



Xicato designs and delivers one of the broadest portfolio spot and linear light sources and electronics that enable architects, designers and building managers to create beautiful, smart spaces in which people love to live and work. With thousands of installations around the globe, Xicato continues to be a leading supplier of high quality lighting solutions. Xicato is defining the future of intelligent light sources by integrating electronics, software and connectivity. Founded in 2007, Xicato's headquarters is based in Silicon Valley and the company has offices in China, Europe and the US.

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LOCATION

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ONLY

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APPLICATION NOTES:

IP67 XFL do not come with adhesive on the back and have to be mounted using clips (XLA-M). Installers may use double-sided adhesive tape to mount the IP67 XFL and Xicato recommends the 3M 4229 for that purpose.

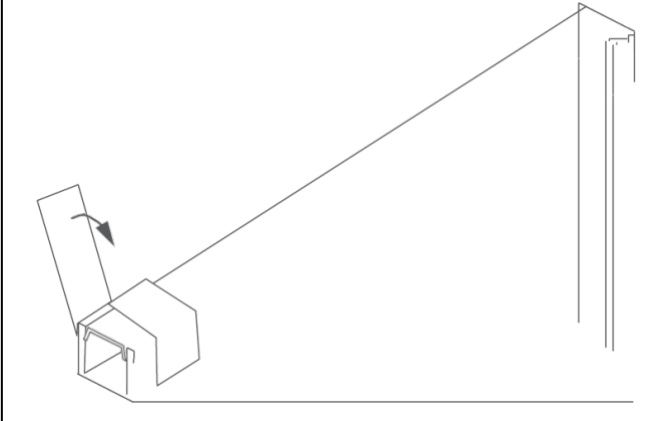
IP67 XFL must also be sealed at the ends of the strip using a boot (XLA-B), and by applying a silicone sealant to fix the boot in place. Xicato recommends a non-acidic neutral silicone sealant such as Loctite Superflex SI 5050CL, Dow Corning 737, Momentive RTV-11, or similar for that purpose.

The most common use of IP67 XFL tape is in outdoor applications where the XFL is mounted directly on the intended surface. In general, an extrusion is not used to build a fixture in such cases. However, it is possible to build a water-resistant fixture with XFL tape in one of two ways. Extrusions have their own IP rating, however the rating of a fixture depends not just on the rating of the tape and extrusion, but also method of assembly and should always be tested after assembly if required. In both the cases below, the fixture assembly is expected to be IP65 splash resistant.

1. Use IP67 XFL tape in an extrusion that is compatible with the dimensions of the XFL. This is shown in the XCC-C spec sheet for XFL products. This requires using the right end cap XCC-E and mounting hardware XCC-M for the extrusion selected.
2. Use a IP22 XFL tape in a compatible extrusion, using the process outlined later in this application note. This requires using a lens cover for the fixture and sealing the fixture with silicone.

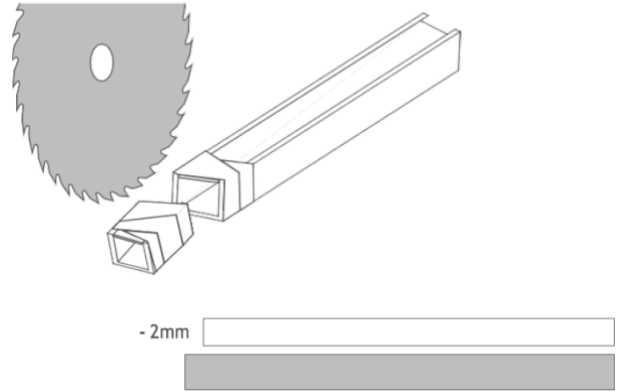
Cutting and Drilling

- 1.** Before cutting the extrusion with the cover, secure the cutting point with self-adhesive tape.

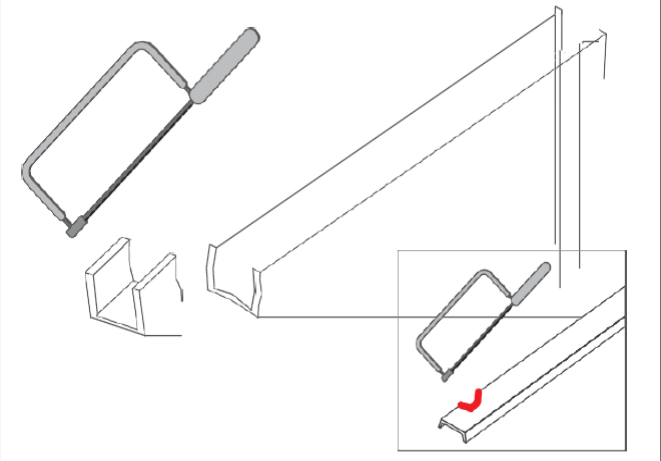


- 2.** Use a mechanical saw to cut.

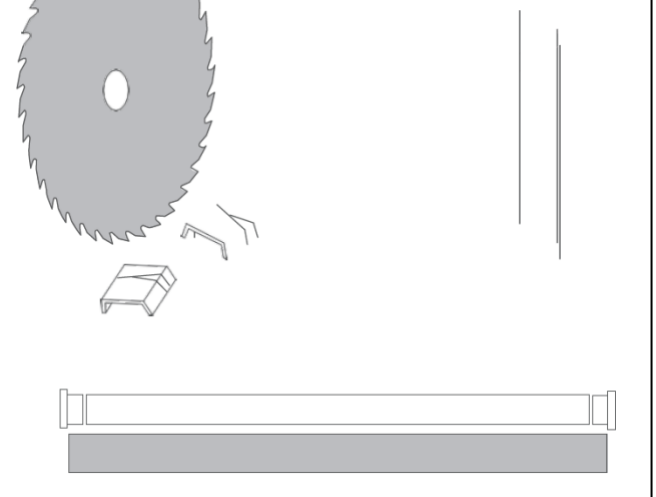
NOTE! It is recommended that the cover be cut 2 mm shorter than the extrusion to account for its thermal expansion.



NOTE! Low precision cutting of the extrusion and cover can be done with a hand saw, however, uneven, jagged edges will remain, and the covers may break.

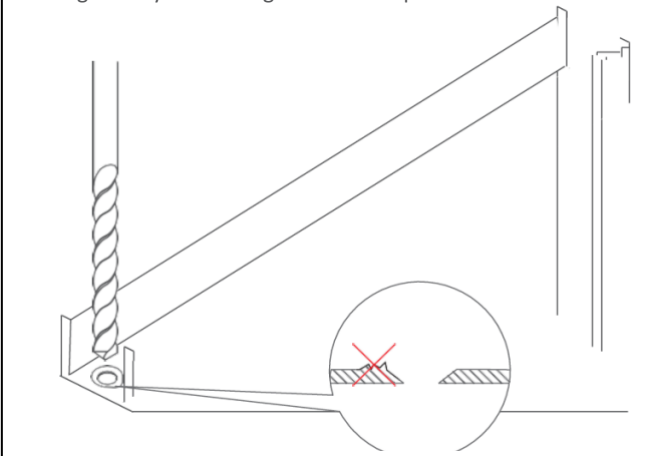


NOTE! For some extrusions there are dedicated end caps that require adequate shortening of the cover.

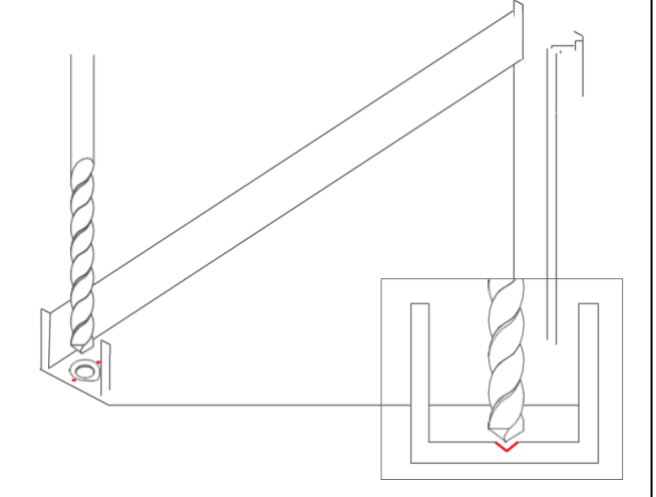


- 3.** Drill a hole in the extrusion in the selected place.

NOTE! Make sure that there are no burrs around the hole after drilling as they can damage the LED strip or cable.

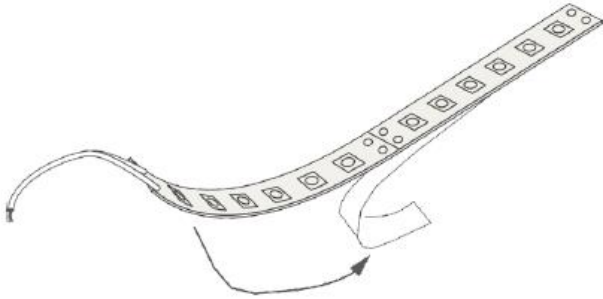


NOTE! Some extrusions feature one or more special grooves that make it easier to start drilling.



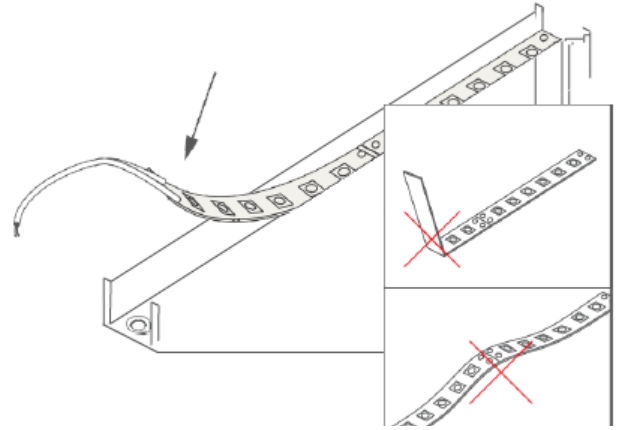
Adhering and Connecting LED Strips

- 1.** Remove the protective layer of the LED strip.



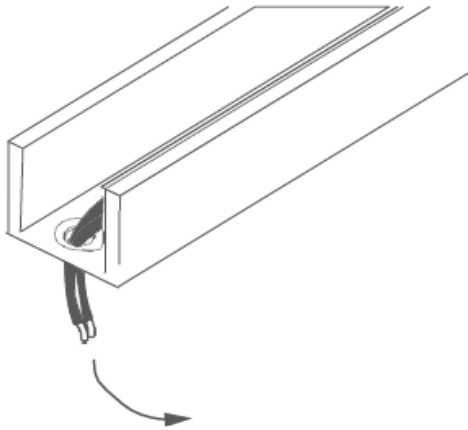
- 2.** Attach the tape in the extrusion using the adhesive provided on the LED strip.

NOTE! The tape must not be bent or peel off the surface.

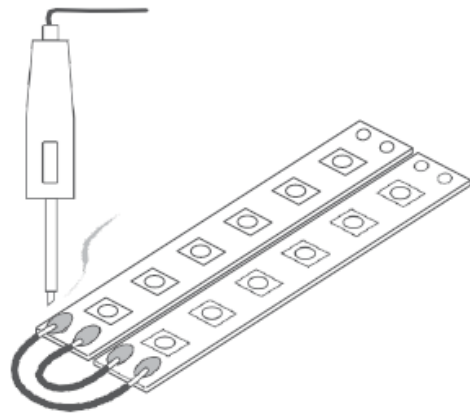


- 3.** Drill a hole in the extrusion in the selected place.

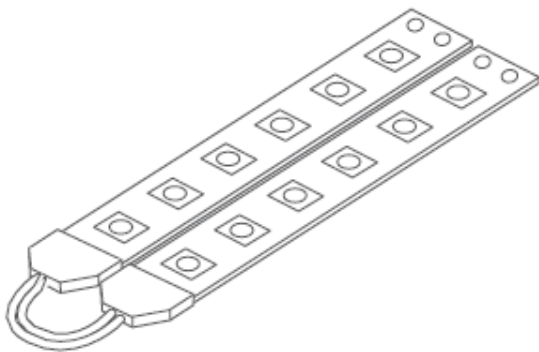
NOTE! Make sure that there are no burrs around the hole after drilling as they can damage the LED strip or cable.



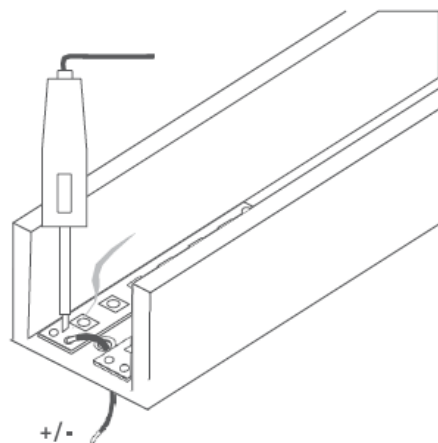
- 4.** Connect the LED strips with wires by soldering.



OPTIONALLY: The LED strips can also be connected using a system of LED strip connectors. More information at www.xicato.com

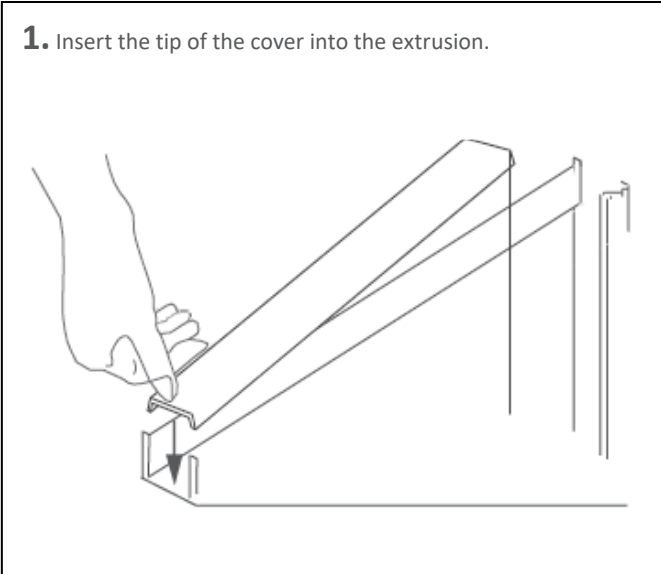


OPTIONALLY: The power cords can be led out from one pole of a given strip. This method is used to power suspended lighting fixtures.

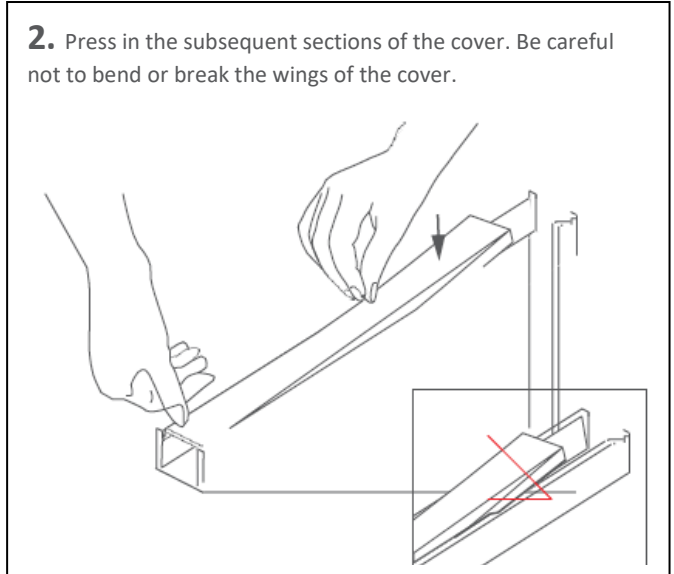


Adhering and Connecting LED Strips

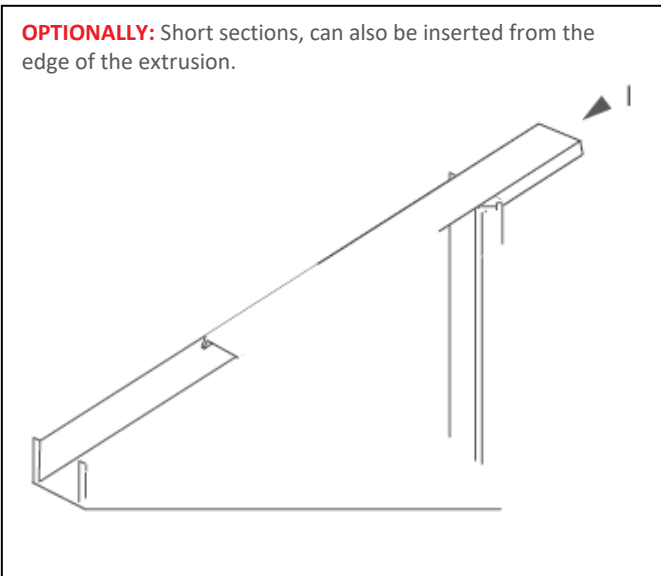
1. Insert the tip of the cover into the extrusion.



2. Press in the subsequent sections of the cover. Be careful not to bend or break the wings of the cover.

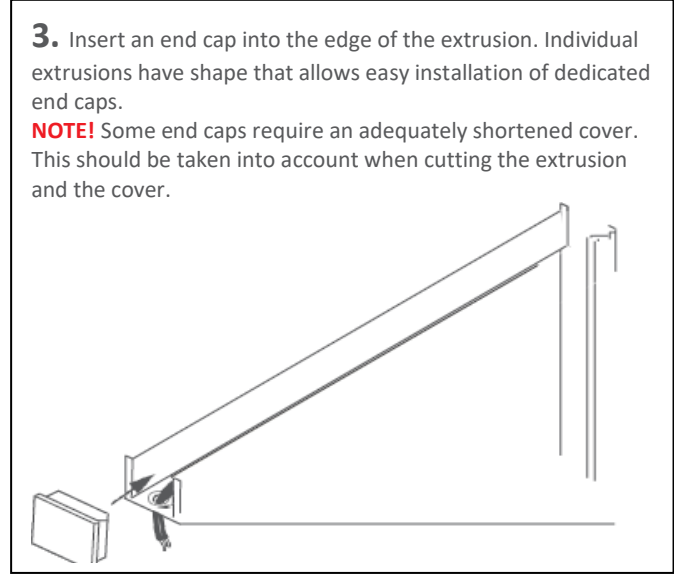


OPTIONALLY: Short sections, can also be inserted from the edge of the extrusion.

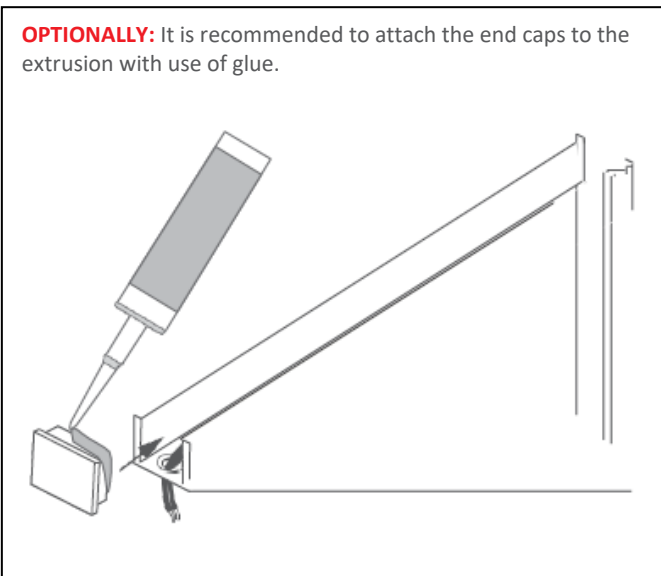


3. Insert an end cap into the edge of the extrusion. Individual extrusions have shape that allows easy installation of dedicated end caps.

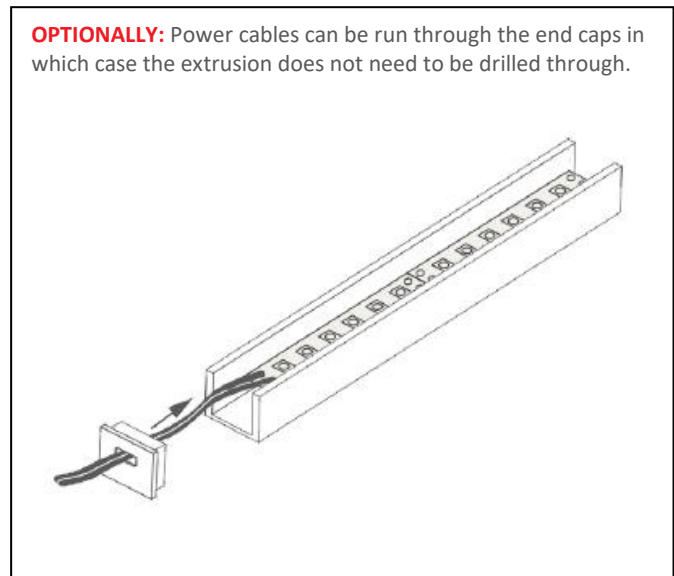
NOTE! Some end caps require an adequately shortened cover. This should be taken into account when cutting the extrusion and the cover.



OPTIONALLY: It is recommended to attach the end caps to the extrusion with use of glue.

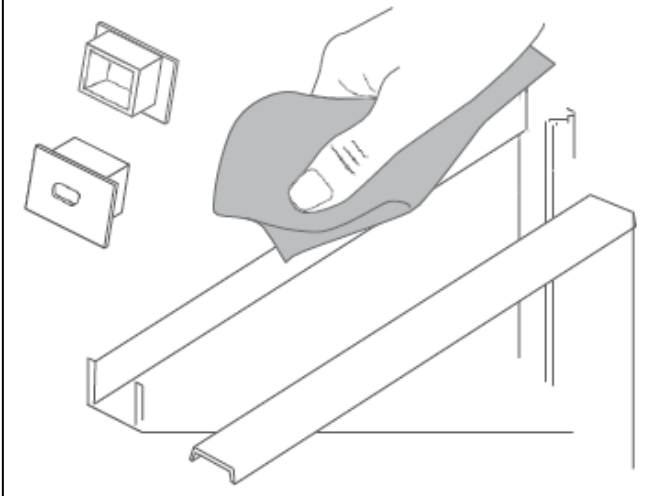


OPTIONALLY: Power cables can be run through the end caps in which case the extrusion does not need to be drilled through.

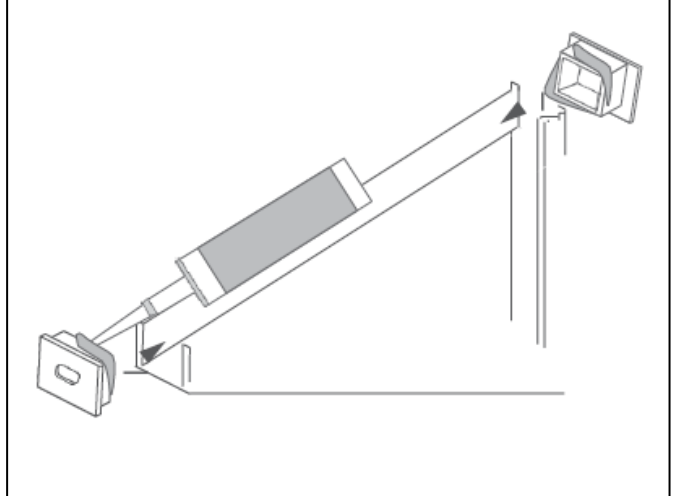


Sealing the Profile

1. Clean dust and dirt from the extrusion and accessories.

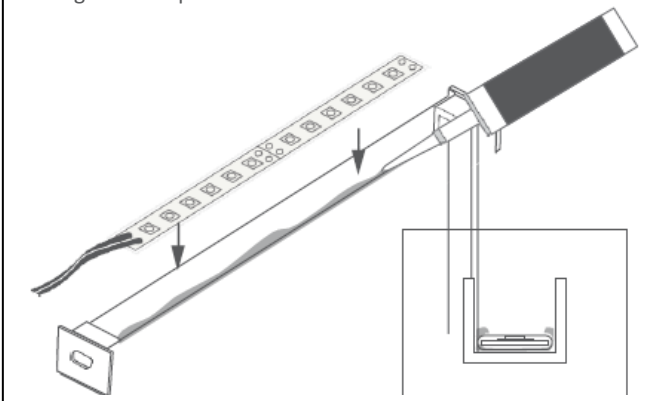


2. Attach the end caps with glue.

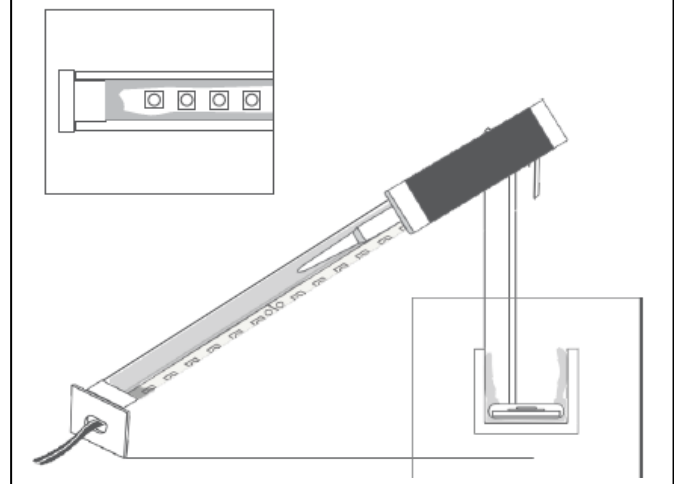


3. Apply a silicone layer to the bottom of the profile and embed the LED strip in it.

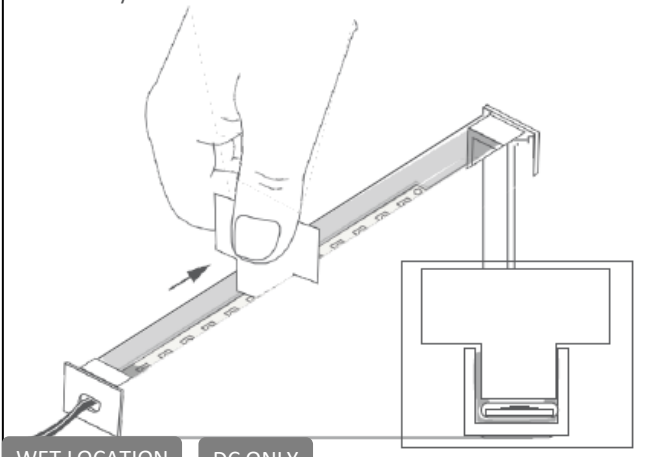
NOTE: The LED strip must have separate protection against moisture. We recommend a silicone sleeve or heat shrink tubing if the strip in the sleeve does not fit into the extrusion.



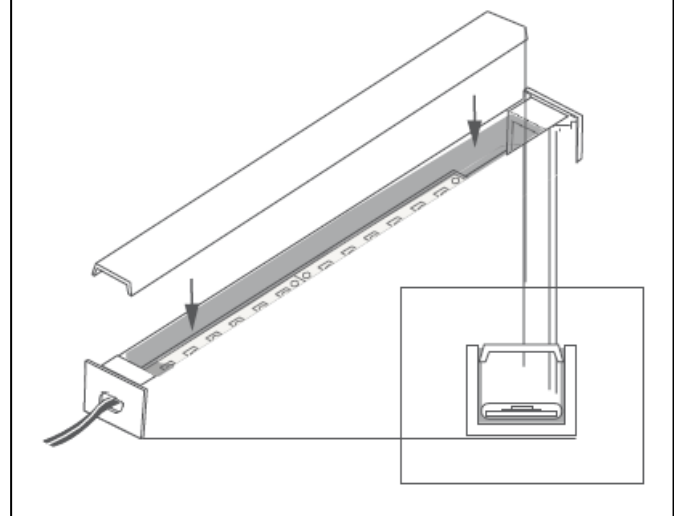
4. Apply a second layer of silicone on the extrusion walls and the end caps.



5. Remove the excess silicone with a rectangular tool (e.g., a piece of cardboard), taking care not to damage the tape. The silicone layer must be even and must not obscure the LEDs.

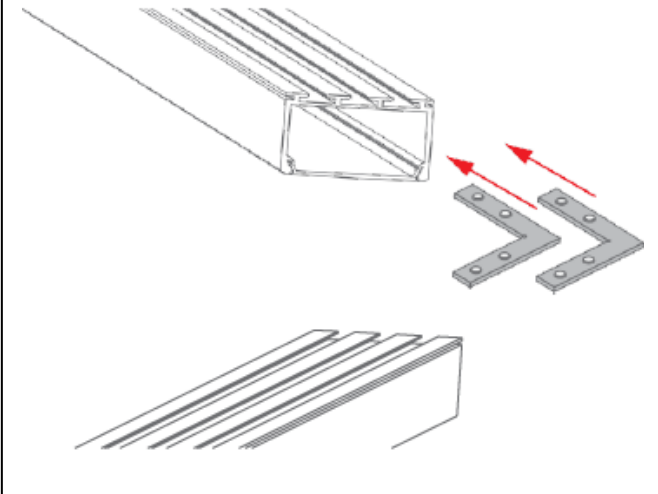


6. Insert the cover.

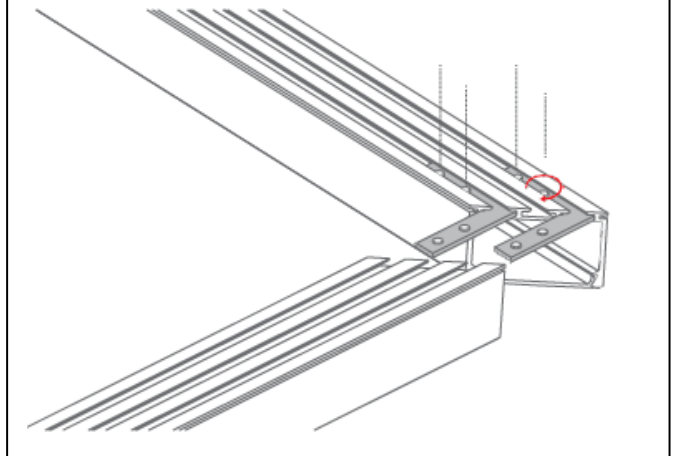


Connecting Extrusions Using Available Connectors

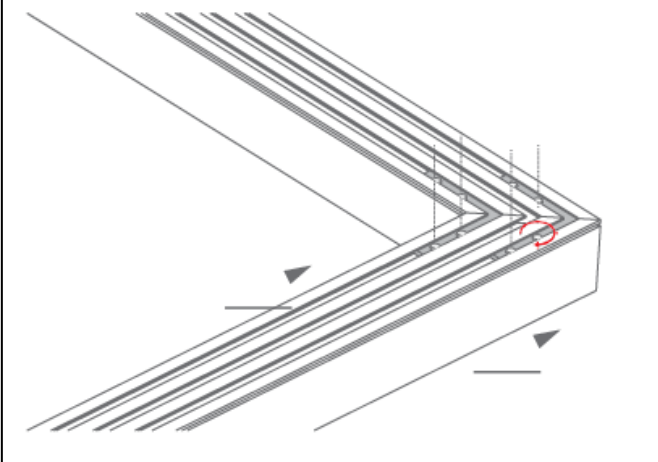
1. Slide the connectors into the small locks of the extrusion.



2. Tighten the two pressure screws in each connector with an Allen wrench.



3. Slide the other half of the extrusion onto the connectors and tighten the pressure screws with an Allen wrench.



Field modifications and installation must comply with all local and national codes as well as Xicato's installation methods, see xicato.com for more information. Manufacturer retains the right to change specification information at any time.