FlexiBRITE G2

FlexiBRITE Series

Installation Guide

Installation

Tools Required

1. Wire stripper
2. Measuring tape
3. Drill
4. Screw driver or rivet tool
5. Utility knife or pipe cutter (tube cutter) – new or very sharp blade is critical
6. Hand or electrical saw with blade for cutting metal

Standard Hardware and Supplies (UL listing may be required on certain items)

1. Butt splice connectors, 18-22 AWG (**Principal Sloan P/N 701386-25**)
2. #6 Pan head screws or 1/8" rivets for mounting clips or track (Length and thread type depend on mounting surface, masonry inserts may be needed for brick or concrete walls).
3. Silicone glue (**Principal Sloan P/N A-SWFX-SA**)
4. AWG # 18, two (2) conductors, PVC jacketed, NEC type Power Limited Tray Cable (PLTC) with UL listing (100' Roll is **Principal Sloan P/N 400299-1200**).
5. AWG # 14, two (2) conductors, PVC jacketed, NEC type Power Limited Tray Cable (PLTC) with UL listing (100' Roll is **Principal Sloan P/N 400301**).
6. FlexiBRITE G2 mounting clips
7. FlexiBRITE G2 mounting track
8. FlexiBRITE G2 end caps
9. Conduit and J-Boxes for power supply installation as needed.

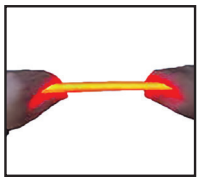
(Appropriate UL listing is required.)

CAUTION

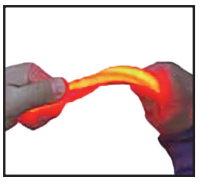
Do **NOT** twist and bend this product abruptly or severely.

This action may cause copper trace or solder connections to crack, resulting in section outages along the strand.

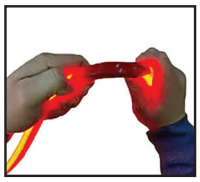
TAKE EXTREME CAUTION WHEN UNBOXING AND INSTALLING.



Normal flex



Unnatural bend



Section outage

Result of twist & bend

Outages caused by these actions may void your warranty. Unwind flex strip from coil or reel carefully and without twisting.

Bending FlexiBRITE G2

FlexiBRITE G2 can bend in plane as tight as a 2.36" (60 mm), Back-bend and Side-bend, and 8.00" (203 mm), Wide.

CAUTION! Bending FlexiBRITE G2 out of plane, twisting FlexiBRITE G2 or stretching FlexiBRITE G2 can damage lighting circuit board and cause non-warranty failure.

Cutting FlexiBRITE G2

FlexiBRITE G2 can be cut to shorter lengths. All cut pieces can be used provided cut is made on cut line and each section has a set of wires for power hook up. Cut Marks are black lines that can be seen through one side of extrusion. **All ends must be sealed**. Wherever possible use 24-ft lengths to minimize number of that have to be sealed.

Connecting FlexiBRITE G2

Hold wires finger tight when stripping. If wires are not held in place they may break free from FlexiBRITE G2 extrusion.

Trim open wires

Any wire loops that have been cut, but are not being used for an electrical connection must be trimmed flush with extrusion and covered with a bead of silicone.

Mounting FlexiBRITE G2

FlexiBRITE G2 can be mounted to any surface that will accommodate conventional fasteners. FlexiBRITE G2 mounting track is recommended for straight runs of FlexiBRITE G2. For script letters and free form shapes use FlexiBRITE G2 mounting clips or the metal flex chain.

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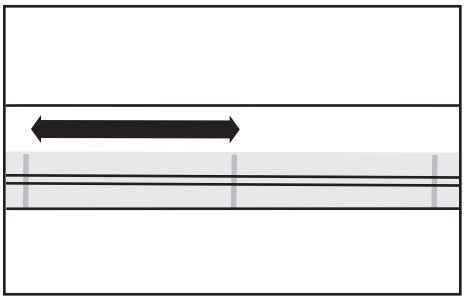
Installation (cont.)

Mounting track: Cut mounting track to required lengths and fasten to surface with #6 pan head screws.
Make all electrical connections for FlexiBRITE G2 using butt splice connectors and coat these connections with liquid electrical tape or silicone.

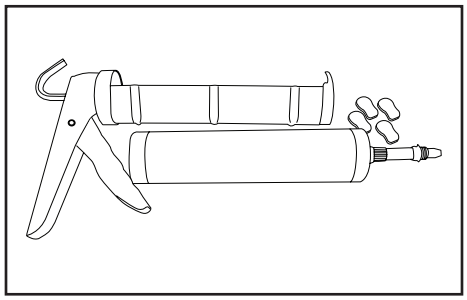
Mounting clips: Place mounting clips wherever necessary to shape FlexiBRITE G2 to desired contour. Fasten clips to mounting surface using #6 pan head screws or 1/8" rivets. **NOTE:** Clear chain ties are not UV stable, thus for indoor use only.

Sealing exposed ends (REQUIRED for all applications)
Apply inserts and end caps to all exposed ends. Any exposed ends without end caps will lead to failure of FlexiBRITE G2.

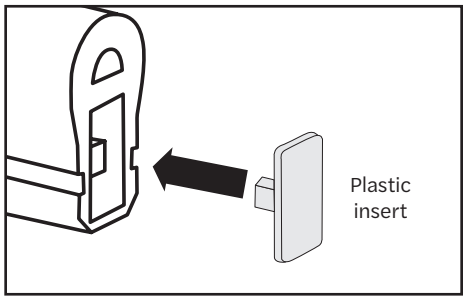
Sealing Exposed Ends - Required for Outdoor Applications



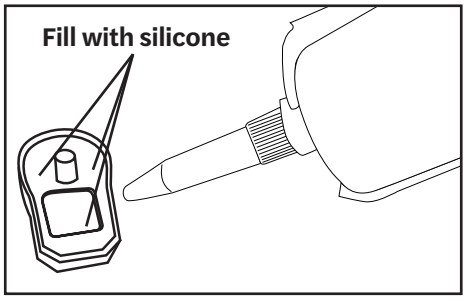
1. FlexiBRITE G2 cut marks are on side and bottom of extrusion. Any cut section will light provided there are wires for power hook-up.

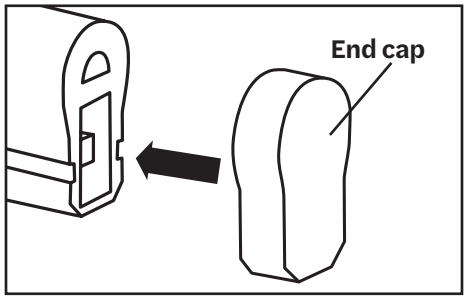


2. Gather required tools, Silicone Glue **(Principal Sloan P/N A-SWFX-SA)** and necessary end caps. Refer to **Standard Hardware and Supplies** on page 1.

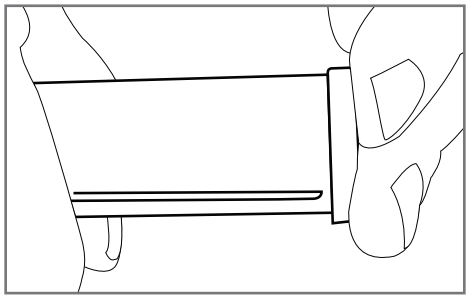


3. **FlexiBRITE G2:** Plastic insert MUST be installed at field cut end prior to applying end cap and silicone.

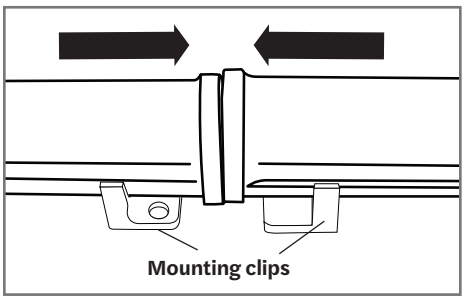




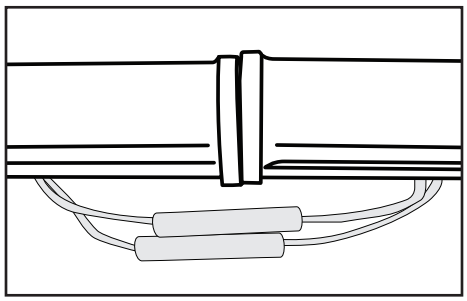
4. Apply silicone to inside of end cap to be bonded. Ensure that enough is used to cover entire surface area of inside of end cap and at least half of its depth.



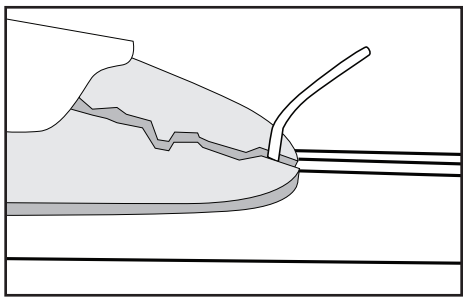
5. Press end cap onto end of FlexiBRITE G2 extrusion, clean off silicone residue and allow to cure. ***NOTE:*** *Silicone will take at least 24 hours to fully cure. It can cure in place on an installation as long as it is not disturbed while curing.*



6. Butt ends together and use mounting hardware as needed to keep them lined up.



7. Use UL Listed butt splices to complete electrical connection to next piece of FlexiBRITE G2 or power supply if needed. Seal connection with liquid electrical tape or silicone.



8. **Trim Open Wires:** Any wire loops that have been cut, but are not being used for an electrical connection must be trimmed flush with extrusion and covered with a bead of silicone.

Power Supply Connection

Connect output on power supply to beginning of FlexiBRITE G2 leg. Connect red wire of power supply output to any available red wire on FlexiBRITE G2 leg and connect black wire of power supply output to any available black wire on FlexiBRITE G2 leg. SloanLED power supplies have Class 2 DC outputs.

Power Supply Selection

Refer to individual product datasheets for product run footage and power supply loading. It is recommended that current be checked on each power supply output after loading is complete. Current drawn by each leg should not exceed current rating on power supply label. If measured current does exceed rated current, reduce length of FlexiBRITE G2 on that leg until current is below rated output.

Routing Secondary Wires

When wiring secondary outputs of power supply, all routing through walls must be sealed with outdoor rated caulk to protect sign and building from water damage and cable from chafing. The PLTC used for power supply leads and jumpers can be routed through walls, inside and outside without conduit. It is recommended that all connections be enclosed in a UL listed junction box with strain relief.

Extension of Power Supply Leads

If a longer lead wire from power supply to FlexiBRITE G2 chain is needed, an extension can be used. The extension should be kept as short as possible (under 15 ft [4.6 m] for 18 AWG UL Listed PLTC or under 50 ft [15 m] for 14 AWG UL Listed PLTC).

WARNING: CHECK POLARITY

After all wire routing is complete and lighting modules are connected to power supply, RECHECK POLARITY OF ALL CONNECTIONS. They must be RED-TO-RED and BLACK-TO-BLACK throughout entire system. Reverse polarity connections may damage LEDs and void product warranty.

NOTE: For power supply installation instructions check manual packaged with your power supply or check online at PrincipalSloan.com.

Troubleshooting:

Entire Sign or leg with FlexiBRITE G2 does not light after complete installation.	Check connection from power supply lead to FlexiBRITE G2 chain. Make sure polarity of connections made at power supply lead and at any jumper wire connection is correct. All connections should be RED-to-RED and BLACK-to-BLACK.
Still does not light.	Using a voltmeter check output voltage of power supply. Output voltage should be 24.0 VDC ± 0.5 VDC. If there is no output voltage, have a licensed electrician check input voltage. Make sure power supply is hooked up correctly and getting primary power. If power supply is hooked up correctly and getting primary power and there is still no output voltage, replace power supply with a new one.
The beginning of a FlexiBRITE G2 leg lights, but entire leg does not light or lights intermittently.	The primary cause of a portion of a FlexiBRITE G2 leg not lighting or lighting intermittently is a bad connection between length that lights and length that doesn't light. Check this connection and ensure correct polarity.
Small segment of a length of FlexiBRITE G2 does not light, but rest of length lights.	FlexiBRITE G2 is designed so if one segment fails, it will not cause entire sign or leg to go out. If one segment is not lighting, but remainder of length of FlexiBRITE G2 is lighting, remove and replace segment, or replace length with a new one.

UL Labeling:

FlexiBRITE G2 is also a UL Recognized Sign Component under UL48 File #E215393.

The most common way FlexiBRITE G2 is labeled for UL is for it to be used as a UL Recognized Sign Component. FlexiBRITE G2 is a UL Recognized Sign Component and Power Supplies provided by SloanLED are UL Recognized Sign Components. When they are properly installed in a sign by a UL sign shop, the shop can apply its UL label to the whole assembly.

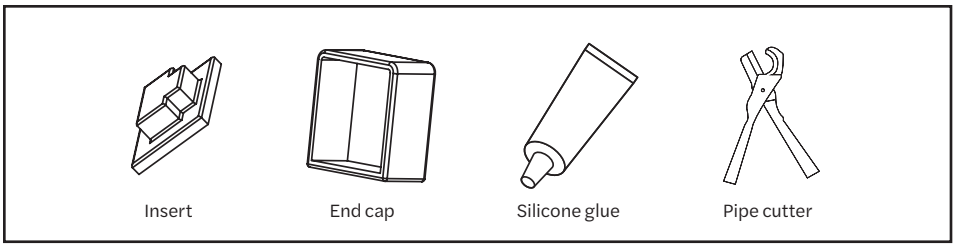
E215393

FlexiBRITE Back-Bend G2

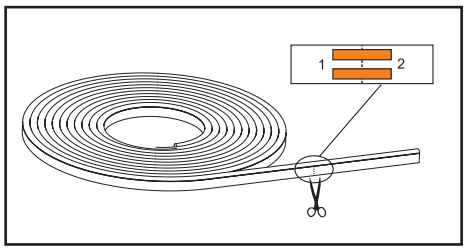
FlexiBRITE Series

Installation Guide

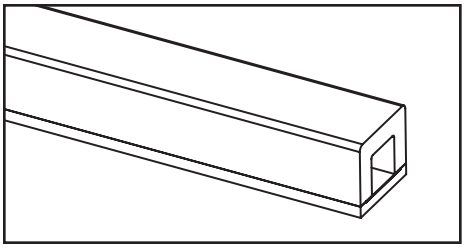
Cutting and Sealing



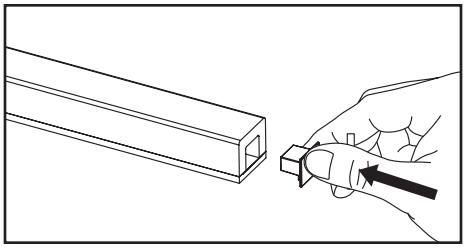
Installation tools & components



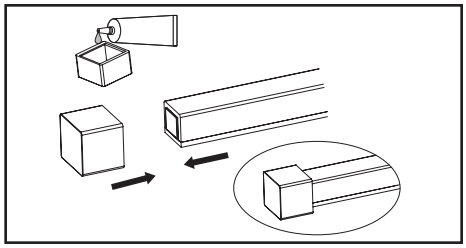
1. Cut on designated cut mark.



2. Clean cut end before next steps.



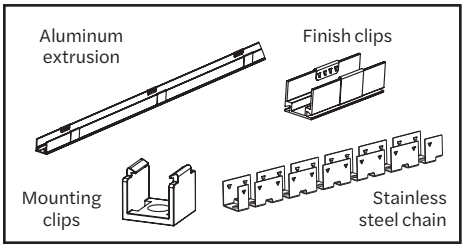
3. Install silicone insert after cut.



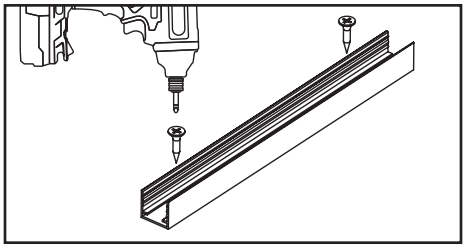
4. Apply silicone glue to silicone end cap, making sure that cut section is completely sealed.

Installation

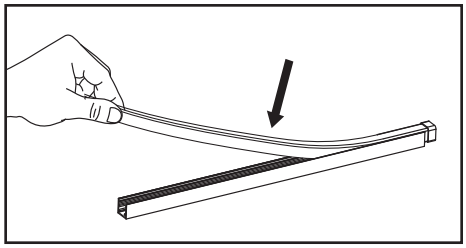
NOTE: There are no pre-drilled holes in the aluminum extrusion, please drill holes accordingly to meet field requirements, using the appropriate screw.



Mounting Accessories

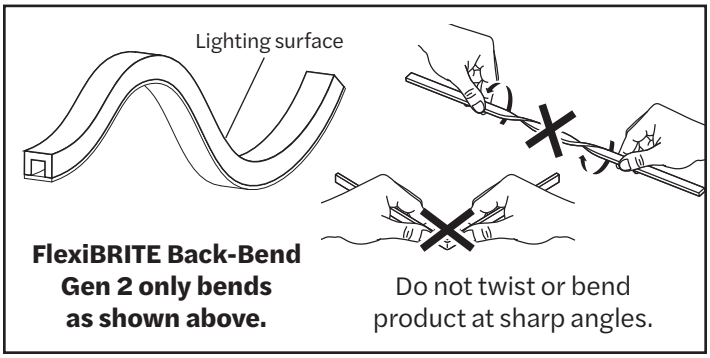


1. Drill screw hole and install mounting accessories with screws provided.

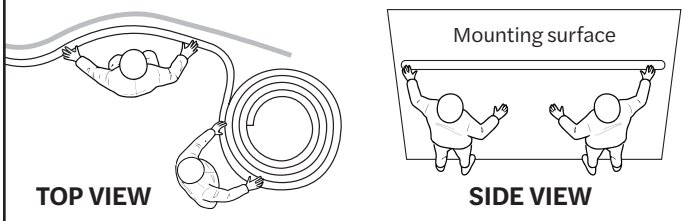


2. Gently press product into mounting accessories.

Warnings



For assembly of FlexiBRITE Back-Bend Gen 2 longer than 6.6 ft:



Careful handling with a minimum of two (2) employees is required.

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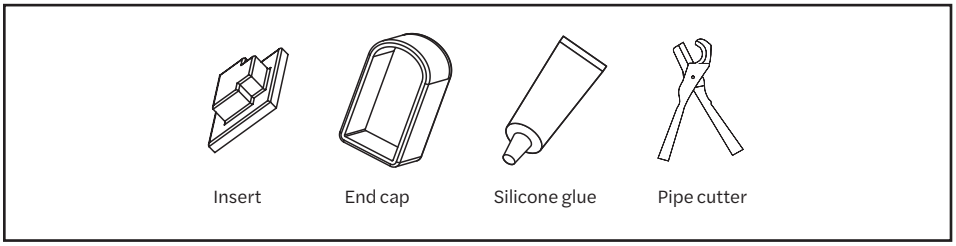
FlexiBRITE Side-Bend G2

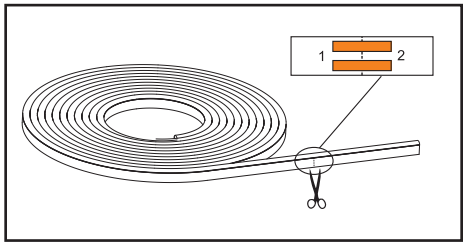
FlexiBRITE Series

Installation Guide

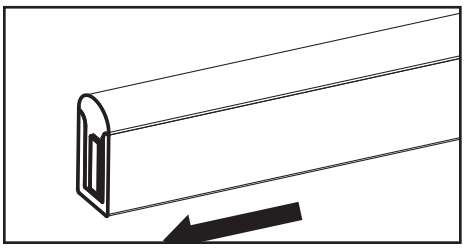
Cutting and Sealing



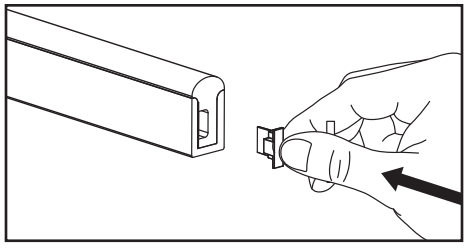
Installation tools & components



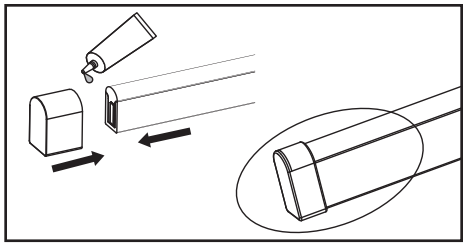
1. Cut on designated cut mark.



2. Clean cut end before next steps.



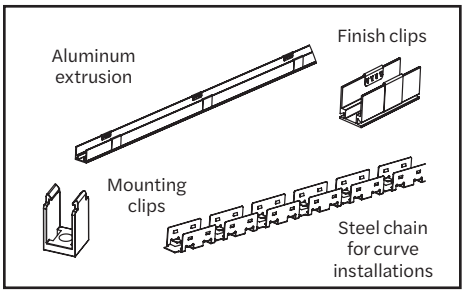
3. Install silicone insert after cut.



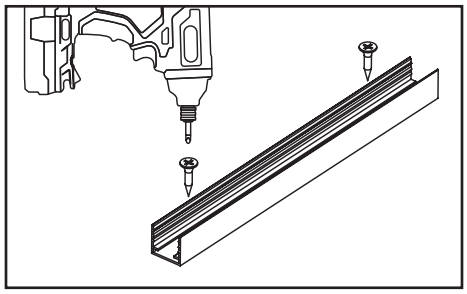
4. Coat end cap with silicone glue and install.

Installation

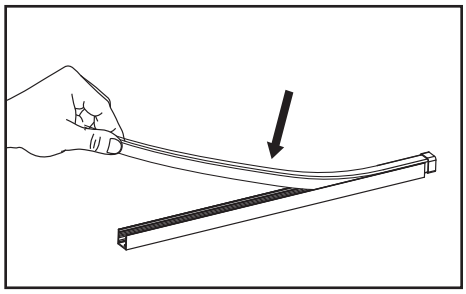
NOTE: There are no pre-drilled holes in the aluminum extrusion, please drill holes accordingly to meet field requirements, using the appropriate screw.



Mounting Accessories

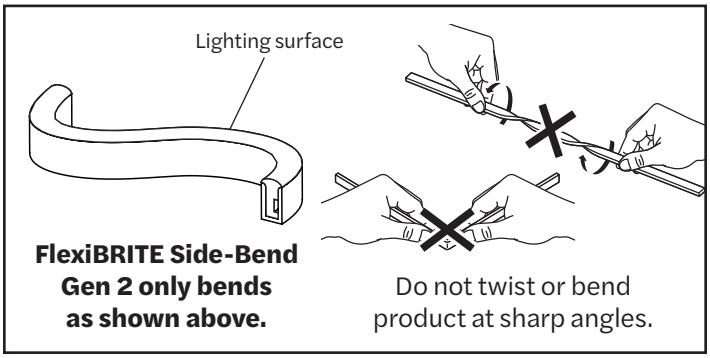


1. Drill screw hole and install mounting accessories with screws provided.

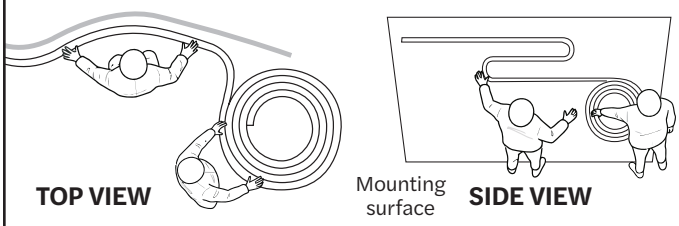


2. Gently press product into mounting accessories.

Warnings



For assembly of FlexiBRITE Side-Bend Gen 2 longer than 6.6 ft:



Careful handling with a minimum of two (2) employees is required.

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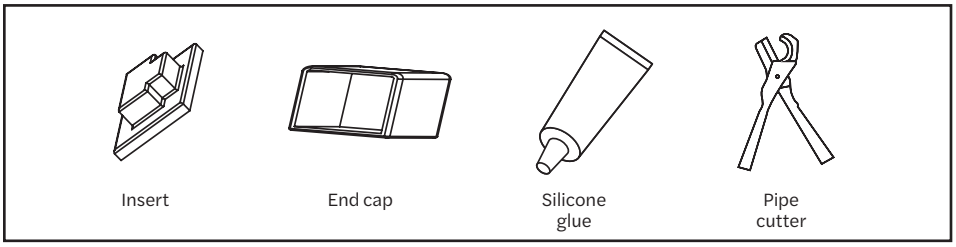
FlexiBRITE Wide G2

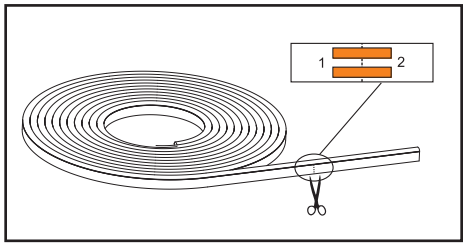
FlexiBRITE Series

Installation Guide

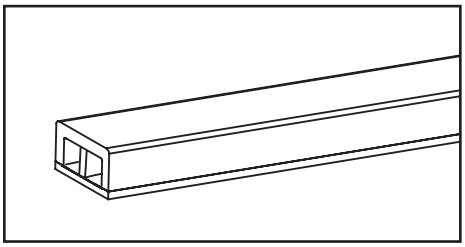
Cutting and Sealing



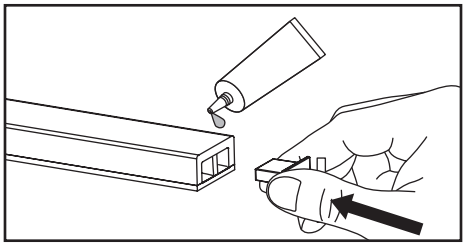
Installation tools & components



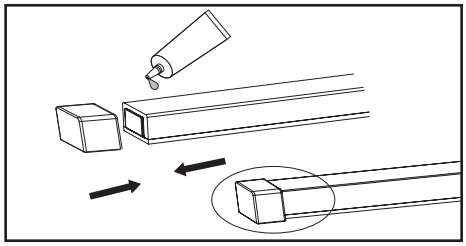
1. Cut on designated cut mark.



2. Clean cut end before next steps.



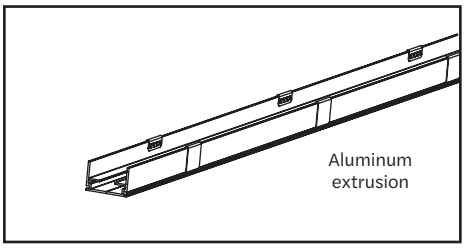
3. Install silicone insert after cut.



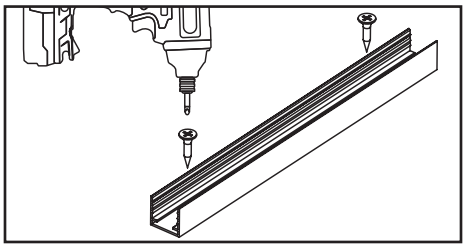
4. Coat end cap with silicone glue and install.

Installation

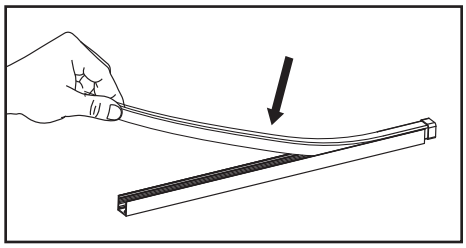
NOTE: There are no pre-drilled holes in the aluminum extrusion, please drill holes accordingly to meet field requirements, using the appropriate screw.



Mounting Accessories

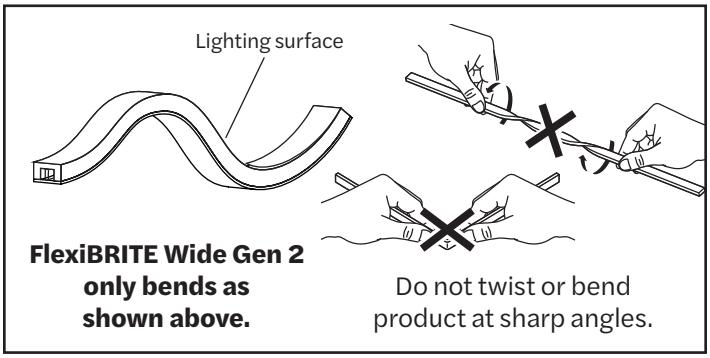


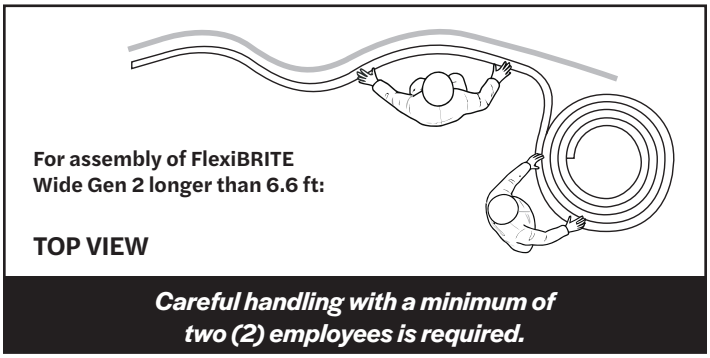
1. Drill screw hole and install mounting accessories with screws provided.



2. Gently press product into mounting accessories.

Warnings





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