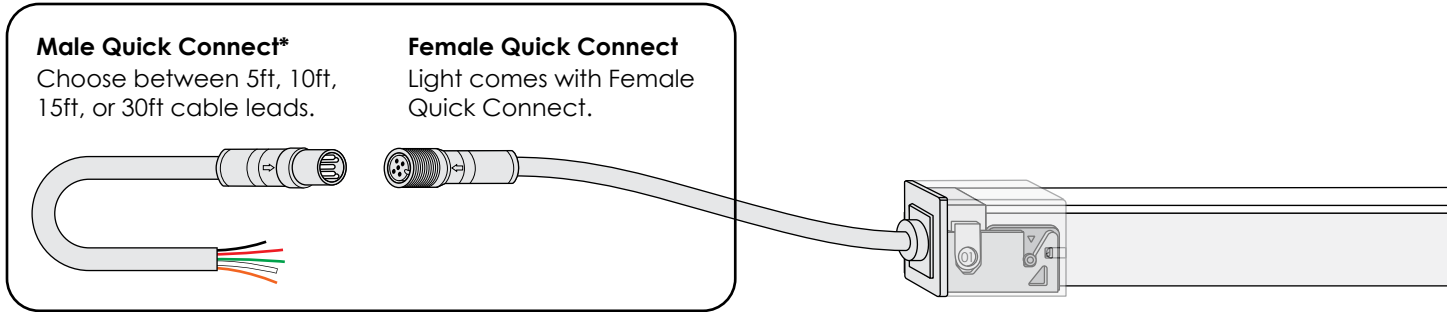
* Cable with Male Quick Connect sold separately.

CABLE-POWER-5FT-3.5M03-18AWG-WHT-5SP
CABLE-POWER-10FT-3.5M03-18AWG-WHT-5SP
CABLE-POWER-15FT-3.5M03-18AWG-WHT-5SP
CABLE-POWER-30FT-3.5M03-18AWG-WHT-5SP

LED Track • Neon 1724 Self-Locking

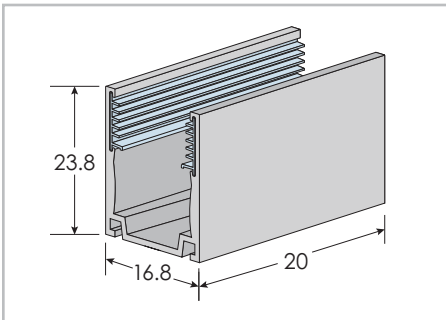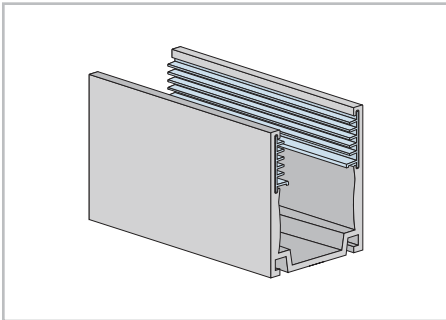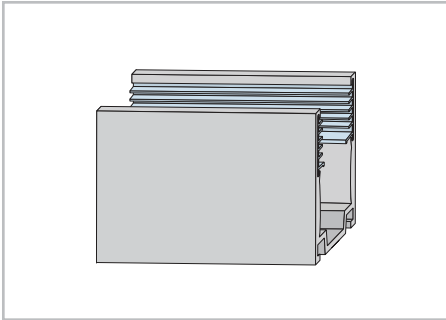|		
Finish (fin)	SIL	Silver
Lens (In)	N	None
Custom Length	Custom Track lengths available Please specify length in inches Standard length 1 m (39"), maximum 2.5 m (98")	
Housing	Aluminum Alloy	
Compatible Lights	Flat 4.57W LED Neon Light NEON-FLT_4.57W-HB-ov-fin-lc-con Round 4.57W LED Neon Light NEON-RND_4.57W-HB-ov-fin-lc-con Round High Temperature 2.2W LED Neon Light NEON-RNDHT_2.2W-HB-24VDC-WHT-lc-con	

23.8

16.8

1000 std.

Dimensions in millimeters

Part Number Configuration

TRACK	NEON-1724SL3	CST	SIL	N
Category	**Family**	**Length**	**Finish**	**Lens**
TRACK	**NEON-1724SL3**	**CST** Custom Length	**SIL** Silver	**N** None

LED Clip • Neon 1724 Self-Locking

Finish (fin)	SIL	Silver
Lens (In)	N	None
Length	20 mm 0.78 Inches (Tolerance +/– 0.3mm)	
Housing	Aluminum Alloy	

Compatible Lights	Flat 4.57W LED Neon Light NEON-FLT_4.57W-HB-ov-fin-lc-con Round 4.57W LED Neon Light NEON-RND_4.57W-HB-ov-fin-lc-con Round High Temperature 2.2W LED Neon Light NEON-RNDHT_2.2W-HB-24VDC-WHT-lc-con

23.8

16.8   20

Dimensions in millimeters
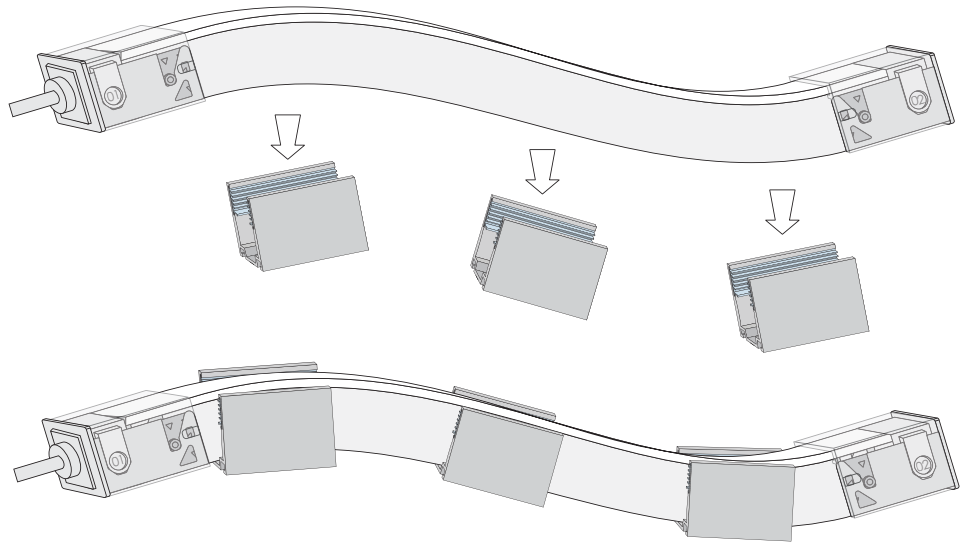
Part Number Configuration

CLIP	NEON-1724SL3	20MM	SIL	N

Category	Family	Length	Finish	Lens
CLIP	**NEON-1724SL3**	**20MM** 0.78 Inches	**SIL** Silver	**N** None

LED Track • Neon 1724 Self-Locking Horizontal Bend
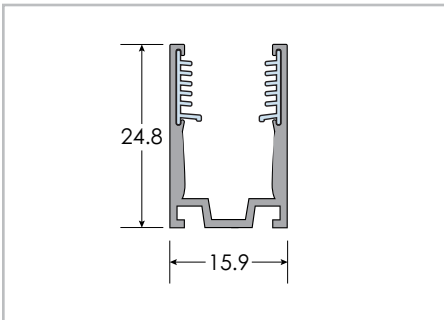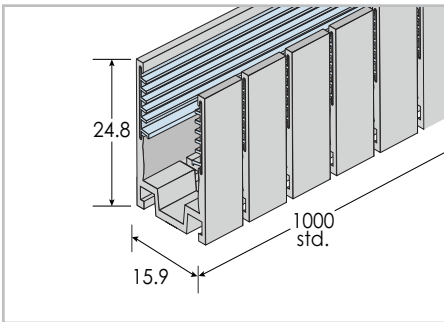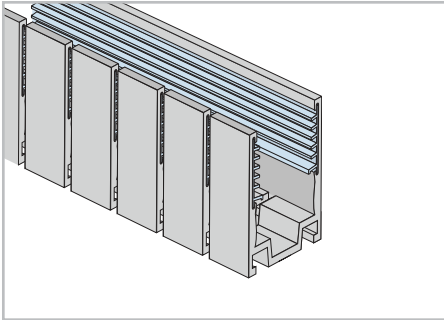
Dimensions in millimeters

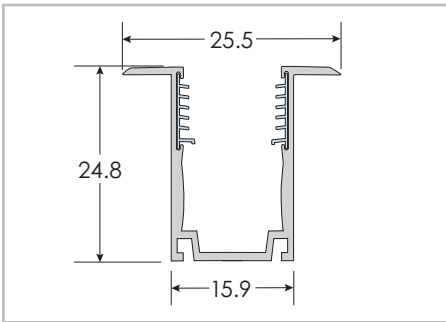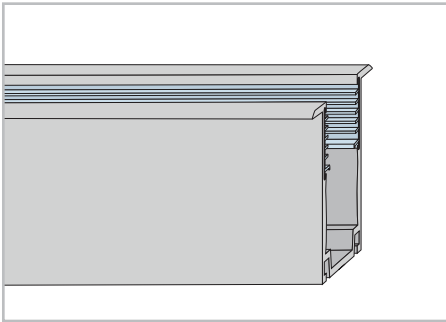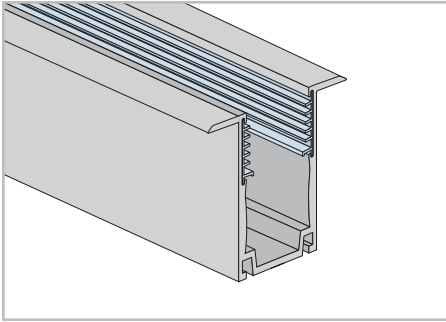| Finish (fin)	SIL	Silver
Lens (ln)	N	None
Custom Length	Custom Track lengths available Please specify length in inches Standard length 1 m (39"), maximum 2.5 m (98")	
Housing	Aluminum Alloy	
Compatible Lights	Flat 4.57W LED Neon Light NEON-FLT_4.57W-HB-ov-fin-lc-con Round 4.57W LED Neon Light NEON-RND_4.57W-HB-ov-fin-lc-con Round High Temperature 2.2W LED Neon Light NEON-RNDHT_2.2W-HB-24VDC-WHT-lc-con	

Part Number Configuration

TRACK	NEON-1724SL3-H_BND	CST	SIL	N

Category	Family	Length	Finish	Lens
TRACK	**NEON-1724SL3-H_BND**	**CST** Custom Length	**SIL** Silver	**N** None

LED Track • Neon 1724 Self-Locking Recessed

|		
Finish (fin)	SIL	Silver
Lens (ln)	N	None
Custom Length	Custom Track lengths available Please specify length in inches Standard length 1 m (39"), maximum 2.5 m (98")	
Housing	Aluminum Alloy	
Compatible Lights	Flat 4.57W LED Neon Light NEON-FLT_4.57W-HB-ov-fin-lc-con Round 4.57W LED Neon Light NEON-RND_4.57W-HB-ov-fin-lc-con Round High Temperature 2.2W LED Neon Light NEON-RNDHT_2.2W-HB-24VDC-WHT-lc-con	

Dimensions in millimeters

Part Number Configuration

TRACK	NEON-1724SL3-REC	CST	SIL	N

Category	Family	Length		Finish		Lens	
TRACK	**NEON-1724SL3-REC**	**CST**	Custom Length	**SIL**	Silver	**N**	None

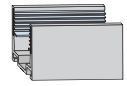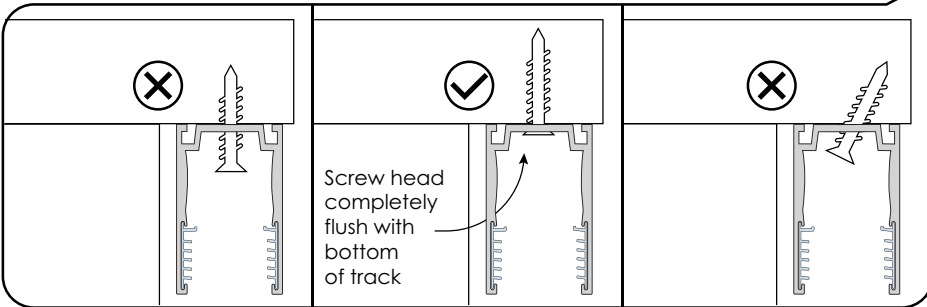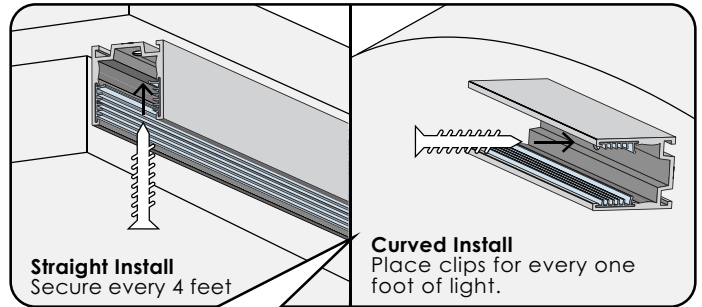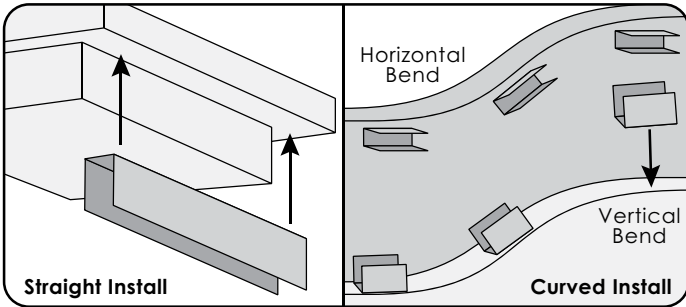# LED Track/Clip • Neon 1724 Self-Locking
Mounting Guide
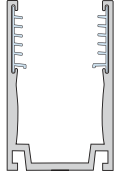
Track

Mount LED Neon lights in long lengths of track to achieve straight installations
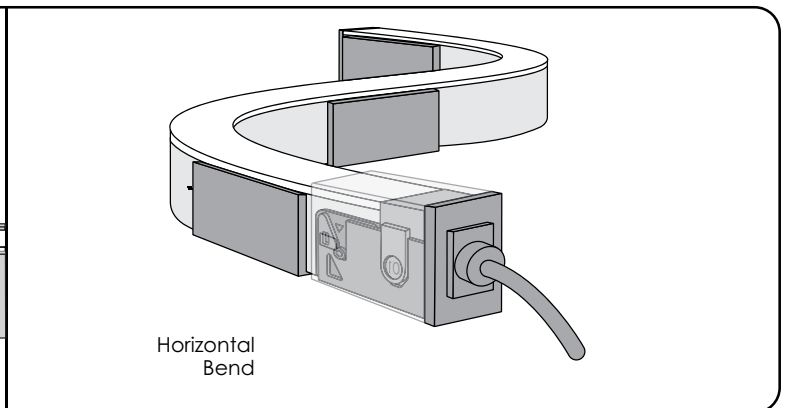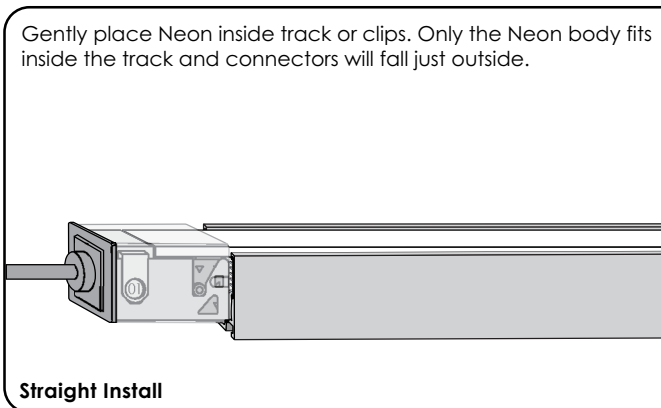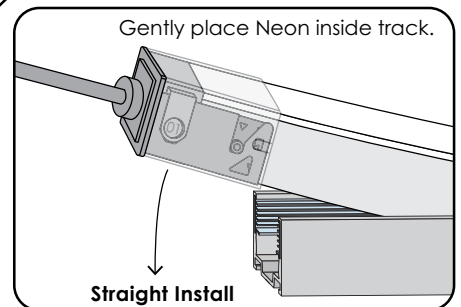**OR** multiple clips along a rounded surface for curved insallations

OR

1 meter (2 meter length available as special order)
(field cuttable to custom lengths)

20 mm

Straight Install

Horizontal Bend

Vertical Bend

Curved Install

Straight Install
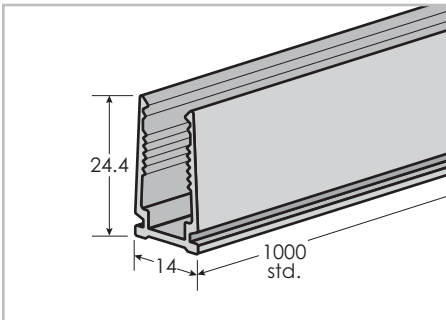Secure every 4 feet

Curved Install
Place clips for every one foot of light.

Screw head completely flush with bottom of track

Gently place Neon inside track.

Straight Install

Gently place Neon inside track or clips. Only the Neon body fits inside the track and connectors will fall just outside.

Straight Install

Horizontal Bend

LED Track • Neon 1724 PVC

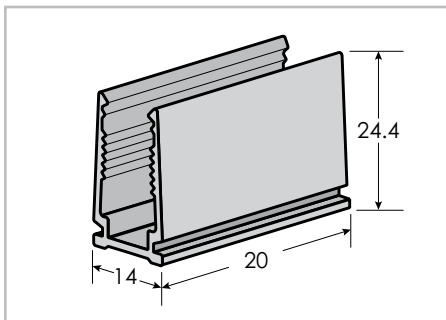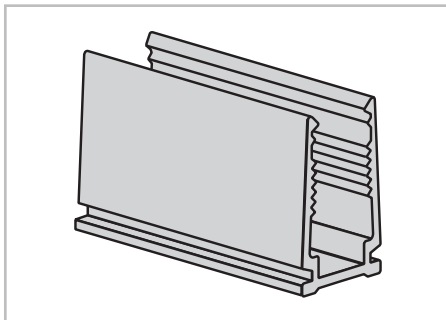|		
Finish (fin)	WHT	White
Lens (ln)	N	None
Custom Length	Custom Track lengths available Please specify length in inches Standard length 1 m (39"), maximum 2 m (78")	
Housing	PVC	
Compatible Lights	Flat 4.57W LED Neon Light NEON-FLT_4.57W-HB-ov-fin-lc-con Round 4.57W LED Neon Light NEON-RND_4.57W-HB-ov-fin-lc-con Round High Temperature 2.2W LED Neon Light NEON-RNDHT_2.2W-HB-24VDC-WHT-lc-con	
Installation Note	No self-locking feature Recommended for undermount installations, use silicone to secure light into track.	
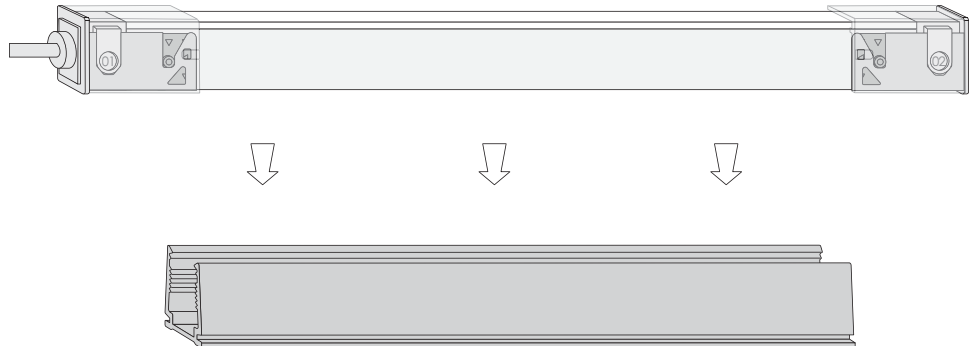
Part Number Configuration

TRACK	NEON-1724PVC	CST	WHT	N

Category	Family	Length	Finish	Lens
TRACK	**NEON-1724PVC**	**CST** Custom Length	**WHT** White	**N** None

2883 Portland Drive, Oakville, ON, L6H 5S4, Tel.: 1.877.LED.2DAY (1 877.533.2329)

LED Clip • Neon 1724 PVC

Finish (fin)	WHT	White
Lens (ln)	N	None
Length	20 mm	0.78 Inches (Tolerance +/– 0.3mm)
Housing	Plastic	

| Compatible Lights	Flat 4.57W LED Neon Light NEON-FLT_4.57W-HB-ov-fin-lc-con Round 4.57W LED Neon Light NEON-RND_4.57W-HB-ov-fin-lc-con Round High Temperature 2.2W LED Neon Light NEON-RNDHT_2.2W-HB-24VDC-WHT-lc-con
Installation Note	No self-locking feature Not recommended for undermount installations

24.4

20

14
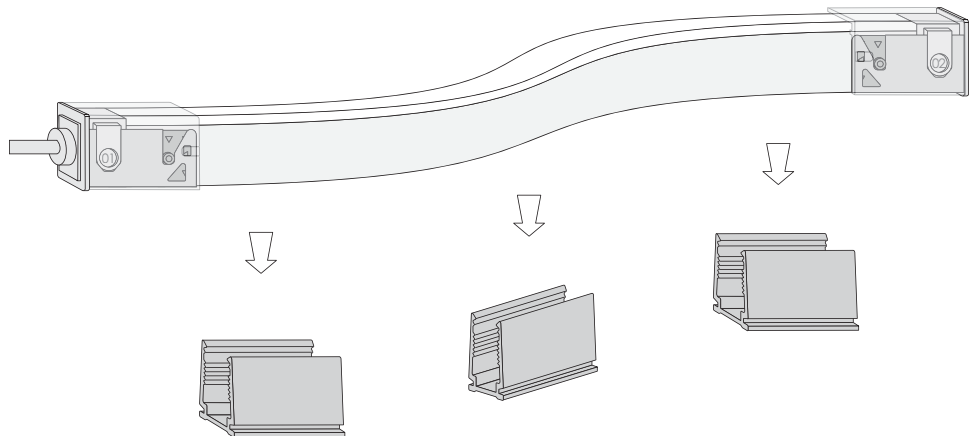
Part Number Configuration

CLIP	NEON-1724PVC	20MM	WHT	N

Category	Family	Length		Finish		Lens	
CLIP	NEON-1724PVC	20MM	0.78 Inches	WHT	White	N	None

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LED Track/Clip • Neon 1724 PVC
Mounting Guide
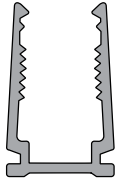
Mount LED Neon lights in long lengths of track to achieve straight installations
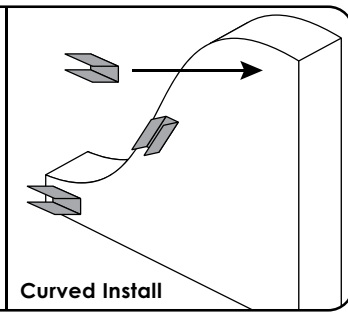**OR** multiple clips along a rounded surface for curved insallations

Track

1 meter (2 meter length available as special order)
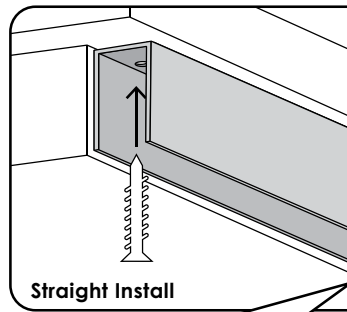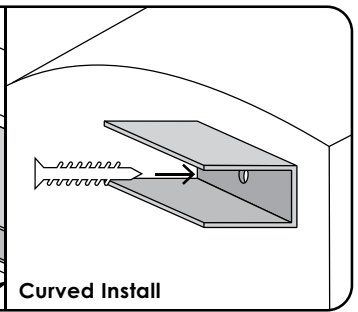(field cuttable to custom lengths)

OR

20 mm

Straight Install

Curved Install

Straight Install

Curved Install

Screw head
completely
flush with
bottom
of track
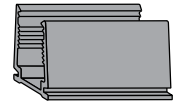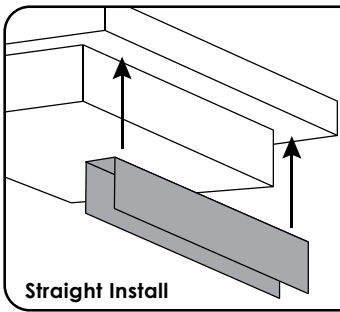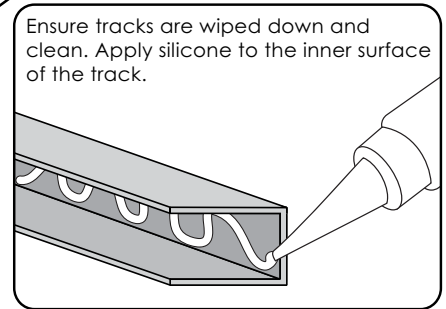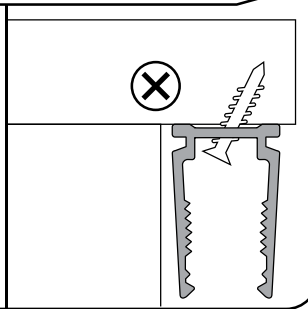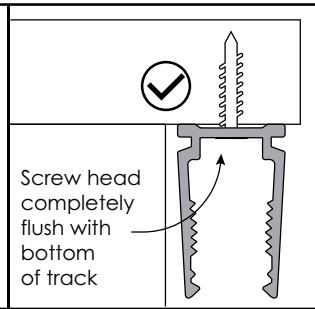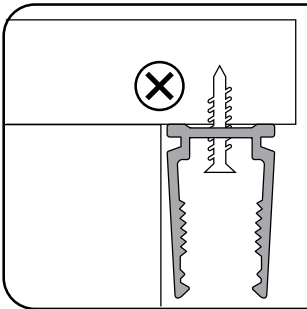
Ensure tracks are wiped down and
clean. Apply silicone to the inner surface
of the track.
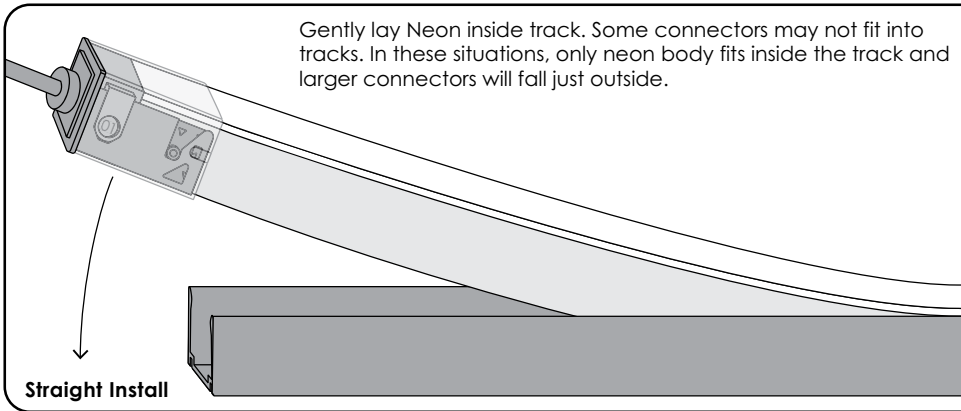
Gently lay Neon inside track. Some connectors may not fit into
tracks. In these situations, only neon body fits inside the track and
larger connectors will fall just outside.

Straight Install

Curved Install

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LED Neon • Flat 4.57 Watt RGBW
Wiring Instructions

RGBW WIRING

To Start:

You will need:

- Marettes
- Clear silicone
- SGi LED Transformer(s)
- SGi LED Neon Light(s)
- 18 AWG 5 conductor shielded cable

Optional 0 – 10V Dimmer
OR
Alternate dimming by remote control

INPUT
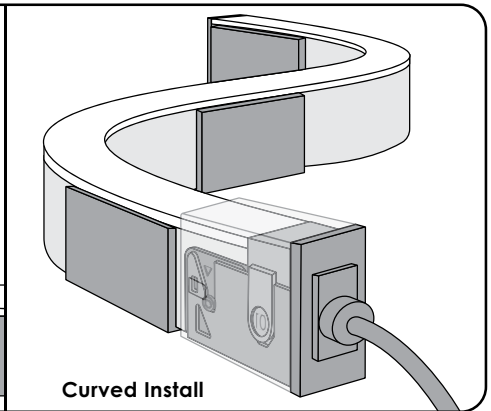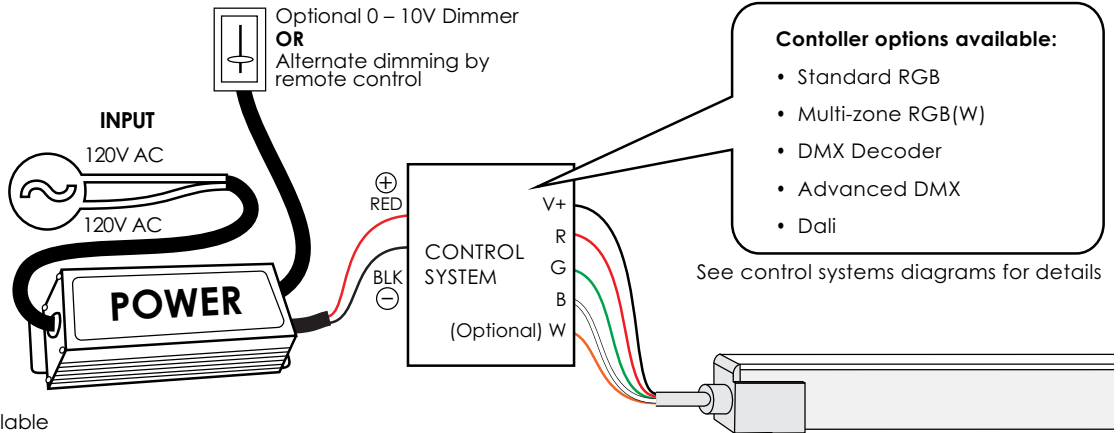120V AC
120V AC

POWER

⊕ RED

BLK ⊖

CONTROL SYSTEM

V+
R
G
B
(Optional) W

Contoller options available:

- Standard RGB
- Multi-zone RGB(W)
- DMX Decoder
- Advanced DMX
- Dali

See control systems diagrams for details

* Non-dimmable drivers are available
**Shown with injection molded end connector

**NEON-FLT_4.57W-HB-24VDC-fin-lc-con** – POWER-21-24VDC-watt DIMMABLE

Power Supply	20 Watt Class 2	40 Watt Class 2	60 Watt Class 2	96 Watt Class 2	150 Watt Class 1	200 Watt Class 1	300 Watt Class 1
Max ft of light[1]	4 ft	7 ft	11 ft	17 ft	26 ft	35 ft*	53 ft*
Max cable distance between power & light	12 AWG >300 ft 14 AWG 238 ft 16 AWG 149 ft 18 AWG 94 ft	12 AWG 189 ft 14 AWG 119 ft 16 AWG 74 ft 18 AWG 47 ft	12 AWG 126 ft 14 AWG 79 ft 16 AWG 49 ft 18 AWG 31 ft	12 AWG 68 ft 14 AWG 43 ft 16 AWG 27 ft 18 AWG 17 ft	12 AWG 46 ft 14 AWG 29 ft 16 AWG 18 ft 18 AWG 11 ft	12 AWG 35 ft 14 AWG 21 ft 16 AWG 13 ft 18 AWG 9 ft	12 AWG 23 ft 14 AWG 14 ft 16 AWG 9 ft 18 AWG 6 ft

* Every 32 linear feet of light must be home-run to transformer. **All installations in North America must follow Class 2 requirements.
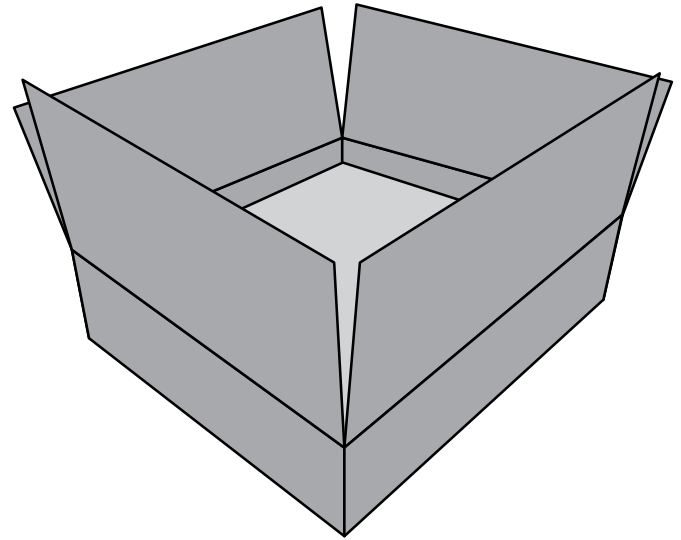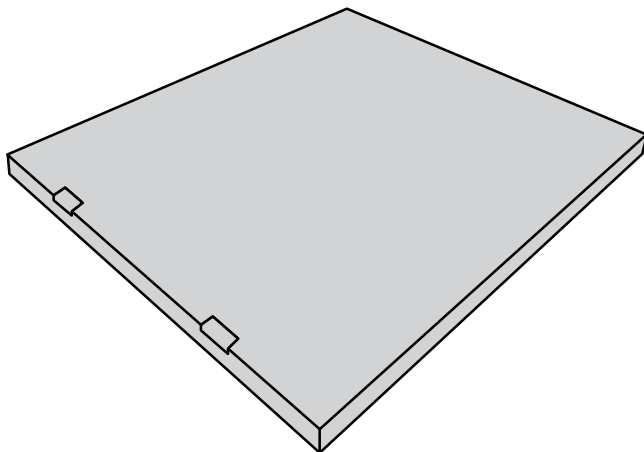[1]At 80% capacity

c(UL)us

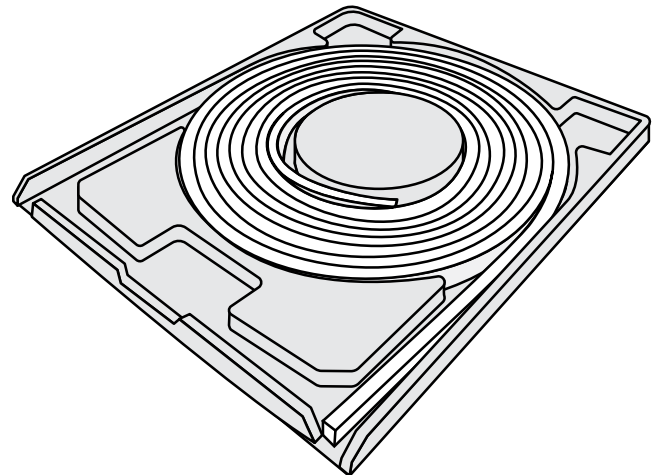# **LED Neon** • Flat 4.57 Watt RGBW
Handling Guide
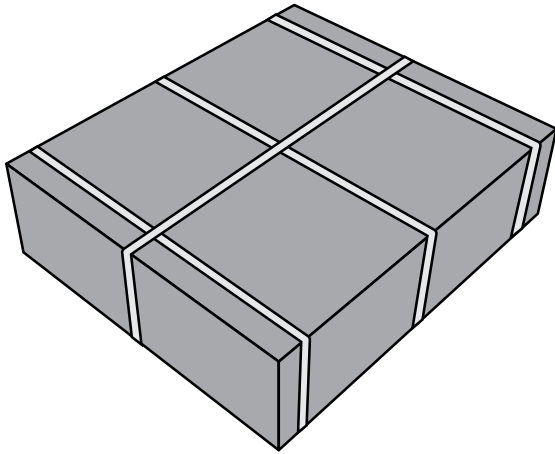
LED Neon lights are shipped in cartons.
Carefully cut open cartons. Do not cut deeply, as the
contents are packed tightly against the carton lid
to prevent movement during shipping.

Each shipping carton can fit one to four trays.

Important: Keep trays flat. Placing trays on their sides can
cause contents to become unravelled.
Each tray can fit multiple LED Neon strips, depending on overall
length. Slide out plastic tray onto flat surface.

Remove LED Neon light by carefully lifting from the plastic
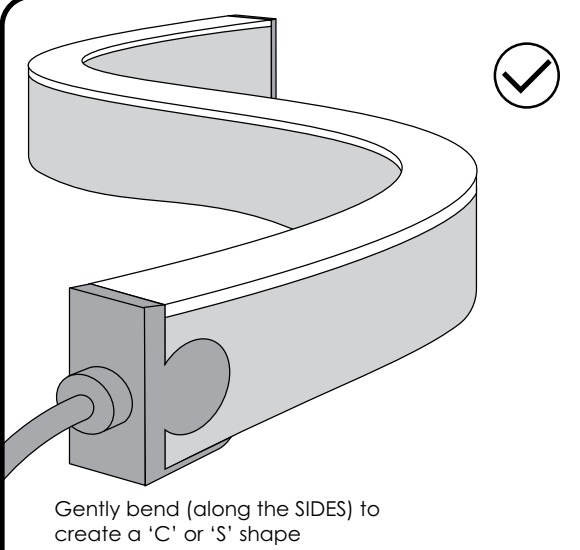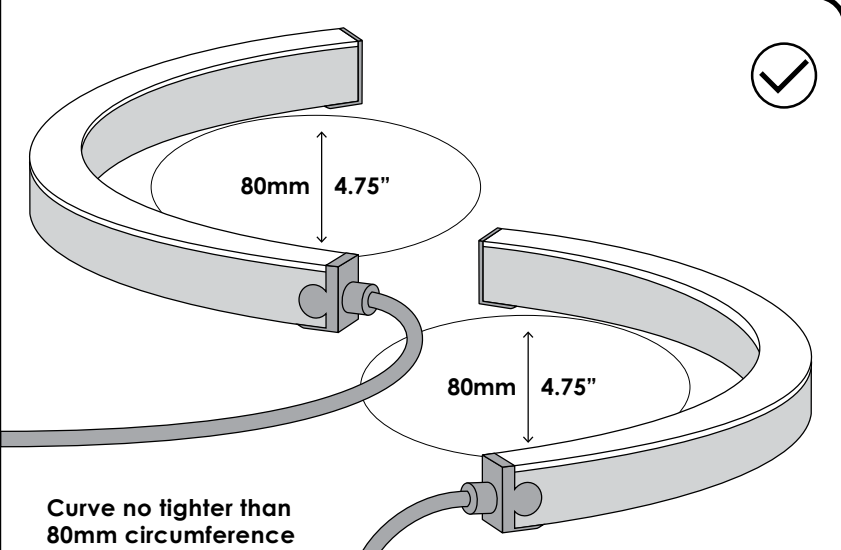holding tray.
**NOTE: PLEASE FOLLOW HANDLING INSTRUCTIONS
         (NEXT PAGE) CAREFULLY. IMPROPER HANDLING CAN
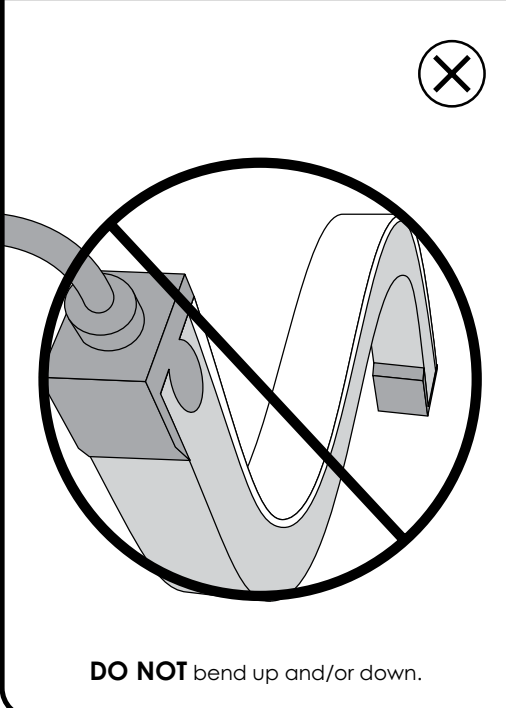   DAMAGE LIGHTS AND VOID WARRANTY.**
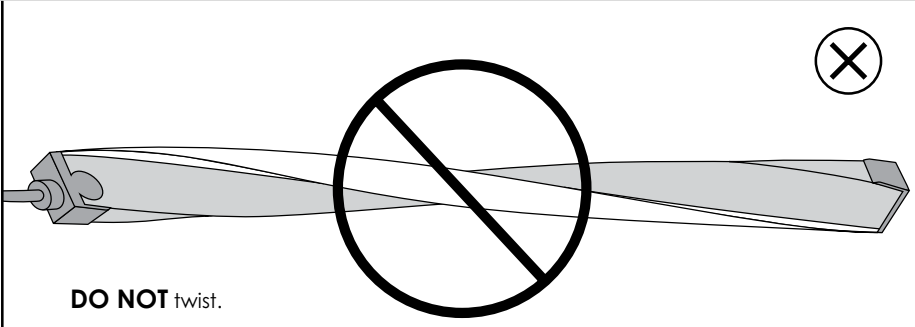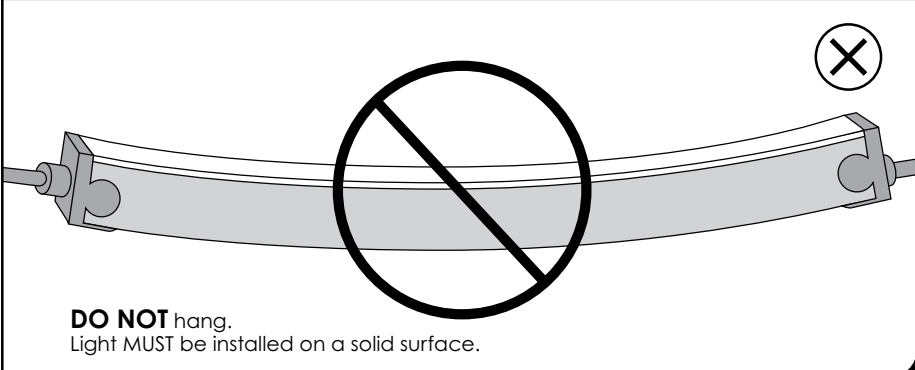
LED Neon • Flat 4.57 Watt RGBW
Handling Guide

Gently bend (along the SIDES) to create a 'C' or 'S' shape

80mm   4.75"

80mm   4.75"

Curve no tighter than 80mm circumference

LED NEON FLAT MAY BE HANDLED IN THE WAYS MENTIONED ABOVE

DO NOT HANDLE LED NEON FLAT AS SHOWN BELOW. **IT MAY DAMAGE YOUR LIGHT.**
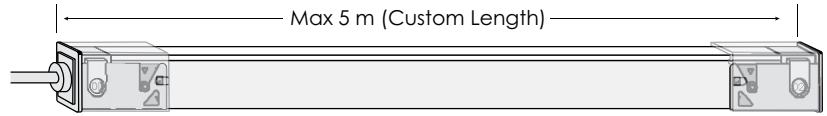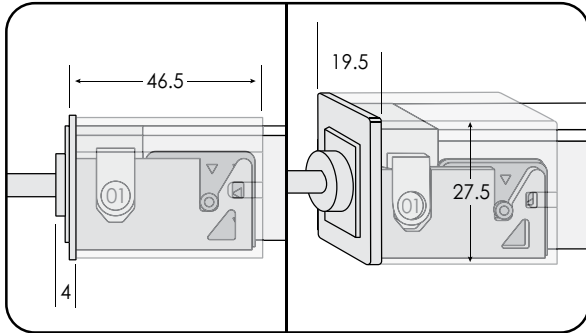

DO NOT bend up and/or down.

DO NOT twist.

DO NOT hang.
Light MUST be installed on a solid surface.

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LED Neon • Flat 4.57 Watt RGBW
Field Cutting Guide

HORIZONTAL BEND NEON LIGHTS

Factory OR Field Install

46.5
19.5
27.5
4

Max 5 m (Custom Length)

01

Cutting the Neon Strip:
1. DO NOT CUT DOWN FROM THE TOP SURFACE.
2. Ensure light surface on Neon Strip is facing up.
3. Locate the closest cut point to the maximum measurement
4. With industrial strength cutters, cut the Neon strip FROM THE SIDE.

Light
Surface

Light
Surface
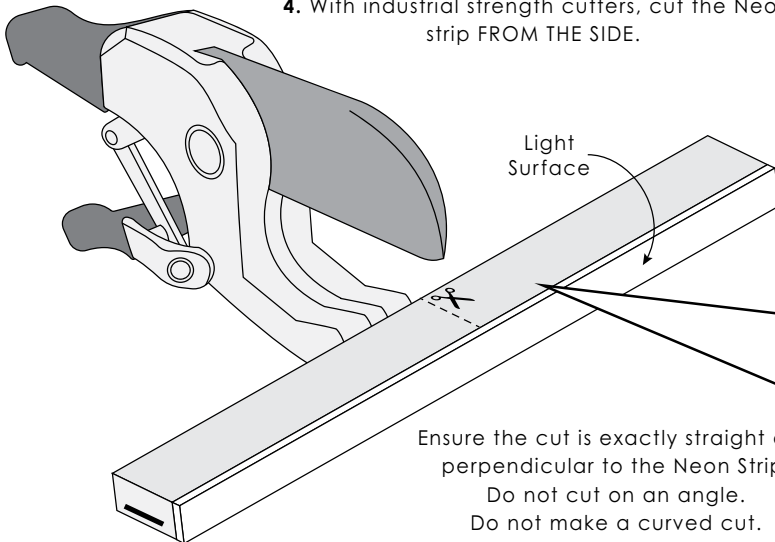
Ensure the cut is exactly straight and
perpendicular to the Neon Strip.
Do not cut on an angle.
Do not make a curved cut.

5. Insert non-metallic object inside opening at end of the light strip.

6. **CAUTION:** Inserting the object in front of PCB (light board) will damage the light. See Neon front view for more detail.

Insert tool
BEHIND
light board

PCB
(Light Board)

7. Finish

Neon end should now
have room to fit
the connector.
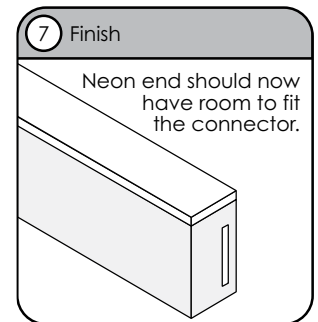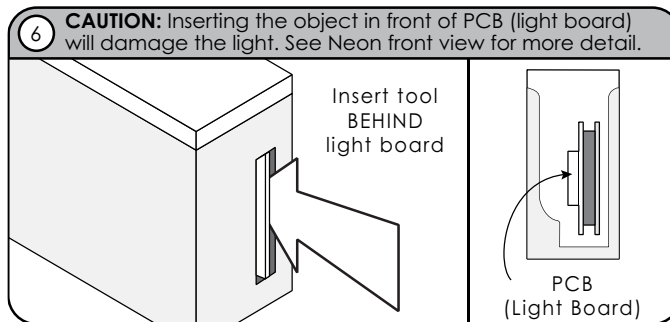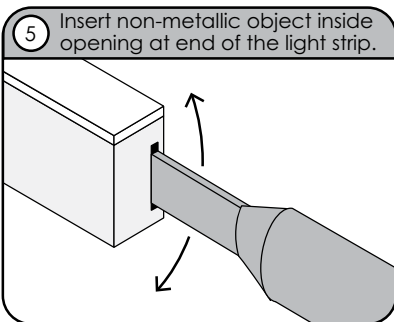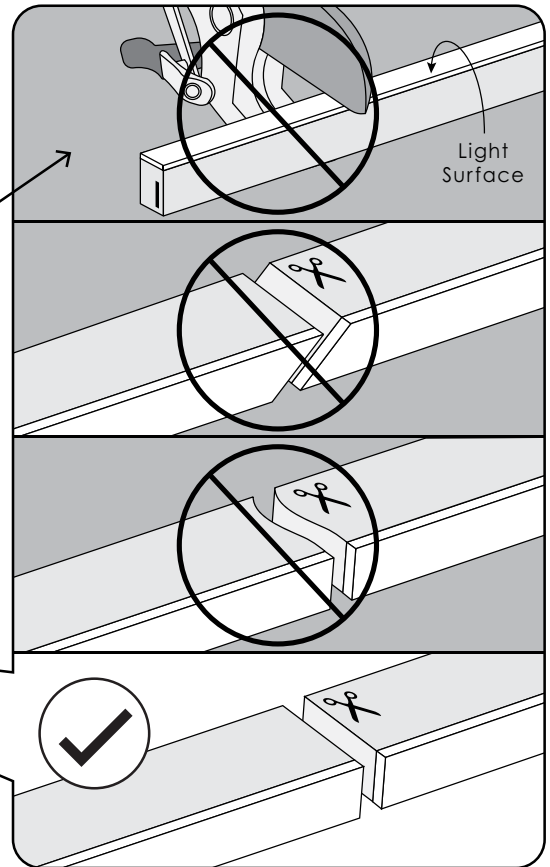
LED Neon • Flat 4.57 Watt RGBW
Snap Connect Field Installation

① Fit Neon strip through clear PC cover. Move the cover down to make room.

①A PC Cover has two sides. Ensure snap end is closest to the connector.

Snap End   Rear End

② Insert connector behind PCB. See following panel for more detail.

Note: Once connected there will be a 2-5mm gap between connector and light

Insert connector here
(Between PCB and PVC)

PVC Housing

PCB LED board

③ Flatten out Self-locking Clip. Align it with Neon strip and fold up.

Fold flaps in

Bottom tab sticks out

④ Align steel U-Plate with connector guides and snap on.

⑤ The U-Plate uses the connector guides to automatically tighten the seal

⑥ Bring clear PC cover back towards the front of the strip to cover connection.

Snap into place

Finished view of Connector
(Repeat Steps 1 – 6 to install End Cap)

2883 Portland Drive, Oakville, ON, L6H 5S4, Tel.: 1.877.LED.2DAY (1 877.533.2329)

LED Neon Light
Flat 4.57 Watt RGBW

With SGi's **Neon Flat 4.57 Watt RGBW**, achieve two completely different (but equally beautiful) looks in a single LED Neon Light. Neon Flat 4.57 Watt RGBW provides breathtaking RGB hues and also offers a sophisticated single colour white, all on the same LED strip. Enjoy the freedom of switching between colour changing excitement and a dignified 4000K, 3000K or 2700K colour temperature. Pair with LED Neon Track or Clips for straight, curved and upside down installations.

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