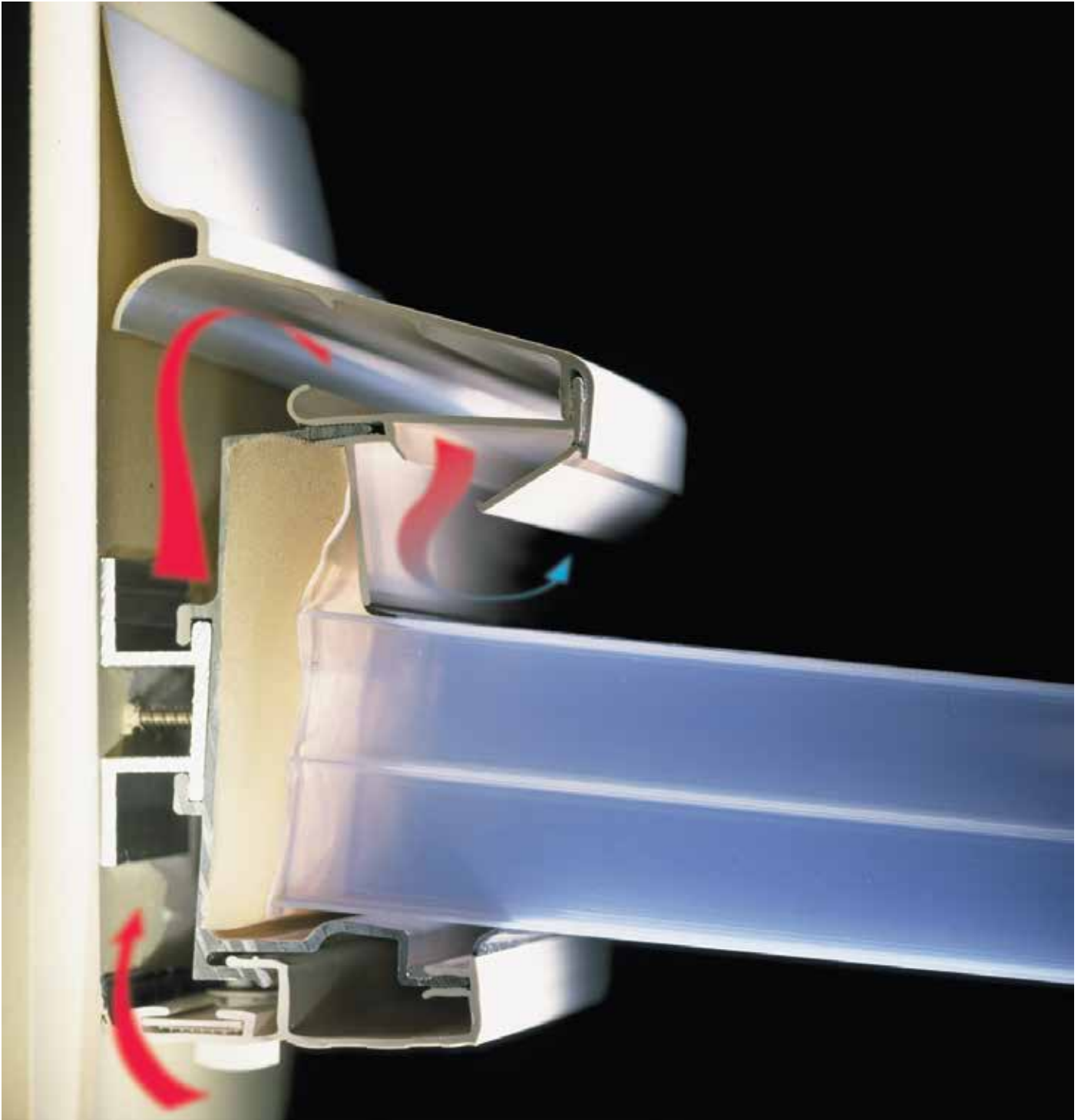




ULTRALITE
by ultraframe

Thank you for choosing the Ultralite® roof.

This guide is designed to make fitting as straightforward as possible.

For further assistance, please contact the Tech Support Team on 01200 452918 or email techsupport@ultraframe.co.uk

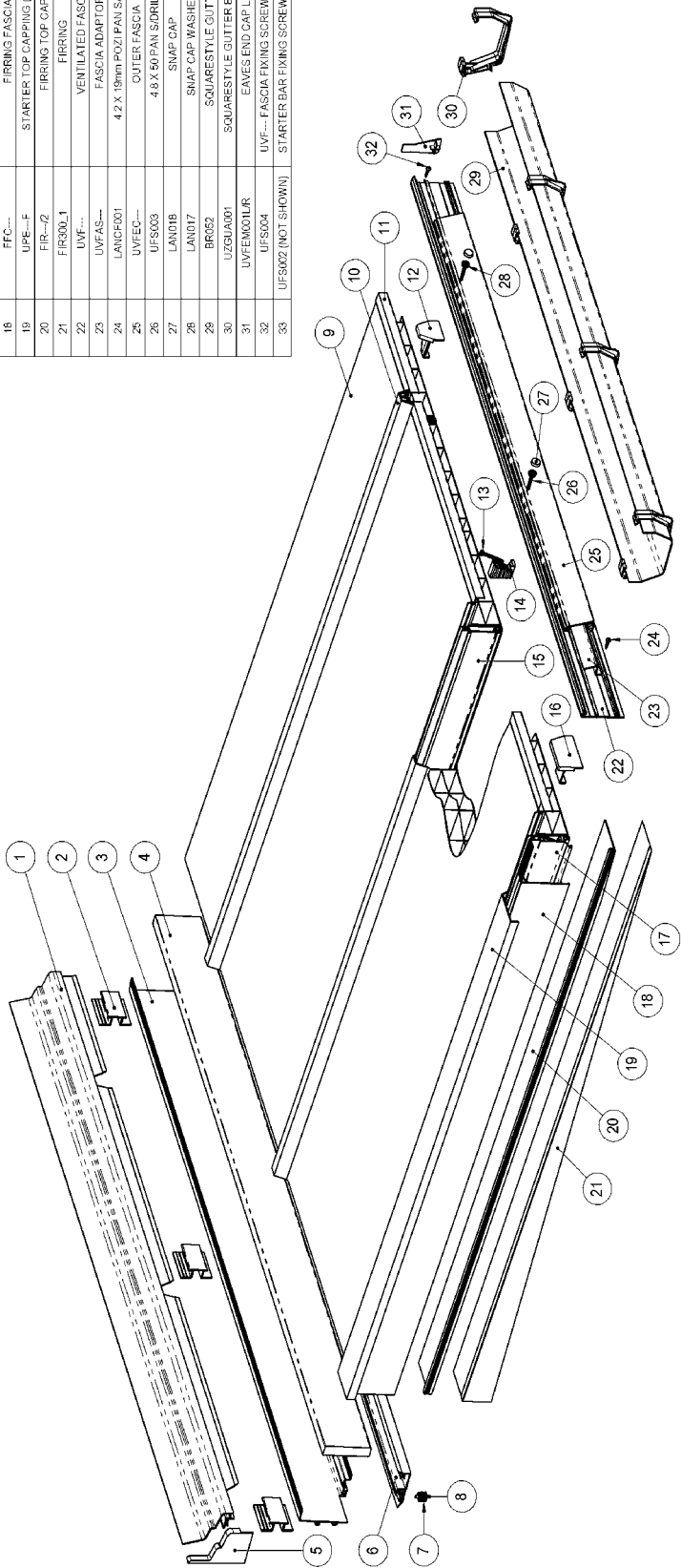
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Please read all of this guide before starting your installation

1. Do not walk or climb directly onto the Ultralite® roof. When gaining access use suitable protection on the roof surface and place crawl boards across the roof. (ie at 90° to the roof slope).
2. When replacing a few old panels with new ones, expect colour variation.
3. All set out dimensions are 'external frame'
4. Inspection of panels should be made before fitting. No claims can be made for damage or marks on fitted panels.
5. When using Ultralite® panels longer than 4.0m (projection measured on slope) additional structural support is required (e.g. purlin).
6. Ultralite® should be fitted at no less than 2.5° and no greater than 10° roof pitch.
7. The bulk of this guide is written for the PVCu furring - if a timber furring is being used then refer to Page 5.
8. Ultralite® roof panels may be fitted left to right or right to left except when the roof abuts a side wall. In this situation always start from the wall side with a full width panel.
9. The PVCu fascia (part no.14) extends 30mm down the front face - please ensure this doesn't compromise any opening top lights.
10. Under no circumstances should blinds, light fittings etc. be fitted to the underside of an Ultralite® roof.
11. Due to excessive gas temperatures, asphalt floor finishes should only be applied prior to installation of Ultralite® or, if the roof is already installed, use alternative floor screeds.
12. It is important to use a low modulus neutral cure brand of silicone when sealing the roof.
13. Homeowner cleaning and maintenance information is included in this installation guide on page 19. Please pass this guide to the homeowner when the installation is complete.

ITEM NO.	STOCK CODE	DESCRIPTION
1	UTC---	WALL PLATE TOP CAPPING
2	UWS060	WALL CHANNEL SPACER 60mm
3	UWC---M	ALUMINIUM WALL CHANNEL
4	USF---	WALL CHANNEL FOAM SEALING TAPE
5	UWES001LR	WALL CHANNEL END CAP
6	UVC---	VENTILATED UNDERGLAZING
7	UOB001H	VENTILATION OPENER BUTTON
8	UOB001/2	VENTILATION OPENER BUTTON SPACER
9	UFP---	ULTRALITE PANEL
10	UPT---	BAR TOP CAPPING
11	UDP500	Drip Profile
12	UECA500	BAR END CAP
13	UFS003	4.8 X 50 PAN SIDRILL
14	UEB500	BAR END FIXING BLOCK
15	UAL	REINFORCE BAR LIGHT
16	UECB500LR	STARTER END CAP LEFT/RIGHT
17	USC---	ALUMINIUM STARTER BAR
18	FFC---	FIRING FASCIA
19	UPE---F	STARTER TOP CAPPING (FIRING)
20	FIR---/2	FIRING TOP CAP
21	FIR300..1	FIRING
22	UVF---	VENTILATED FASCIA
23	UVFAS---	FASCIA ADAPTOR
24	LANCF001	4.2 X 19mm POZI PAN SIDRILL
25	UVFEC---	OUTER FASCIA
26	UFS003	4.8 X 50 PAN SIDRILL
27	LAND18	SNAP CAP
28	LAN017	SNAP CAP WASHER
29	BR052	SQUARE STYLE CUTTER
30	UZGUA001	SQUARE STYLE GUTTER BRACKET
31	UVFEM001LR	EAVES END CAP LR
32	UFS004	UVF--- FASCIA FIXING SCREW - 4.2 X 25mm
33	UFS002 (NOT SHOWN)	STARTER BAR FIXING SCREW - 4.5 X 38mm

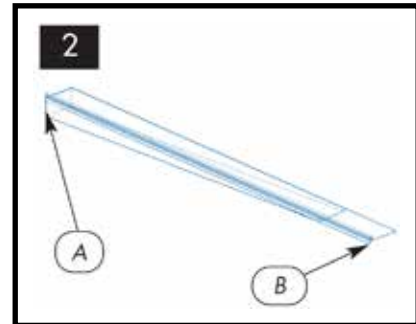


PVCu FIRRINGS

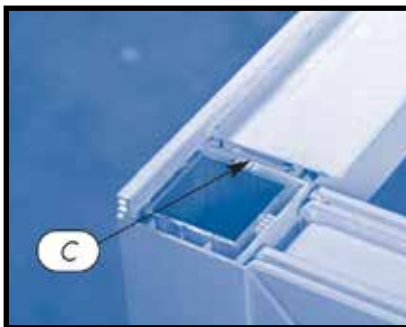
For timber firrings see opposite page.



1 Offer the furring piece to the side frame. The outside face of the furring should be flush with the outside face of the frame.



2 Mark and then cut the furring to length from the back (A). Point B should be flush with the outside face of the front frame.



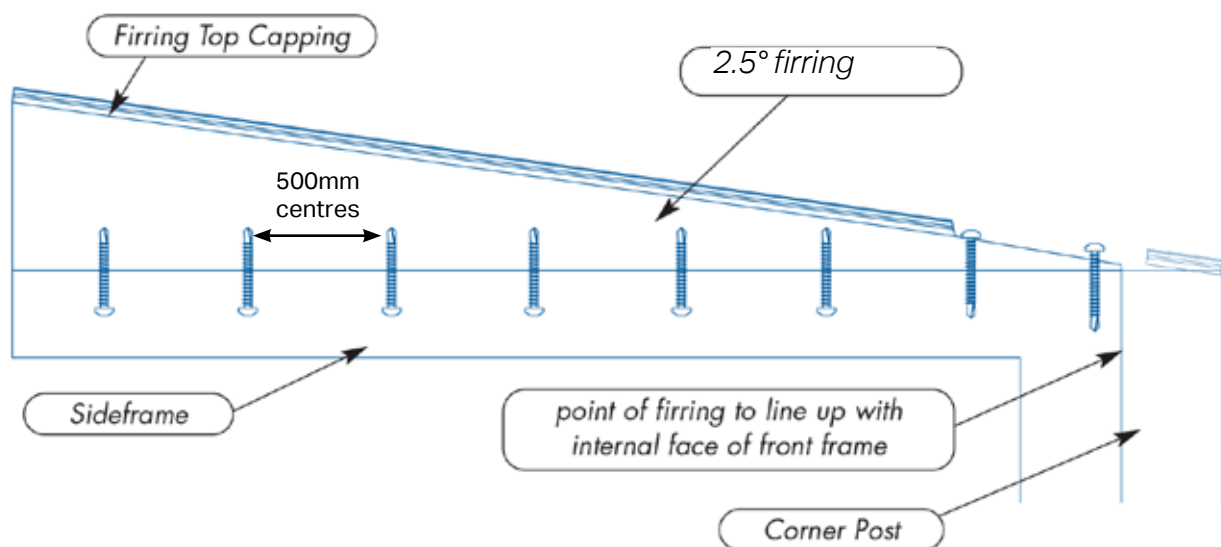
Trim the furring top cap to allow the furring body (edge C) to line with the internal face of the front frame, the barb detail extending to the front face of the corner post. Where required, trim the outside edge of the furring cap to fit around the corner post.



From the bottom outside face of the furring, remove the film from the adhesive tape. Align before pressing firmly into the correct position.

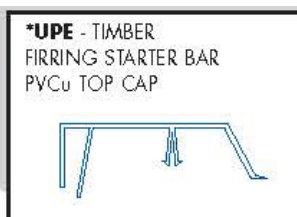
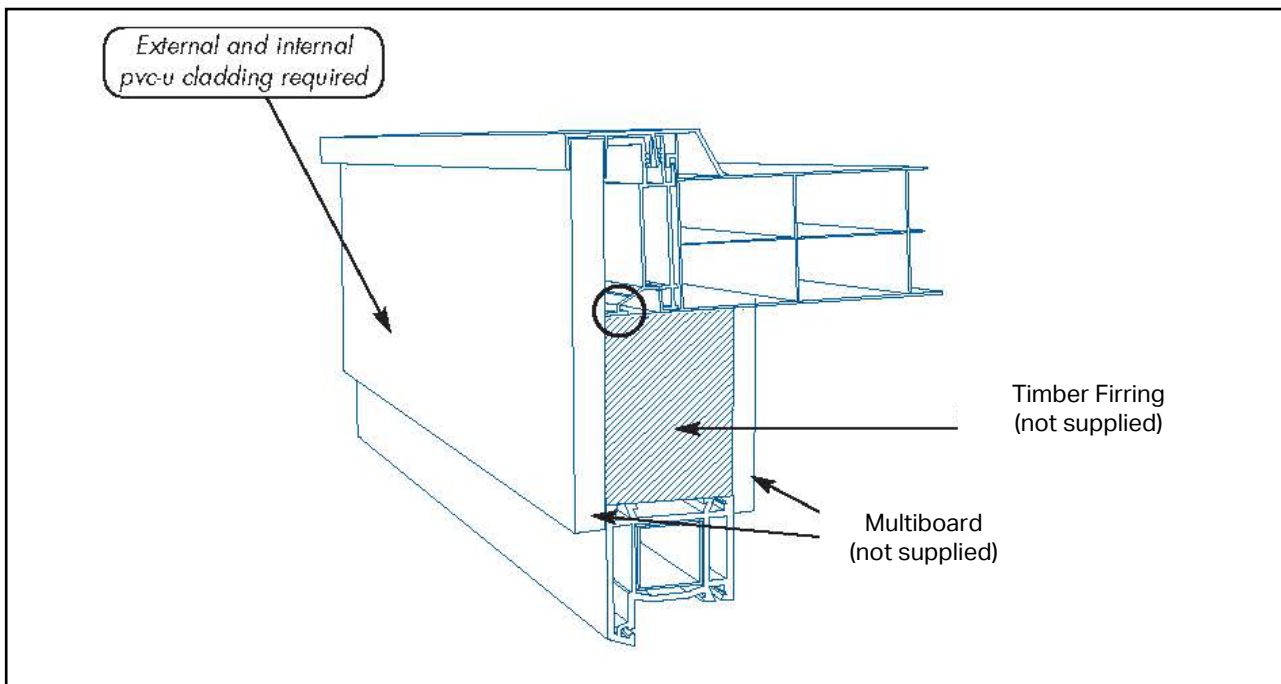
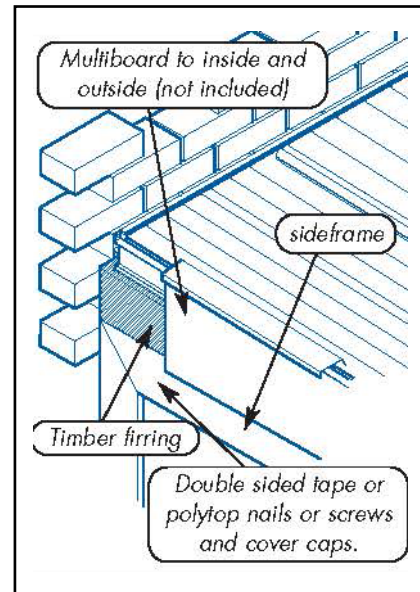


Securely screw the furring piece to the side frames at 500 centres. (See below).



TIMBER FIRRINGS

To cloak the junction between the sideframe and the roof structure use multiboard (not included) or equivalent. This is then slotted into the starter bar capping as shown. Position wallplate top capping over, ensuring that all the notches line up with the bars and then firmly push on. Run a bead of silicone around the profile of the bar capping at the intersection with the wall channel capping, and along the entire length of the co-extruded gasket.



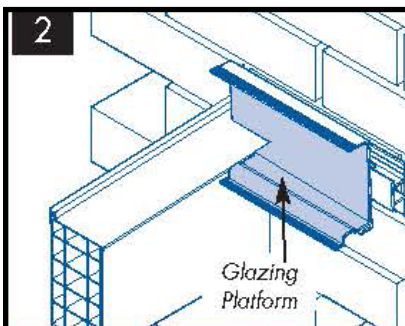
WALL CHANNEL

Please note: Centralise the wall channel. Ensure the wall channel is level and parallel with the front frame. If it is found that the wall is out of square, packers will need to be used accordingly. If internal wall finishes eg. plaster is to be applied, the spacing of the wall channel from the wall needs to be greater to ensure that the ventilation slots in the undercladding are unobscured.

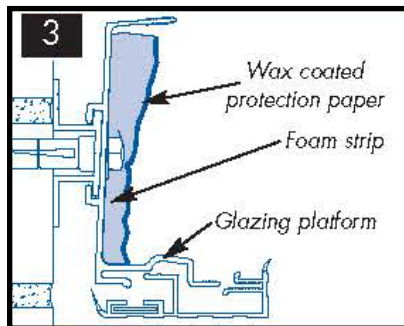
The wall channel requires notching at each end prior to fitting - see step 2.



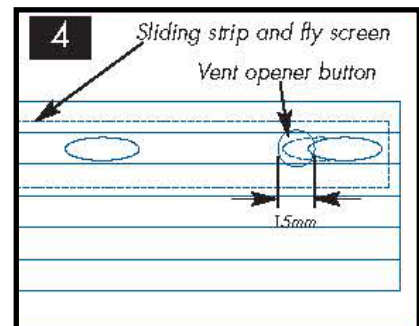
Slide aluminium wall spacers along the rear of the wall channel, one at each end and spaced at maximum 750mm centres. Bolt fix into the wall using 'Fischer' bolts or similar, depending upon substrate.



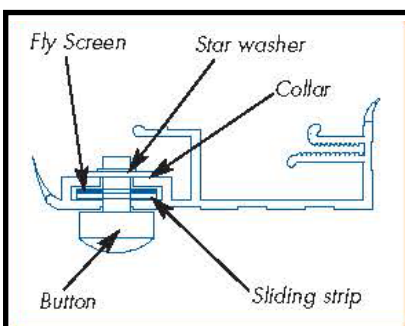
At the junction between the wall channel and the firring, notch out the edge of the wall channel so that the glazing platform is level with the firring.



Remove the wax coated protection paper from the outer face (adhesive side) of the foam strip (supplied in wall channel) prior to installing bars and panels.



Now prepare the ventilated undercladding. Remember when fitting the button to extend the slot in the undercladding only, not in the sliding strip or fly screen. When the vent button is firmly in place, open and close the vent and trim any excess strip or fly screen from either end.



VENTILATED WALLCHANNEL OPENER BUTTON

Trial fit ventilated undercladding to wall channel prior to installing panels.

BARS & PANELS

SETTING OUT

We recommend that if you are working to a modular width you mark the top of the front frame and the aluminium wall channel to suit the 500mm centres of each intermediate bar (plus an allowance of 26mm at each side for the starter bars).

Measure the length of the Ultralite® panels and bars taking into account 28mm offset from wall/structure. Please note: Panel size includes 50mm drip overhang, therefore the bars are 50mm shorter than the total panel length, eg. 3 metre panels come with 2950mm bar lengths. The panels and bars are to finish flush with the outer face of the front frame whilst the end drip extends 50mm into the gutter.



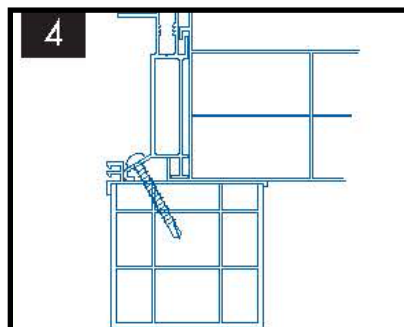
Having removed the wax coated protection paper from the wall channel foam (adhesive side out), lay the first panel between the wall channel and front frame.



Insert the starter bar into the panel connecting detail along its outer edge. Align the starter bar leg parallel to the upstand on the firing top cap.



When the starter bar and the first panel are aligned with the outside face of the front frame, insert a bar fixing block into the starter bar, screw fix through the fixing block into the starter bar with the screws provided.



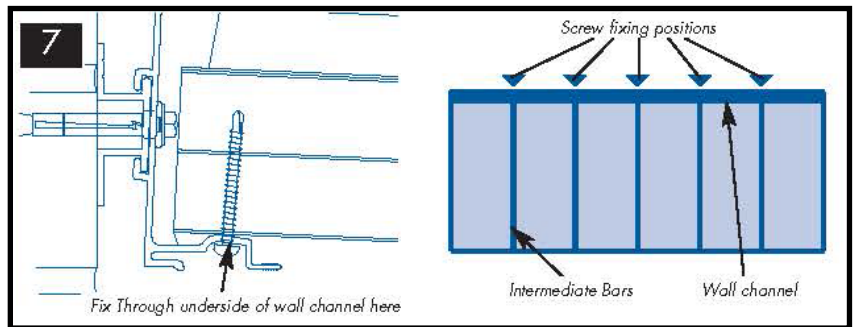
Measure and fix the first starter bar fixing screw 100mm from the outside face of the front frame. All remaining screw centres should be set at 500mm max along the length of the starter bar.



Align each panel in the same way and insert, from the front end, an intermediate bar at every connection detail. It is important that every panel/bar are fixed as you go along to avoid creeping. As this process is undertaken, you must ensure that the panels are set out at 500mm centres.



Ensure the front of each panel is square and flush with the front face of the frame. Insert a fixing block into each intermediate bar and screw fix into the head of the front

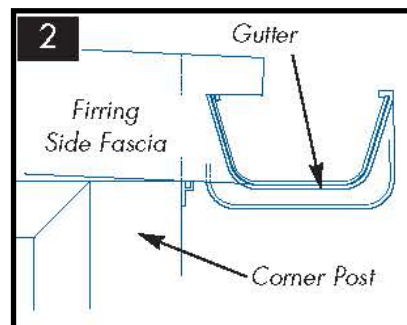


All intermediate bars are to be fixed at the wall channel position by screwing through the underside of the wall channel into the bar, as each panel is positioned.

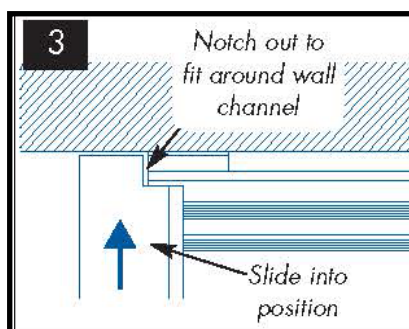
CLADDINGS & CAPPINGS



Once the glazing bars and panels are fixed, the furring fascia is fitted prior to fitting the bar top cappings. Before fitting it requires cutting to length, a vertical plumb cut to wall is recommended. The fascia slots onto the starter bar and clips into the channel on the PVCu furring.

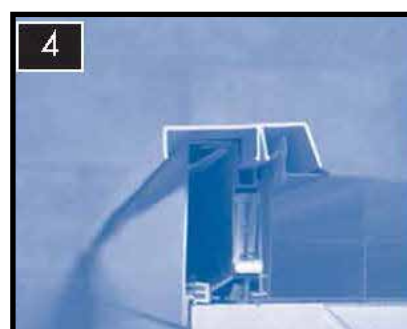


At the front there are two options. One option is to plumb cut the fascia to the external corner of the corner post. The alternative option is to extend the fascia beyond the corner post and scribe the fascia around the gutter as shown in the diagram.



The starter bar top cappings (left and right) require notching around the wall channel before fitting.

Please note: Before knocking the starter bar top cappings on with a plastic hammer, remove the protective film from the double sided tape on the top edge of each furring fascia.



Position the top cappings on the starter bars and knock into position using a plastic hammer. All top caps should finish flush with the 50mm panel drip overhang.



Continue to fit the remaining top cappings on the intermediate bars.



Cut the pre-notched wall channel top capping to length and, using a hacksaw, widen the two end notches to sit over the starter bar cladding. Locate the pre-notched wall channel top capping onto the serrated aluminium wallplate and tap backwards using a nylon hammer.



Fit the wall channel end caps with dabs of silicone.

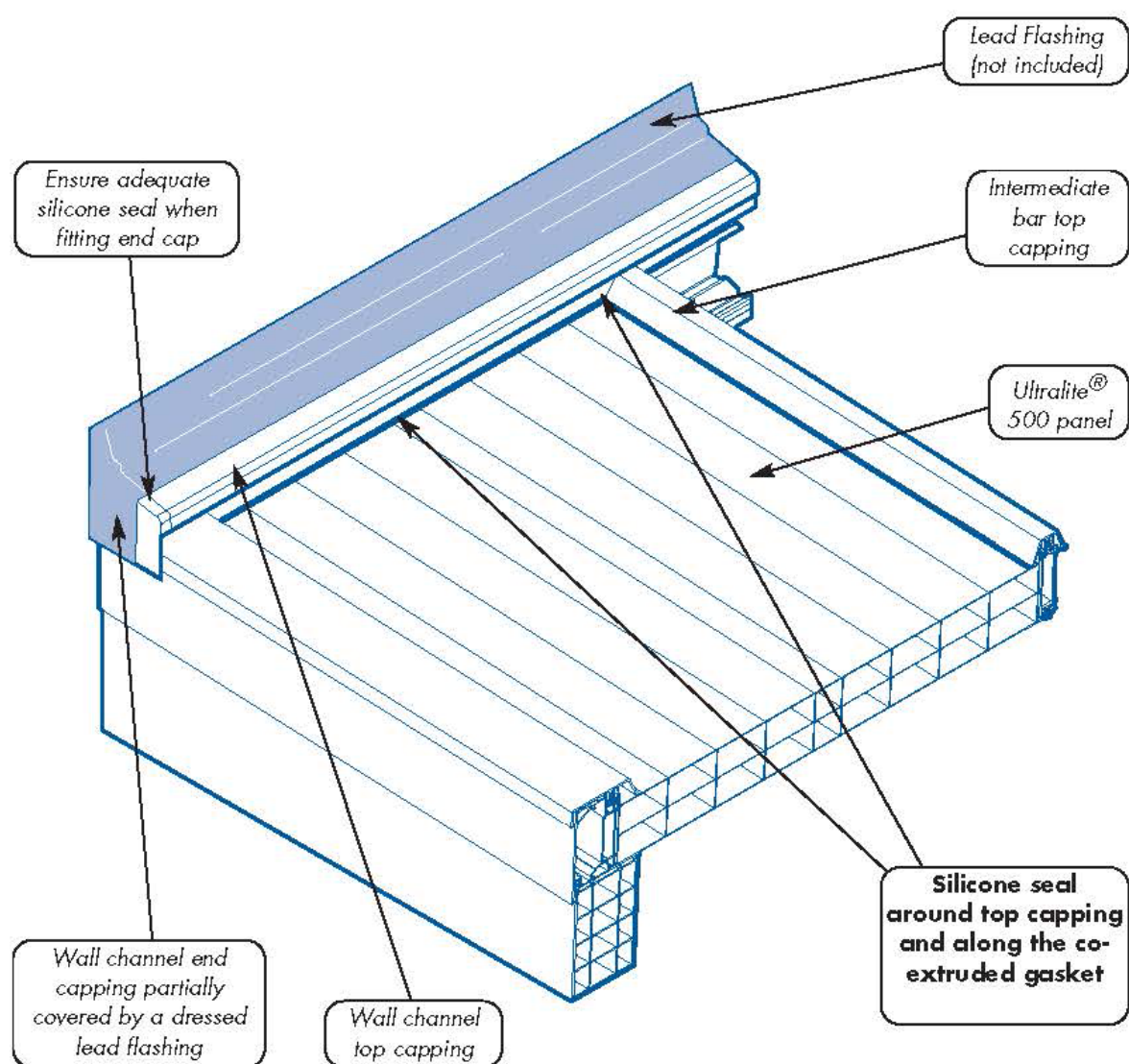
WALL CHANNEL FLASHING

Please note: Always use crawl boards to comply with health and safety regulations and to prevent damage to the panels.

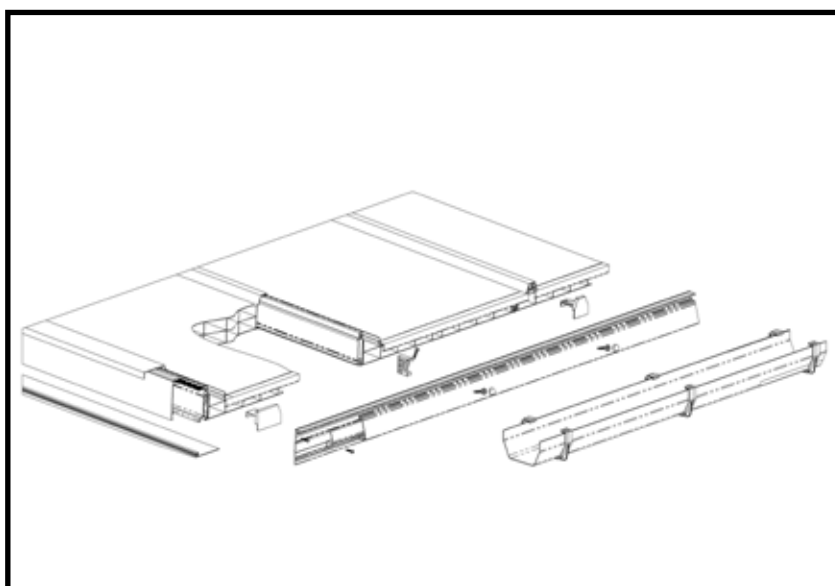
bricks are very porous and subject to water penetration. A risk assessment should have been made at survey stage on the fitment of a cavity tray.

1. Dress lead flashing from wall over the top capping profile. Lead flashing must be finished with a 30mm ground out mortar joint, lead wedged and pack filled with silicone to fill the mortar joint. Ensure each end of the wall channel is adequately sealed with lead as shown on the main diagram.

Advisory note: If this is a new conservatory and if installing against a brickwork elevation, many modern



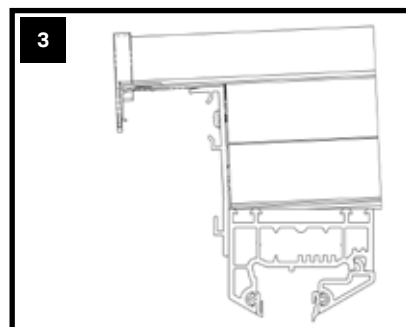
FASCIA & END CAP



1 Apply silicone around the end of each bar and then insert cap onto the bar top capping.



2 When the endcaps are in position offer up the ventilated fascia board (trapping the endcap legs) tight up to the underside of the 50mm drip overhang. Remove a short length of the protective film from the double sided tape (back face of the fascia). Then screw the fascia into the vertical slot of each fixing block.



3 Ensure that the foam sealing strip (on the top edge of the fascia board) is compressed against the underside of the panel and is adequately sealed with silicone along its entire length.

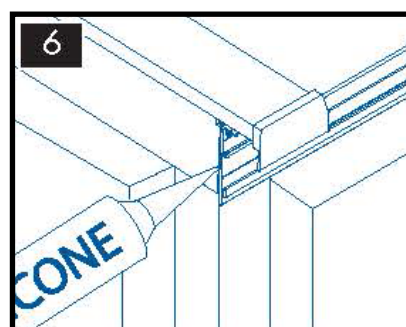


4 Pull "tail" of film protection layer and completely remove, firmly pressing the fascia securely against the head of the frame.

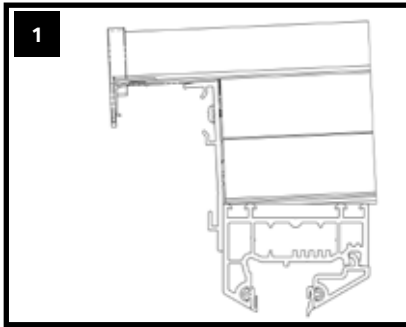


5 Run a bead of silicone along the back of the end drip profile and clip the profile to the drip overhang on the panel.

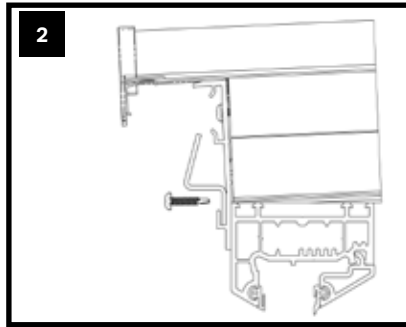
Gutter brackets must now be installed.



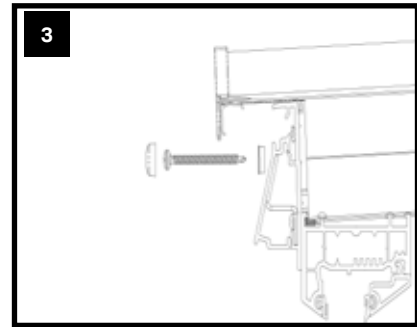
6 Finally, pull off the internal protective film on the panels now that all the construction work is complete. Very important: Ensure that any gaps in the construction are generously sealed to prevent water and insect ingress. In particular ensure that each end of the fascia board is well sealed.



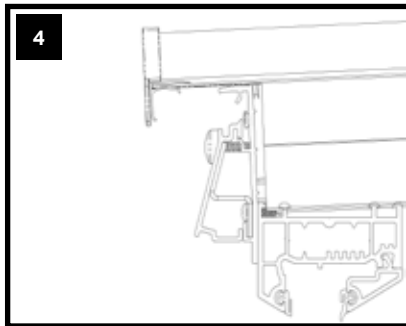
After the UVF fascia has been fitted along with bar end caps, the new fascia and gutter components can be fitted.



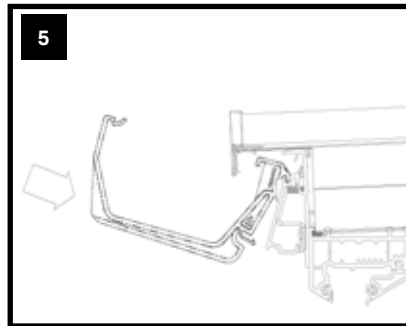
Take the UVFAS fascia adaptor profile and push it into the lower slot on the UVF profile fitted previously. Use a LANCFO01 screw to fix the profile back at 150mm from ends and at 400mm centres.



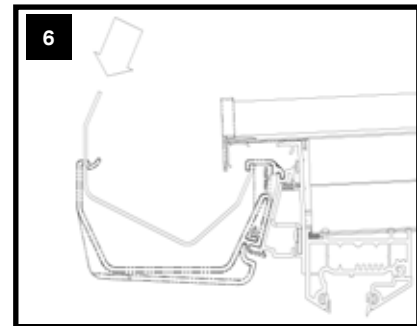
After UVFAS profile has been fitted take UVFEC outer fascia profile and push it up to the fascia adaptor and fix it back using a UFS003 screw aligned with the bars. Fix the screw straight into the fascia not at an angle just below the top of outer fascia. Ensure the washer and snap cap are fitted to each screw.



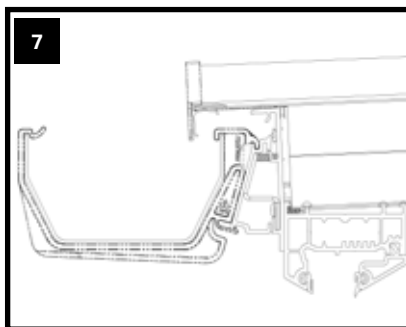
The assembled fascia should look like the image above, ensure all profiles are secured before fitting the gutter brackets.



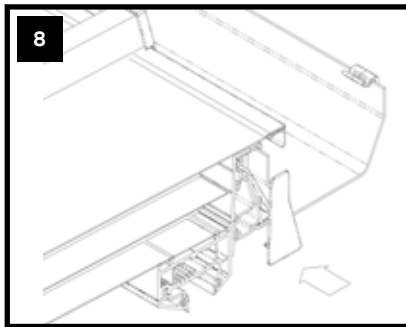
Hook the top of the gutter bracket (UZGUA001) over the UVFEC profile. Once hooked over push the bracket towards the fascia to slide the chamfered edge over the lower section of the UVFEC profile. After the bracket clicks into place it is ready to hold the gutter in place.



Take the squarestyle gutter (BR052) and hook it under the bracket on the closest side to the fascia. Once it's hooked under the bracket push down on the other side hooking it under the tab.



Once the gutter has been fitted to the brackets the fascia and gutter has been fully assembled as shown in the image above.



Take the eaves end cap and apply silicone to the inside face. Then push the end cap into the open slot between the gutter and fascia profile.

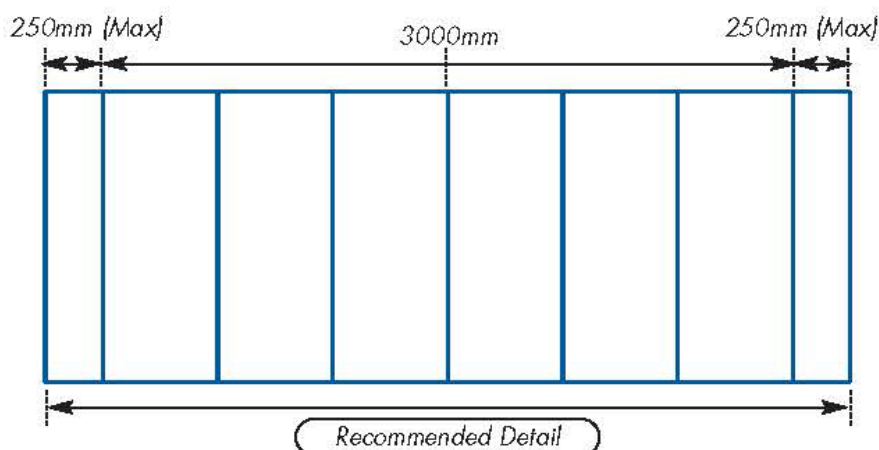
CUTTING DOWN PANELS

If the roof you are fitting is Non-modular in width, for aesthetic purposes we advise you to equalise the panels.

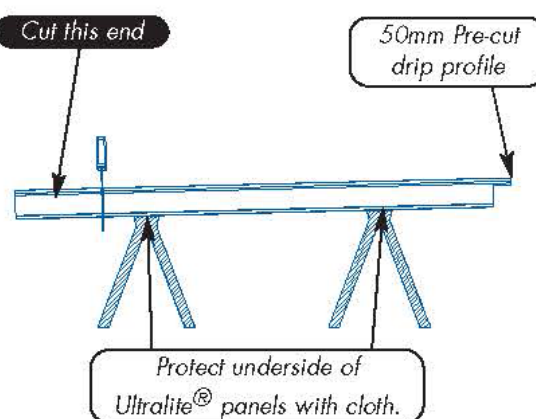
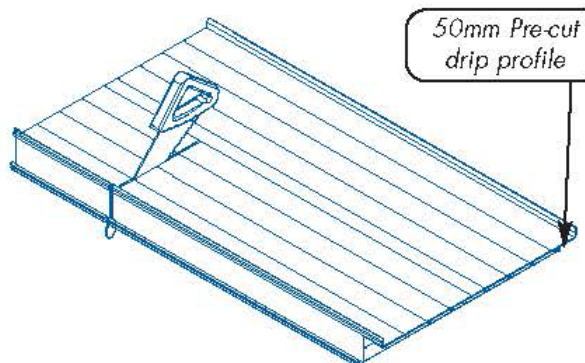
When cutting Ultralite® panels please allow a slight angle on your tressels, this allows any debris to fall to the ground. Any swarf captured inside the flutes must be cleared out prior to installation. Ensure that the underside is protected using cloth to prevent panel damage.

If non-modular in length please ensure end to be cut is opposite to pre-cut drip end. A panel saw is recommended.

Peel back the blue protective film from both ends approximately 100mm to allow the panel to sit on the wall channel and front frame. Do not remove all the film at this stage.



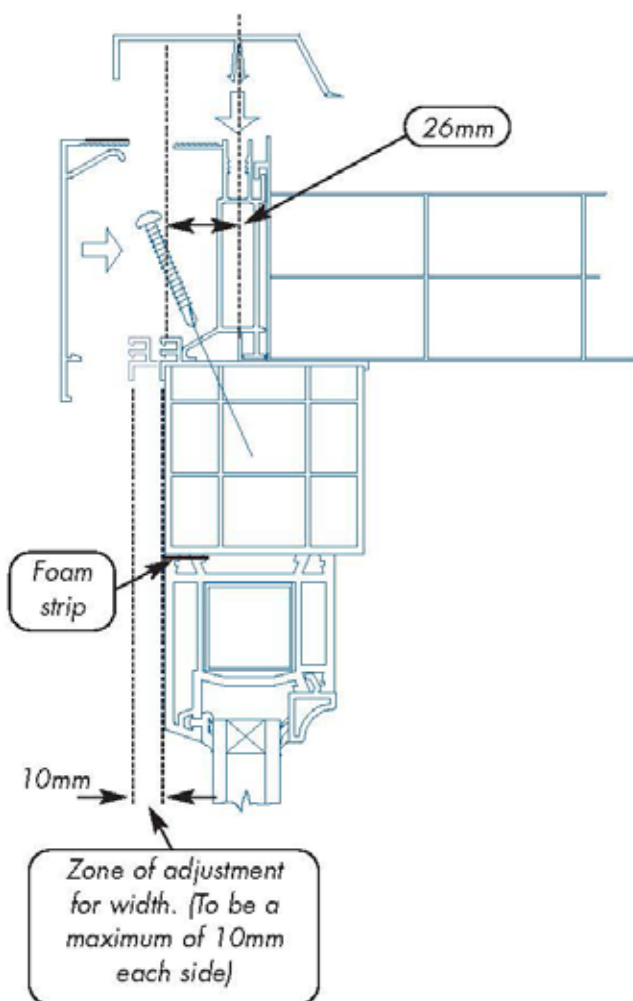
NB. When buying an odd number of panels ie 3½ packs (7 panels), the intention is to equalise from the centre line (as above), with the end panel not exceeding 250mm in width. You will require one extra intermediate reinforcing bar and fittings for this layout. If greater than 250mm you will need four packs rather than 3½.



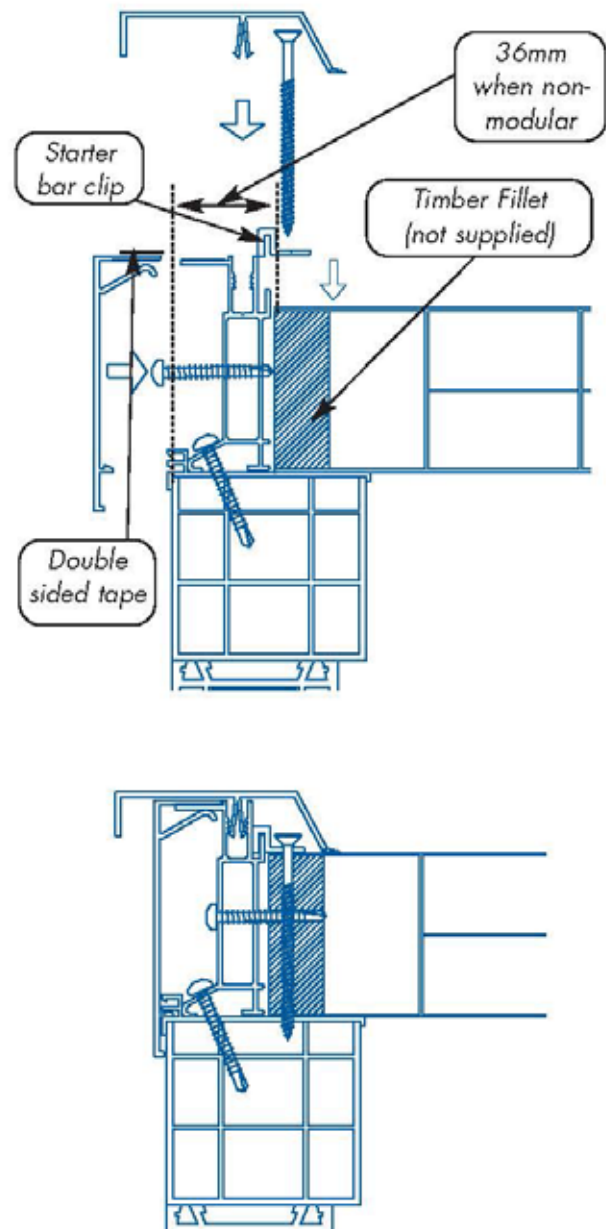
MODULAR / NON- MODULAR EDGE DETAILS

In non modular cases, where a panel has to be cut down along its length an aluminium fixing clip is provided (part no. 8). Pack the cut flutes with timber (57 x 20mm), silicone along the abutment between the panel and the starter bar then screw through the clip into the timber, as shown, at 500mm centres..

MODULAR EDGE DETAIL

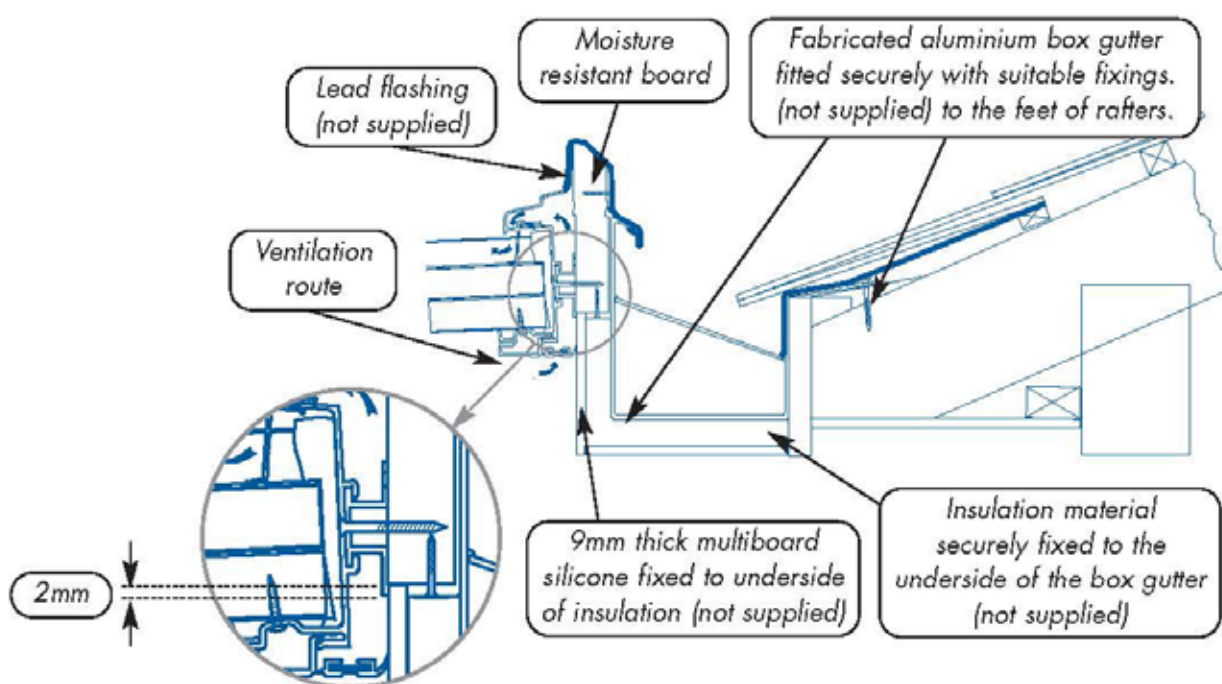


NON - MODULAR EDGE DETAIL



OPTIONAL BOXGUTTER

The Ultralite® box gutter offers even more headroom for extremely low eaves fixing situations. These box gutters are individually manufactured for each specific installation and will accept our standard box gutter adaptor components.

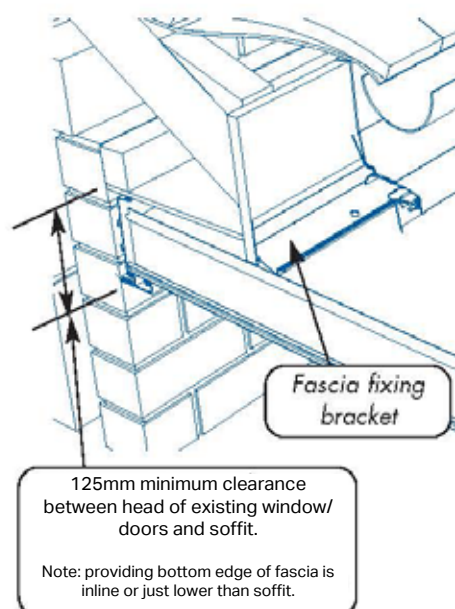
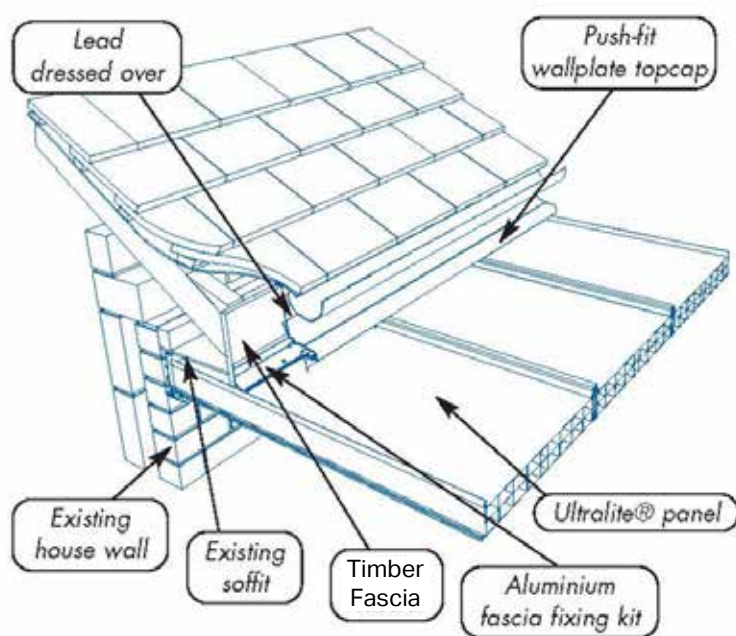


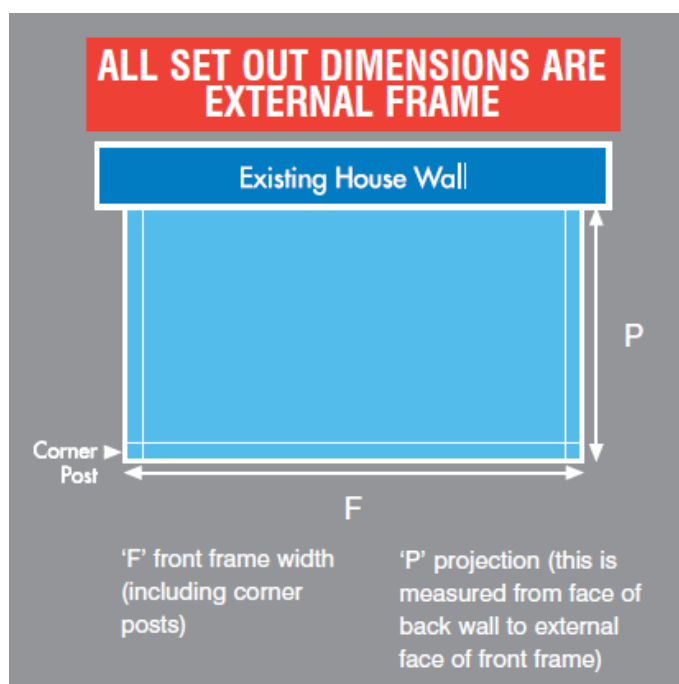
OPTIONAL FASCIA FIXING KIT

The fascia fixing kit is normally used when there is insufficient headroom at the wallplate position, to effectively weather the roof. Remove the house gutter, cut the aluminium extrusion to the required length and screw fix every 500mm. Cut the PVCu top capping and push fit into place. Fit the top capping end caps. Cut and then fold strip of lead over the top edge of the fascia board, screw fixing it along this top edge. Dress the lead firmly down over the top capping, taking care to detail this accurately over the

caps. One final job is to close the triangulated gap left where the Ultralite® panel nestles under the soffit using silicone sealant, multiboard and some screws.

Please note: It may be necessary, in certain situations, to insert a piece of high performance roofing felt underneath the slates/tiles which will necessitate the removal of some slates/tiles.





Working on modular widths

Number of packs	Number of panels	Front frame width (F)
2	4	2052
3	6	3052
4	8	4052
5	10	5052
6	12	6052
7	14	7052
8	16	8052
9	18	9052
10	20	10052

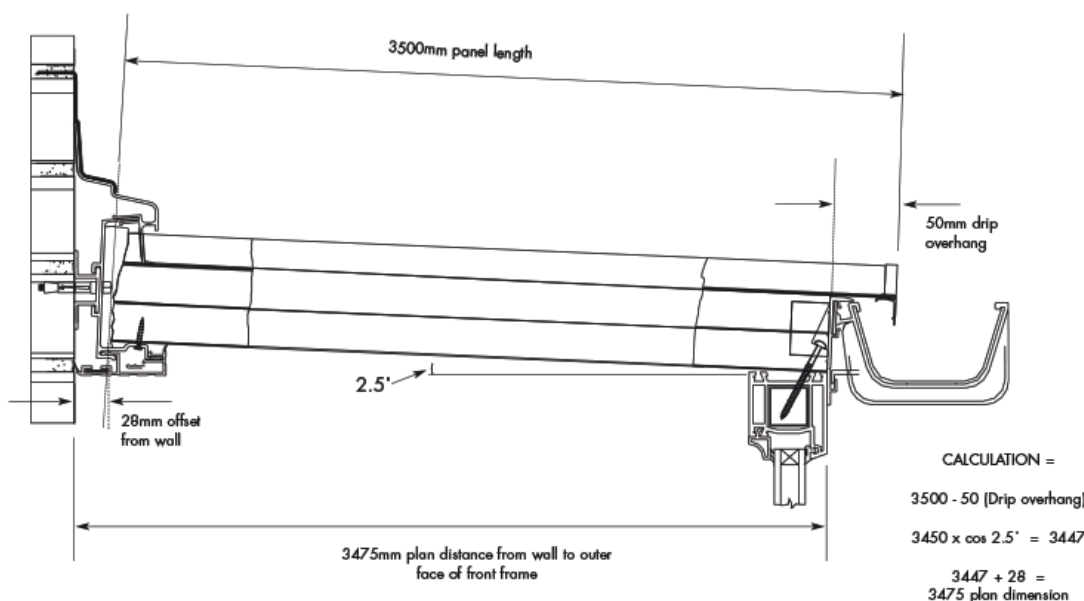
Single panel packs are available.

Standard panel length	Actual Projection (P) External face, front frame
2.0 with PVCu furring	1976
2.5 with PVCu furring	2476
3.0 with PVCu furring	2975
3.5 with PVCu furring *	3475
4.0 with PVCu furring	3974
5.0 with PVCu furring	4973
6.0 with PVCu furring	5972

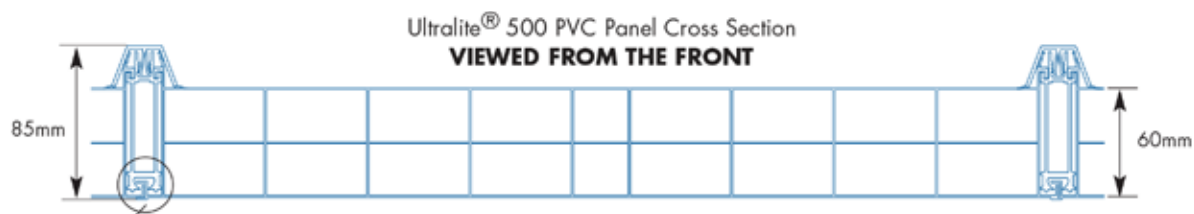
This is based on 2.5° pitch. Dimensions take into account the factory pre-cut drip of 50mm and the wall plate offset see illustration below. The rule is that the rise is 44mm per metre of projection at 2.5°.

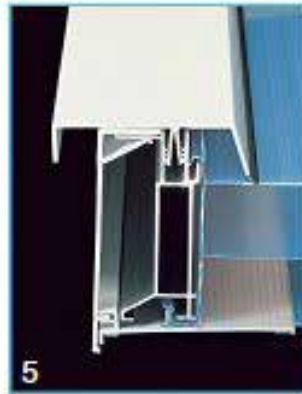
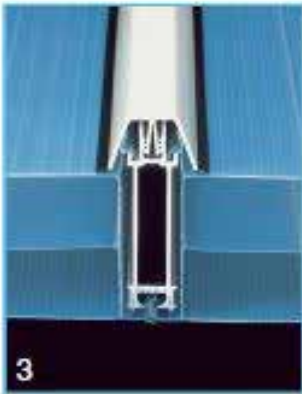
***Example**

3.5m panel



	500 PVCu
Modular panel width	500mm
Overall system depth	85mm
Glazing panel depth	60mm
Glazing panel material	PVCu
Reinforcement material	Aluminium beam
'U' Value	$1.9 \text{ Wm}^{-2}\text{K}^{-1}$
Weight	6kg/ m ²
Pitch	2.5° min - 10° max
Glazing panel colour	Opaque
Light transmittance	70%
Ventilated wall plate	Standard
System colour	White
PVCu firing kit	Optional (2.5° only)
Stock panel lengths	2m 2.5m 3m 3.5m 4m 5m 6m
Roof Blinds	Not to be fitted
FIRE RATING	BS 476: Pt. 3 EXT.F.AAX





- 1 Furring detail
- 2 Aluminium structure
- 3 Intermediate bar
- 4 Wallchannel and ventilation
- 5 Starter bar

We are pleased that you have chosen a conservatory using the highest quality patented Ultralite 500 PVCu roofing panel system and, with its excellent aesthetics and high insulation, we are sure it will give you many years of use.

- Please note that the panels themselves, due to their design, offer excellent diffusion from the sun and, under no circumstances, must internal blinds be fitted as this will invalidate the guarantee.
- Should you wish to carry out maintenance to the roof, timber crawl boards must be placed across the PVCu top cappings to protect the PVCu panels and prevent accidents.
- Periodically your roof may need cleaning due to falling debris, leaves etc. Hot soapy water and a soft brush should be used to wash down the roof.
- It is advisable that gutters should be checked and cleaned regularly, particularly if the roof is adjacent to overhanging trees etc.
- Ventilation should be maintained in conservatories, particularly in humid and hot weather. On the Ultralite 500 PVCu system the adjustable ventilation at the wallplate should be left open continuously, particularly in the summer months.
- Asphalt floors: Due to excessive gas temperatures, asphalt floors should be applied prior to installation of the Ultralite 500 PVCu roof system. If the roof is already installed use alternative floor screeds.
- Under no circumstances should blinds, light fittings etc. be fitted to the underside of an Ultralite® roof.





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