

HOMEOWNER INFORMATION

We are pleased that you have chosen a conservatory using the highest quality patented Ultralite 500 PVC 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 PVC 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 PVC 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 PVC roof system. If the roof is already installed use alternative floor screeds.

Should you have any queries regarding these recommendations or require any further information please contact your installer.



Ultralite500 Installation Guide

Version: 9.0
Date: Decemberr 2003

It is Ultraframe's policy to continually seek to improve its products, processes and services, and we reserve the right to change specifications without prior notice. Ultraframe is a trading name of Ultraframe (UK) Limited



Ultraframe (UK) Ltd
Salthill Road, Clitheroe,
Lancashire, BB7 1PE
www.ultraframe.com

Buy direct or from your nearest Ultraframe fabricator/distributor:

ULT500INST BRIGGS - 10000 12/03 - NM



world class conservatory systems



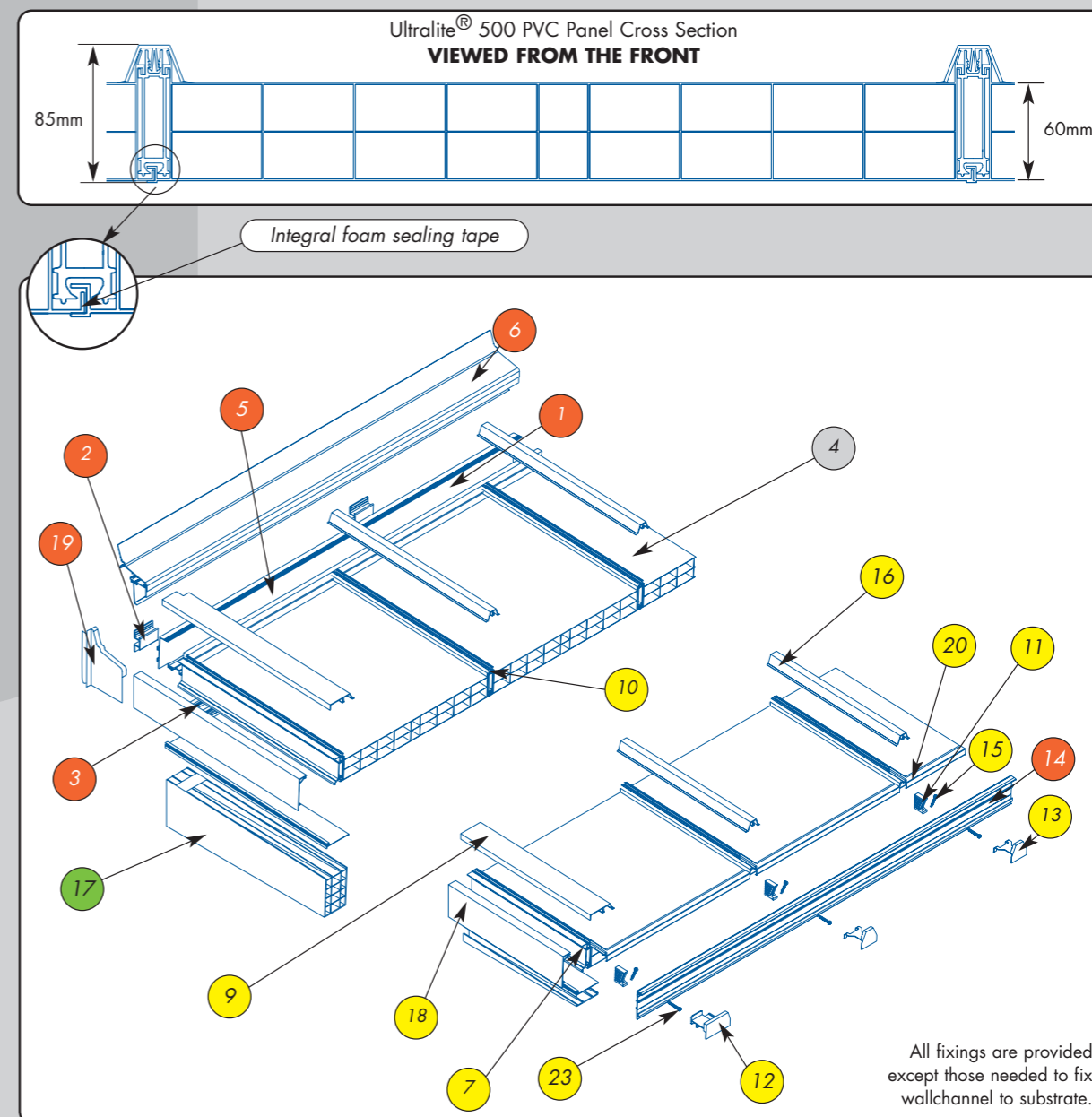
THIS INSTALLATION GUIDE HAS BEEN RE-FORMATTED TO MAKE INSTALLATION EVEN EASIER. EACH SECTION IS COLOUR CODED WITH ITS RELEVANT BOX OF PARTS ALSO MARKED ON THE END WITH THE SAME COLOURED LABEL.

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Please read all of this guide before starting your installation

1. Inspection of panels should be made before fitting. No claims can be made for damage or marks on fitted panels.
2. When using Ultralite[®] panels longer than 4.0m (projection measured on slope) additional structural support is required (e.g. purlin).
3. Ultralite[®] should be fitted at no less than 2¹/₂° and no greater than 10° roof pitch.
4. 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).
5. The bulk of this guide is written for the pvc-u furring - if a timber furring is being used then refer to Page 14.
6. 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.
7. The PVC fascia (part no.19) extends 30mm down the front face - please ensure this doesn't compromise any opening top lights.
8. Under no circumstances should blinds, light fittings etc. be fitted to the underside of an Ultralite[®] roof.
9. 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.
10. It is important to use a **low modulus neutral cure** brand of silicone when sealing the roof.

11. A single sheet Maintenance Notice is included in this installation guide as the outside back cover. Please cut this off and pass this to the end user when the installation is complete.



All fixings are provided except those needed to fix wallchannel to substrate.

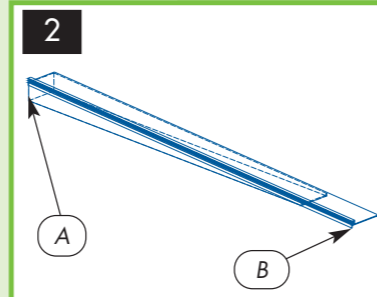
- | | |
|--|---|
| 1. UWC - Aluminium Wall Channel | 13. UEC500 - Intermediate Bar End Cap |
| 2. UWS060 - Aluminium Wall Spacer | 14. UVF - Ventilated PVCu Fascia |
| 3. UVC - Ventilated Wall Channel PVCu Undercladding | 15. UFS003 - Intermediate/Starter Bar Fixing Block Screw |
| 4. UFP - Ultralite [®] 500 PVC Glazing Panel | 16. UPT - Intermediate Bar PVCu Top Cap |
| 5. USF - Wall Channel Sealing Foam (not shown) | 17. FIR - Optional PVCu Furring |
| 6. UTC - Clip-fit PVCu Wall Channel Top Cap | 18. FFC - Optional PVCu Furring Fascia Cladding |
| 7. USC/F - Aluminium Starter Bar (for furring) | 19. UWE500N L/R - Wall Channel End Cap |
| 8. UBC/F - Aluminium Starter Bar Clip (not shown) | 20. UDP500 - PVC-u End Drip Profile |
| 9. UPE/F - Starter Bar PVCu Top Capping | 21. UOB001 - Ventilated Opener Button (not shown) |
| 10. UAL /UAH - Aluminium Intermediate Reinforcing Bar | 22. UFS002 - Starter Bar Fixing Screw (not shown) |
| 11. UEB500 - Fixing Block (for starter and intermediate bars) | 23. UFS004 - Ventilated PVCu Fascia Fixing Screw |
| 12. UEC500 L/R - F - Starter Bar End Cap | |

FIRRINGS

For timber firrings see page 14



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.



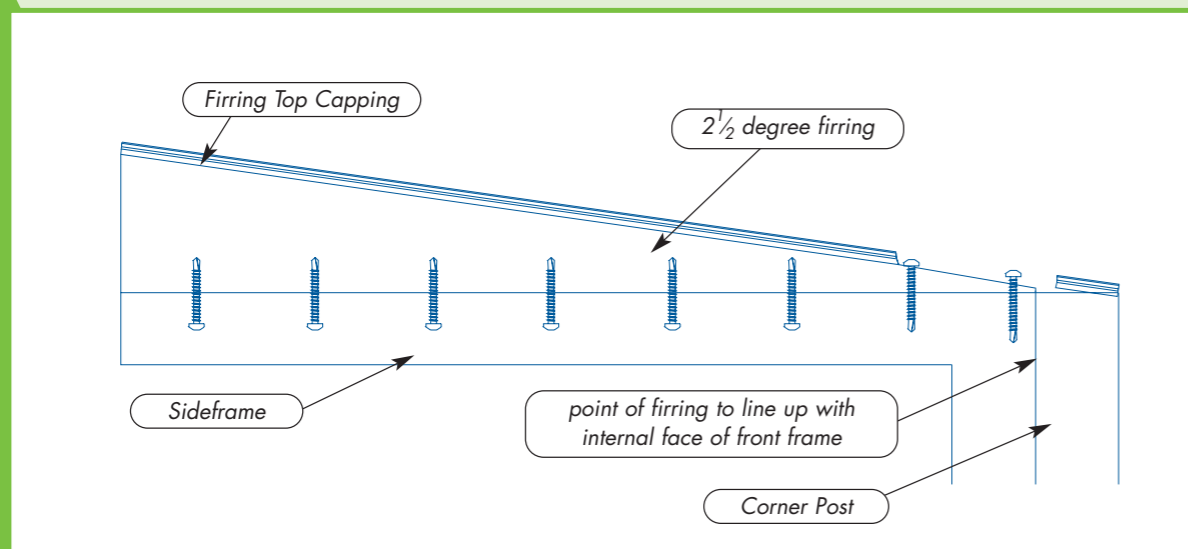
Trim the furring top cap to allow the furring body (edge C) to line with the internal face of the front frame, the barb detail extending to the front face of the corner post. Where required, trim the outside edge of the furring cap to fit around the corner post.



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).

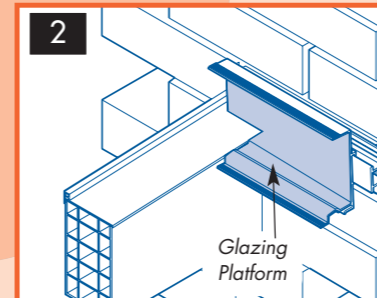


WALL CHANNEL

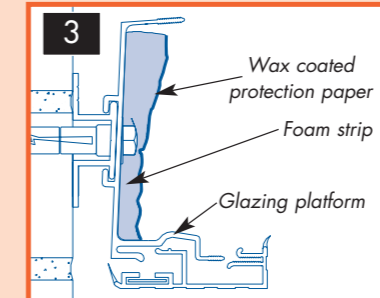
Please note: Centralise the wall channel. Ensure the wall channel is level and parallel with the front frame. If it is found that the wall is out of square, packers will need to be used accordingly. If internal wall finishes eg. plaster is to be applied, the spacing of the wall channel from the wall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



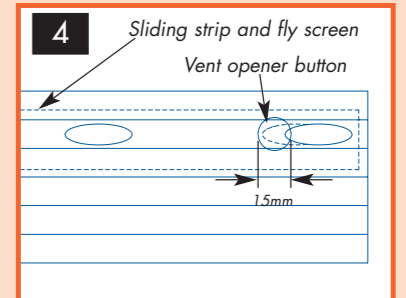
1 Slide aluminium wall spacers along the rear of the wall channel, one at each end and spaced at maximum 750mm centres. Bolt fix into the wall using 'Fischer' bolts or similar, depending upon substrate.



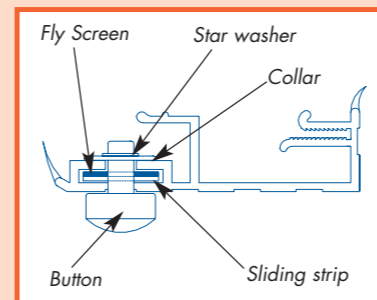
2 At the junction between the wall channel and the furring, notch out the edge of the wall channel so that the glazing platform is level with the furring.



3 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.



4 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.

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.

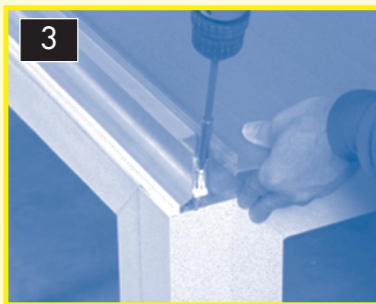
BARS & PANELS



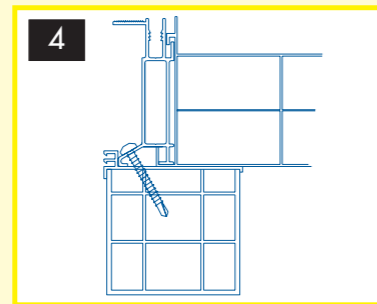
1 Having removed the wax coated protection paper from the wall channel foam (adhesive side out), lay the first panel between the wall channel and front frame.



2 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.



3 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.



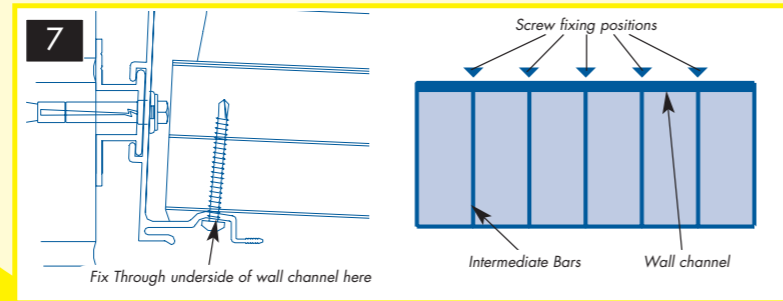
4 Measure and fix the first starter bar fixing screw 100mm from the outside face of the front frame. All remaining screw centres should be set at 500mm max along the length of the starter bar.



5 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.



6 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 frame.

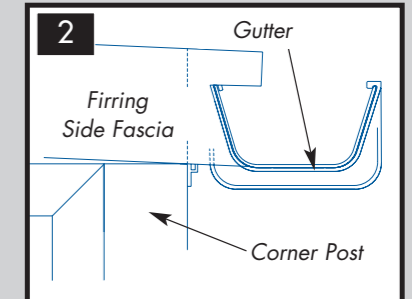


7 All intermediate bars are to be fixed at the wall channel position by screwing through the underside of the wall channel into the bar, as each panel is positioned.

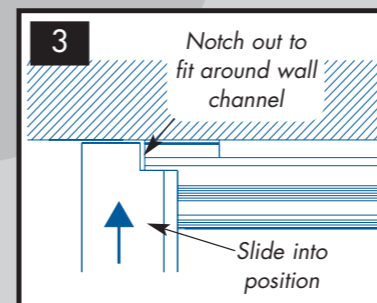
CLADDINGS & CAPPINGS



1 Once the glazing bars and panels are fixed, the firing 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 firing.

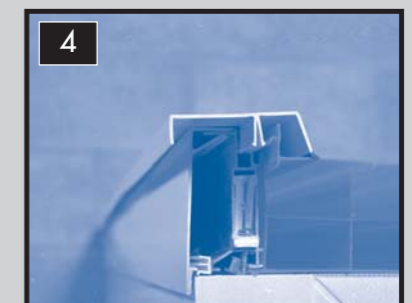


2 At the front there are two options. One option is to plumb cut the fascia to the external corner of the corner post. The alternative option is to extend the fascia beyond the corner post and scribe the fascia around the gutter as shown in the diagram.



3 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 firing fascia.



4 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.



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



6 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.



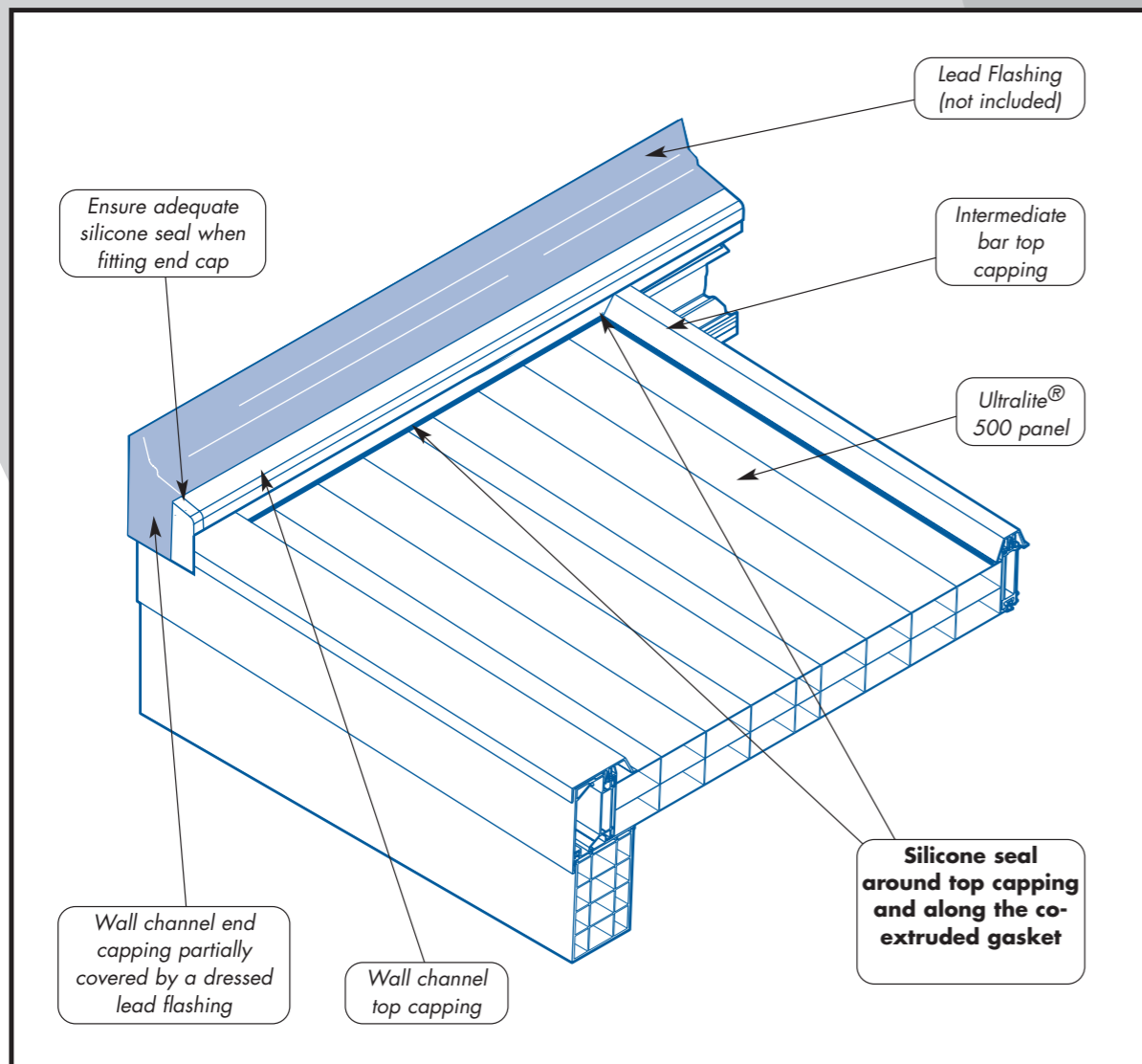
7 Fit the wall channel end caps with dabs of silicone.

WALL CHANNEL FLASHING

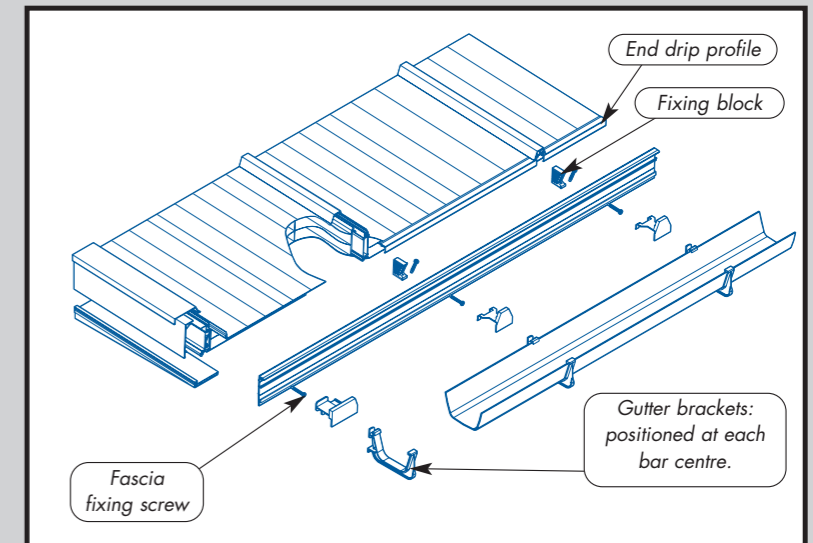
Please note: Whilst The Ultralite[®] roof can take a man's weight we advise that the surface is always protected and crawl boards are used to comply with health and safety regulations and to prevent damage to the panels.

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 installing against a brickwork elevation, many modern bricks are very porous and subject to water penetration. A risk assessment should have been made at survey stage on the fitment of the cavity tray.



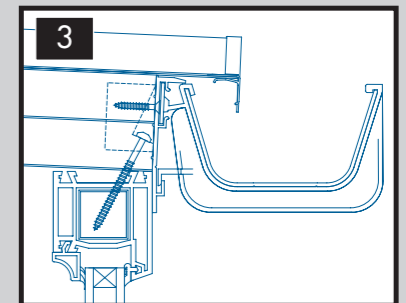
FASCIA & END CAPS



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



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.



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.

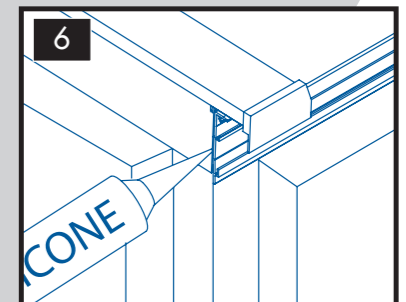


Pull "tail" of film protection layer and completely remove, firmly pressing the fascia securely against the head of the frame.



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

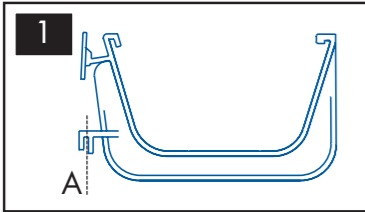
Gutter brackets must now be installed.



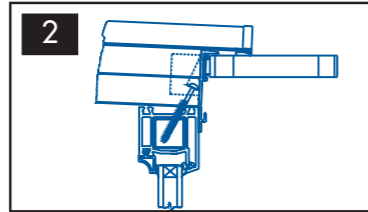
Finally, pull off the internal protective film from the panels now that all the construction work is complete.

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.**

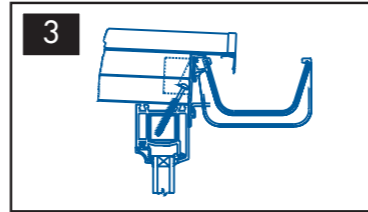
FLOWLINE GUTTER



Gutter bracket is designed to accept a pitch of 10°. If working to a pitch of 2.5° to 5° - extreme barb requires cutting off at point A.



At each bar centre, place a gutter bracket horizontally, into the clip channel of the ventilated fascia.

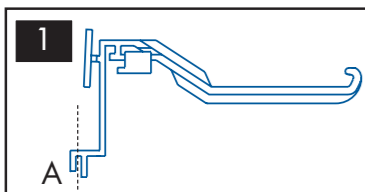


Turn/twist through 90 degrees to locate the bracket

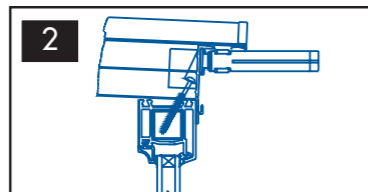
Gutter packs are available in 4m and 8m packs. The list below details the contents of each pack.

Item									
Individual Stock Code	FGU 400	FSE 001	UGB 500N	FSE 002	FJB 001	RWP 250	GAD 001	BES 001	RDB 002
Description	Flowline Gutter	Stop End Outlet Square	PVC-u Clip-fit Gutter Bracket	Flowline Stopends	Flowline Union Bracket	Square Downpipe	Downpipe Socket	Pipe Shoe	Adjustable Downpipe Clips
UGP 400 4 metre	1	1	8	1	-	1	1	1	2
UGP 800 8 metre	2	1	16	1	1	1	1	1	2

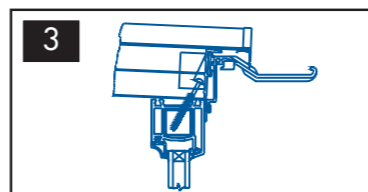
CLASSIC GUTTER



Gutter bracket is designed to accept a pitch of 10°. If working to a pitch of 2.5° to 5° - extreme barb requires cutting off at point A.



At each bar centre, place a gutter bracket horizontally, into the clip channel of the ventilated fascia.



Turn/twist through 90 degrees to locate the bracket

Gutter packs are available in 4m and 8m packs. The list below details the contents of each pack.

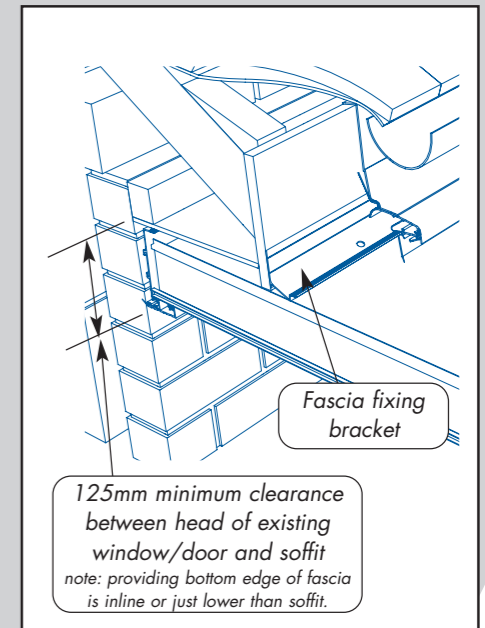
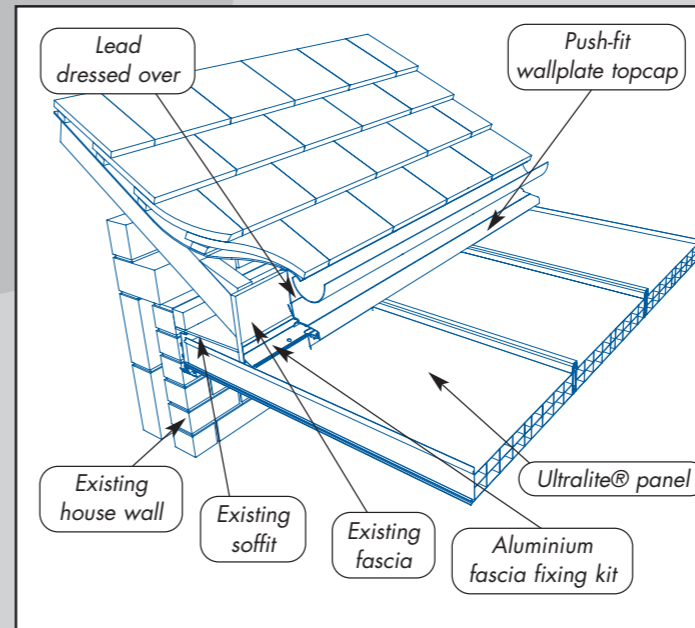
Item									
Individual Stock Code	MGU 400	MRO 001	UCB 500	MSE 001 MSE 002	MJB 001	RWP 250	GAD 001	BES 001	RDB 002
Description	Classic Gutter	Classic Running Outlet	PVC-u Clip-fit Gutter Bracket	Classic Stopends Left & Right	Classic Union Bracket	Square Downpipe	Downpipe Socket	Pipe Shoe	Adjustable Downpipe Clips
UCP 400 4 metre	1	1	8	1L/1R	-	1	1	1	2
UCP 800 8 metre	2	1	16	1L/1R	1	1	1	1	2

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 PVC-U 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 end 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.

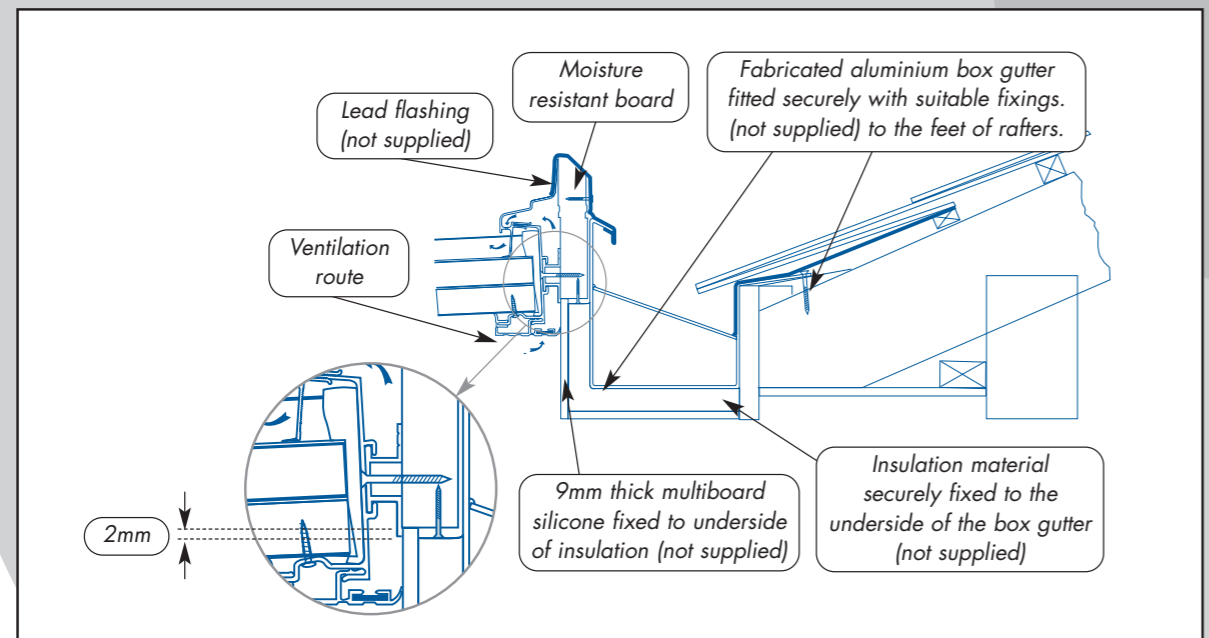
Please note: It may be necessary, in certain situations, to insert a piece of high performance roofing felt underneath the slates/tiles which will necessitate the removal of some slates/tiles.



OPTIONAL BOXGUTTER

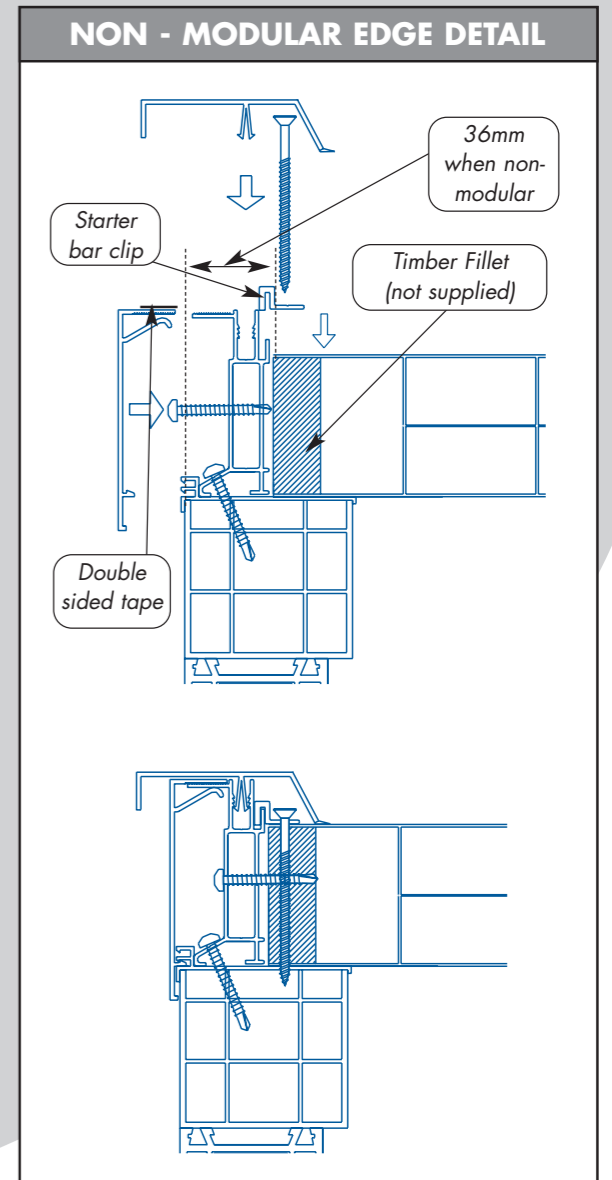
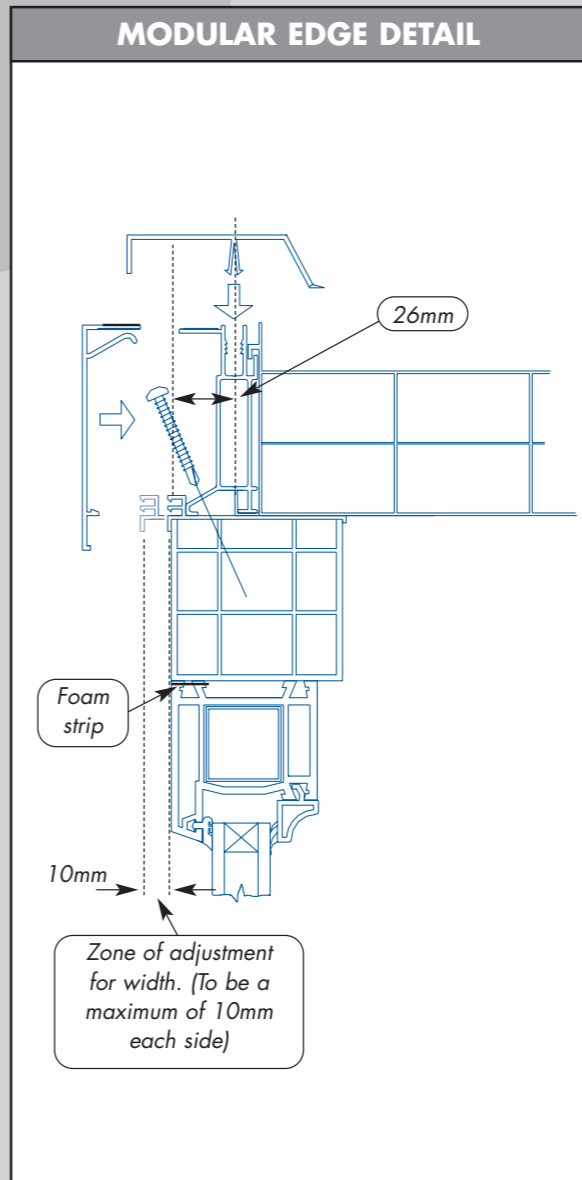
The Ultralite® box gutter offers even more headroom for extremely low eaves fixing situations. These box gutters are individually manufactured for each specific installation and will accept our standard box gutter adaptor components.

When ordering this item please contact our sales department for a 'Specification/Survey Form' or photocopy Pg 24 of the Conservatory Surveyors Guide.



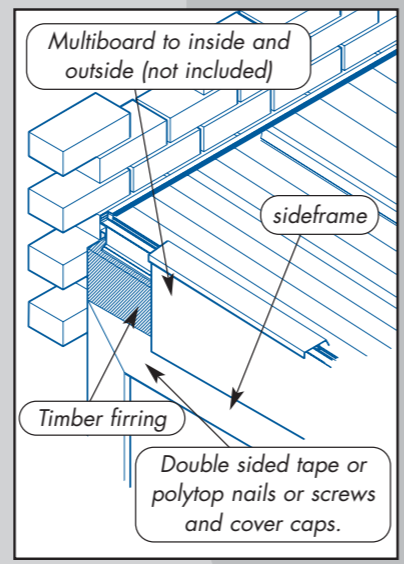
MODULAR/ NON- MODULAR EDGE DETAIL

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.



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.



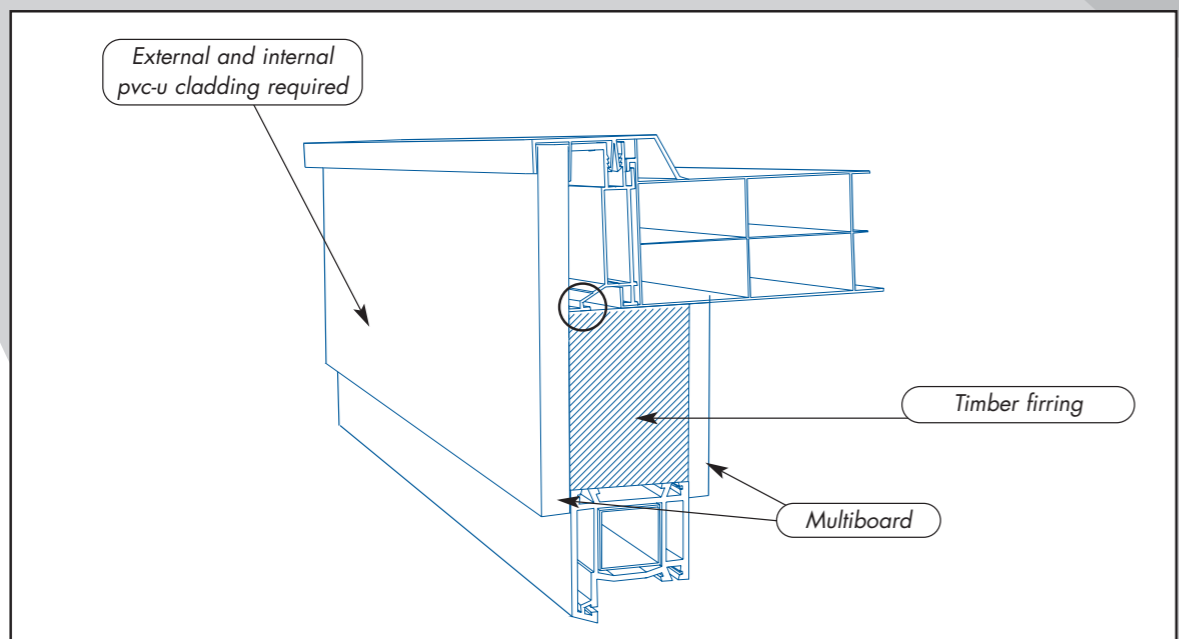
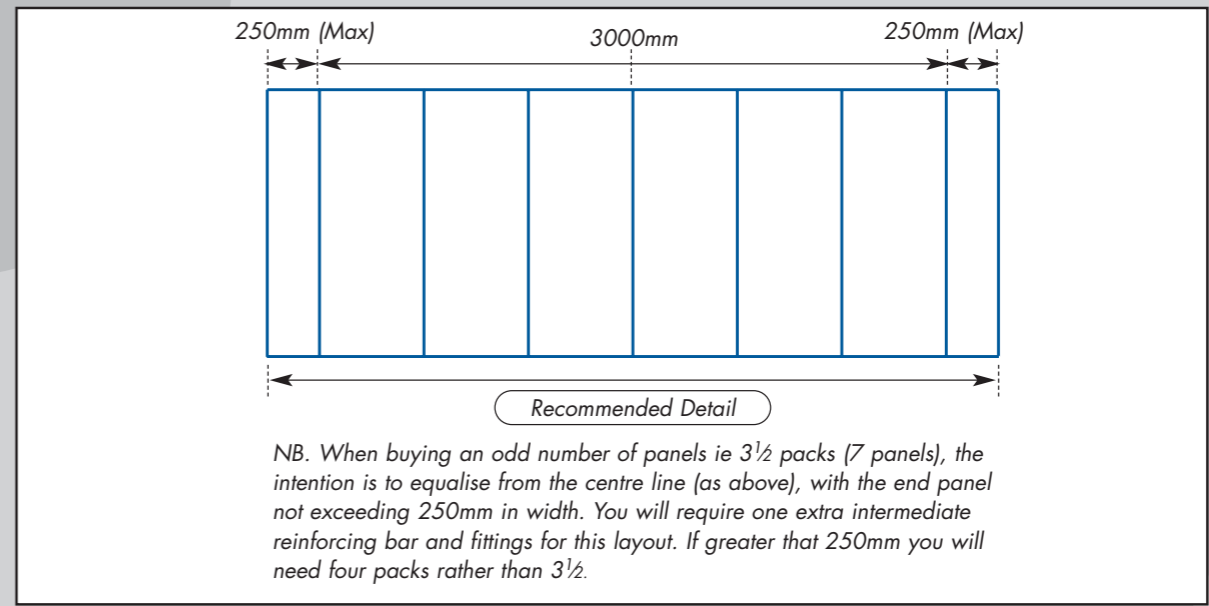
CUTTING DOWN PANELS


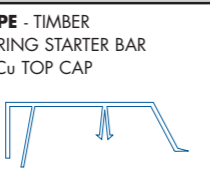
If the roof you are fitting is Non-modular in width, for aesthetic purposes we advise you to equalise the panels.

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.**



- *USC - TIMBER FIRRING STARTER BAR 
- *UPE - TIMBER FIRRING STARTER BAR PVCu TOP CAP 
- UEC 500L - left UEC 500R - Right TIMBER FIRRING STARTER BAR END CAP 