

Ultralite

2.0 by Ultraframe



Lightweight
Roof System



High Strength
Aluminium



Modular
Glazing Bars

Installation Guide

V2 / Sep 26

Thank you for choosing the Ultralite 2.0 roofing system.
This guide is designed to make fitting as easy as possible.

Before you commence installation of the roof, please;

- 1) Take a moment to read these two introductory pages before reading the rest of this guide.

For assistance please contact the Technical Support Team
on **01200 452918** or email techsupport@ultraframe.co.uk

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Tools Required



10mm Socket Spanner



Deadblow Hammer or White Rubber Mallet



No. 2 Pozidrive Bit



5mm Wide Flat Blade Screwdriver



Hack Saw



Drill/Screwdriver



Long nose pliers



Gasket Shears/ Snips



5mm Drill Bit
7mm Drill Bit



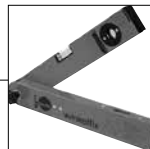
Sealant Gun



Spirit Level



Tape Measure



Anglefinder



Plumb bob

Eaves to frame fixings, host wall fixings and starter bar to furring/frame screw not supplied

General points

Care should be taken when handling components, as surfaces may be scratched if not handled with care. Choose a suitable area for unpacking the components and always check them before fitting. Any claims for missing or damaged parts are only accepted in line with our standard terms and conditions of sale.

Health & safety

Site safety is paramount. The Construction (Design & Management) Regulations 2015 apply to the whole construction process, on all construction projects from concept through to completion. Compliance is required to ensure construction projects are carried out in a way that secures health and safety. The installation company shall be responsible for the safety of all of the fitting team, the customer and members of the public.

The Surveyor carries out a risk assessment to reduce risk on site and this should have been discussed with you prior to starting.

Personal Protective Equipment – such as goggles, mask and ear defenders – should be used when, for example, grinding out for the flashing.

Careful consideration should be given to the safe disposal of all packaging – our packaging is predominantly made from recycled materials and can be readily recycled.

Sealing

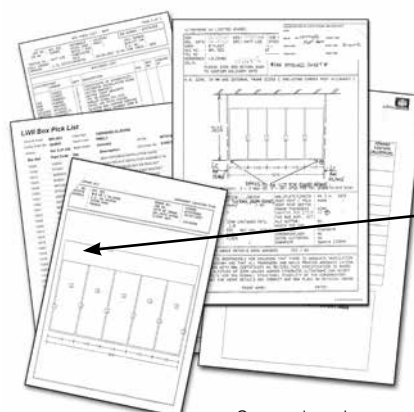
It is important to use the correct sealant when sealing the roof.

1. For roofs glazed with Polycarbonate

a Low modulus neutral cure brand of silicone must be used.

The Superstructure

Check the Dwarf wall or check the wall / frame are plumb and level all round. Ensure that all frames which abut the host wall are vertically plumb. Before starting to install the roof, please check the condition of the host wall and whether it's plumb – depending upon what you find, these conditions can seriously affect the final integrity of the roof.



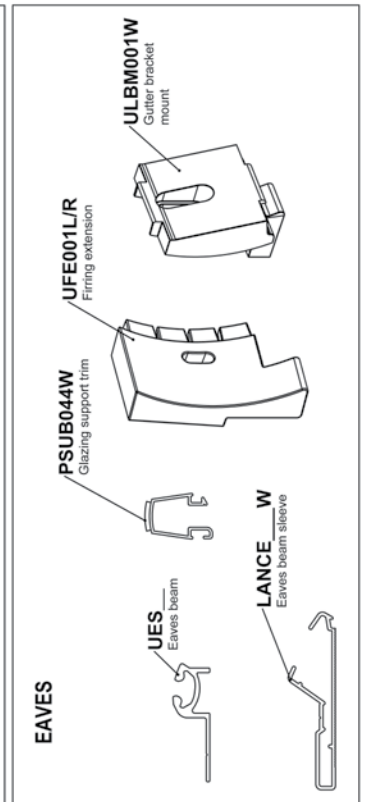
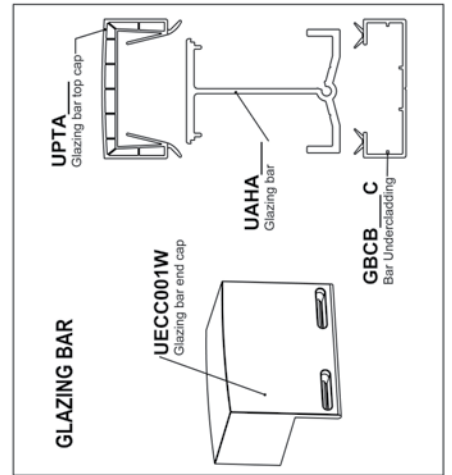
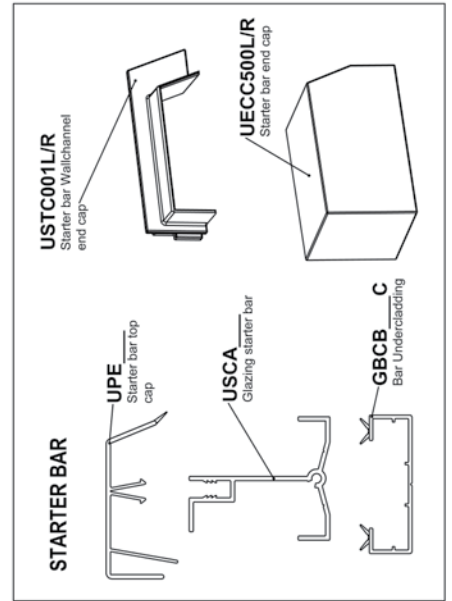
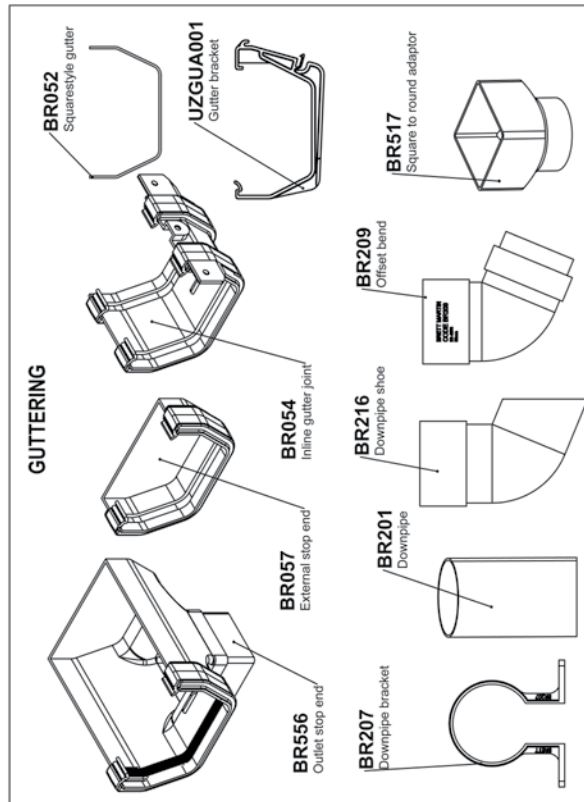
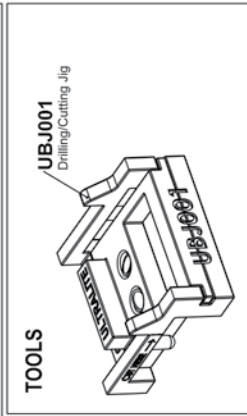
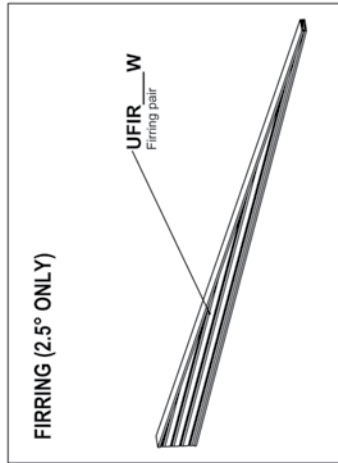
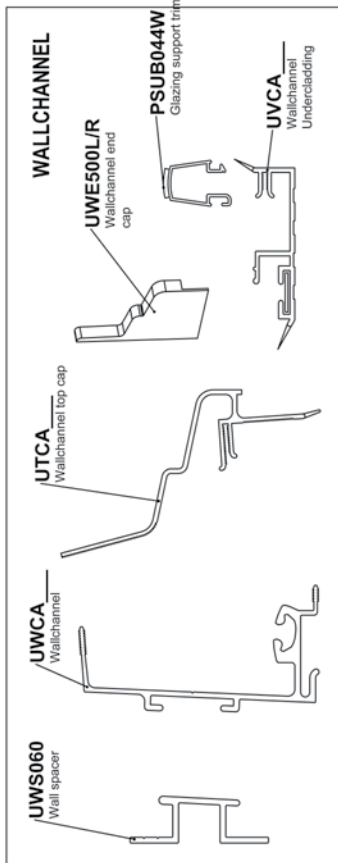
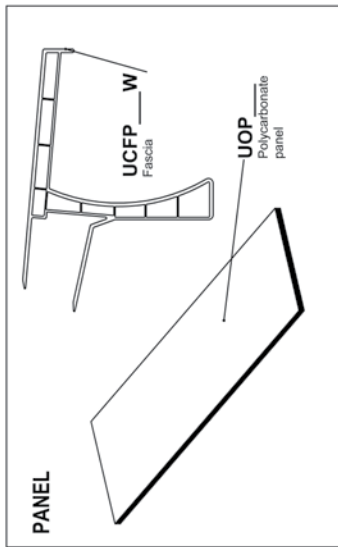
Numbering convention starts, eg 1, 2, 3, A, B, C

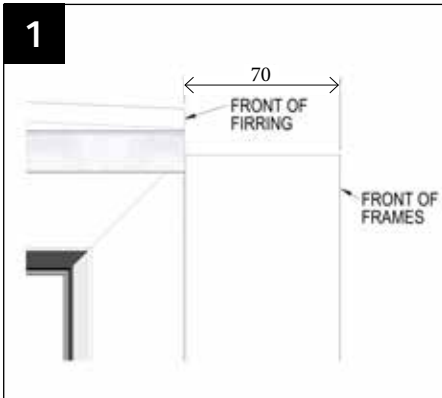
Back left hand corner

Comprehensive paperwork accompanies each roof

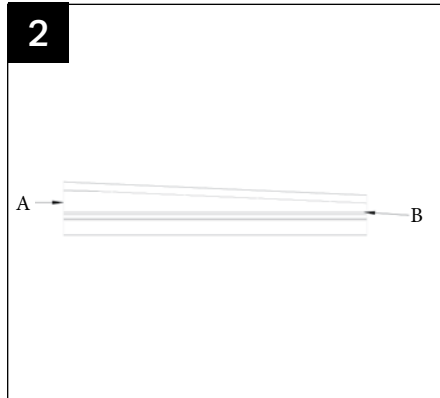
COMPONENT IDENTIFICATION

Ultralite 2.0 by Ultraframe

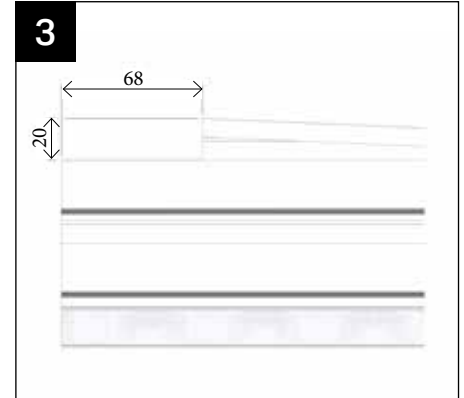




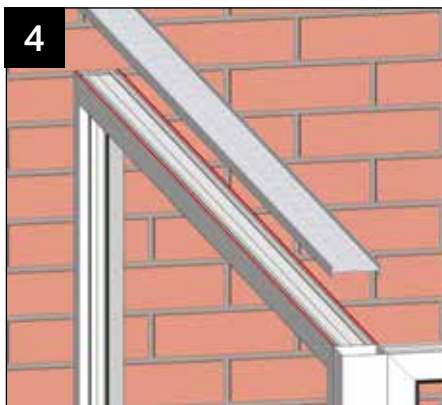
Cut firrings at (A) 70mm shorter than overall projection of frames from host wall, this is to allow the eaves beam to sit in front of firrings.



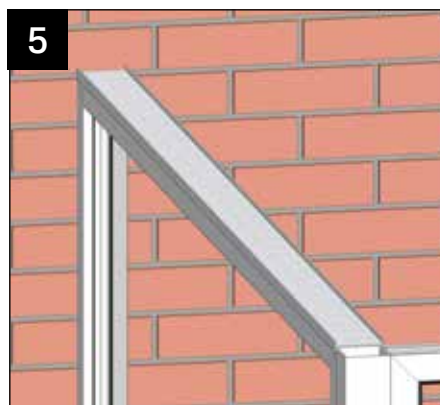
Cut at end A, DO NOT cut end B.



Cut corner notch into A end of each furring.



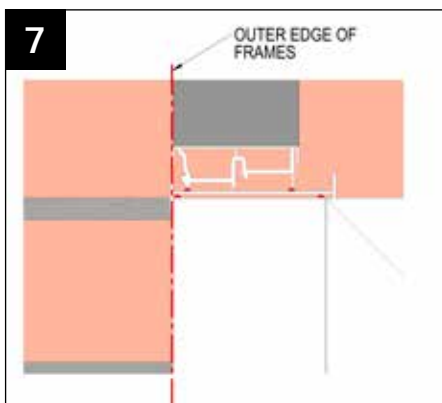
Apply sealant to window frames.



Place H section cap on top of frame with one end against host wall.



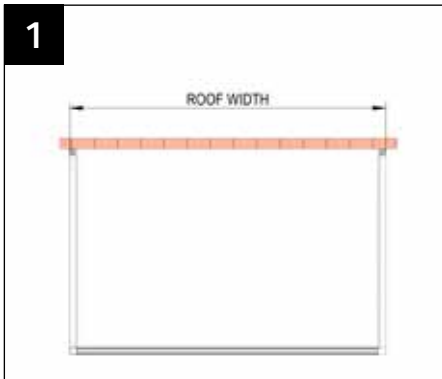
Apply sealant to top of H section cap and against the host wall.



Align the furring to the host wall and outer edge of H section cap, then press firmly into place.

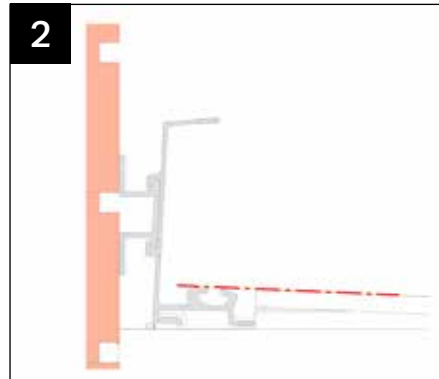


Screw furring into frame below at 500mm centres (ideally screwed from below but can be from above if no access).



Measure the overall width of the roof at the host wall. Cut the wall channel to the longest measured length. If the measured width of the roof is a non-modular width, see the non-modular section before proceeding.

Measure to the external frame to give you a wall plate size / overall roof size.

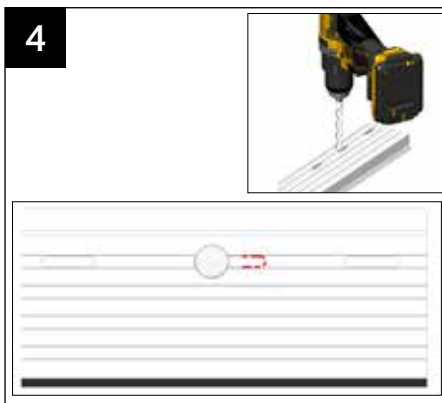


Slide wall spacers into wall channel, one at each end and spaced at **maximum 750mm centres**. Offer up the wall channel to host wall and align top of bolt slot with furring top cap (or raked frames if used). Pre-drill the wall channel through each wallspacer, spotting through onto the brickwork. Remove wall channel and drill brickwork to suit masonry fixings (not included).

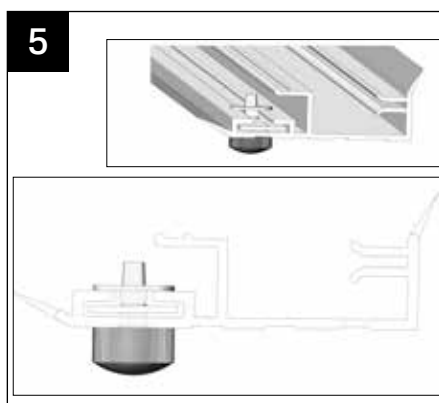


Mount wall channel to host wall. If it is found that the wall is out of square, packers will need to be used accordingly. If internal wall finishes (e.g. plaster) are to be applied, the spacing of the wall channel from the host wall must be increased to ensure that the ventilation slots in the undercladding are unobscured.

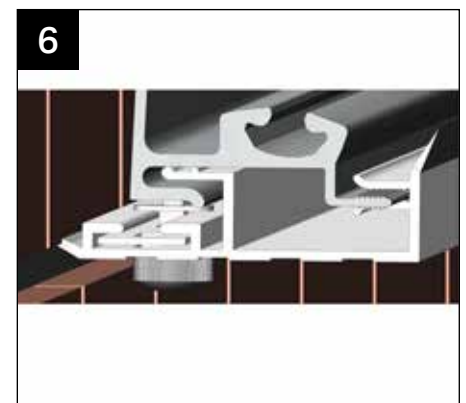
Avoid fixing wall channel into mortar lines.



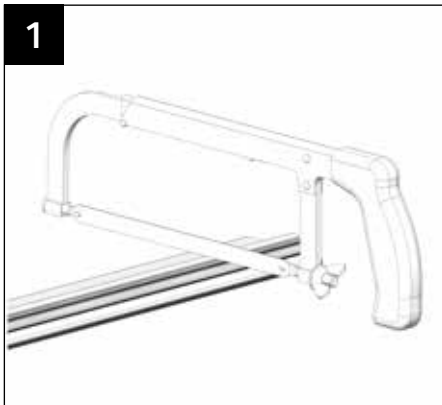
Select a slot in wall channel undercladding for vent button (choose to suit homeowner use). Drill a small pilot hole next to the slot and then use 5mm drill bit in pilot hole to breakthrough to and extend chosen slot. Ensure the hole is **ONLY** drilled into the undercladding, not the sliding strip or fly screen.



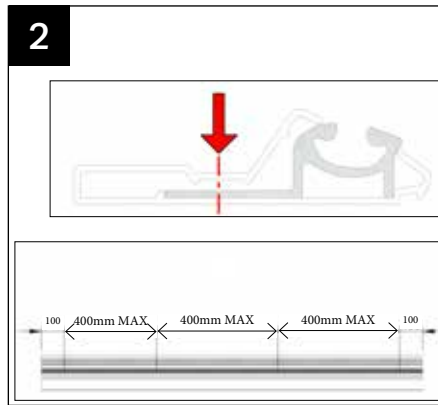
Mount Ventilation opener button into extended slot.



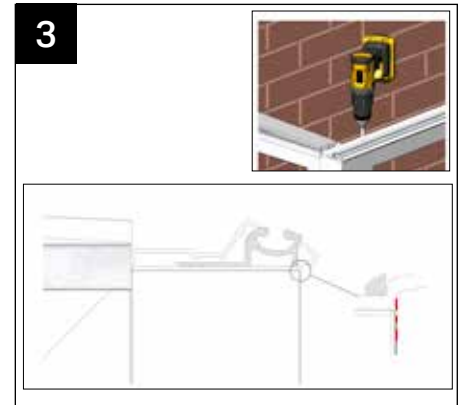
Assemble undercladding to wallchannel by locating the barbs on the front of the channel. Use a deadblow or rubber mallet against a piece of timber to tap the undercladding back towards the wall to engage it on the Barbs. Ensure the gasket against the host wall is facing upwards.



Cut the eaves beam, with the sleeve, to the external width of the front frames.

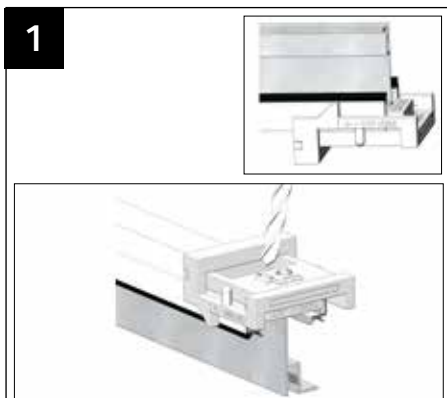


Drill the eaves beam (with sleeve) at 100mm from each end and drill additional holes at maximum 400mm centres. The hole size is to be an appropriate clearance size for fixings (not supplied) and drilled through the 'V' Groove highlighted.

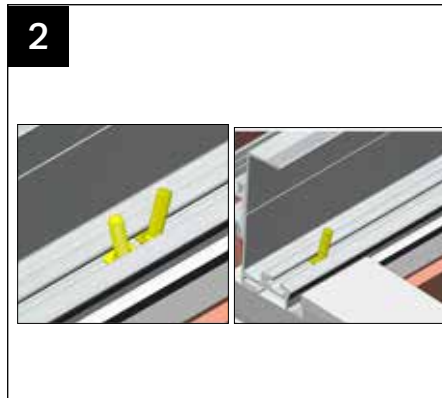


Apply sealant to top of frames, place eaves beam onto frame aligning to the outside edge of the frame. Fix down to the frames using appropriate fixings (not supplied).

Installing an an assumed 70mm frame a 30mm washer head screw is required.



Place the jig provided onto the underside of a starter bar. Ensure the jig is pushed on until the bar hits the stop on the jig. Clamping the jig in place, drill 7mm holes in the ridge (top) end of the bar.



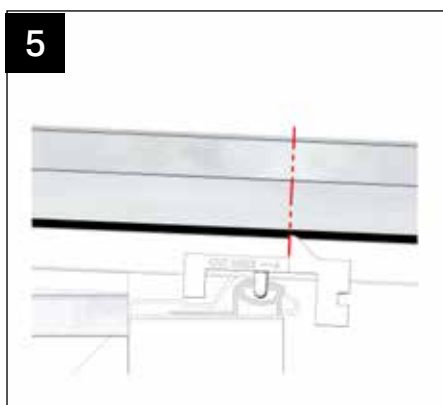
Slide glazing bolts into bolt slots so that 2 bolts are positioned roughly every 500mm for glazing bars and 1 at each end for starter bars in both the wall channel and eaves beam.



Place this starter bar onto the Wallchannel locating over the upper bolt and sit the bar on the eaves allowing it to overhang.



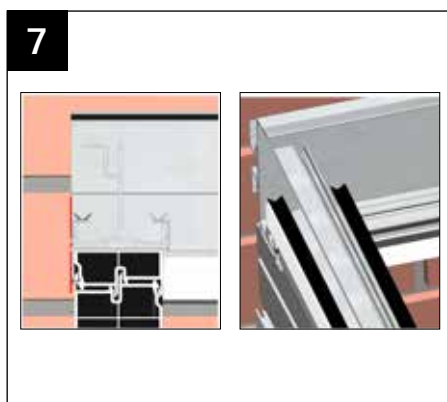
Remove the drill jig from the cutting jig. Lift the bar and slide cutting jig onto the underside of the bar and locate dowels into eaves beam bolt slot. Using the marked upstand on the jig, mark the cutting line as shown onto the starter bar.



Cut starter bar to marked out length. Repeat this process for all remaining bars.



Repeat the process for drilling the bolt holes used previously for the remaining bars.

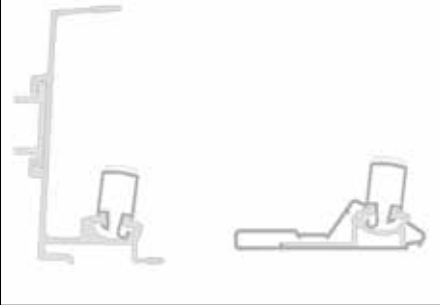


Position first starter bar on wall channel and eaves beam. Align the bar to the outer edge of the roof.



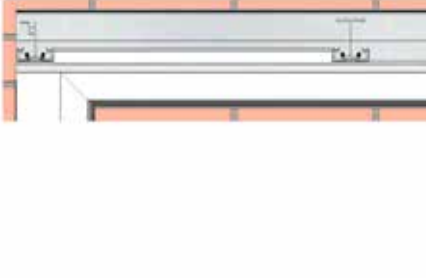
Using a 10mm socket, secure starter bar to wall channel and eaves beam with the provided nuts. After fitting, check alignment between Starter bar and firing edge again and adjust as needed. It is recommended to screw through the starter bar into the firring (or raked frame) every 500mm (fixings not provided). Seal fixings with washer or sealant.

9



Attach the first support trim pieces to both the wall channel and eaves beam and push up to the previously fitted bar. Pay close attention to the orientation of the trims (see image above).

10



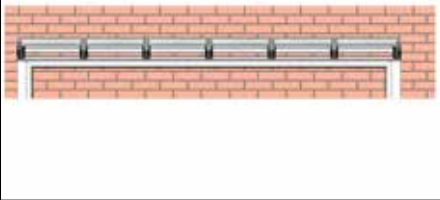
Place next glazing bar on to wall channel and eaves beam and position at 500mm bar centres to previous bar, ensuring the bolts are fed through the holes in the glazing bar.

11



Using 10mm socket, secure glazing bar to wall channel and eaves beam. After fixing, check gap between bar centres at wall channel and eaves beam and adjust as needed.

12



Repeat this process until all of the support trims and bars are fitted.

Fitters tip - When mounting glazing bars to wall plate, it can be very tight.

Slide undercladding out from aluminium bar and place just the undercladding over the bolts.

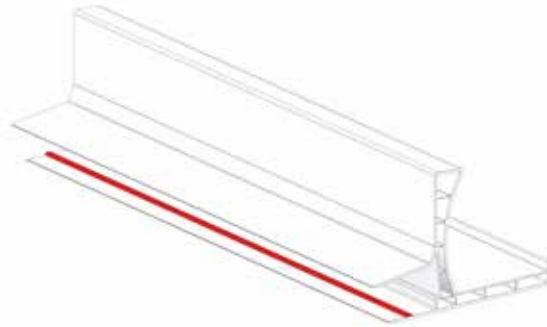
Then lift the bar so the bolts are through the undercladding, but the aluminium can now slide back into place. Then slide the aluminium to re-align with undercladding and lower fully onto bolts.

1



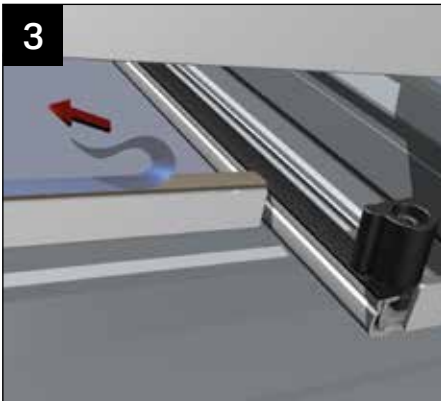
Measure the length of a glazing bar. Measure and mark all panels to the same length. Cut all panels to marked length.

2



Peel back protective film on both top and bottom of the polycarbonate sheet at the end WITH breather tape. Apply a bead of sealant to the underside of the upper leg on the fascia. Pull lower leg to open gap and place onto panel where film has been removed. Avoid contact between sealant and panel until panel is fully inserted to ensure sealant remains on top leg of fascia. Press the fascia into the panel firmly to adhere. Sealant should squeeze out of top leg, clean immediately from panel. CAUTION: The polycarbonate sheet has an inner and outer side, be careful to get right way round (branded film facing up).

3



Tease the 'tail' of the glazing support trim tape free (ready to be pulled away when the panel is finally in position). Leave the tail so it can be reached from inside the roof later.

4



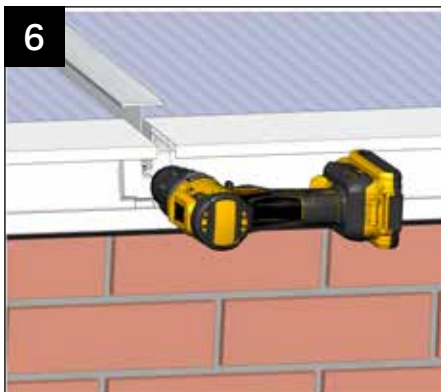
Locate one side of the panel onto the side of the bar with the fascia approximately 150mm outboard of the eaves and rotate the opposite side down onto the adjacent bar. If a tight fit, gently tap down with a rubber mallet and a timber drift. Push the panel up until the fascia stops against the frame.

5



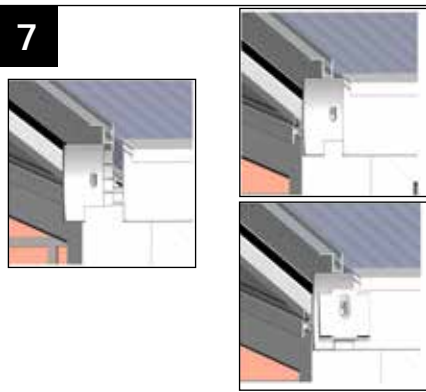
Position gutter bracket mount between the first 2 fascias and align with Glazing bar behind (this could require the panels to move to their correct final position). Push the rear of the lower section of the mount against the frame to ensure it is in the correct orientation.

6



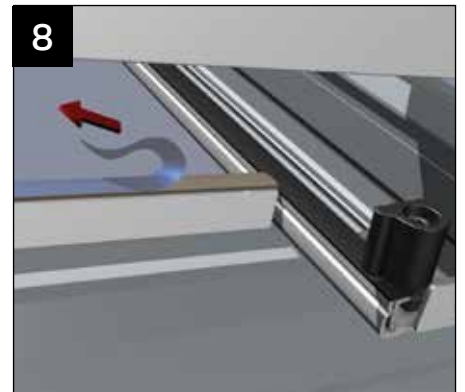
Fix bracket to glazing bar using 4.8 x 32 mm fastener provided into the screwport which is visible through the slot in the gutter bracket mount.

7

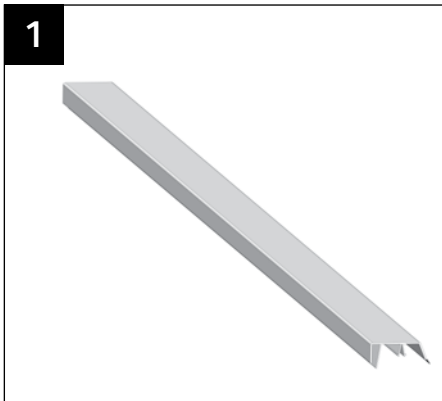


Repeat this process for remaining gutter bracket mounts. For the 2 end mounts, first align and slide the fascia extension into the final fascia piece before positioning the mount.

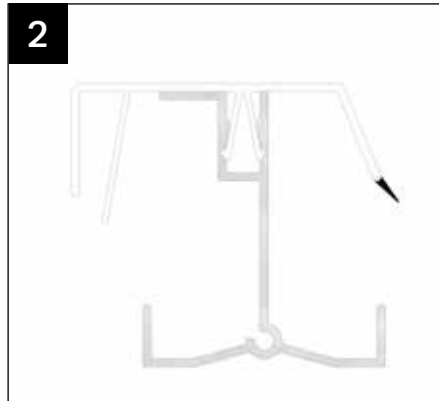
8



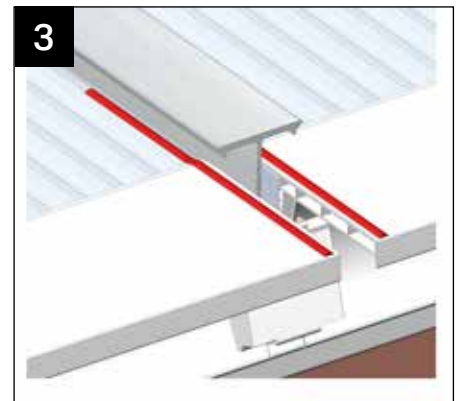
From the inside of the roof, take the tail of each support trim and fully peel the tape from the trim.



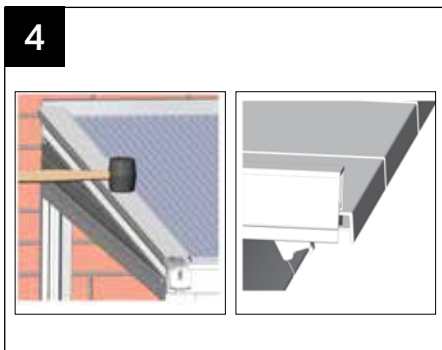
1
Measure, mark, and cut starter bar top caps to 70mm longer than the glazing bar measurement, record this measurement for later.



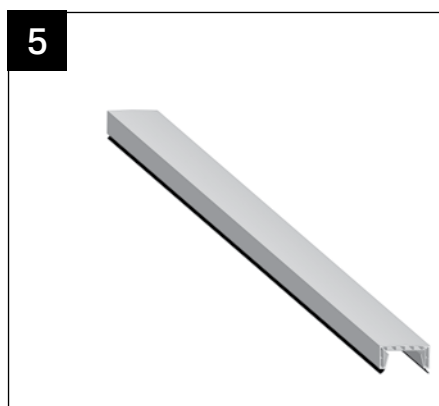
2
Place the starter bar top cap onto starter bar and align barbs with slot in the top of the bar.



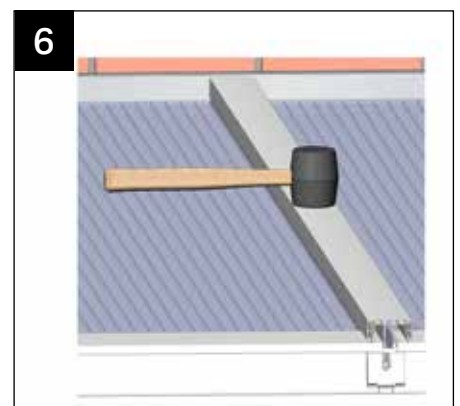
3
Apply bead of sealant to edge of panels so that it will be hidden by the top cap. The gasket of the top cap should catch the edge of the sealant and pull the sealant out under the gasket.



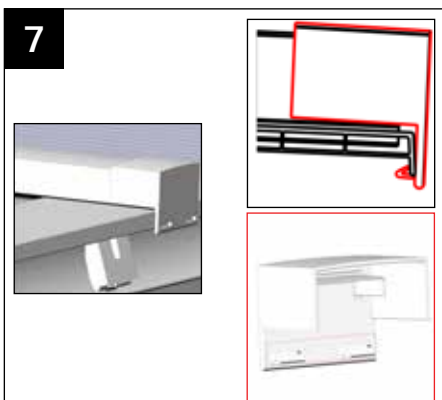
4
Knock starter top caps into slot with mallet starting at the eaves beam and proceeding up to the wall channel. Using a timber batten can make this easier. Ensure Top cap is set back from the front of the fascia by ~<5mm, knock up from the bottom if required. Clean excess sealant from outer bottom edges of top cap



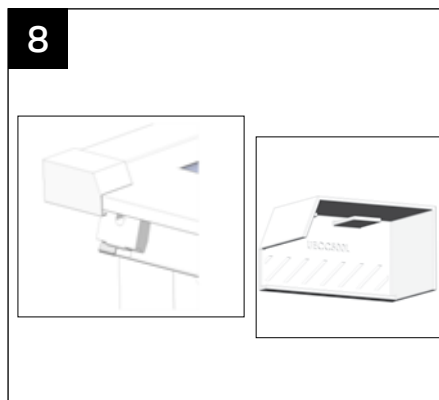
5
Cut each glazing bar top cap to the same length as the starter bar top caps.



6
Locate cap over the top of the glazing bar and align with the end of the fascia. Knock down with a deadblow or rubber mallet and a timber drift. Ensure top cap is set back from the front of the fascia by ~<5mm, knock up from the bottom if required.

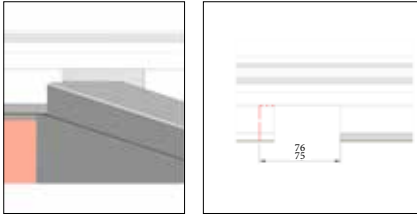


7
Apply sealant to the rear of each bar end cap and locate the end cap over the bar top cap against the fascia.



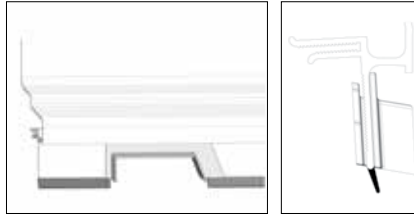
8
Apply sealant to the rear of the starter bar end cap in the dashed area. Locate the cap over the bar top cap against the fascia.

1



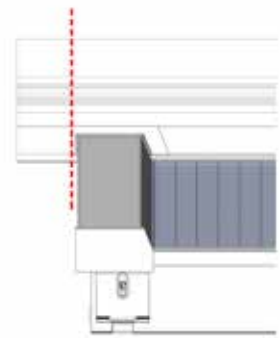
Cut the wall channel top cap to increase the size of the notches for the starter bar top caps to a width of 75-76mm. The notch must be extended on the outer side (end of wall cap side)

2



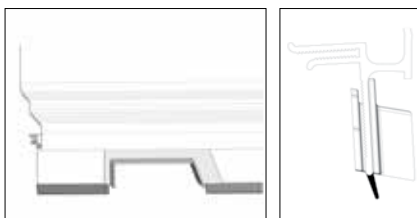
Slot the starter bar top cap shroud into the wallchannel top cap to test fit the part with the notch created.

3



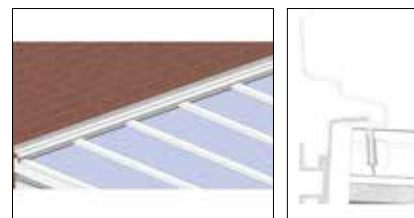
The wall channel top cap must be long enough to fit the starter top cap shrouds. Beyond this, the top cap can be cutdown as desired.

4



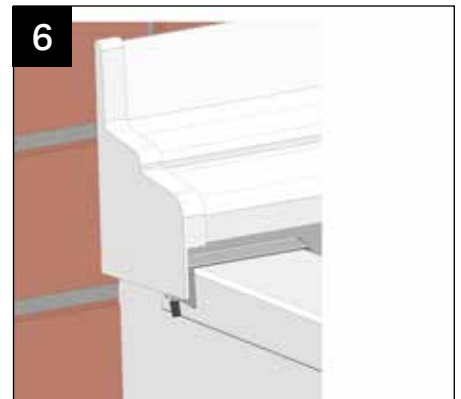
Apply a small bead of sealant to the slot of the starter top cap shroud and slide the shroud back into the wall channel top cap. Also apply a small bead of sealant to the inside edges of the shroud where it will contact the starter top cap.

5



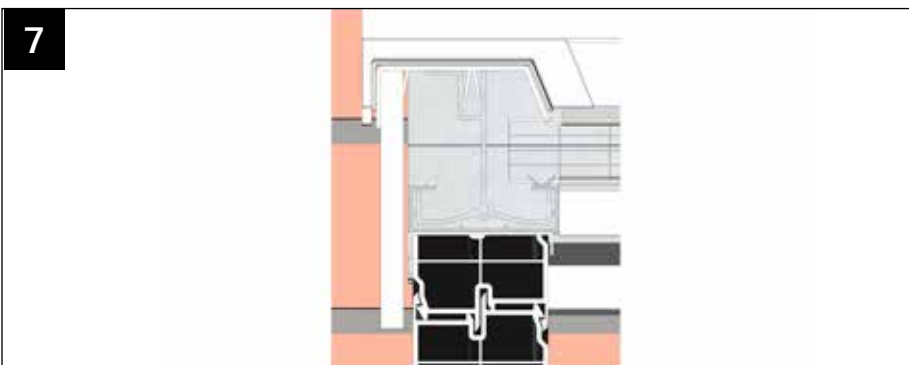
Locate wall channel top cap on horizontal bar and knock on towards wall using a deadblow or rubber mallet and timber drift. Gently pull the starter top cap shrouds down to meet the starter top caps as required.

6



Apply sealant to the rear of the wall channel end caps and locate onto ends of top cap, seal around end cap as appropriate.

7

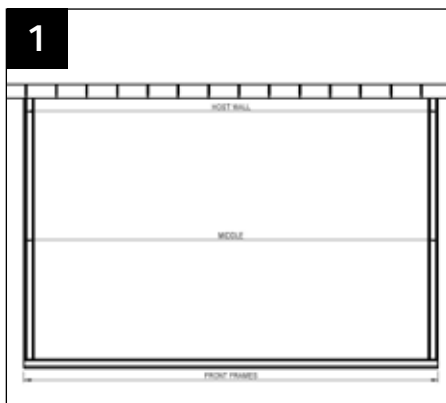


A fascia board of 9-10mm thickness (not included) is to be used to finish the outside edges of the roof. Apply a bead of sealant to the slot in the underside of the starter bar top cap and to the edge of the Furring top cap. Push the fascia board against the longer inside leg of the starter bar top cap and up into the slot. Press the fascia board firmly into the slot and the side of the roof. Apply fixings as necessary into the lower section of the fascia board to fix to the firrings/frames.

8



From the inside of the roof, apply sealant to the area above the eaves beam to seal to the fascia board.



The overall modular width of the roof is the advertised kit width + 60mm (e.g. a 2m width roof kit will span 2.06m overall).

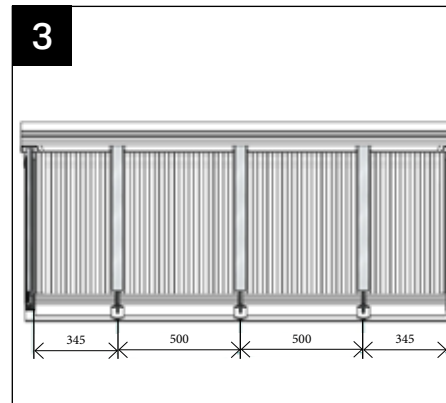
2

MEASURED WIDTH = 1750
KIT WIDTH = 2000

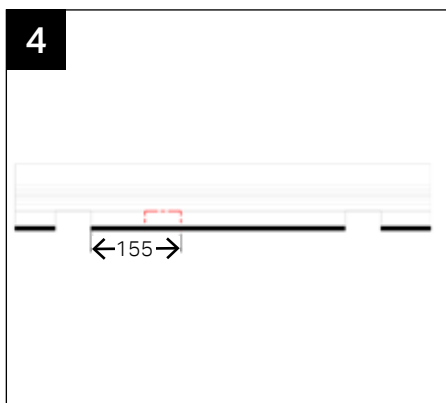
$$\text{CUT} = \frac{2000 + 60 - 1750}{2}$$

CUT = 155

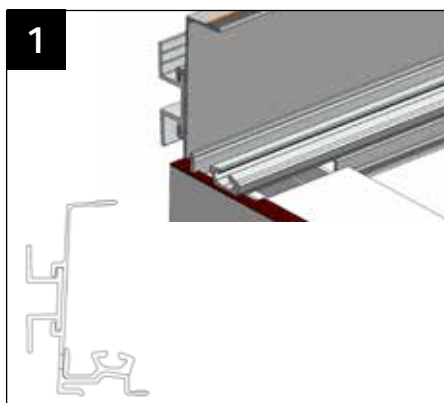
To adjust to suit, both outside panels need cutting down. To calculate the amount to cut down use the following formula: (kit width + 60 - actual width)/2. The resulting length is the amount that the panel (including fascia) and support trims need cutting down for each end panel.



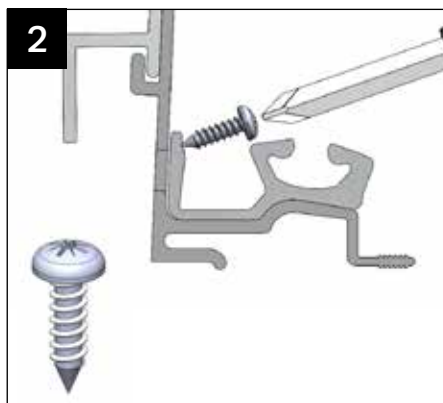
The distance between bar centres for the outside panels must be reduced by the same amount.



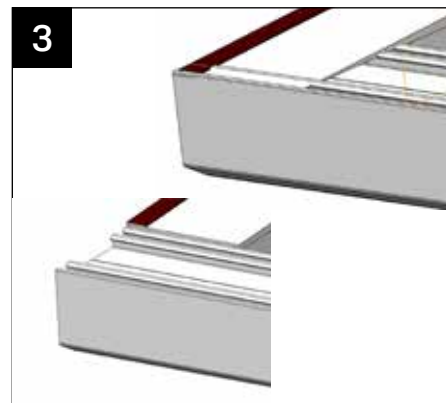
If the outer panels have been cutdown and the bar centres reduced, a full new notch is required. Measure from the inside edge of the existing notch towards the middle of the roof by the amount bar centres have been reduced. This is the location for the new inner edge of the notch.



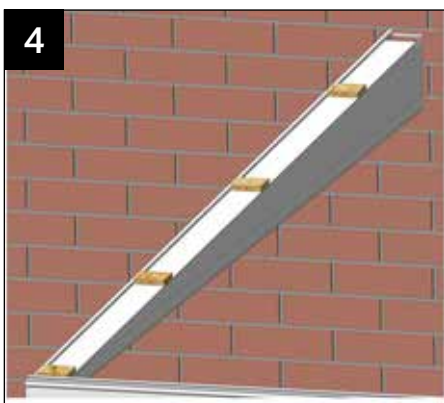
Place wall channel adaptor on top of the existing wall channel. Align each end to the outer edge of the firrings (cut to size if necessary).



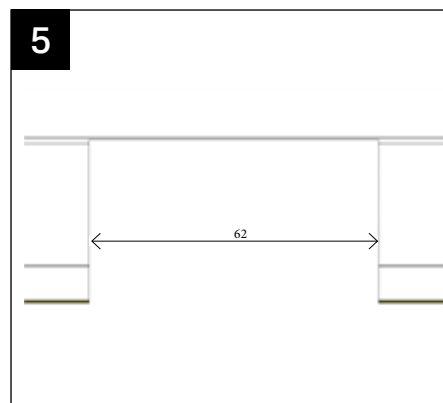
Using 3.5 x 9.5 self tapping screws provided, screw adaptor into wall channel 100 mm in from each end and at a maximum of 450mm spacing in between.



Cut back the firrings by 70mm to make space in front of the firring for the new eaves beam.



The firring requires packing to raise the top of the firring to meet the underside of the new starter bar. Pack out under each fixing location between the starter bar and firring. For the remaining area under the bar, use expanding foam if desired. Cover inside with trim piece/D molding.



Cut the existing notches in the top cap to suit the new glazing bar top caps.

