

Flex Dual Channel

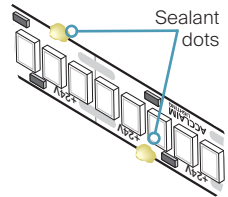
Installation

Mounting

Flex Interior tapes are supplied with 3M™ VHB acrylic adhesive backing, protected by a peel-off paper liner. To ensure that good adhesion is achieved, ensure the mounting surface is free of grease, moisture and any contaminates.

When mounting on the sides or undersides of surfaces

We recommend that you add small dots of silicone sealant along both sides of the Flex tape (to overlap the tape edge and mounting surface) using Dow Corning® 799, 1199 or equivalent. This will provide additional stability and help to prevent any separation of the tape from the mounting surface over time. The silicone dots are best applied once the tape is fixed in place; then the whole installation should not be disturbed until it the sealant has fully cured.



Cleaning and preparing the mounting surface

Most substrates are best prepared by cleaning with a 50:50 mixture of isopropyl alcohol (IPA) and water* prior to applying the tape. Exceptions to this general procedure that may require additional surface preparation include:

Heavy oils

A degreaser or solvent-based cleaner* (such as 3M™ Prep Solvent 70, 3M™ Citrus Base Cleaner, mineral spirits, naphtha or similar, subject to suitability for the surface material) may be required to remove heavy oil or grease from a surface and should be followed by cleaning with IPA/water*.

Other contamination or oxidation

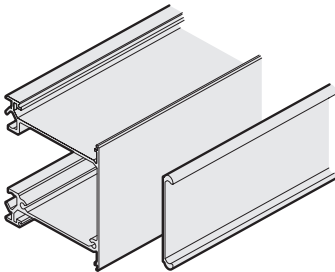
Abrading a surface, followed by cleaning with IPA/water*, can remove heavy dirt or oxidation (e.g. galvanized steel) and can increase surface area to improve adhesion. Abrasion often also helps adhesion to paints and plastics. Very small scratches in the surface, generated with circular motion rather than straight-line motion, are most desirable.

** Note: These cleaner solutions contain greater than 250 g/l of volatile organic compounds (VOC). Please consult your local Air Quality Regulations to be sure the cleaner is compliant. When using solvents, be sure to follow the manufacturer's precautions and directions for use when handling such materials.*

Flex dual channel (FLK DUL)

The smart anodized aluminum Flex Dual Channel allows you to mount up to three parallel runs of Flex tape and direct their output in opposing directions (usually up and down). Frosted polycarbonate lenses help to homogenize the output.

Options



Grommet

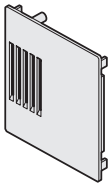


Spacer x 4

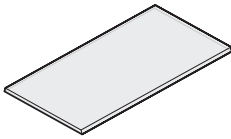


**Locking
rod x 2**

Flex dual channel with backplate and accessories
(3.28' / 1m) [FLK DUL]



End cap
[FLK DUL EC]



Lenses
(3.28' / 1m)
[Clear: FLX DUL CL]
[Frosted: FLX DUL FL]

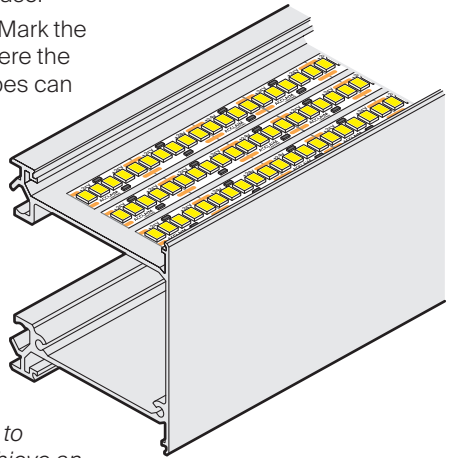
To fit the Flex tape(s)

- 1 If necessary, cut the channel to the length required. Ensure that any resulting burrs are removed. *Note: The Flex dual end caps do not encroach upon the tape areas, so you can fit the tapes edge to edge, if required. However, make suitable allowances for your supply connections to the tape; also a hole will need to be drilled through each tape mounting surface to the central void to allow access for the supply cabling.*
- 2 Ensure the tape mounting surfaces on the upper and lower surfaces of the channel are completely dry, clean and free of grease.
- 3 Determine the length of tapes required. Mark the positions at each end of the channel where the tapes will be placed. Up to three Flex tapes can be mounted in parallel on the upper and lower surfaces.

Notes:

Depending on the length of the Flex dual channel and the number of Flex tape runs, ensure that the maximum (serial) run of any one circuit does not exceed the maximum of 16.4' (5m).

Flex tape can be cut every 1" (25mm), which may slightly constrain the precise lengths of tape that can be achieved. Therefore it may be beneficial to center the tape within the channel to achieve an even distribution. If solder connections are being made, you will find it easier to solder the connections before fitting the tape onto the Flex dual channel (due to heat dissipation).

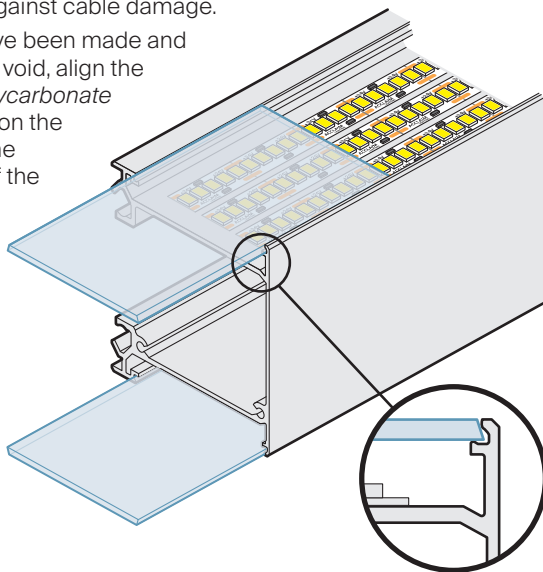


- 4 Cut the tapes to their nearest marked cutpoints.
- 5 Begin peeling the backing from the Flex tape and carefully stick it into the channel, starting at the marked position.

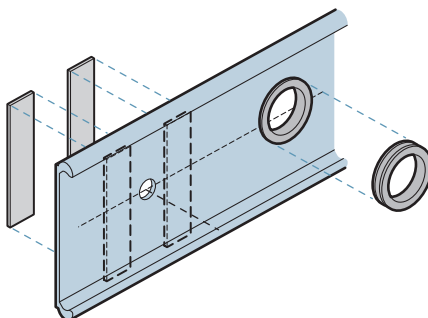
IMPORTANT: While pressing the Flex tape into position, take care not to put excessive pressure on the components or connections.

To mount a Flex dual channel

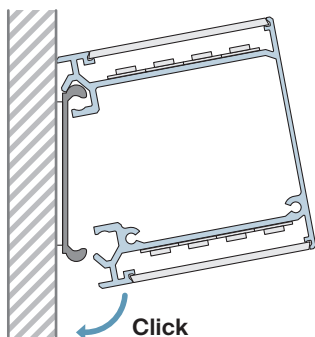
- 1 Survey the mounting area and determine the entry point for the supply cabling and the load bearing capacity/construction of the wall (i.e. drywall, brick, etc).
- 2 If necessary, cut the main channel, backplate and polycarbonate lenses to suit the required length - all of these items should be exactly the same lengths.
- 3 Ensure that the supply cabling for the upper and lower Flex tape runs are brought through to the channel's central void ready for connection to the main incoming connection. At least one hole per tape mounting surface will need to be drilled through - ensure all burrs are removed and for best practise, fit suitable grommets to guard against cable damage.
- 4 Once all tape connections have been made and brought through to the central void, align the chamfered edges of each *Polycarbonate lens* with the grooves located on the upper and lower surfaces of the channel. Slide the lenses all of the way in until their edges align with the channel.



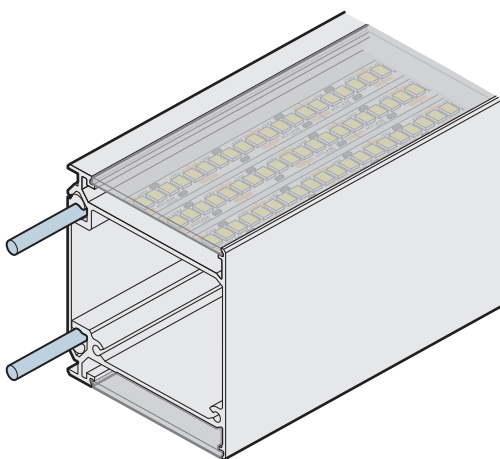
- 5 Drill a mounting hole at each end of the *Backplate* (at a diameter to suit your chosen fixing screws) and also a $\varnothing 0.71"$ (18mm) hole that will align with the supply cabling.
- 6 Remove any burrs, insert the supplied grommet into the larger hole and stick the supplied spacers onto the rear of the backplate, one each side of both mounting holes.
- 7 Feed the supply cabling through the grommet and secure the backplate to the mounting surface.
- 8 Offer up the channel to the backplate and make the necessary connections to the supply cabling within the central void in the channel.



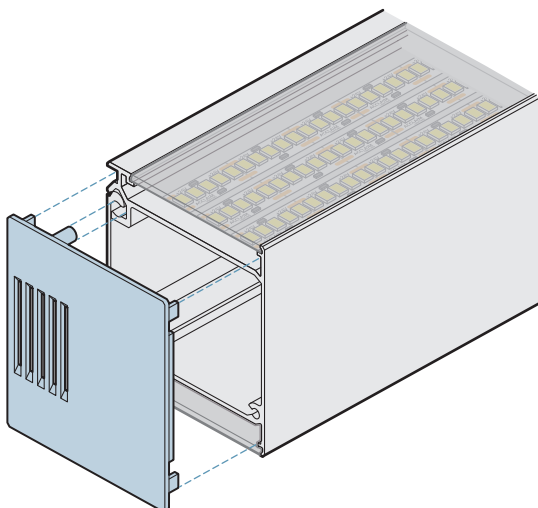
- 9 Once all connections are tested, incline the channel back slightly along its axis and engage the upper slot (at the rear) of the channel with the top surface of the backplate. Rotate the channel down so that its lower slot engages with the bottom surface of the backplate - you should hear a 'click' as the two items fully lock together.



- 10 Cut the supplied two *Locking rods* so that they are roughly 1.38" (35mm) shorter than the channel (this will provide sufficient space for the end cap tabs). Insert the rods into the circular voids that are formed between the backplate and the slots of the channel.



- 11 Align each *End cap* with the channel (the five vents on each cap go closest to the mounting surface) and carefully attach them so that all of their various tabs engage correctly with the appropriate parts of the channel.



Dimensions

