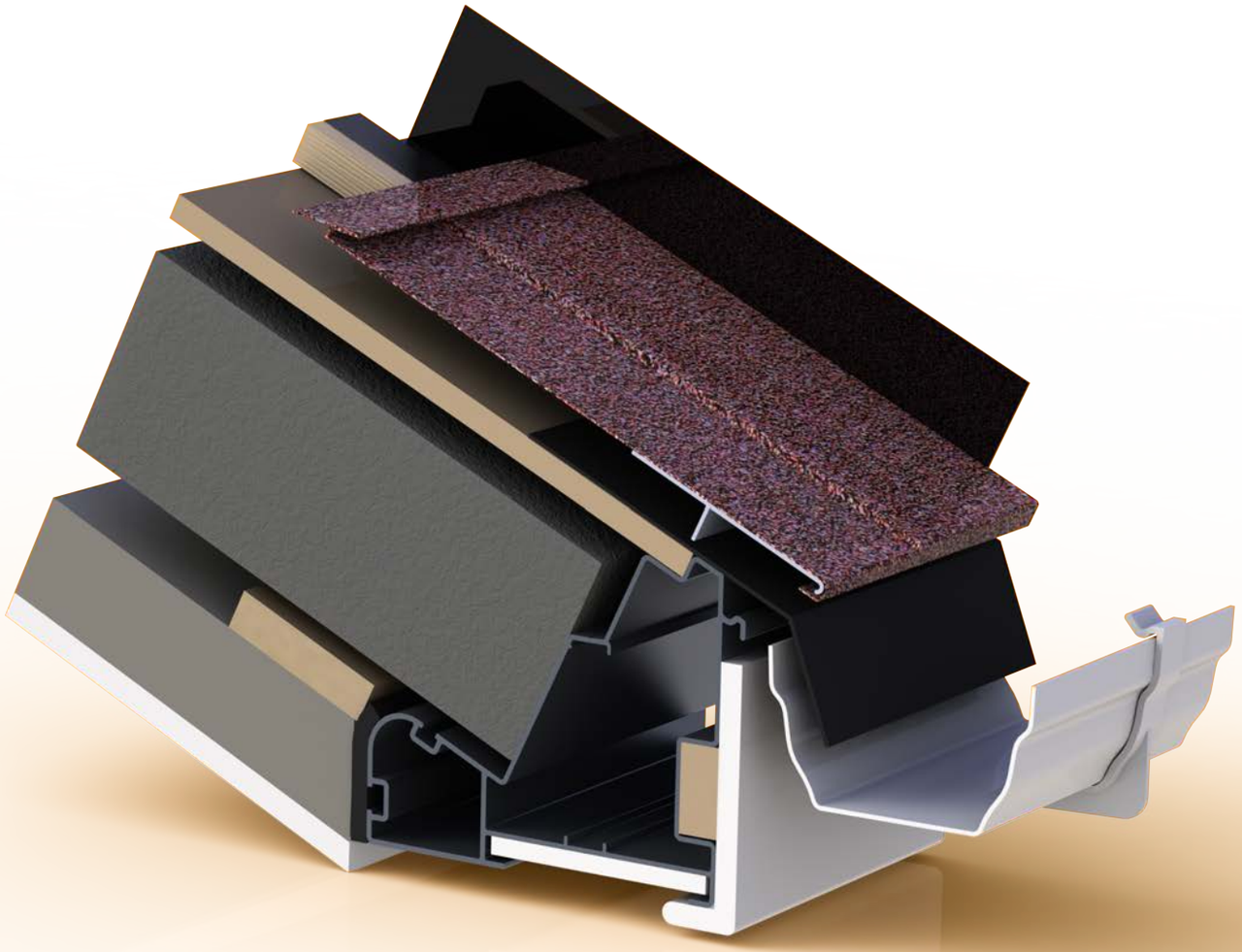
INSTALLATION GUIDE

2021



TRANSFORMING LIVING SPACES

SupaLite
TILED ROOF SYSTEM

contents

INSTALL INFORMATION PROVIDED

- FULL MANUFACTURE PACK
- INSTALL GUIDE

Components List:

Supalite Fixing Kit (1 supplied per 16sqm)
4.8 x 60 Baypole Screws
4.8 x 80 Baypole Screws
5.5 x 50 Self Drill CSK Screws
7.5 x 122 Concrete Screws
3.5 x 32 Drywall Screws
4.2 x 90 Drywall Screws
25mm polypins (appropriate to fascia)
1, 3 & 5mm glazing packers

Roof fixings
M6 Bolts & Nuts
M8 Bolts & Nuts

Fascia
120mm Fascia board
105mm Soffit board
Fascia Corners (90 / 135)*
Straight Joints*
Box Gutter Under Cladding*

SkyVista*
Cassette – complete with Internal rafter, Intermediate rafter, Gasket, Eaves Beam Foam.
PVC End Profile
Glazing Bar End Cap
Top Cap
Top Soaker
Glass Soaker
BG1 tape

Tile Components
Extralight-
Tiles
Ridges / Hips*
End Cap (90/135)*
Top Cap (3 way / 5 way / Universal)*
Barges / Barge Soakers*
Valley Tray*
Tile Starter Cleat

Tapco-
Tiles
Ridges

Eaves Trays
Wall Soakers*

Gutter
4m/6m Lengths (4m only in Anthracite Grey)
Brackets
Union*
Stop End*
Corners (90/135 or custom weld)*
2.4m Downpipe
Downpipe Clips
112 offset bends
Downpipe Shoe
Box Gutter Adapters*
T Welds (special order only)

Miscellaneous
Insulation
11mm Board
Membrane
Roof Vents* (see separate install guide)
Tile Battens
Plasterboard Battens

***Only if required for design of roof**

Tools Required:

Cordless Drill	Tape Measure	Angle Grinder	Pencil
Hand Saw	Acro Prop	Roofing Stapler	Utility Knife
Hammer	Spirit Level	Tin Snips	Wrench
Glazing Shovel			

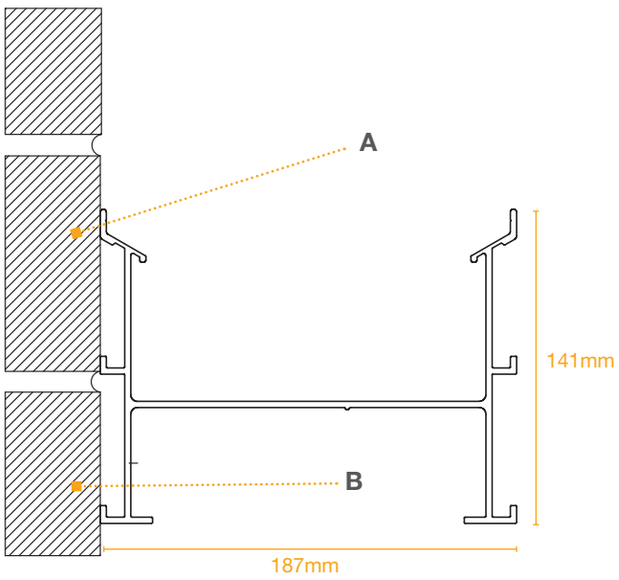
Please note: The above tools are only advisable; It is the responsibility of the installer to ensure the correct safety equipment is used on site. Additional tools may be used.

BOX GUTTER

BOX GUTTER TO THE WALL FIXING

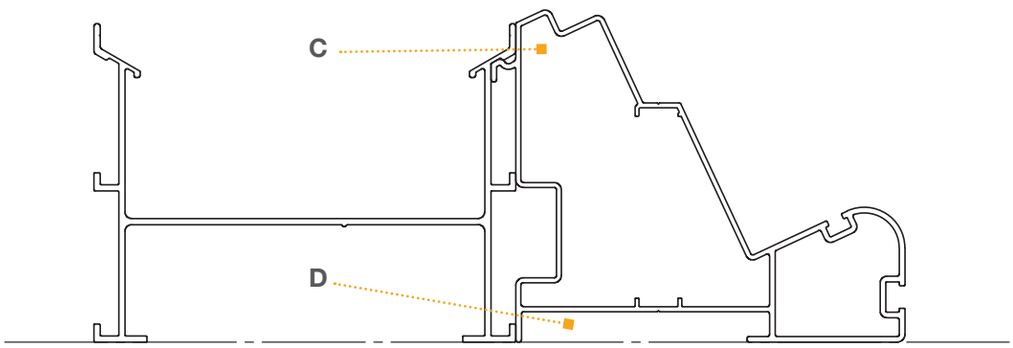
*If not installing a box gutter please go to page 10 to begin installation.

To secure the box gutter to the wall use a minimum of a 120mm Masonary fixings



IMPORTANT: Fix box gutter in the designated point to the wall. (**A & B**)

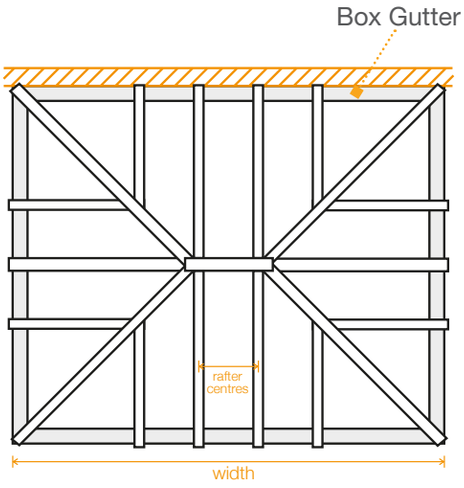
EAVES TO BOX GUTTER FIXING



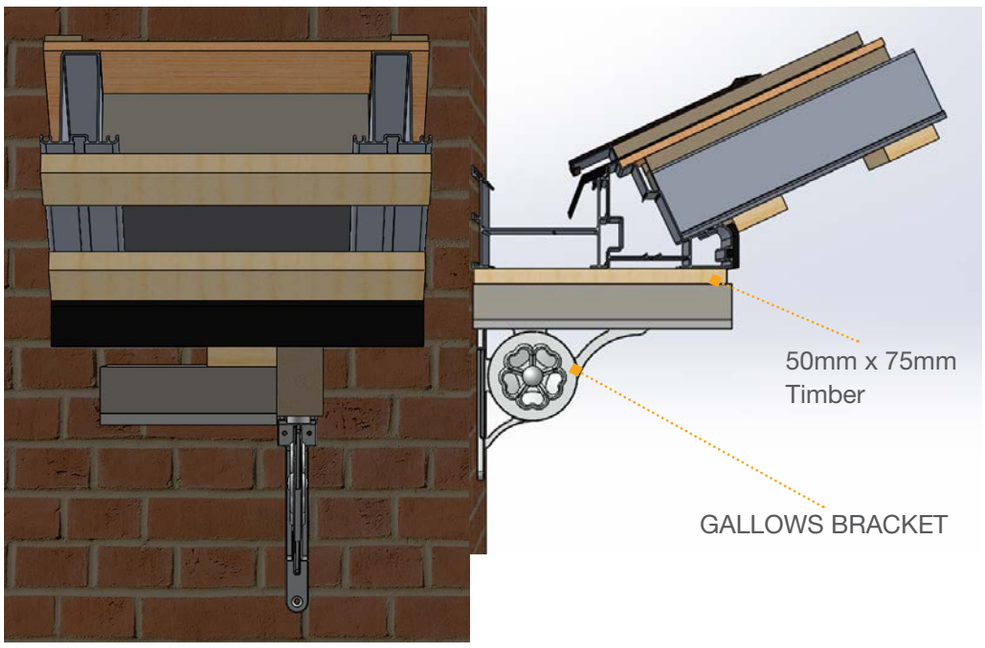
Position eaves beam to be parallel with the underside of the box gutter.
Fixing points are **C & D** (Aluminium 35mm self tapping screw) fix every 200mm.

GALLOWS BRACKETS / BOX GUTTER SUPPORTS

Gallows Brackets

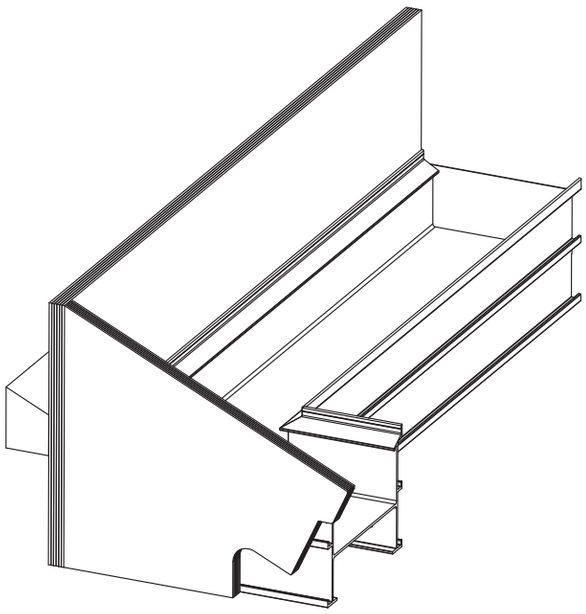


All box gutters with a length exceeding 3000mm require support from either a gallows bracket or by means of a supporting brick pier / wall



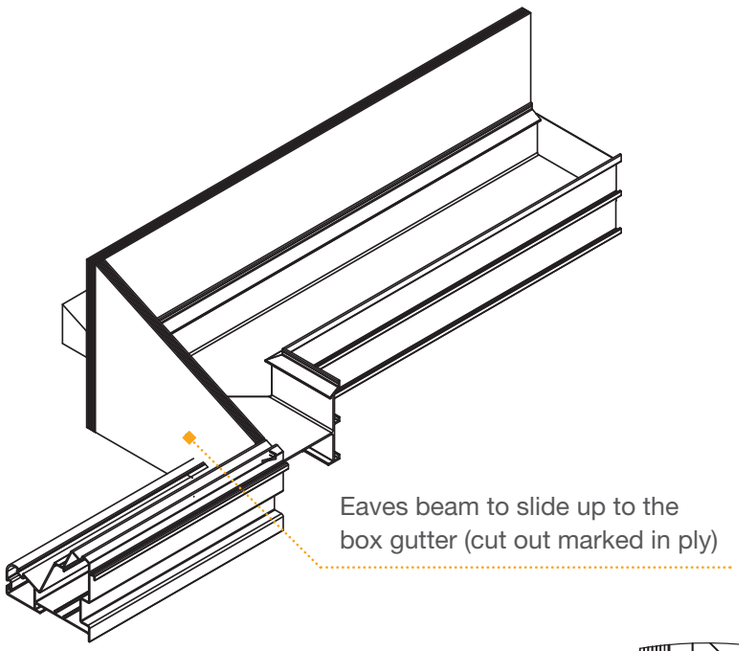
BOX GUTTER

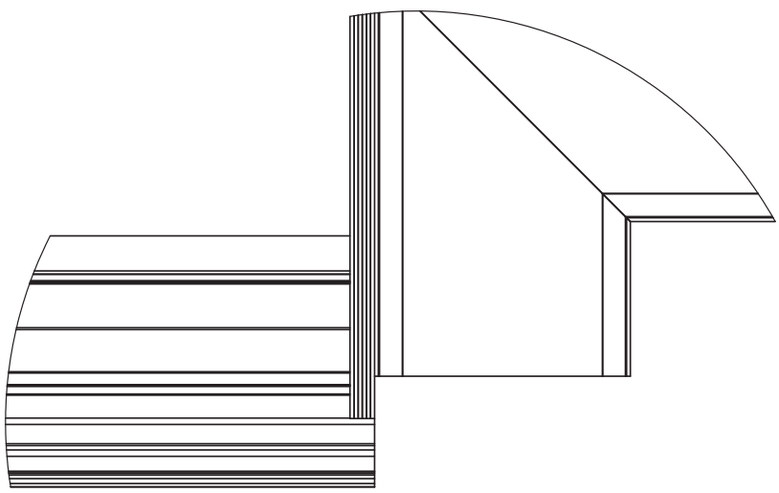
HIGH RISE BOX GUTTER



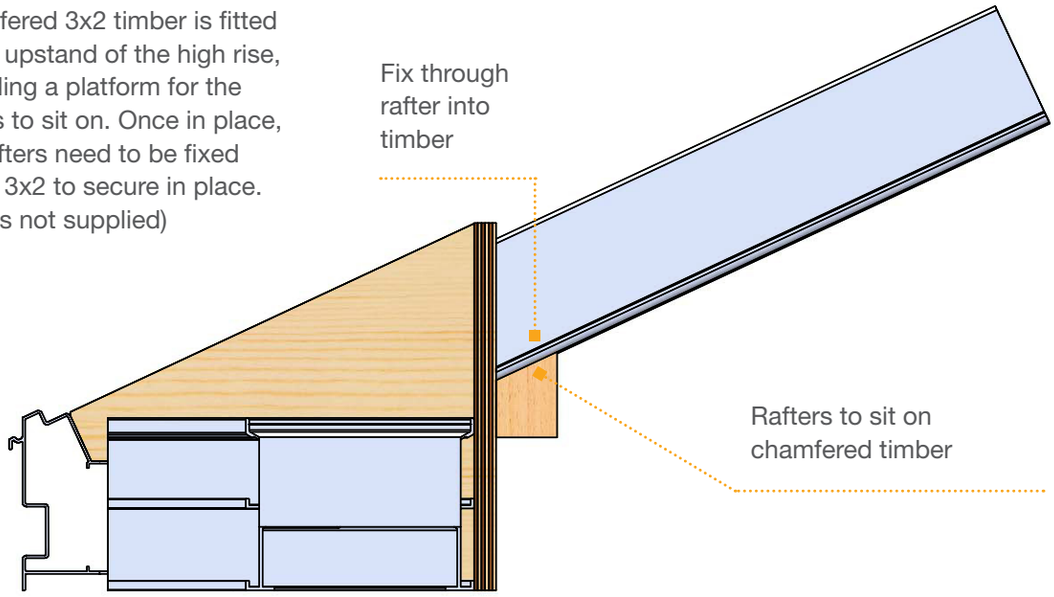
The high rise is constructed from the SupaLite box gutter profile.

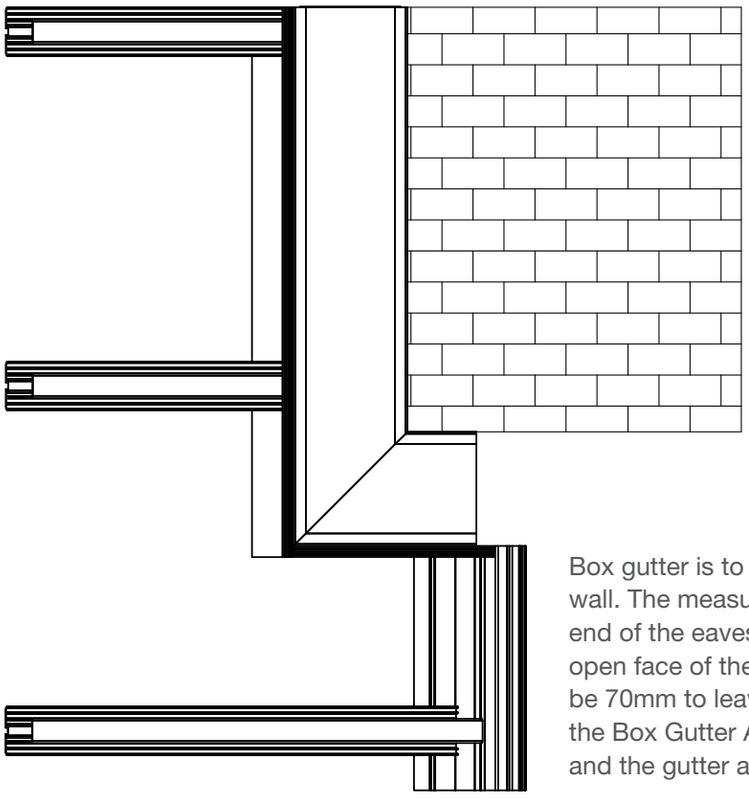
18mm ply is fixed to the side of the box gutter to create an upstand, which is sealed using smooth lead replacement.





Chamfered 3x2 timber is fitted to the upstand of the high rise, providing a platform for the rafters to sit on. Once in place, the rafters need to be fixed to the 3x2 to secure in place. (fixings not supplied)

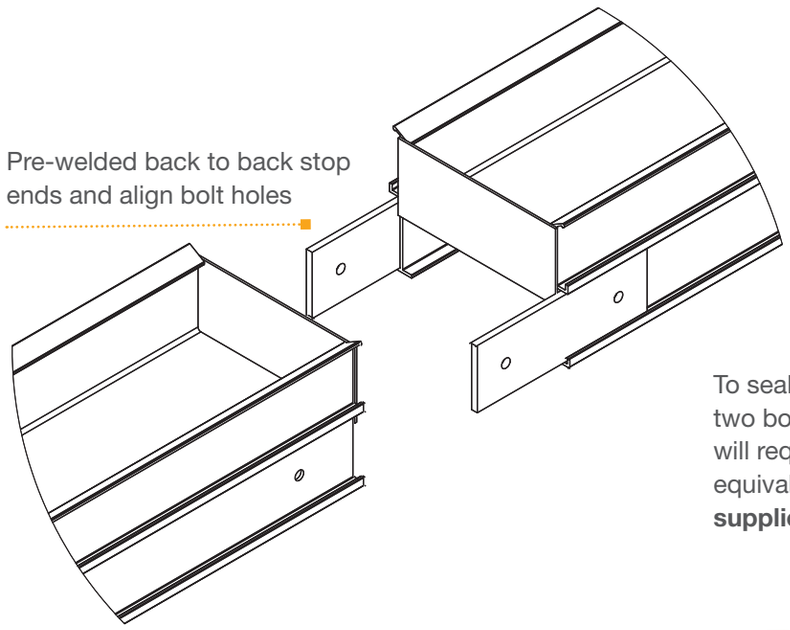




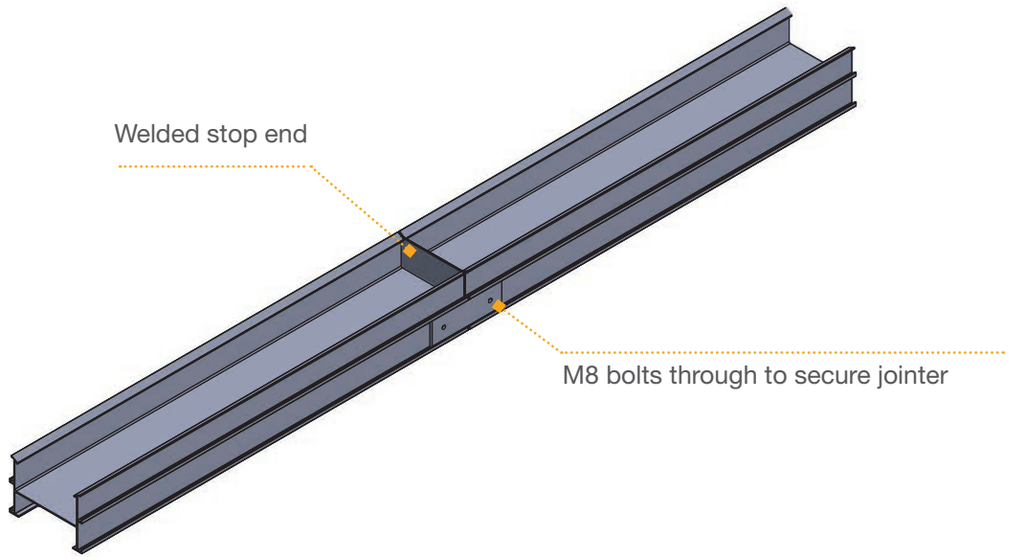
Box gutter is to wrap around the wall. The measurement from the end of the eaves beam to the open face of the box gutter will be 70mm to leave allowance for the Box Gutter Adapter (BGA) and the gutter angle.

BOX GUTTER

BACK TO BACK BOX GUTTER

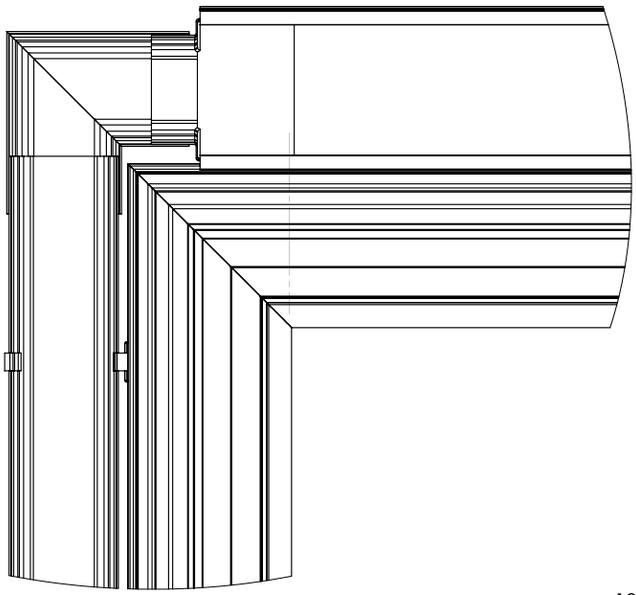


To seal the gap between the two box gutter sections, you will require lead replacement or equivalent to seal the join. **(Not supplied as part of the kit roof.)**



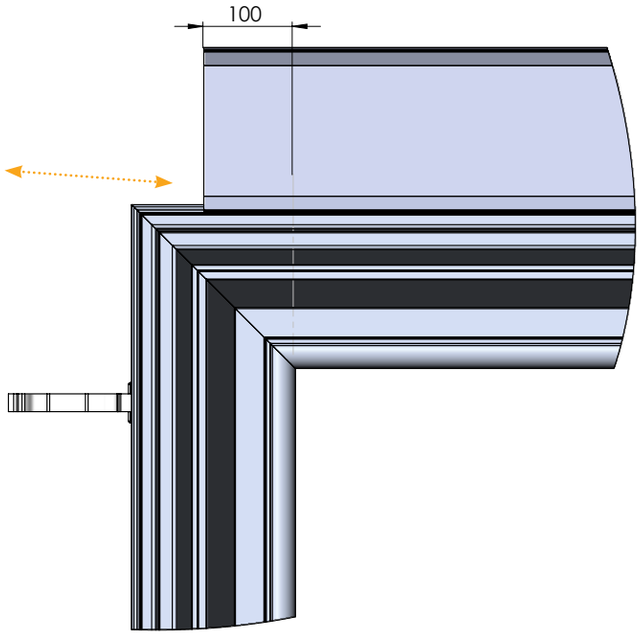
BOX GUTTER ORIENTATION

Box Gutter Adapter (BGA) slides into the box gutter.
The 90º gutter angle links the BGA to the standard gutter.



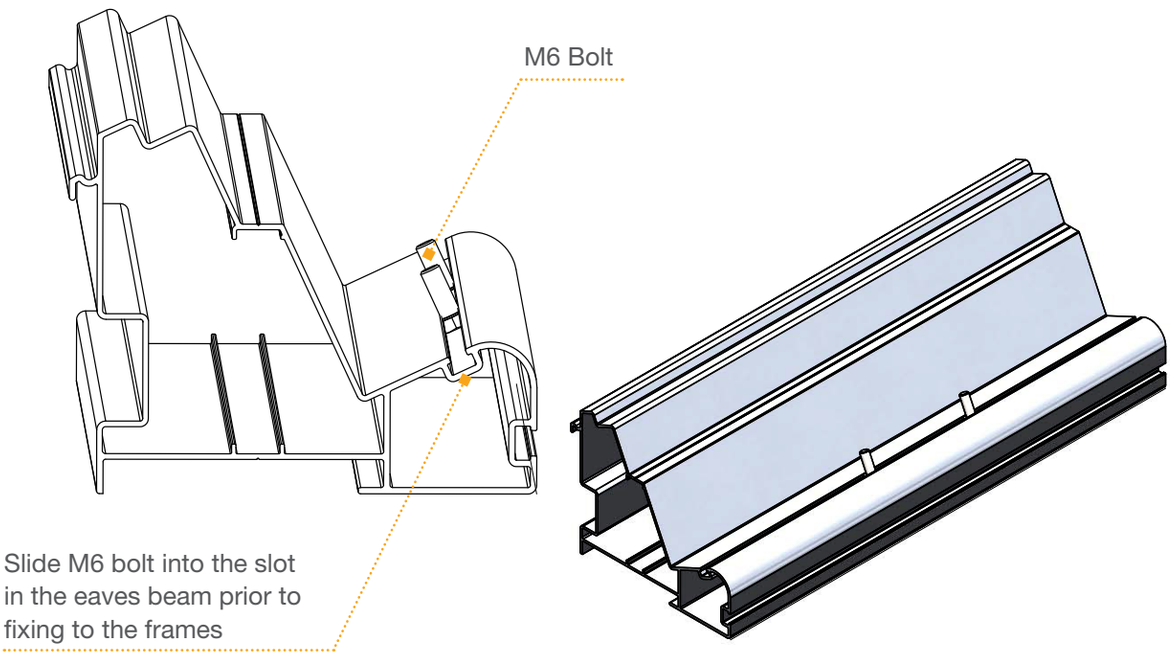
Prior to connecting the BGA to the box gutter, ensure the box gutter has been prepped with silicone under where the adapter will sit. Seal the BGA using the 300mm of sealing tape provided. Fascia under cladding is provided to cover the face of the BGA and box gutter. This is supplied in the same colour as fascia on order.

Box gutter is to be 100mm larger than internal eaves beam which is set back 70mm from external eaves beam to allow BGA to work.

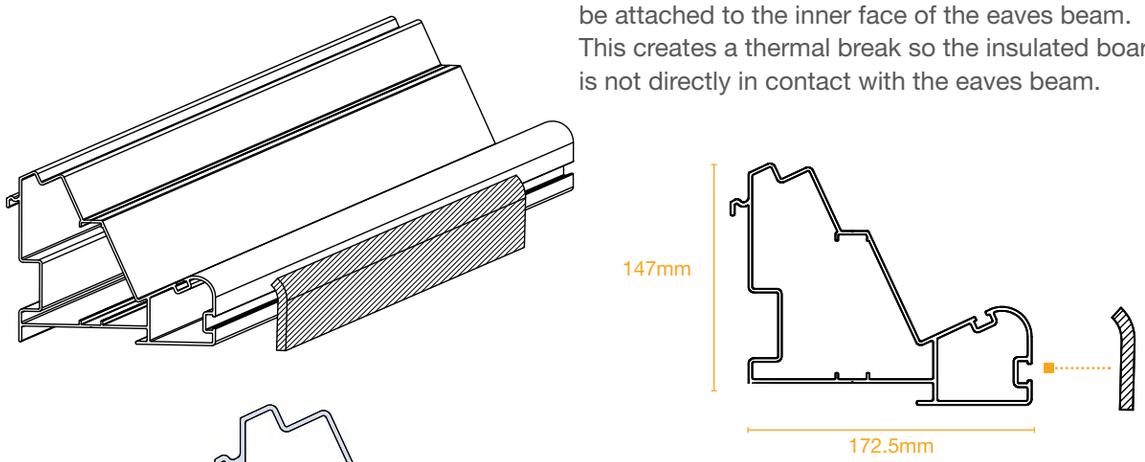


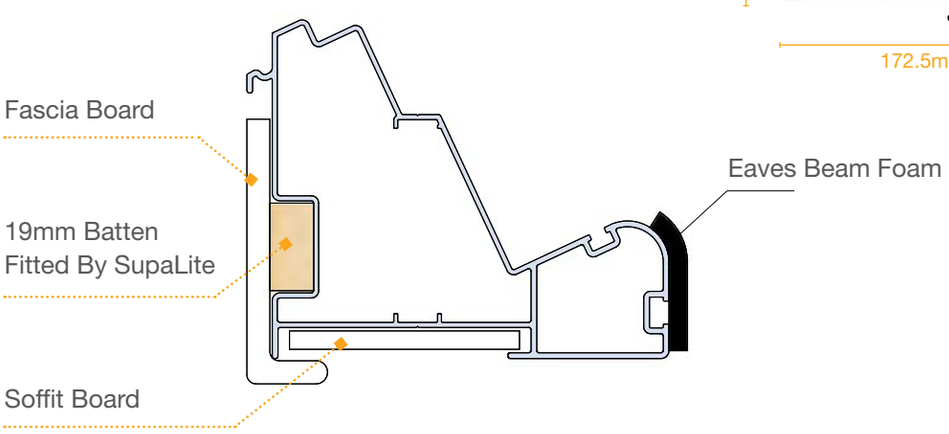
EAVES BEAM

PREPPING OF EAVES BEAM



Eaves beam foam is a self adhesive foam that is to be attached to the inner face of the eaves beam. This creates a thermal break so the insulated board is not directly in contact with the eaves beam.

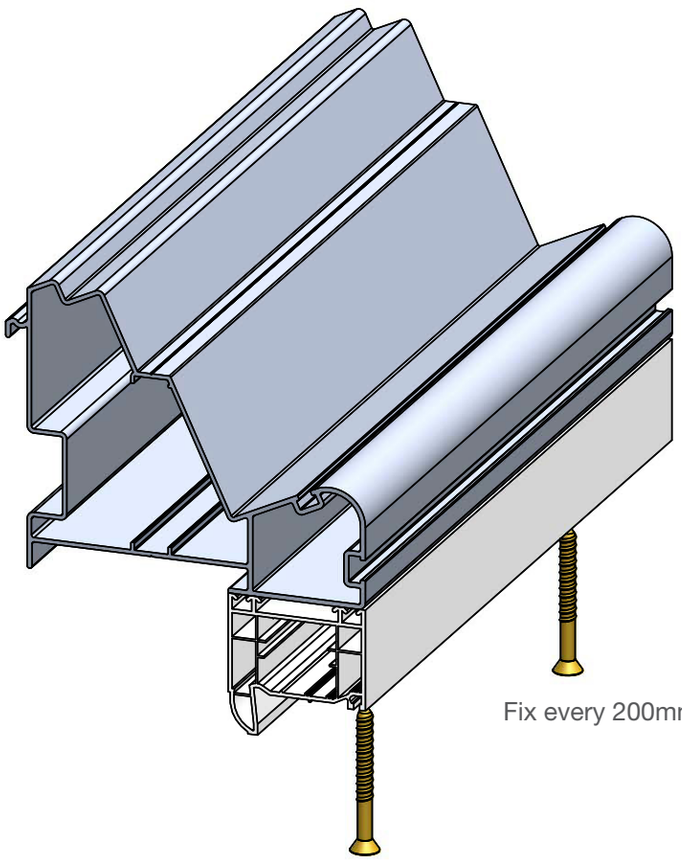




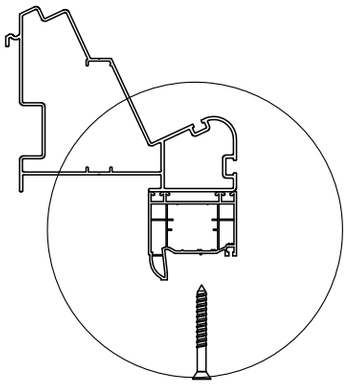
Prep eaves beam with the above prior to installation

EAVES BEAM TO FRAME FIXING

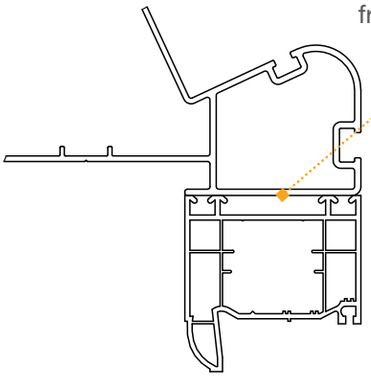
When setting the eaves beam, ensure that the internal face of the eaves beam aligns with the internal face of the frames.

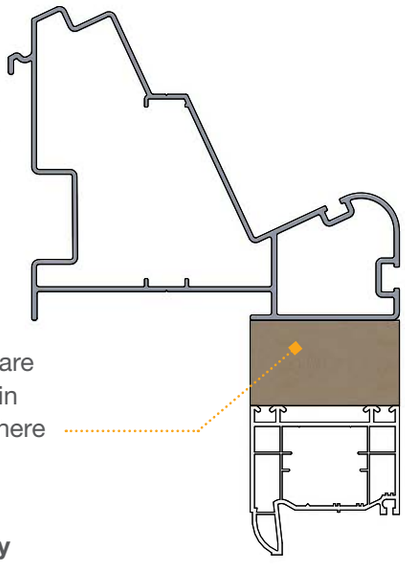


Fix every 200mm



Prior to fitting your eaves beam to the frame, SupaLite recommend a silicon sealant to be applied to top of the frames



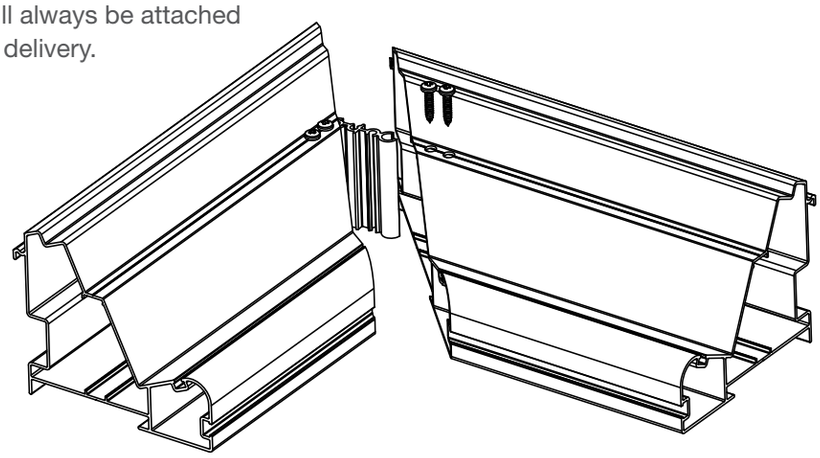


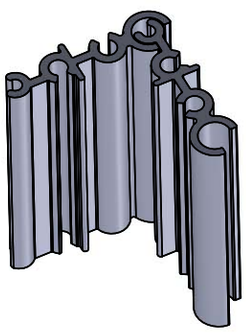
Timber Packers are required in certain instances, i.e. where you would need reinstall blinds.

(Not supplied by SupaLite).

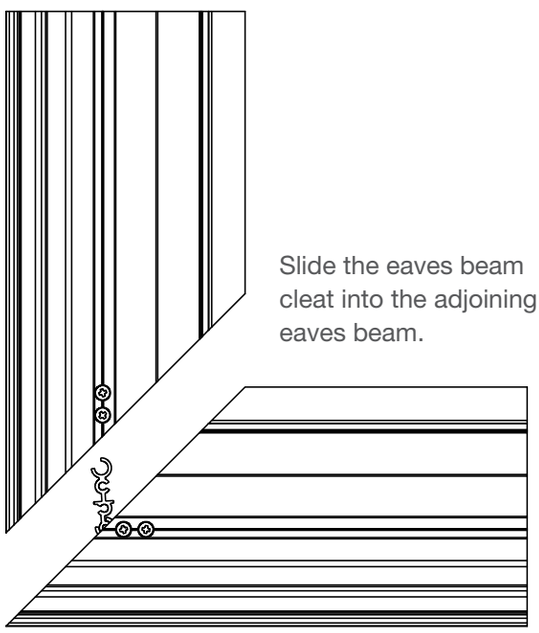
EAVES BEAM FIXING CLEAT

One side of the eaves beam cleat will always be attached prior to delivery.



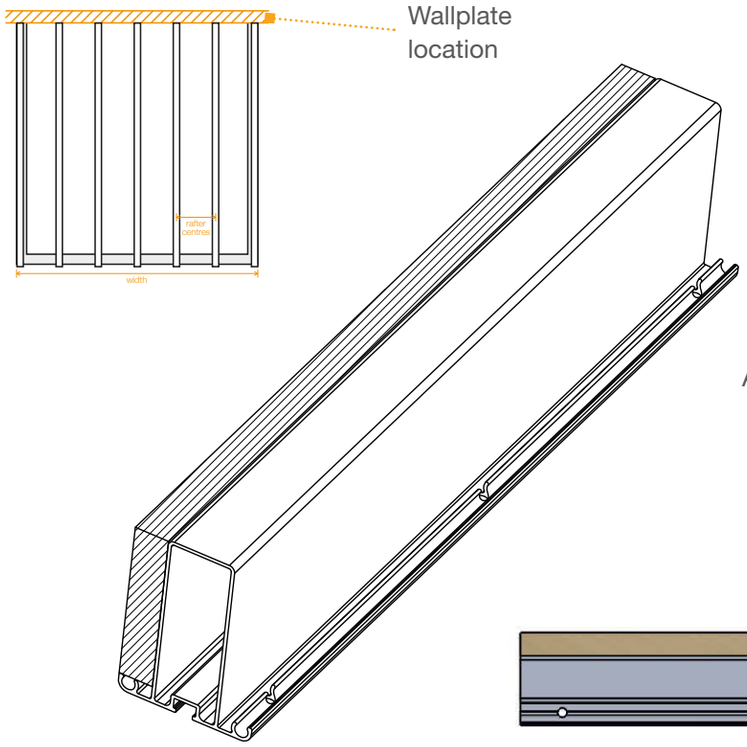


Eaves Beam Cleat

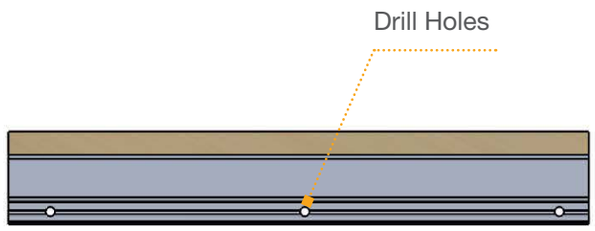


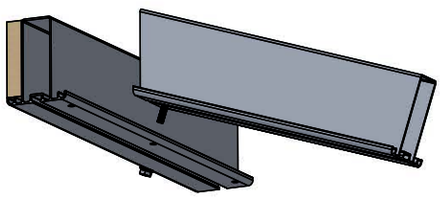
Slide the eaves beam cleat into the adjoining eaves beam.

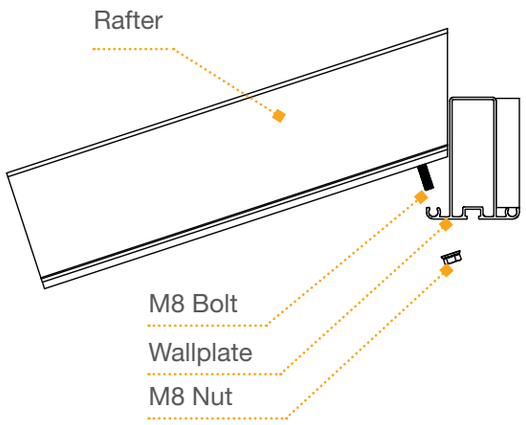
ATTACHING RAFTERS TO WALLPLATE



All drill holes are pre drilled
for easy installation





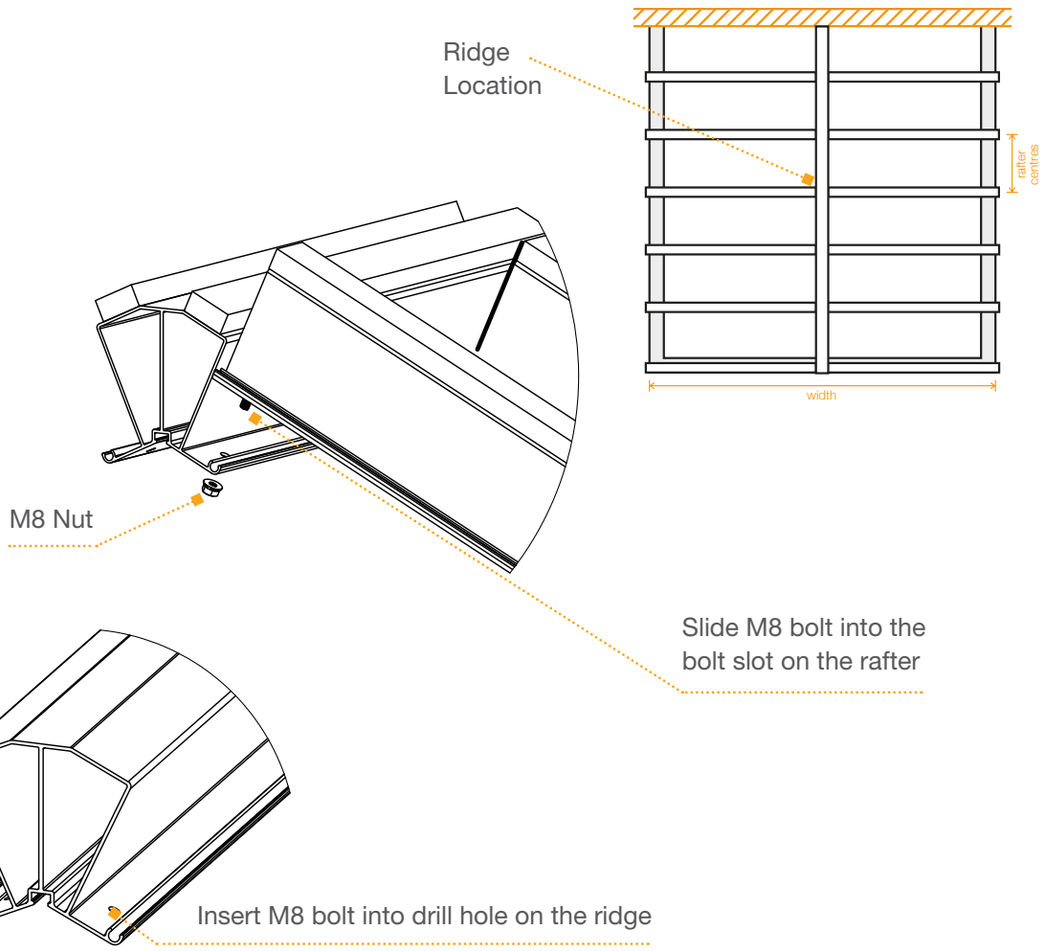


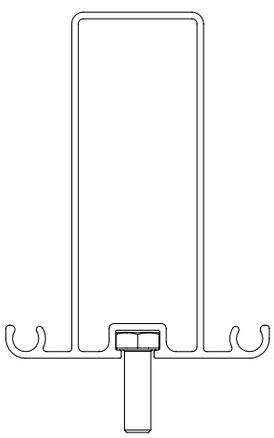
Step 1
M8 bolt to be slotted in underside bolt slot on the rafter.

Step 2
Insert the bolt through the pre-drilled bolt slot to secure the rafter to the wallplate.

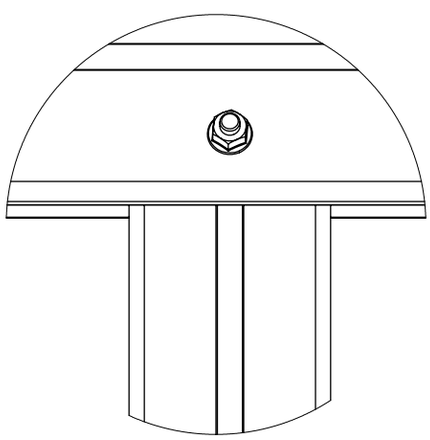
RIDGE

ATTACHING RAFTER TO RIDGE DETAIL





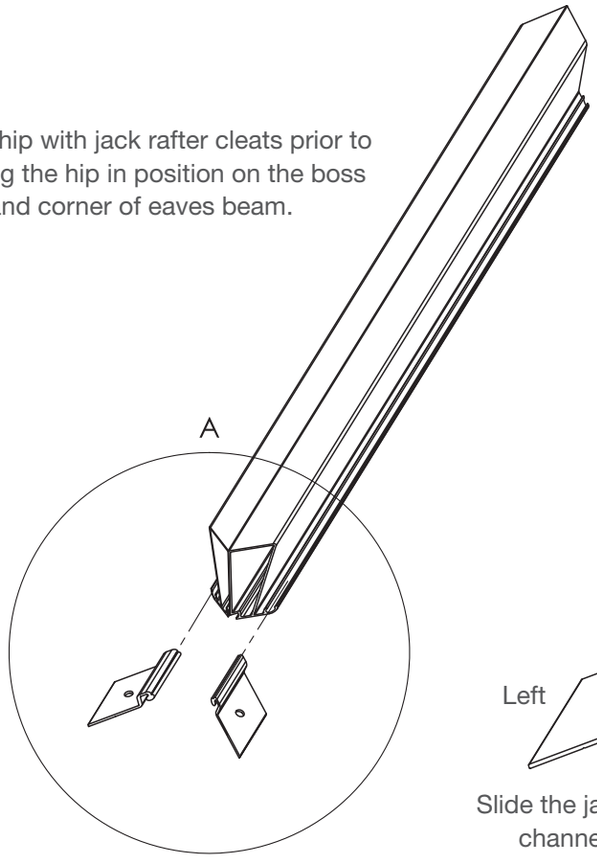
Rafter to M8 bolt detail

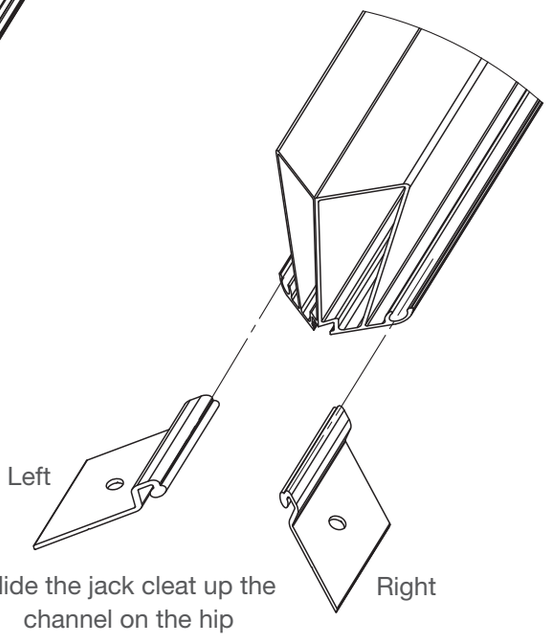


Underside of ridge detail
with rafter attached.

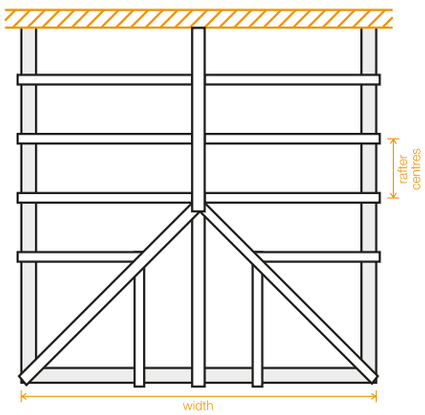
JACK RAFTERS TO HIP DETAIL

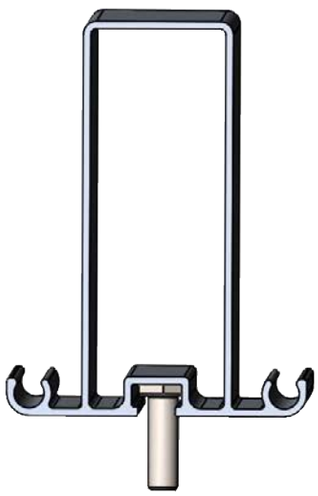
Prep hip with jack rafter cleats prior to setting the hip in position on the boss end and corner of eaves beam.





Slide the jack cleat up the channel on the hip





Slide an M8 bolt down the channel

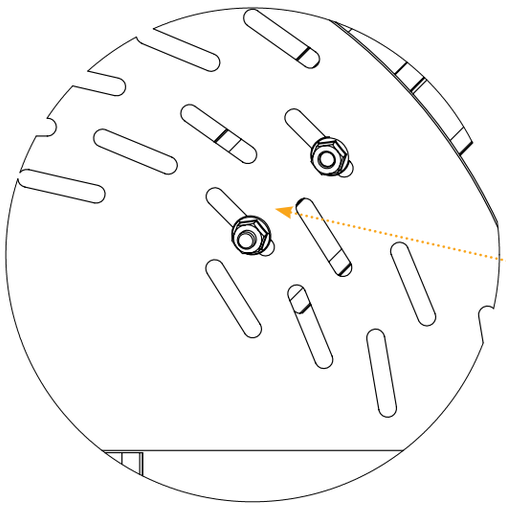
HIP

ATTACHING HIPS TO RIDGE BOSS END

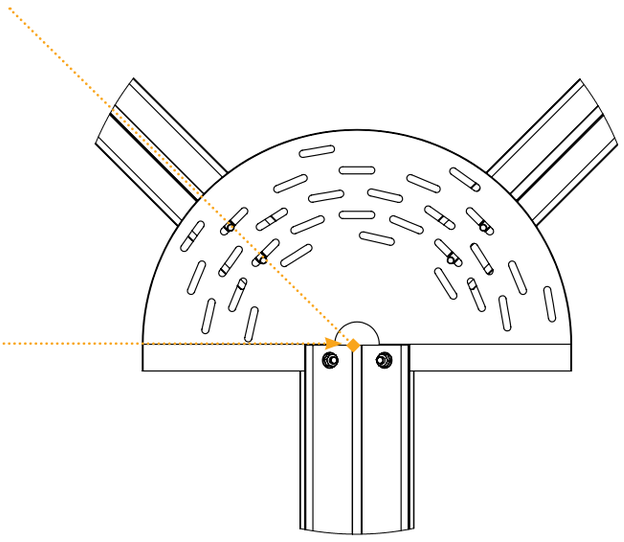
Prior to fixing the hips an M8 fixing bolt will need to be inserted into the channel on the underside of the hip.

The M8 fixings, once in place on the hips, are to be inserted into the bolt slots on the boss end.

Fixings required are M8 bolts

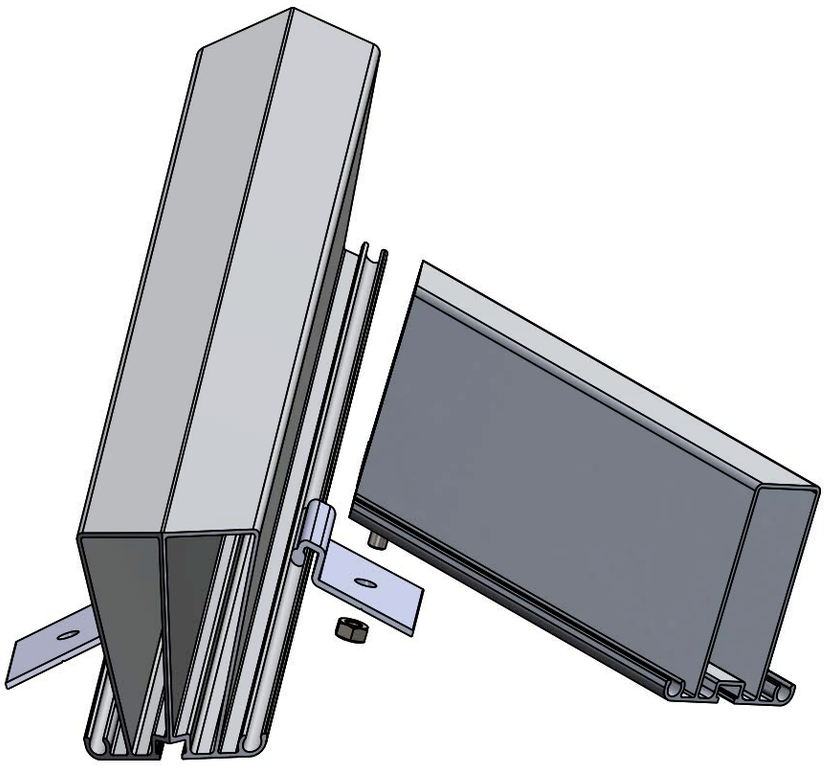


When securing the hips onto the boss end, it is important to ensure the hips are pointing to the centre of the ridge.

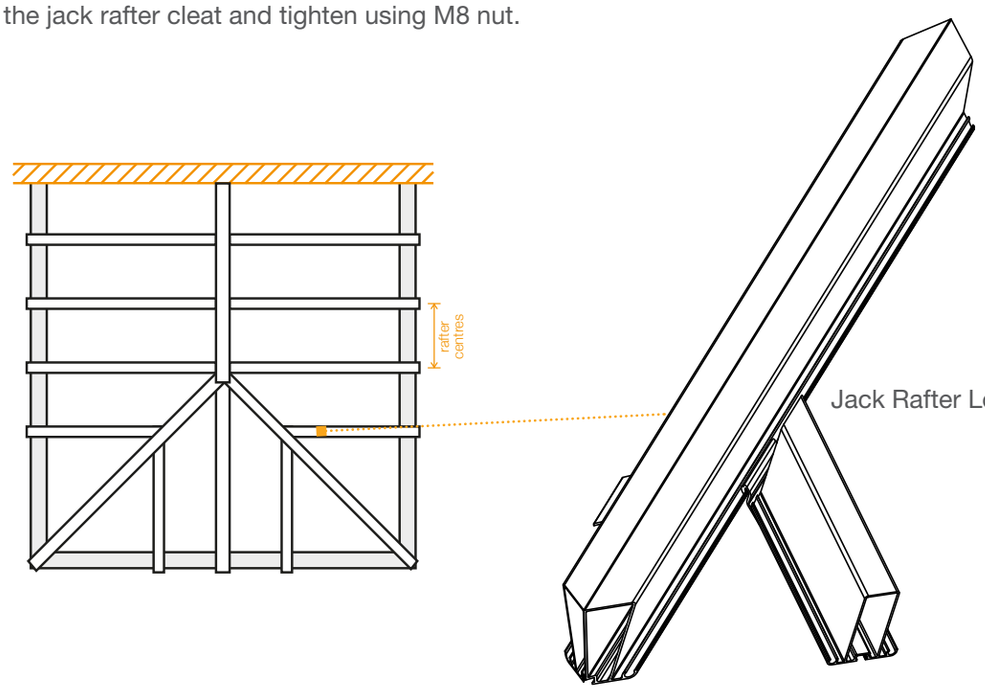


Hip location point

CONNECTING JACK RAFTER TO HIPS



Insert M8 bolt into channel on jack rafter. Insert the bolt on the jack rafter through the hole of the jack rafter cleat and tighten using M8 nut.



RAFTERS TO EAVES

RAFTER TO EAVES BEAM FIXING DETAIL

Rafter cleat detail

STEP A - Slide the rafter cleat into channel in rafter (see figure 1)

STEP B - Place bar in position placing the bolts in the eaves beam into the holes in the cleat (see figure 2)

STEP C - Fix into position using M8 nuts

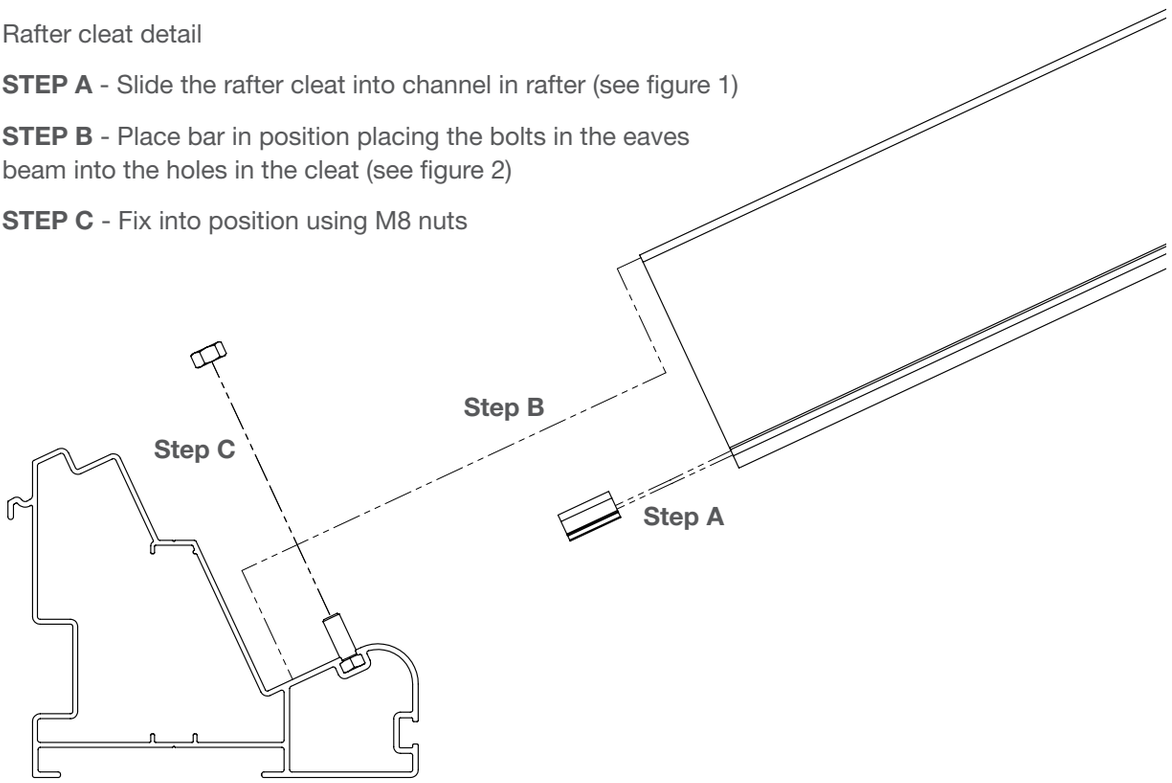


Figure 1

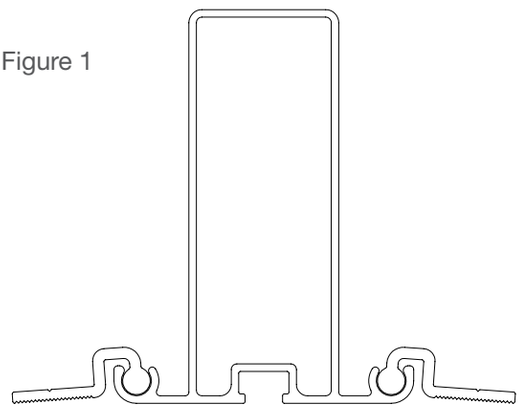
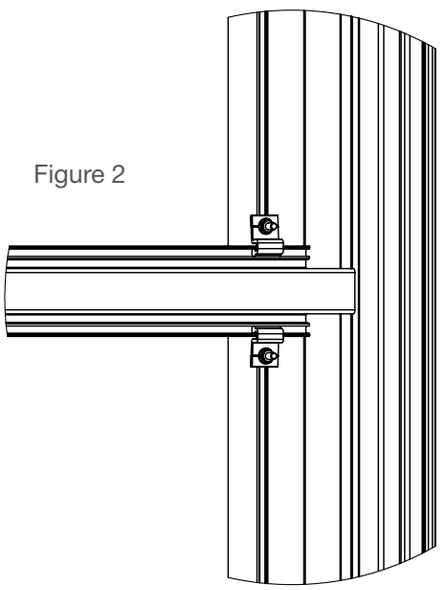
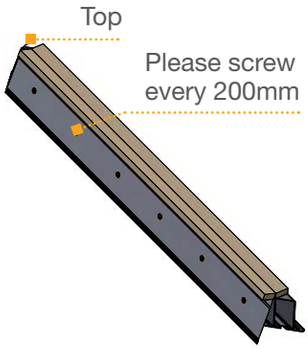
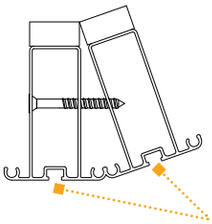


Figure 2



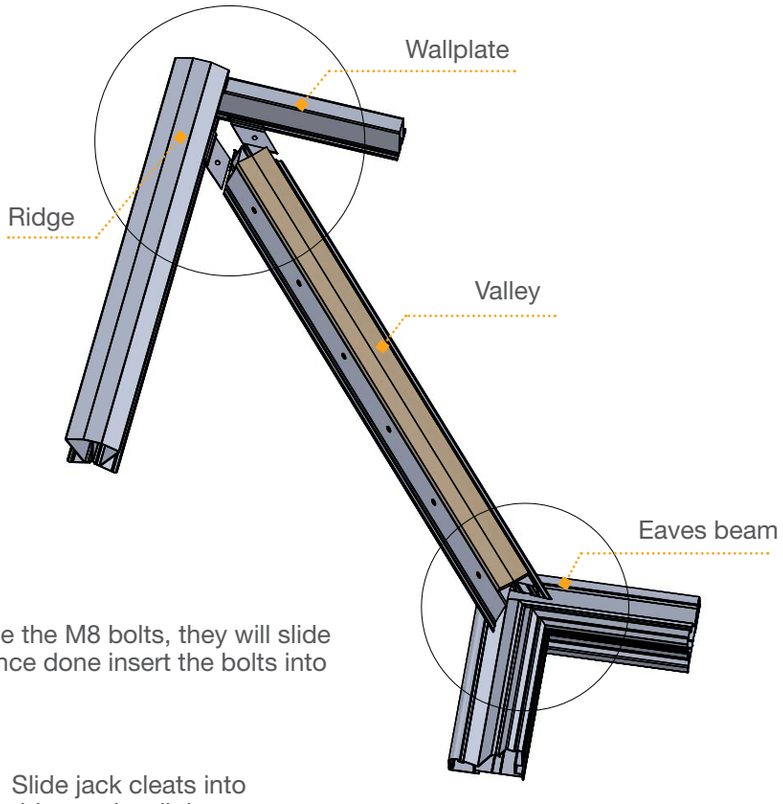
VALLEY



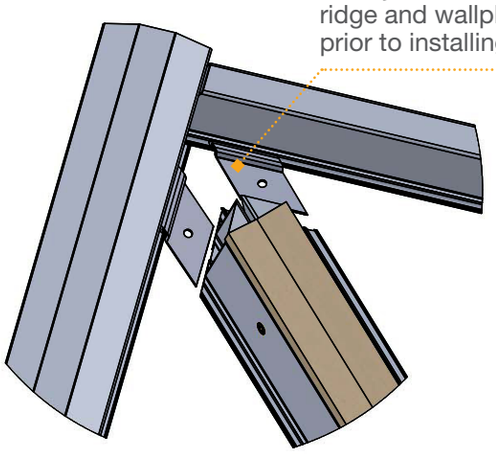


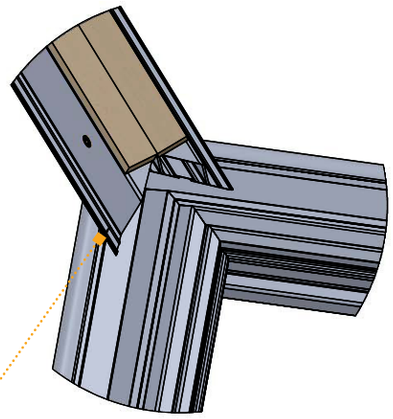
You must screw through both sides of the rafters to secure together to form the valley.

Insert M8 bolts into channel ready to attach to jack cleats.



In order to secure the valley use the M8 bolts, they will slide into either side of the valley. Once done insert the bolts into the jacks cleats and fasten.

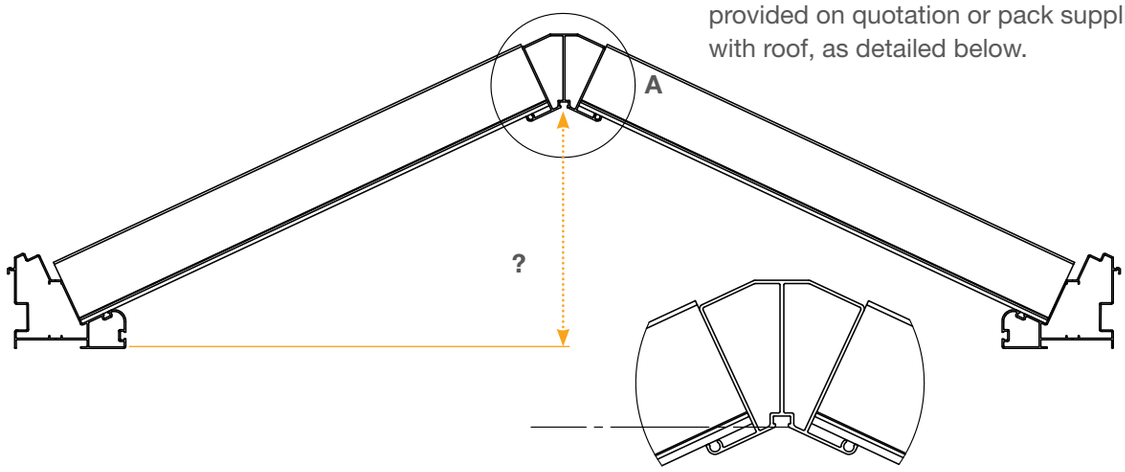




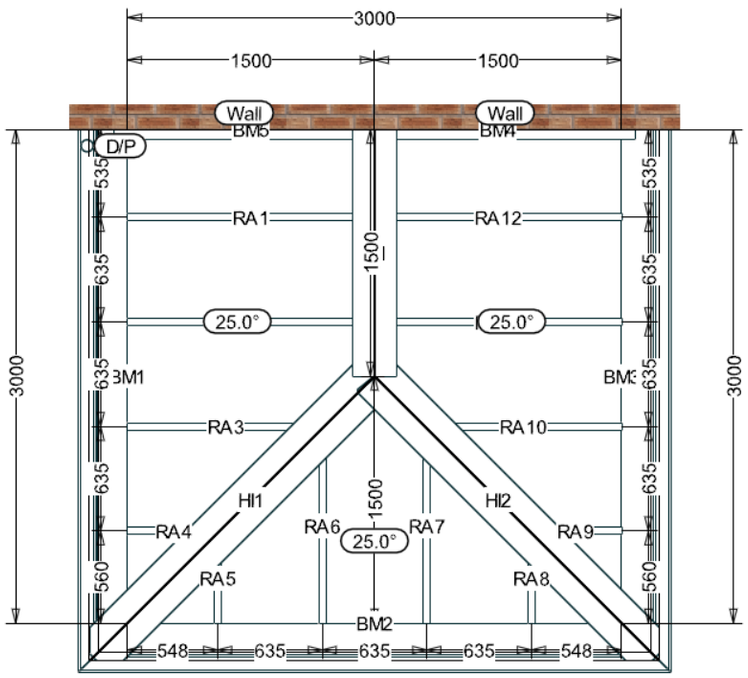
RIDGE

SETTING RIDGE HEIGHT

When setting ridge height, use the height provided on quotation or pack supplied with roof, as detailed below.



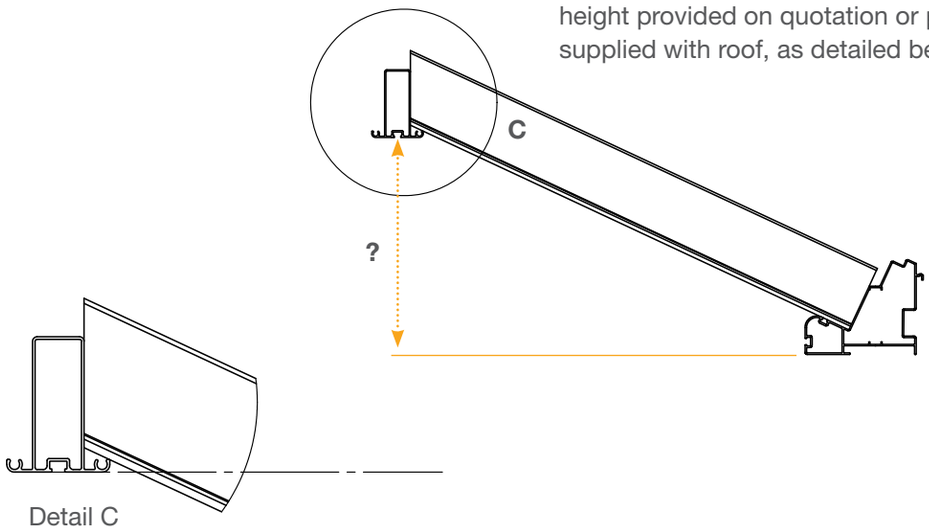
Detail A
Scale 1: 5



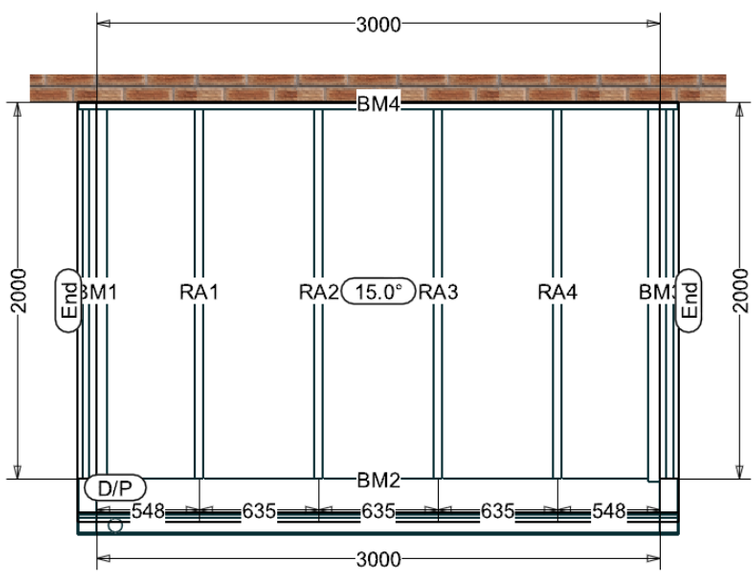
Fascia colour	White
Gutter colour	White
Tile type	Extralight
Tile Colour	Charcoal
Insulation type	EPS 100mm
Board type	11mm Board
Roof weight (approx.)	438.32 kg
Plasterboard quantity	5
Frame depth	70mm
Top of frame to U/S ridge	756mm
Top of frame to top of ridge	946mm
Roof slope	25.0°

SETTING WALLPLATE HEIGHT

When setting wallplate height, use the height provided on quotation or pack supplied with roof, as detailed below.



Detail C
Scale 1: 5



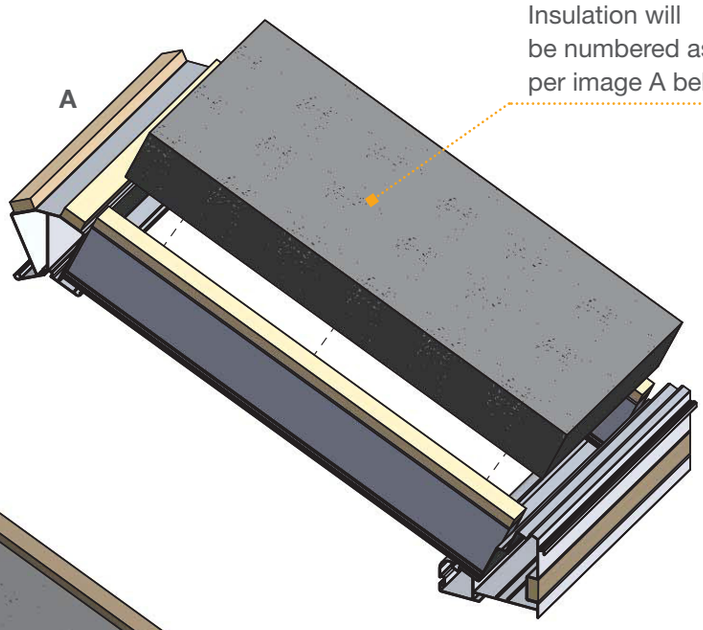
Fascia colour	White
Gutter colour	White
Tile type	Extralight
Tile Colour	Charcoal
Insulation type	EPS 100mm
Board type	11mm Board
Roof weight (approx.)	246.58 kg
Plasterboard quantity	3
Frame depth	70mm
Top of frame to U/S ridge	570mm
Top of frame to top of ridge	745mm
Roof slope	15.0°

INSULATION

INSERTING INSULATION INTO THE ROOF

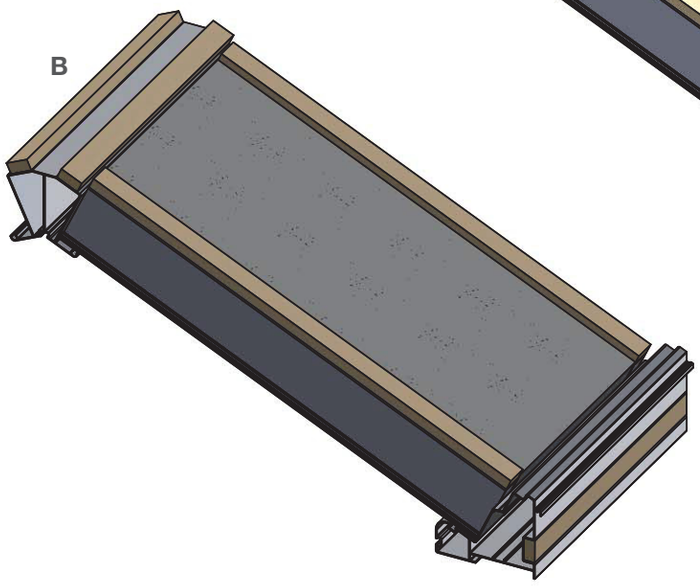
Insulation will be numbered as per image A below

A

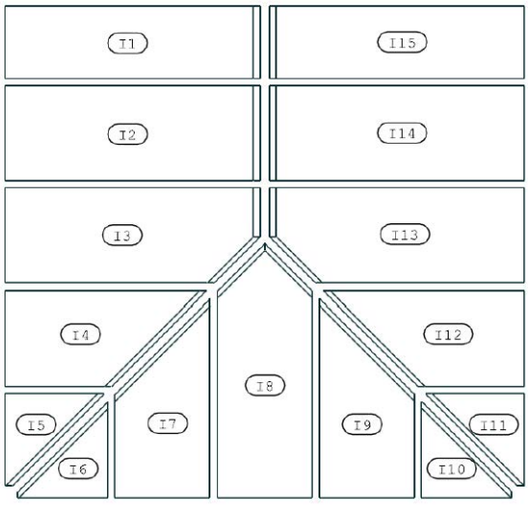


Insulation is to be dropped in between the rafters as shown images A and B

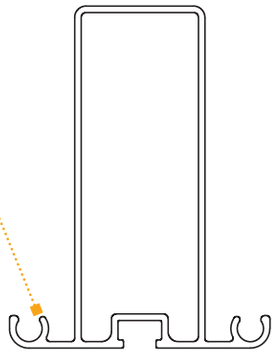
B



Fitters Guide supplied by SupaLite (Image A)

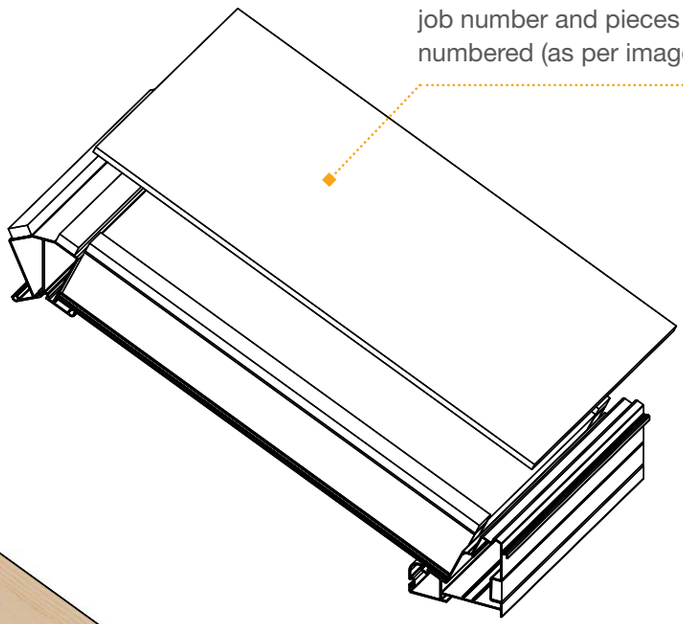


Insulation is held in place by the rafter wings



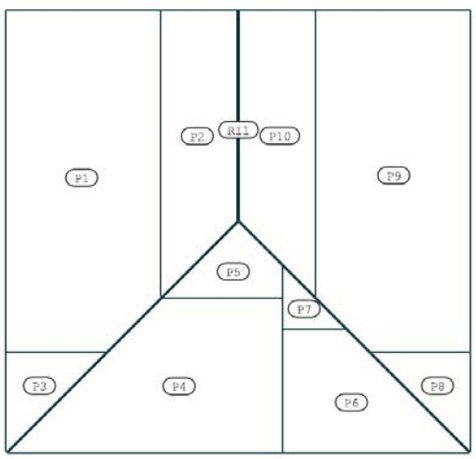
FIXING 11MM BOARD

All timber boards are scribed with specific job number and pieces numbered (as per image A)



Timber board should then be fixed to the eaves beam, Rafters, Ridge or Wallplate using self tapping screws.

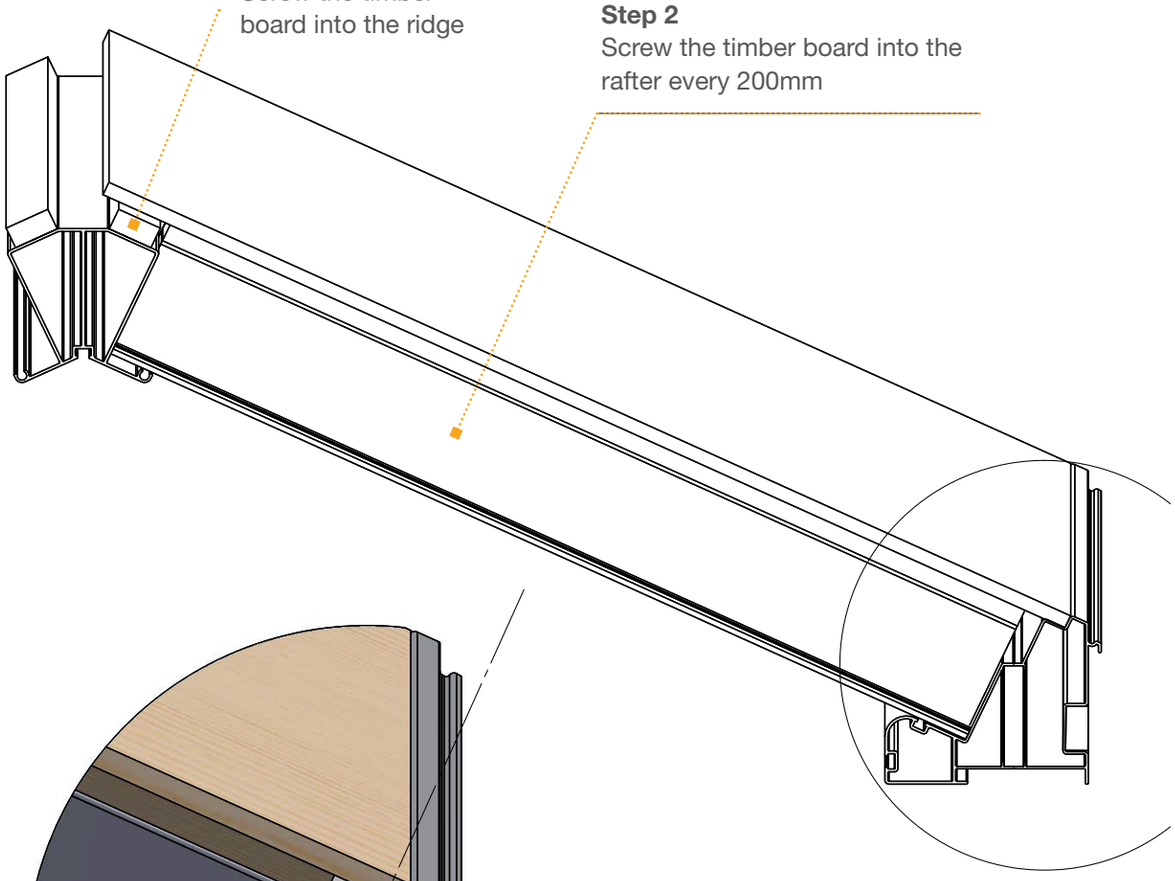
Fitters Guide supplied By Supalite (Image A)

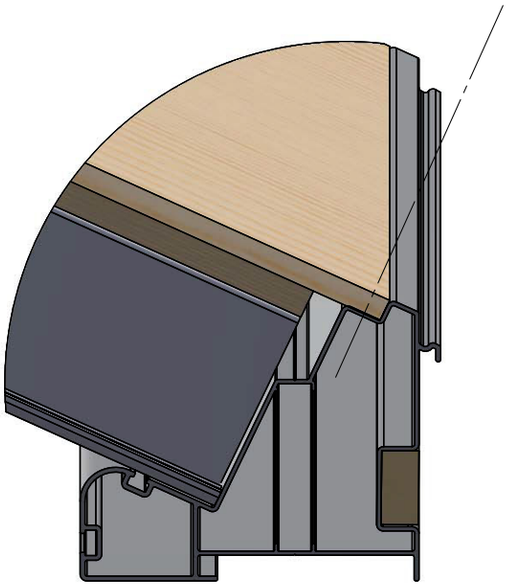


FIXING 11MM BOARD

Step 1
Screw the timber board into the ridge

Step 2
Screw the timber board into the rafter every 200mm





Detail B
Scale 1: 3

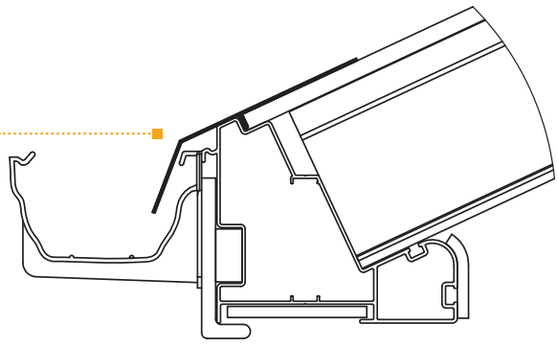
Step 3
The most important part of installing the SupaLite roof is to ensure that the timber board is fixed to the eaves beam, (see detail B)

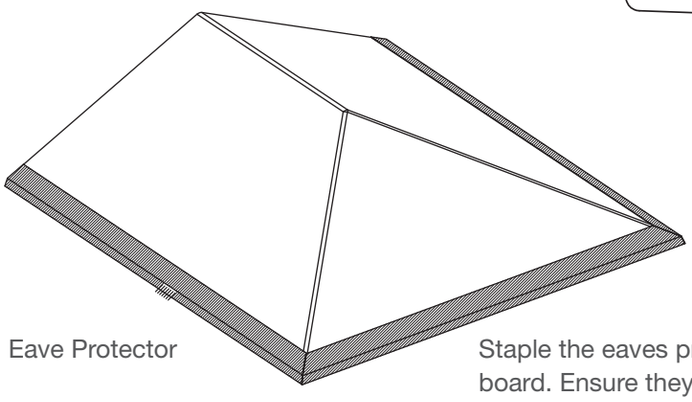
Above step should be every 200mm

SETTING THE EAVES PROTECTOR / MEMBRANE

Eaves protector is to be installed to allow water to flow directly into the gutter from the roof.

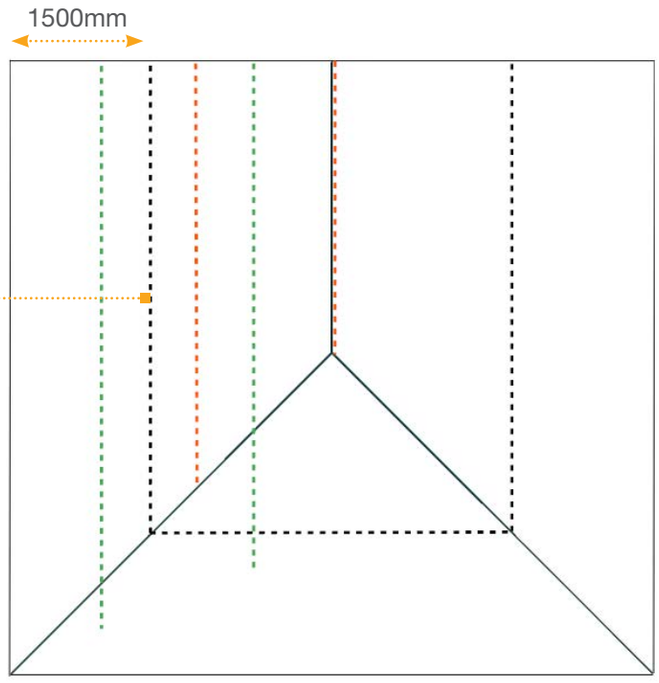
Eaves Protector (Image A)





Eave Protector

Staple the eaves protector directly to the timber board. Ensure they are overhanging correctly. (As per image A above)



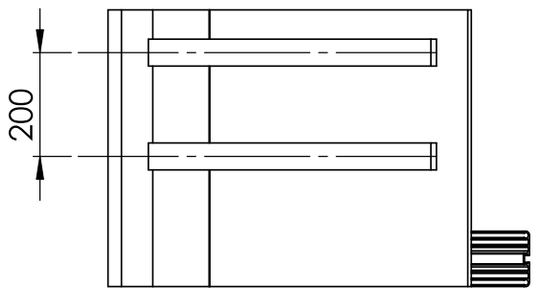
The membrane is semi-waterproof, however, additional measures should be taken if the roof is left exposed overnight, i.e additional tarpaulins used to cover the roof.

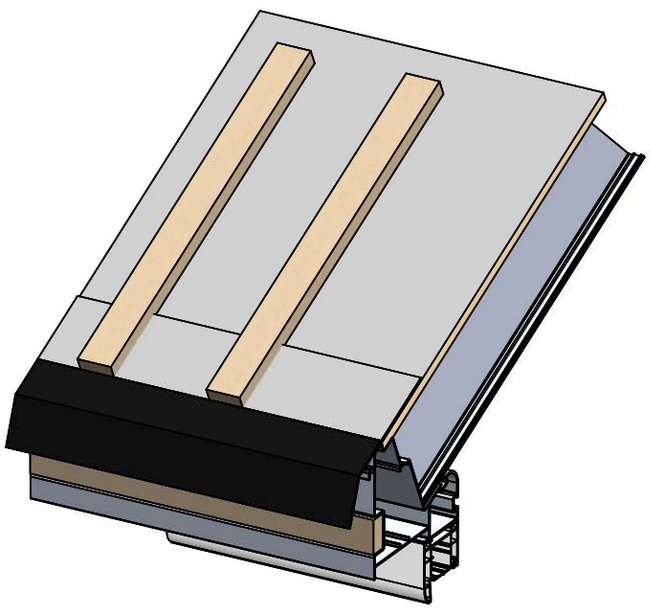
Position the membrane with all joins running horizontally to the pitch of the roof. A minimum 200mm overlap is required before stapling into place. All hips and ridges must be covered with a minimum overlap of 150mm. A 100mm excess is required to run up the house wall and the membrane must also run to the outside of the eaves protector.

ROOF BATTENS

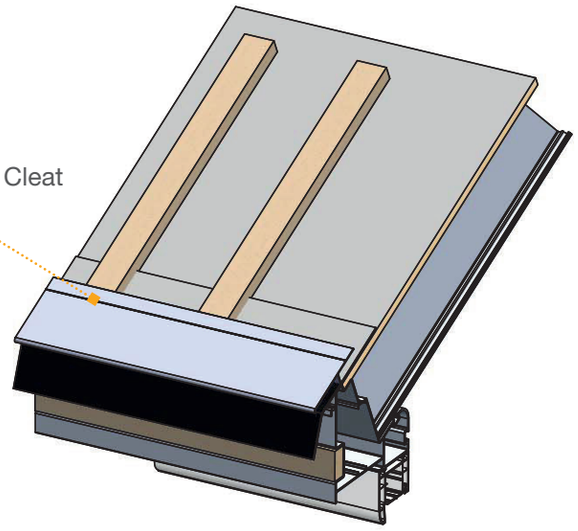
EXTRALIGHT TIMBER BATTEN SPACINGS

Vertical tile battens are to be installed directly onto the membrane, fixings for the Extralight tiles are not supplied as part of kit roof.



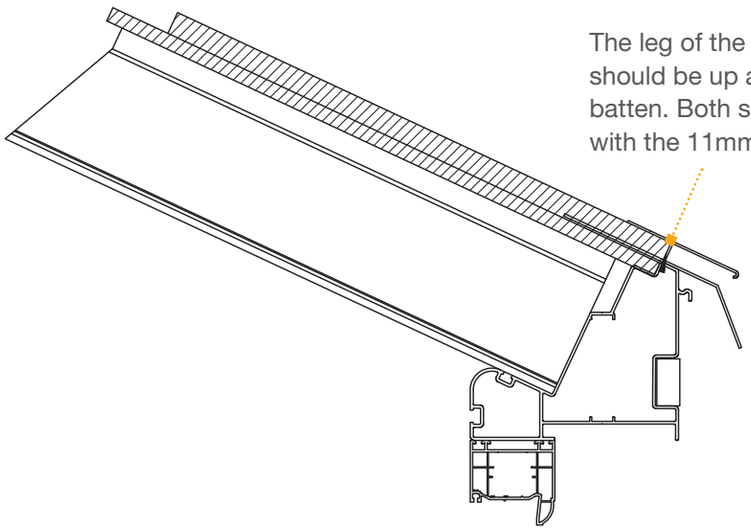


When setting out the battens you are recommended to use a 200mm spacing to stop the tiles from dipping when pressure is applied



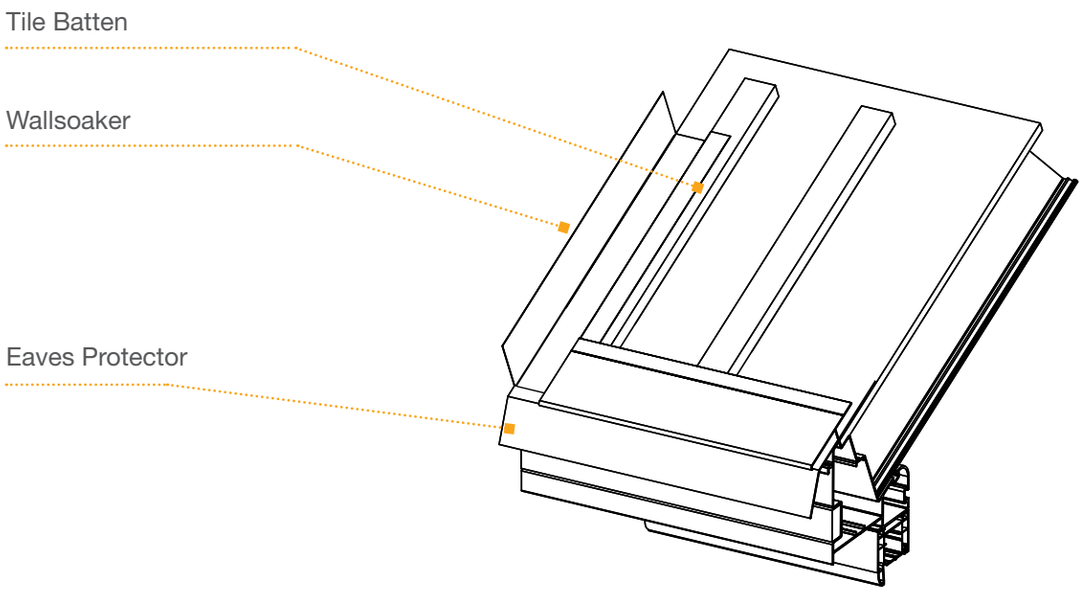
Extralight Tile Starter Cleat fixing point.

The tile starter cleat will be provided to go around all sections of the roof which have an eaves beam.

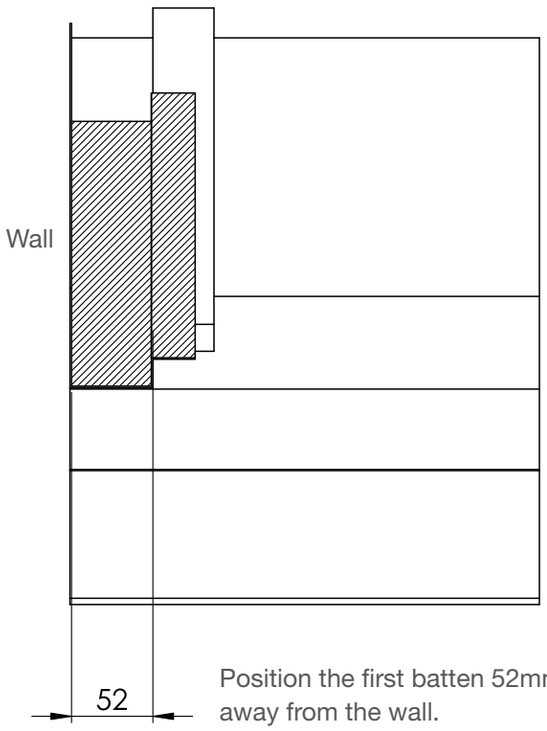


The leg of the starter cleat should be up against the tile batten. Both should be in line with the 11mm board

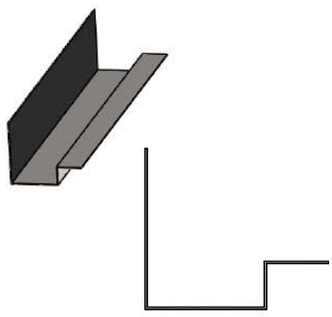
EXTRALIGHT WALLSOAKER



When setting the wall soaker screw directly down into the batten to fasten in place.



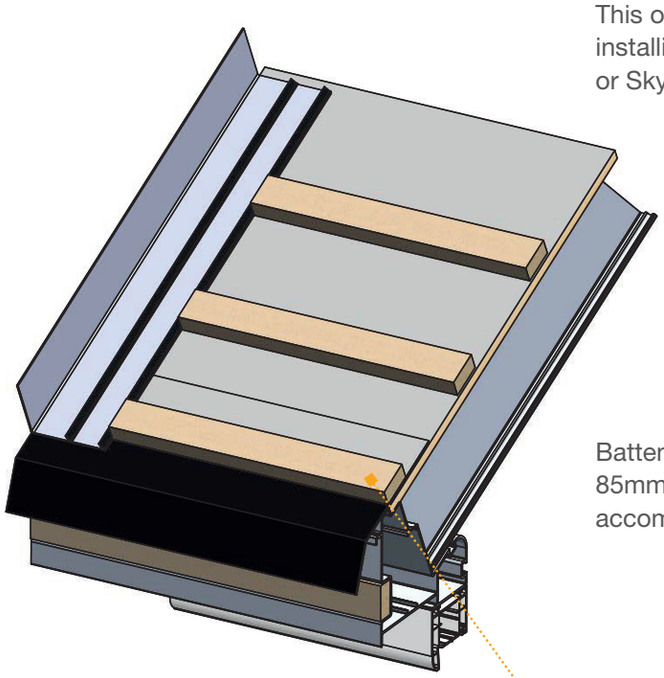
Position the first batten 52mm away from the wall.



Extralight PVC Wall soaker profile

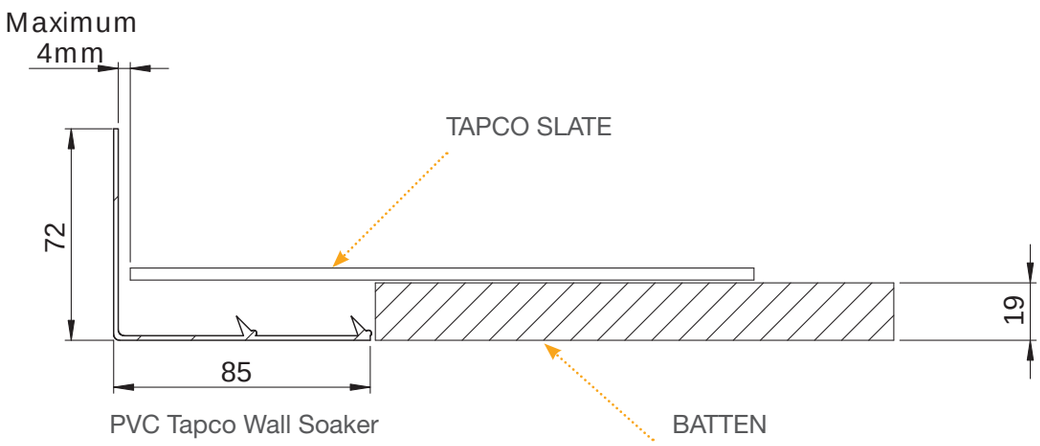
TAPCO WALLSOAKER USING BATTENS

This option is required when installing a roof with a valley or SkyVista.



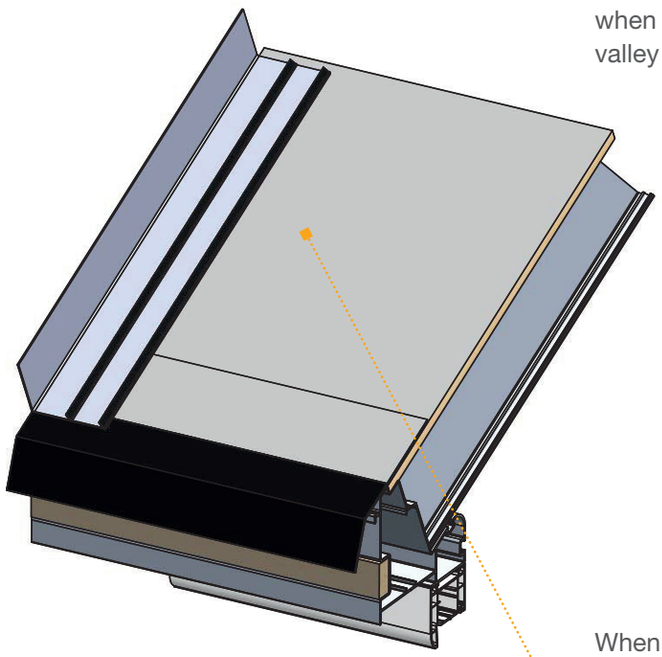
Batten needs to be set in 85mm from the house wall to accommodate the soaker.

Horizontal battening for Tapco

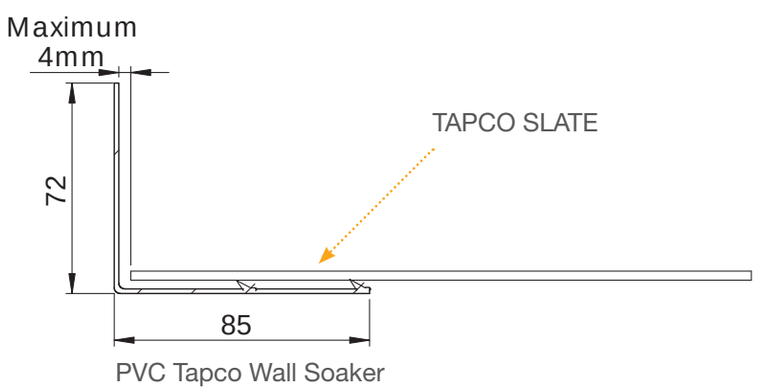


TAPCO WALLSOAKER USING NO BATTENS

This option is not suitable when installing a roof with a valley or SkyVista.

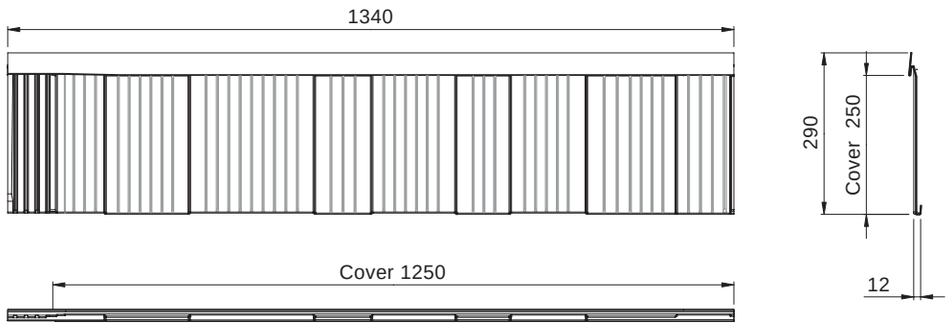


When going straight onto the membrane, the Tapco slate will compress the gaskets on the soaker to ensure a watertight finish, see below detail.

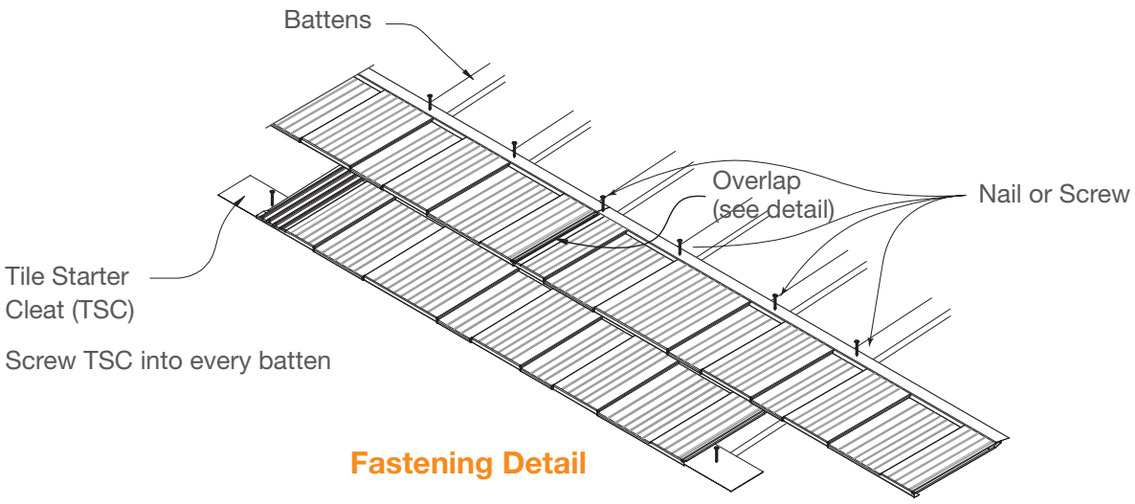


PVC Tapco Wall Soaker

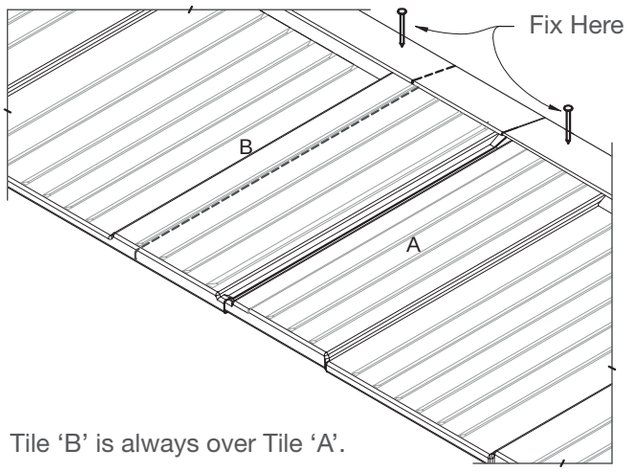
EXTRALIGHT TILING DETAIL



Tile Dimensions

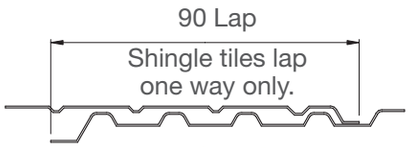


Fastening Detail



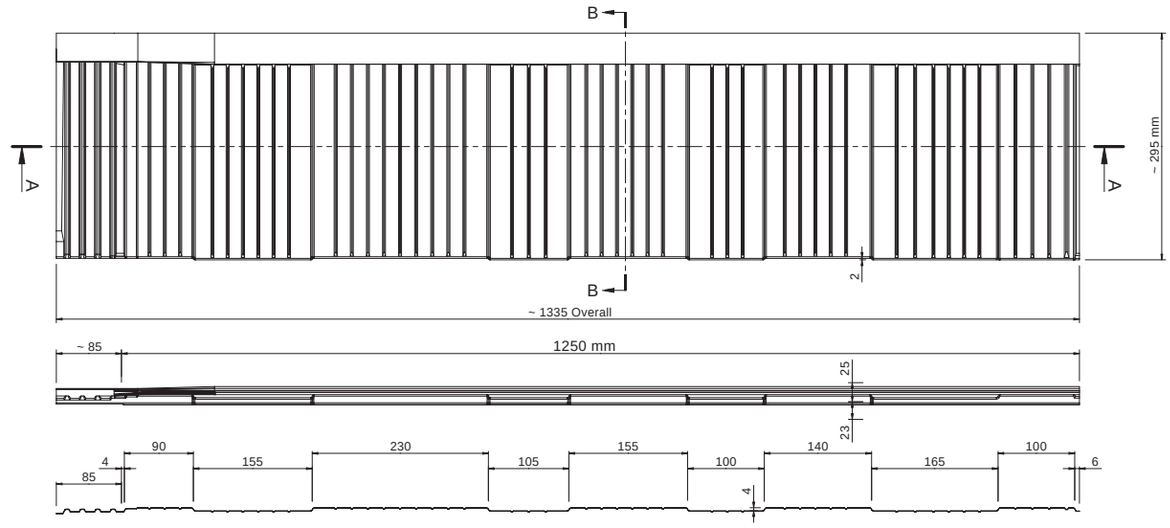
Tile ‘B’ is always over Tile ‘A’.

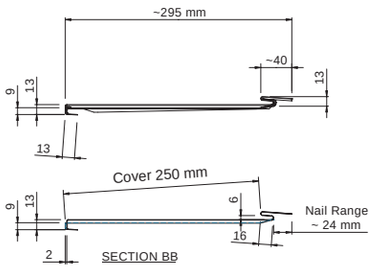
Overlap Detail

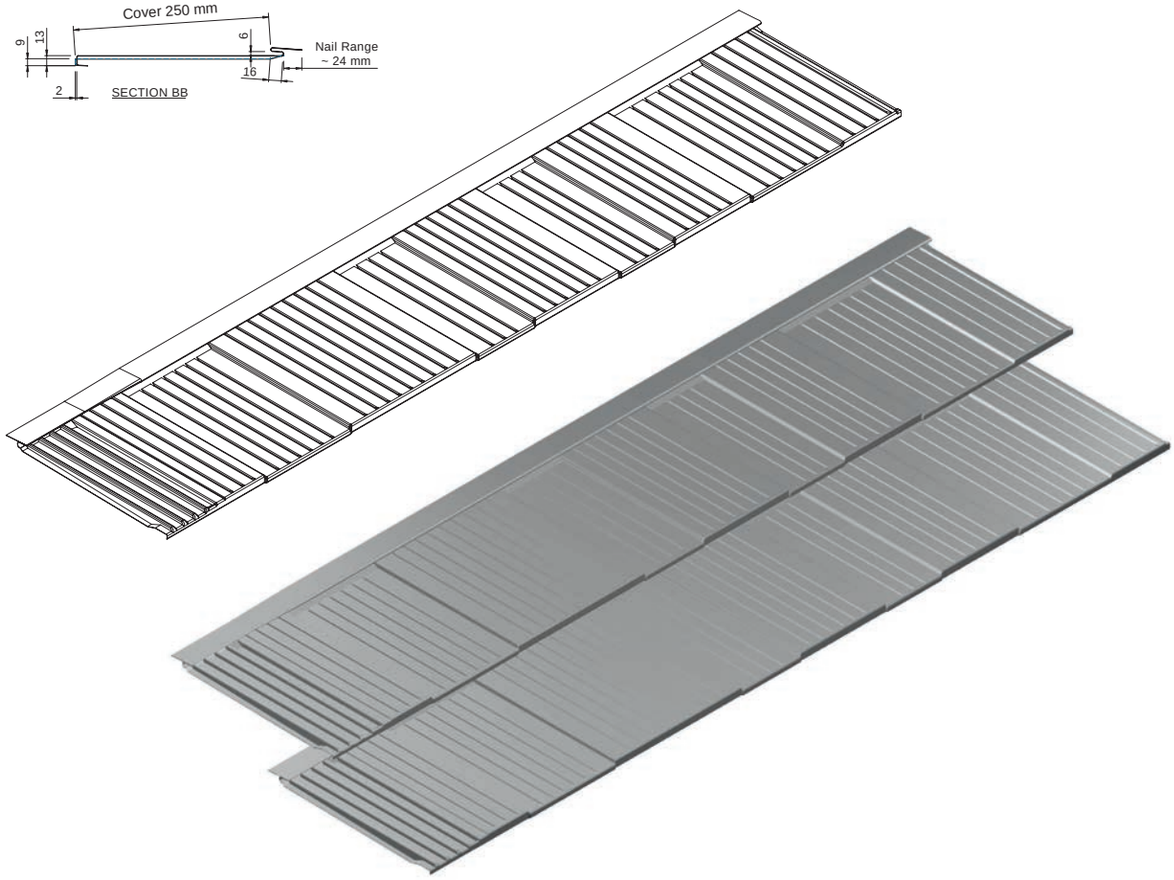


Lap Section

EXTRALIGHT TILING DETAIL







EXTRALIGHT COMPONENTS

Gable Ridge End Cap

Specifications
Length: 240mm
Width: 150mm

3 Way Top Cap

Specifications
Length: 375mm
Width: 340mm

The Y-Junction can only be used on Edwardian style roofs

90° / 135° End Caps

Specifications
Length: 200mm
Width: 125mm

5 Way Top Cap

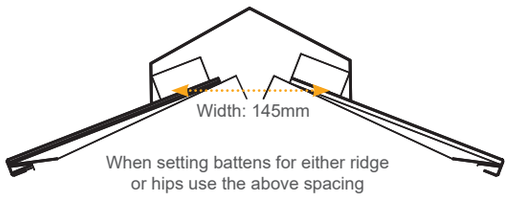
Specifications
Length: 500mm
Width: 500mm

The 5 Way end cap can only be used when all facets sizes are equal as well as angles are set at 135 degrees

Ridge

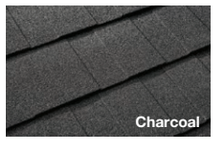
Specifications
Length: 1300mm
Width: 150mm

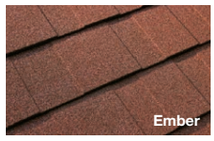
Universal Top Cap

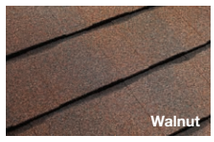


When setting battens for either ridge or hips use the above spacing

Tile Colours

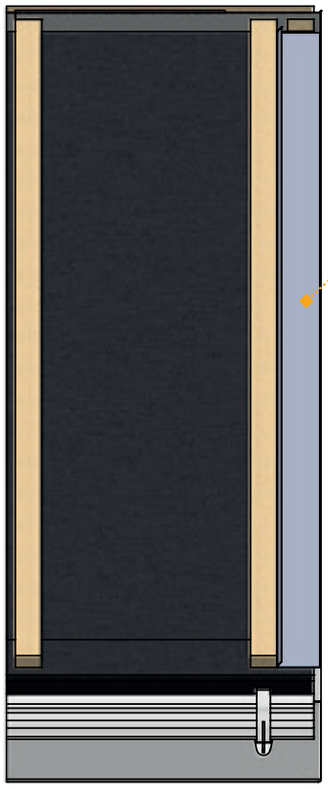


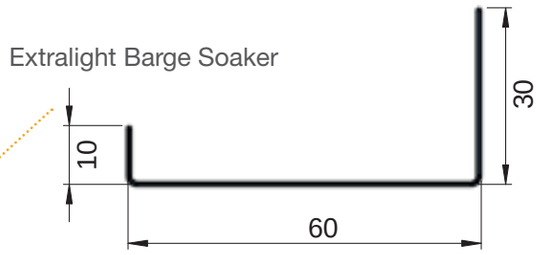




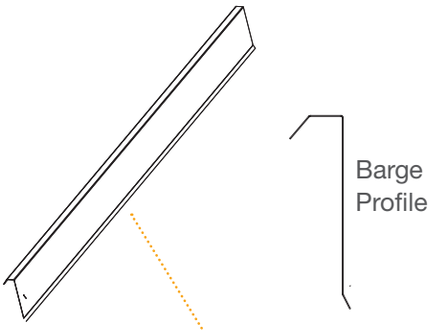
extraLIGHT
LIGHT WEIGHT ROOF TILE SYSTEM

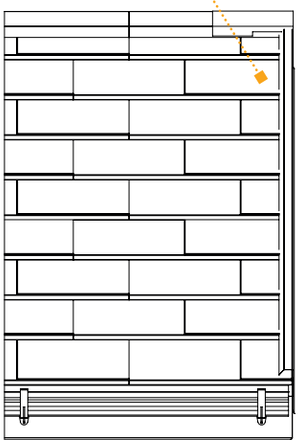
EXTRALIGHT BARGE SOAKER

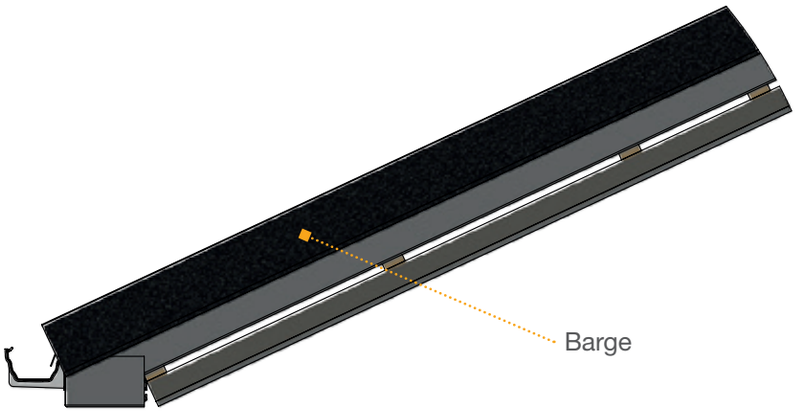




1. Fit the soaker tray for the barge on a bed of silicone with the long vertical leg flush with the edge of the roof.
2. Batten up to the soaker tray.
3. Tile roof up to the vertical leg of the soaker tray.
4. The barge is placed with the internal face against the outside of the soaker. The barge will sit on top of the tiles, hooking over the soaker tray.
5. Fix the barge in position through the face of the barge using self tapping screws and cover the head of the screws using the grit and glue provided. (Repair Kit, images on page 33).

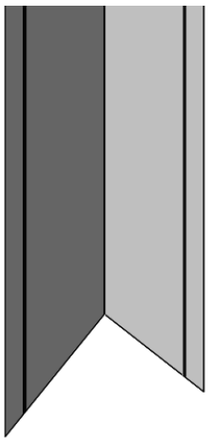


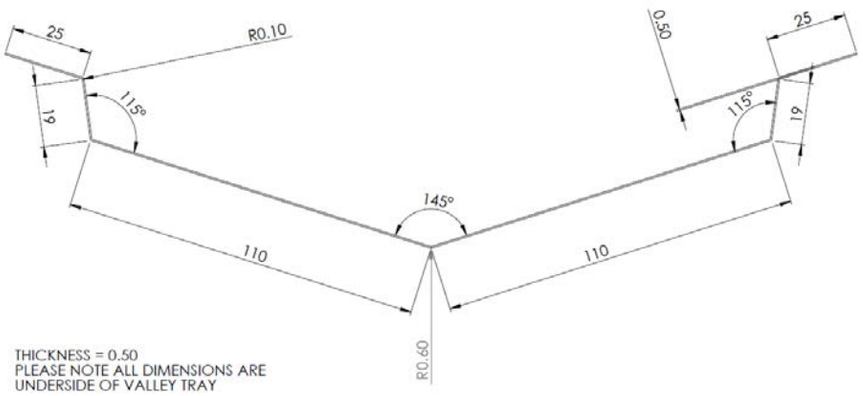




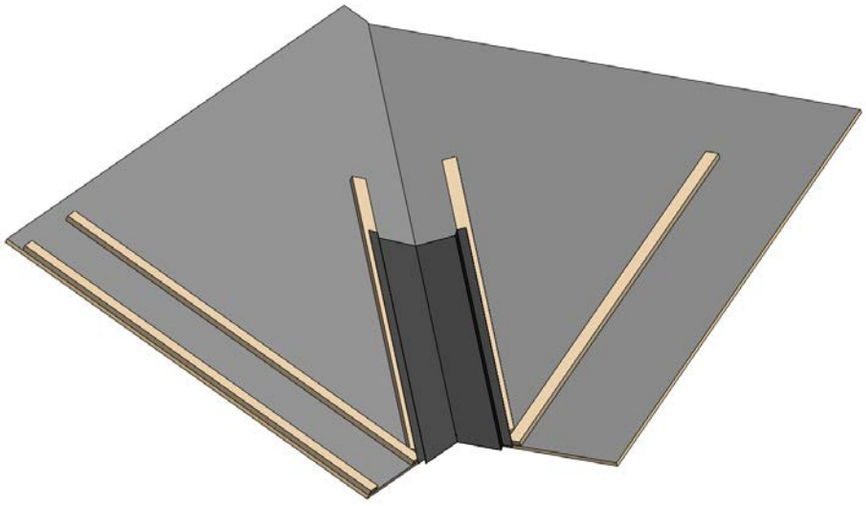
Please note when soaker tray and barges require more than 1 on an elevation you should always overlap the barge/soaker above the one below to avoid creating a step which would could then hold water

VALLEY TRAYS





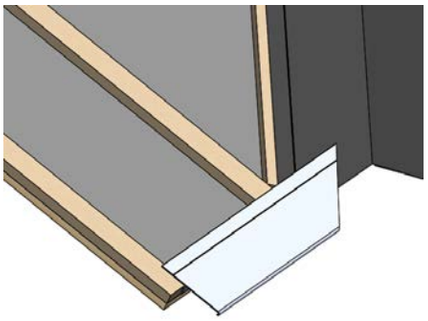
Fitters will be responsible for cutting the correct angle on the valley to match the angle of the roof.



From middle of the valley, measure out 110mm when setting the tile batten.

Screw both valley wings directly down into the battens as previously set out.

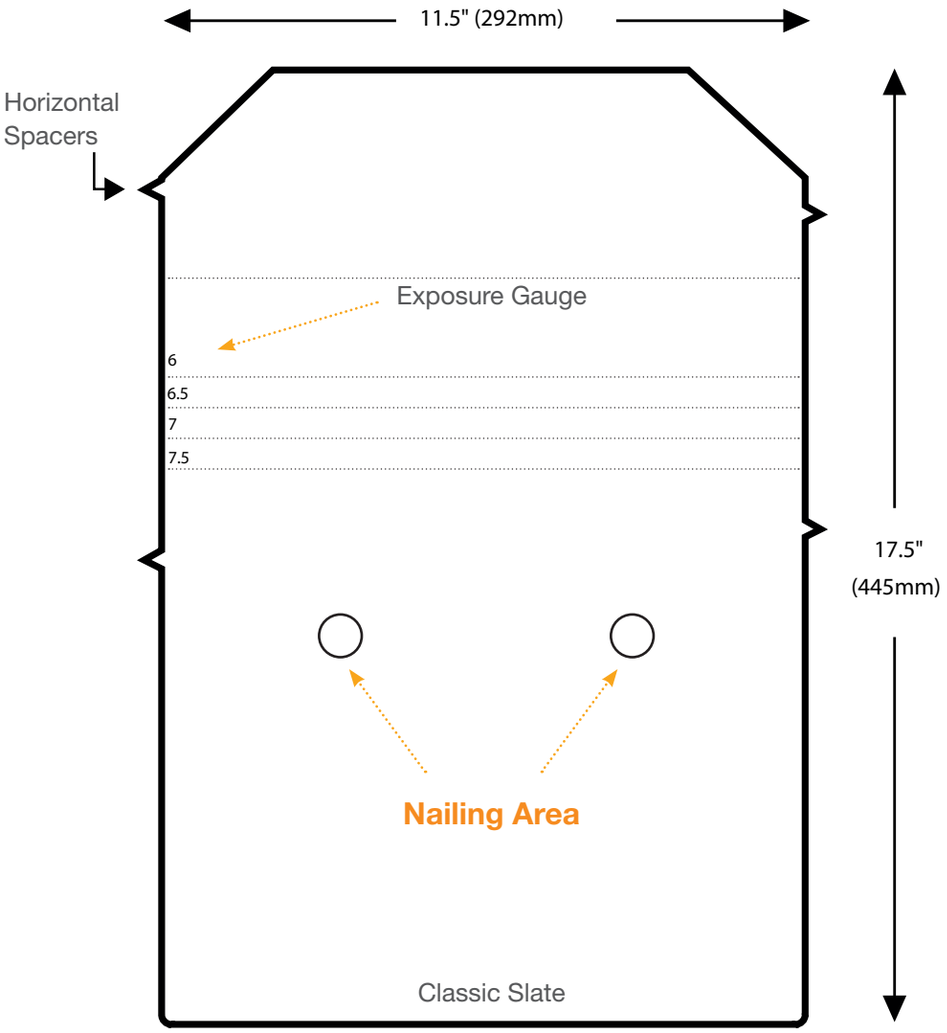
Cut out bottom of the tray to allow for the tile starter cleat to run into the valley tray. Over hang tray by 20mm from the end of the 11mm board. When setting tile starter cleat, set 40mm in from the centre of the valley.



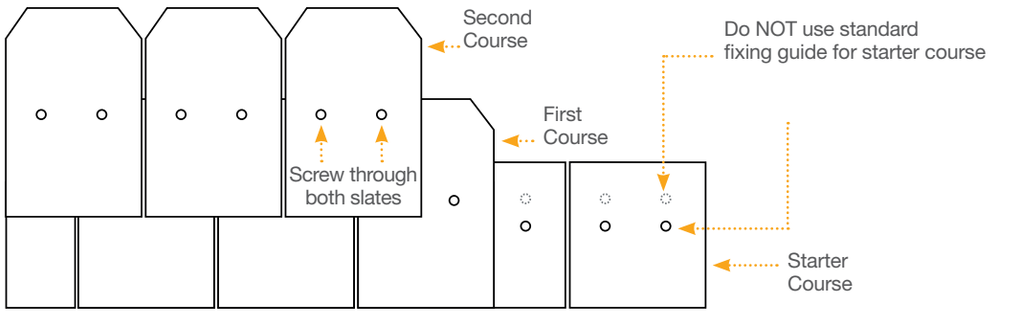
Tile Starter Cleat

Please revert to pages 30-31 for the extralight fitting instructions.
Allow 80mm gap between tiles running up the valley.

TAPCO SLATE DETAIL



When installing Tapco onto a gable roof, an overhang needs to be created by laying tiles past the edge of the ply. Once complete, the fascia board will be offered up to the underside of the tile.

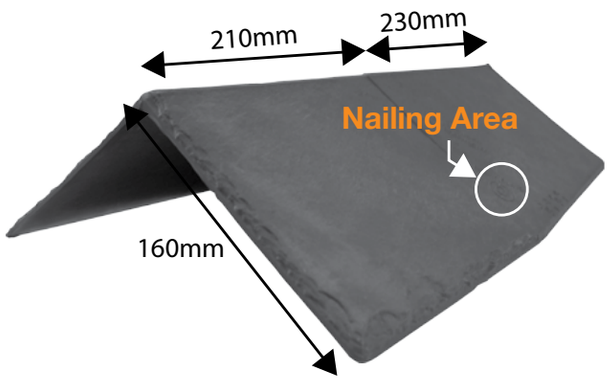


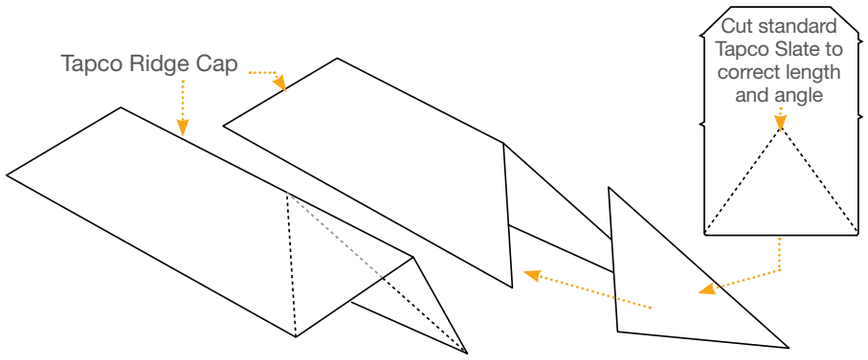
TapcoSlate Classic

ROOF PITCH	GAUGE	SLATES PER M²
14* to 25 degrees (fully boarded or felt & battens)	6" (152mm)	22
25 to 27.5 degrees (fully boarded or felt & battens)	6.5" (165mm)	20
27.5 to 30 degrees (fully boarded or felt & battens)	7" (178mm)	19
above 30 degrees (fully boarded or felt & battens)	7.5" (191mm)	18

CLASSIC RIDGE

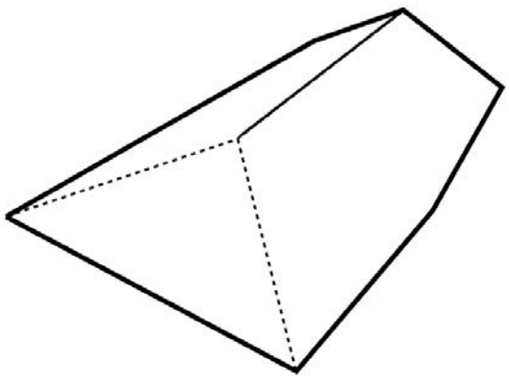
Classic Ridge
Ridge & Hip Caps

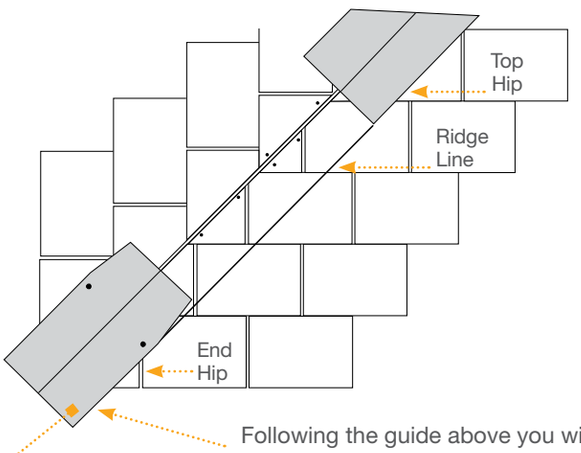




Follow the above guide for cutting tile and ridge, then adhere the two parts using either a heat gun or strong sealant to hold together. This will create a top cap for the crown point of the roof.

Following the below guide you will create the end cap for your hip



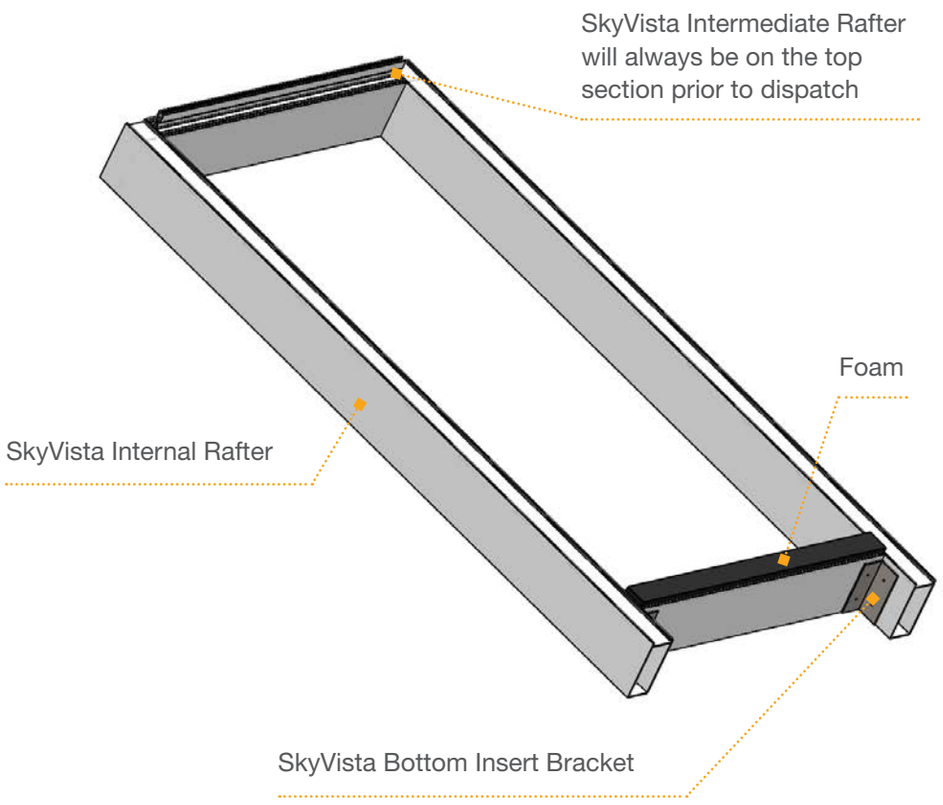


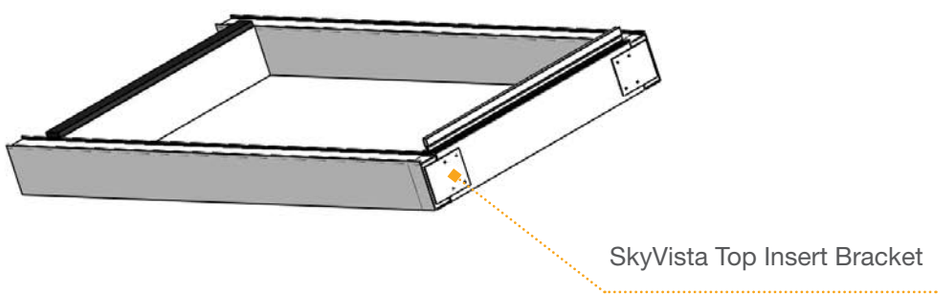
Discard these cuts

Following the guide above you will create the end cap for the hip by removing the excess overhang.

CASSETTES

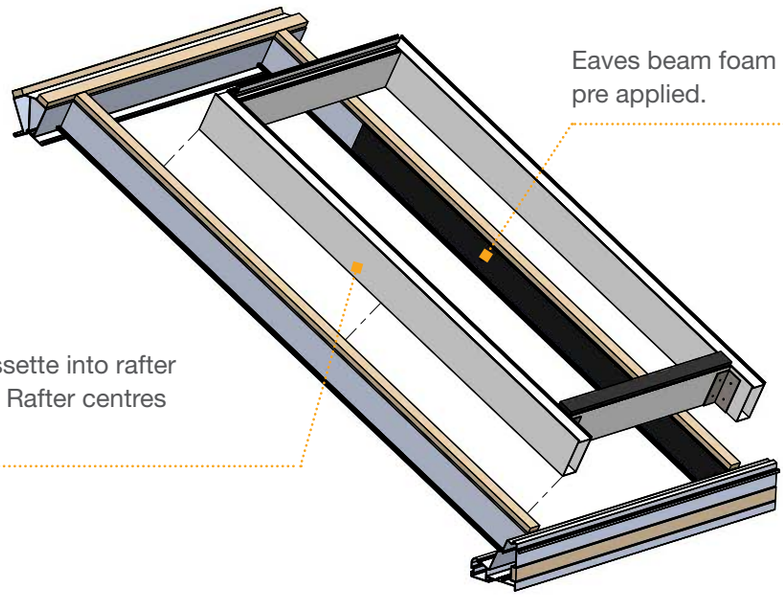
As shown in the image below the cassette will come pre fabricated by SupaLite, ready to install.

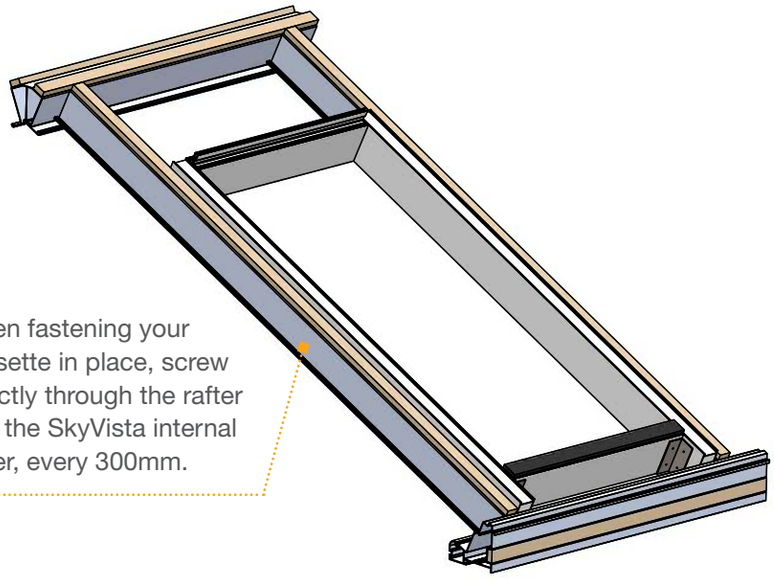




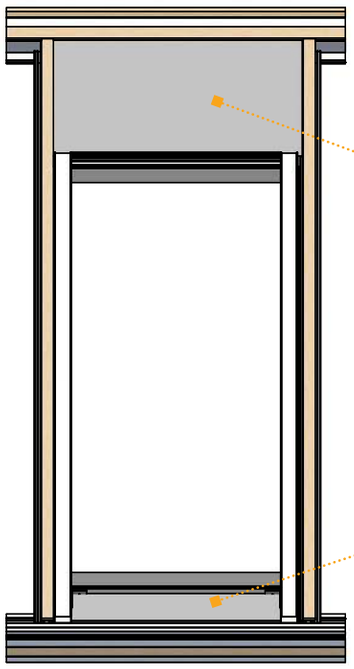
Intermediate rafter will also be pre-fabricated in the SkyVista internal rafter (see page 41).

INSTALLATION OF CASSETTE





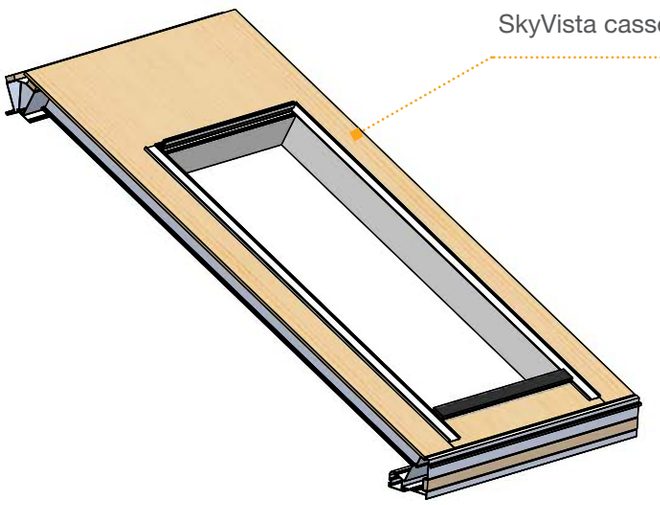
INSULATION & BOARD AROUND CASSETTE



Insulation to be inserted in above the SkyVista cassette.

Insulation to be inserted in below the SkyVista cassette.

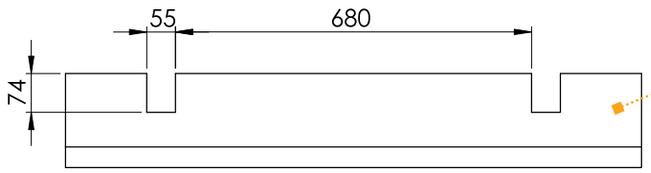
Fix 11mm board around the SkyVista cassette.



Once the roof is boarded, membrane the roof as per the instructions on page 25.

EAVES PROTECTOR DETAIL

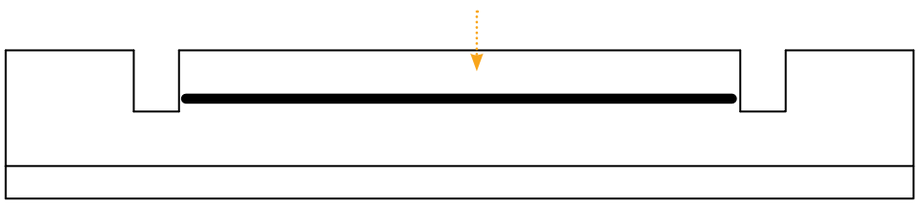
Eaves protector to be fastened directly to the board



Eaves Protector Detail

Cut out to be done on site

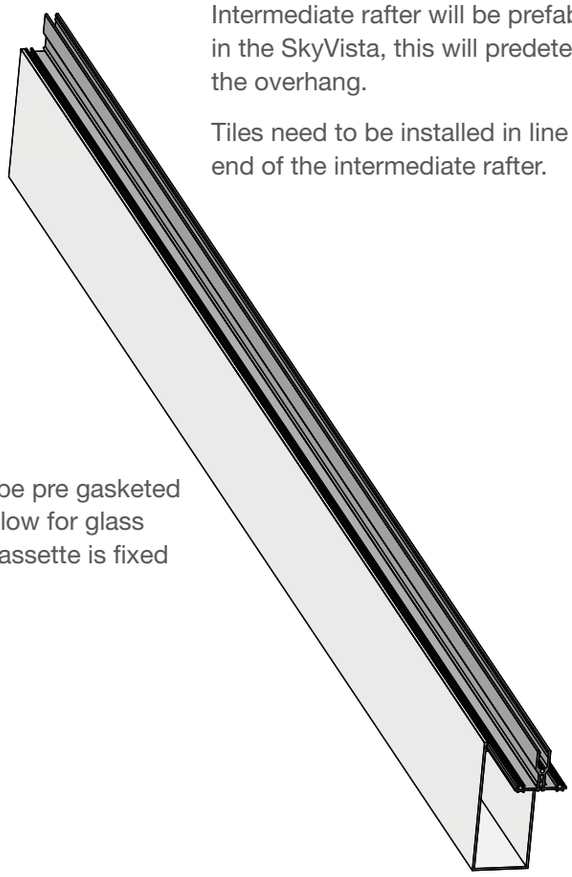
BG1 Tape will be provide to attach directly to the eaves protector, this will enclose the gap to the glass



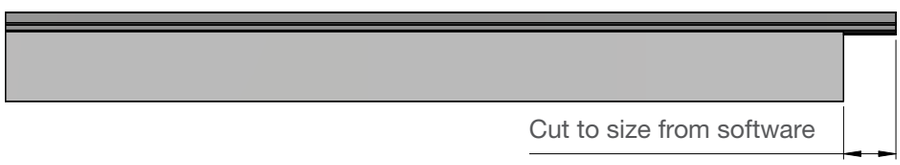
INTERMEDIATE RAFTER

Intermediate rafter will be prefabricated in the SkyVista, this will predetermine the overhang.

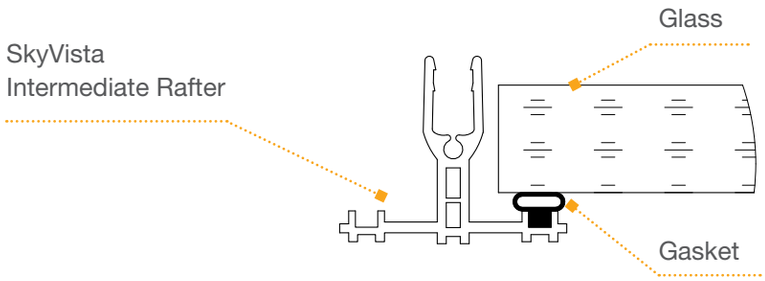
Tiles need to be installed in line with the end of the intermediate rafter.

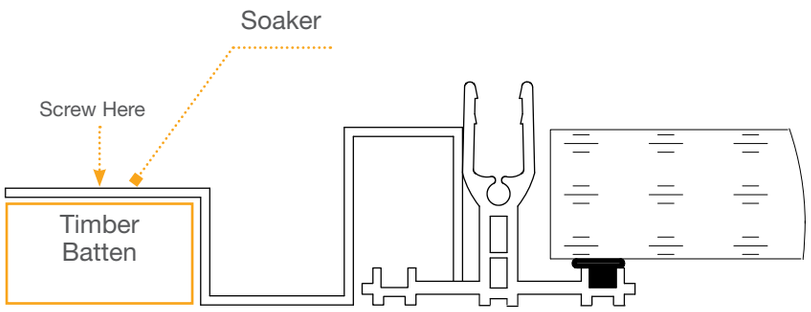


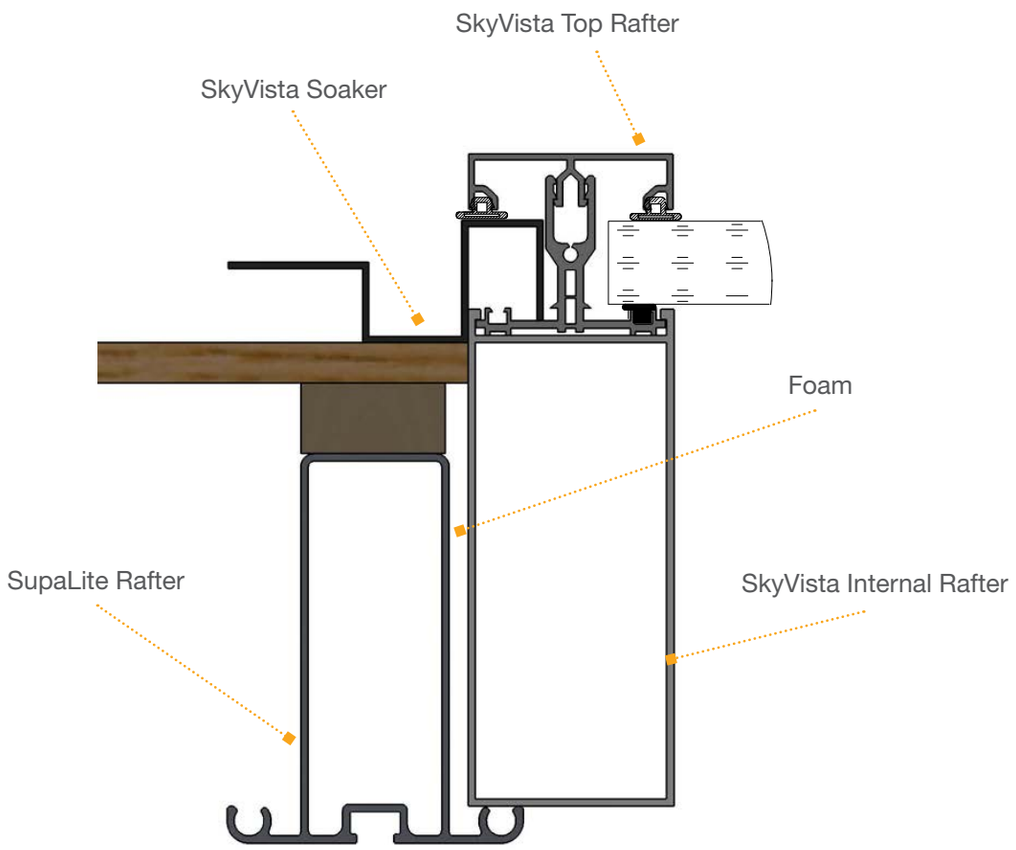
Intermediate rafters will be pre gasketed to expedite install and allow for glass to be fitted as soon as cassette is fixed in place.



CROSS SECTIONS OF SkyVista PROFILE

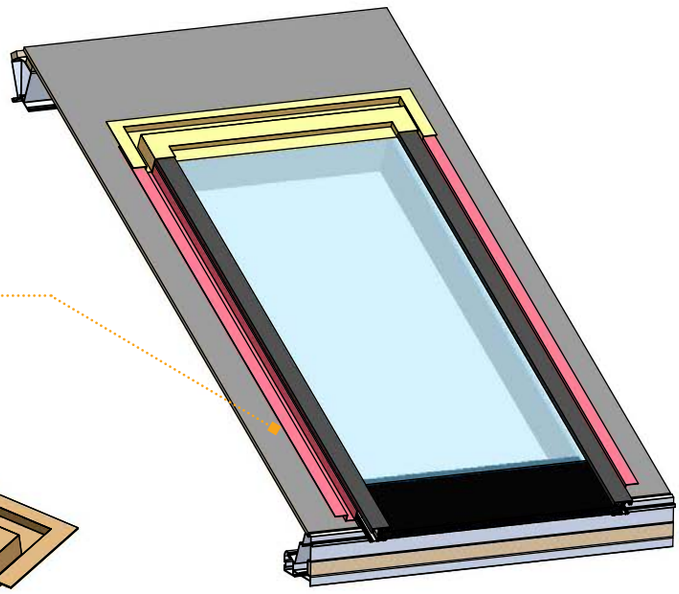




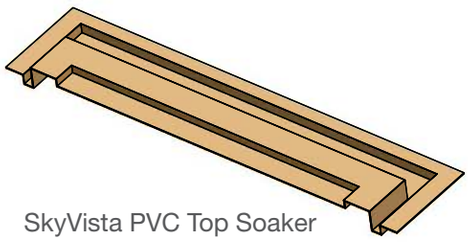


FLASHING SkyVista

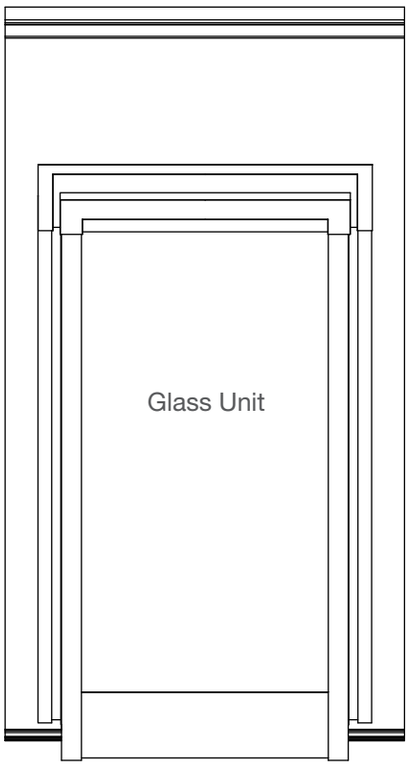
A 10mm gap must be left around the SkyVista to ensure a soakaway is created to allow water to drain down the soakers.



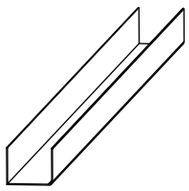
SkyVista Glass Soaker



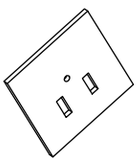
SkyVista PVC Top Soaker



SkyVista Glass End profile
770mm Black



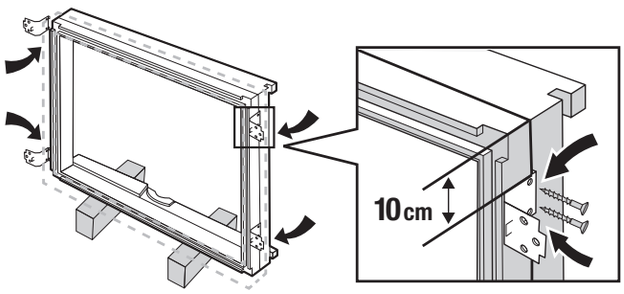
SkyVista Glazing Bar End Cap
2 Per Sky Vista



Please note: Ensure glass is protected when cutting tiles, as damage can be caused to the self-clean coating.

INSTALLATION OF ROOF WINDOW

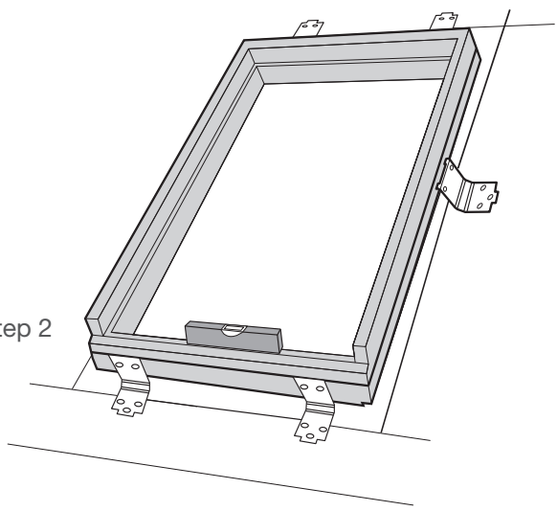
When creating the opening for the roof window, ensure you make the hole 20mm bigger around the perimeter of the roof window. Once the hole is created and step 1 (below) has been followed, drop the roof vent into the location required (this can be anywhere in the roof spacing).



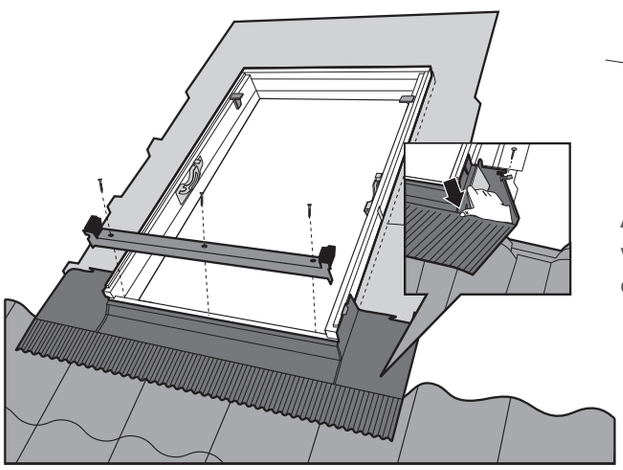
Step 1

Screw plates directly to the side of the roof vent casing

When fixing the casing between the rafters ensure the plates are fixed directly to the boards (Extralight)



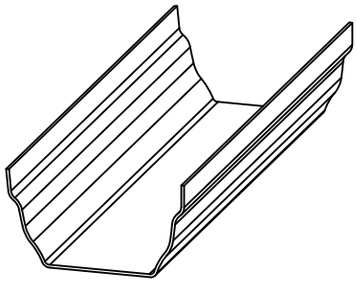
Step 2



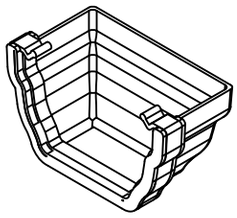
Always start flashing the roof window when you have tiled up to the bottom of the vent like image.

GUTTER COMPONENTS

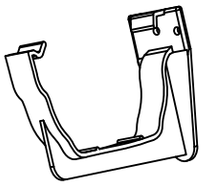
The guttering supplied is Krown Aqua Flow double ogee. This needs to be stored away from direct sunlight and extreme heat to avoid distortion occuring.



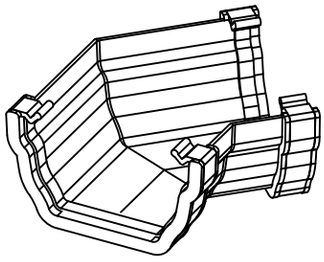
Gutter 4m Lengths
Gutter 6m Lengths



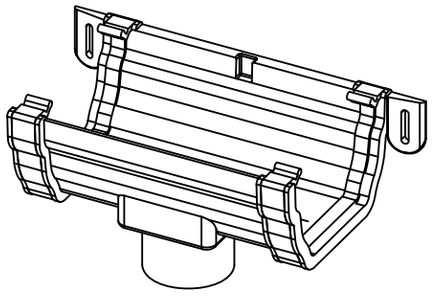
Gutter Stop End



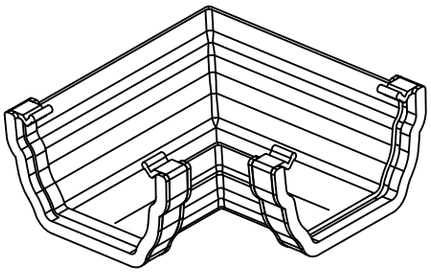
Gutter Bracket



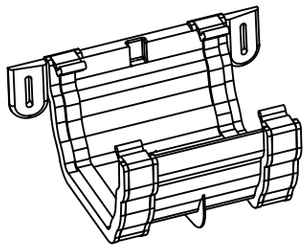
135 Degree
Gutter Bend



Gutter Running
Outlet



90 Degree
Gutter Bend

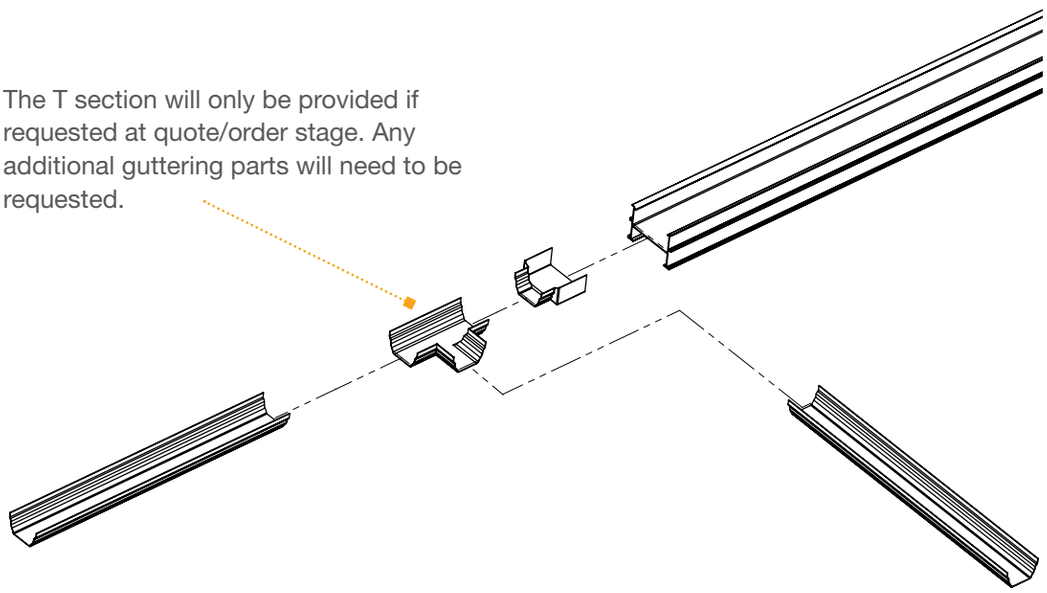


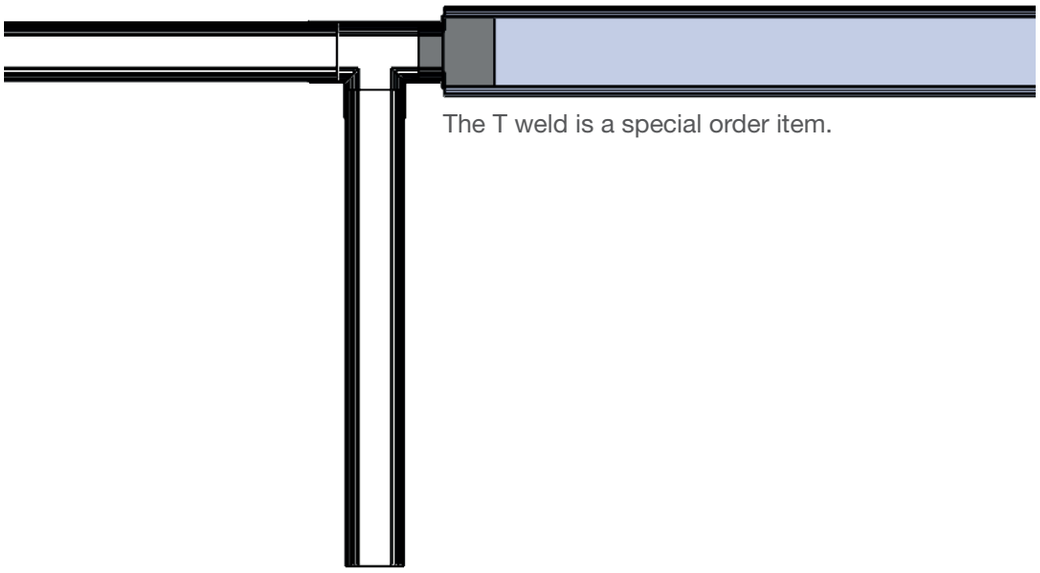
Gutter Union

Please note stop end running outlets are not available in this gutter system.

WELDED T ADAPTERS DETAIL

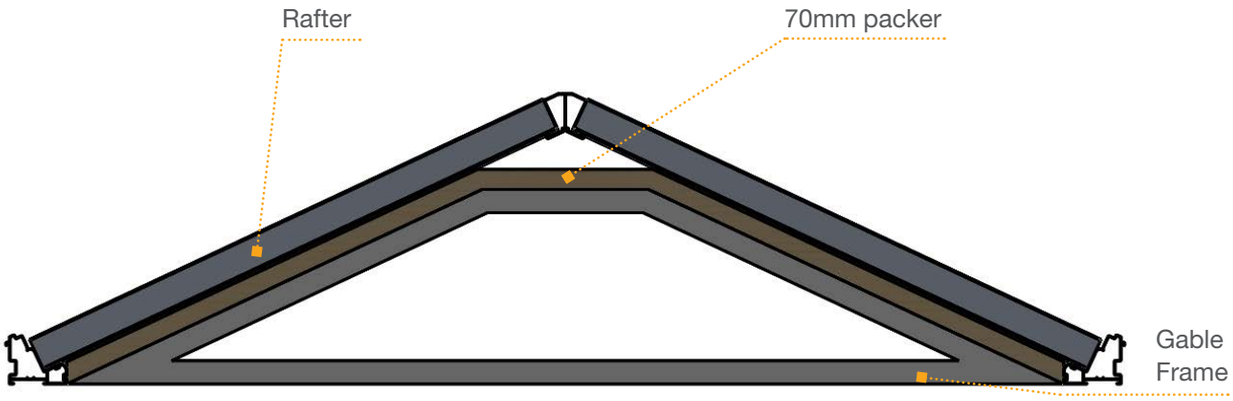
The T section will only be provided if requested at quote/order stage. Any additional guttering parts will need to be requested.





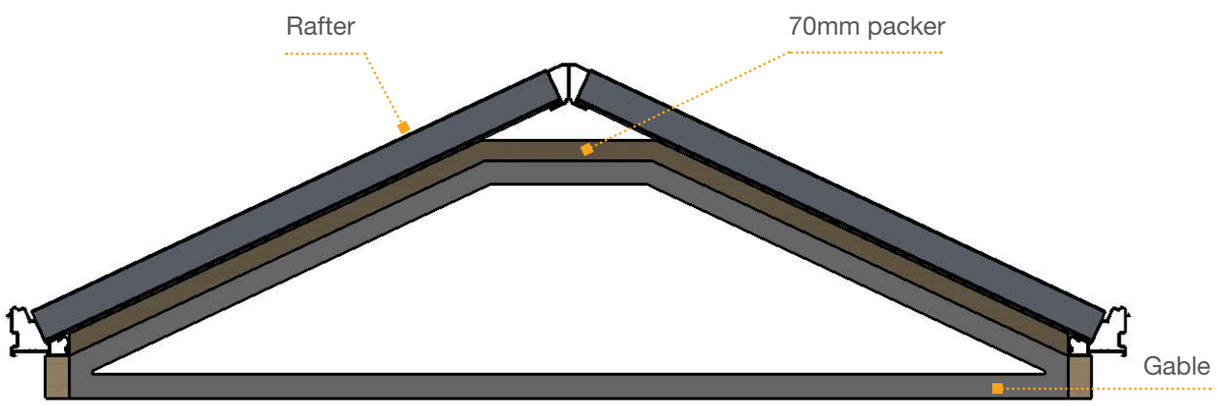
The T weld is a special order item.

GABLE FRAME DETAILS



The Gable above shows a standard gable to suit a Supalite Roof. This is made to a point with the eaves beam fitted directly to the top of the 70mm packer. The gable will leave a 70mm void between the gable and underside of the rafter. You will need to fill in with frame extenders or timber. The reason for this is to stop the plasterboards and plaster impeding in the glass line.

Both options are available, with no need to replace frames if principles of either option are adhered to.

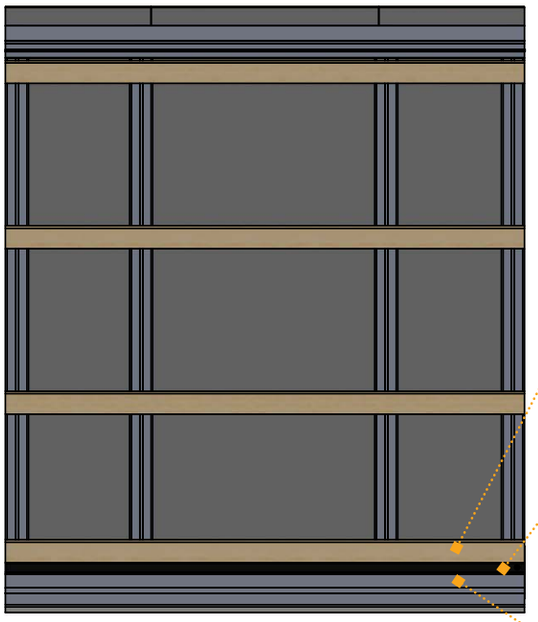


Where a gable frame has an upstand, the eaves beam will need to be packed up by the upstand height. This would therefore make the eaves beam sit at the point where the upstand and the slope meet. This will leave a 70mm gap which will need to be packed out by 70mm with either frame extenders or timber. The reason for this is to stop the plasterboard and plaster impeding on the glass line.

PLASTERBOARD & INTERNAL BATTENS

62.5mm plasterboards supplied with timber battens as a standard on all SupaLite roofs.

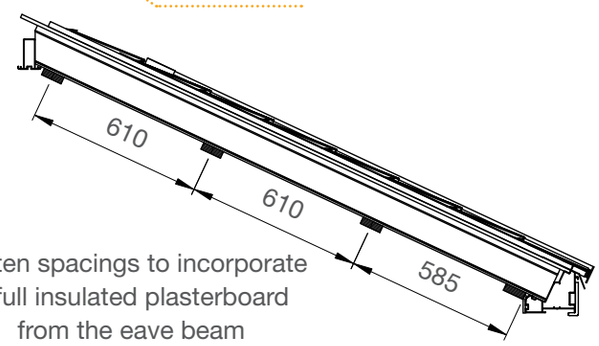
When fixing the battens to the rafters ensure they are horizontal and not vertical



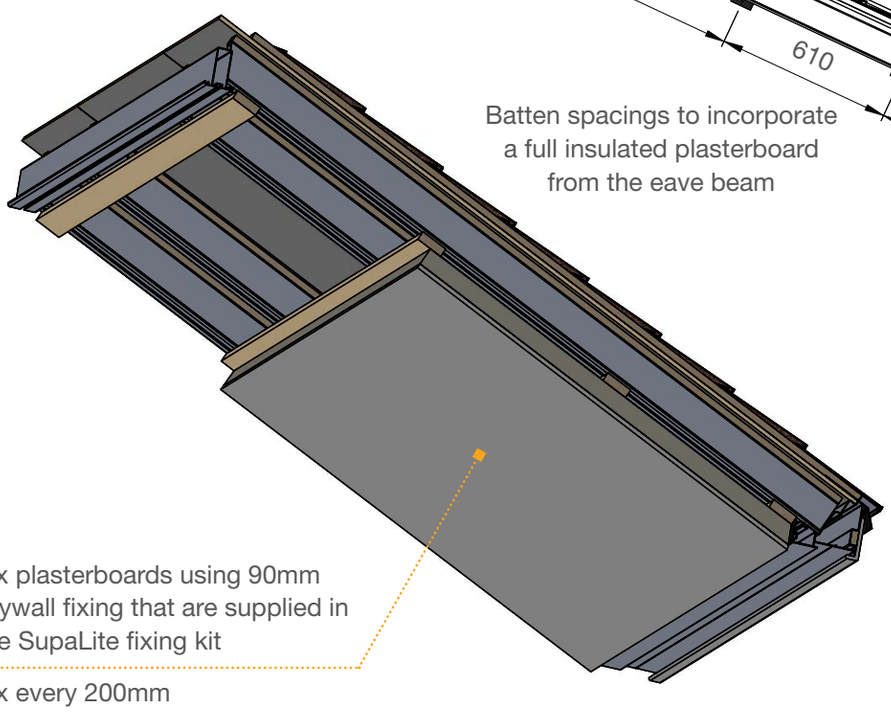
75x25 Kiln dried battens

Eaves beam foam

Eaves beam



Batten spacings to incorporate a full insulated plasterboard from the eave beam

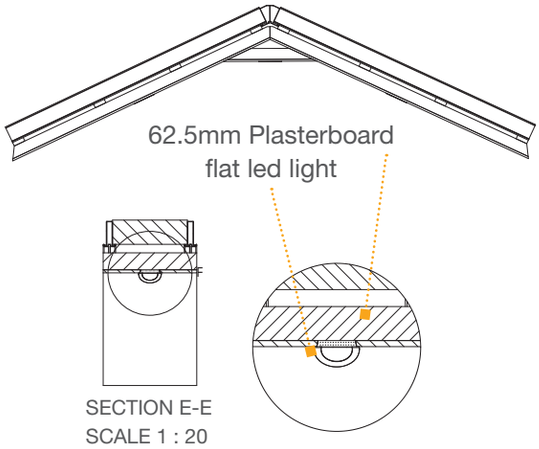


Fix plasterboards using 90mm drywall fixing that are supplied in the SupaLite fixing kit

Fix every 200mm

It is an important factor to consider when installing ceiling lights into a SupaLite roof that the insulation is not cut or disturbed.

It is important to follow the guidelines set out below to ensure your lighting is installed correctly.

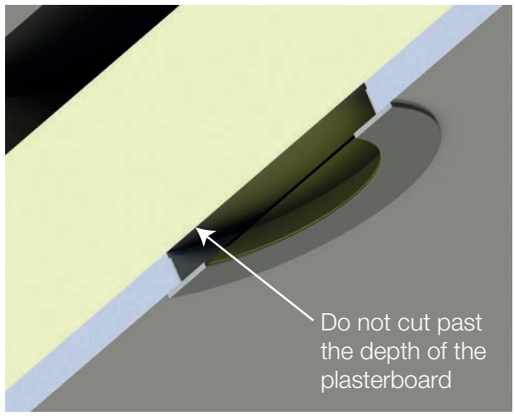


SECTION E-E
SCALE 1 : 20

SUPALITE RECOMMENDS

When installing lighting into the slope of the roof, only use low profile (<=12mm) low voltage lighting. This will allow the fitting to be recessed into the plasterboard without disturbing the insulation.

It is acceptable to install standard light fittings into the ridge board of the roof providing that the insulation in the slope above is not disturbed.



These guidelines MUST be followed in order to be fully compliant with building regulations

- Do not cut or disturb installed insulation;
- Fit deep LED or GUD into the ridgeboard only;
- Install only low profile LVL lights into the slope;
- Building regulation guidance MUST be observed.

Please follow the illustrations shown above for SupaLite's recommended fitment of lighting. Seal the gap around the cables to stop warm air entering the roof space.

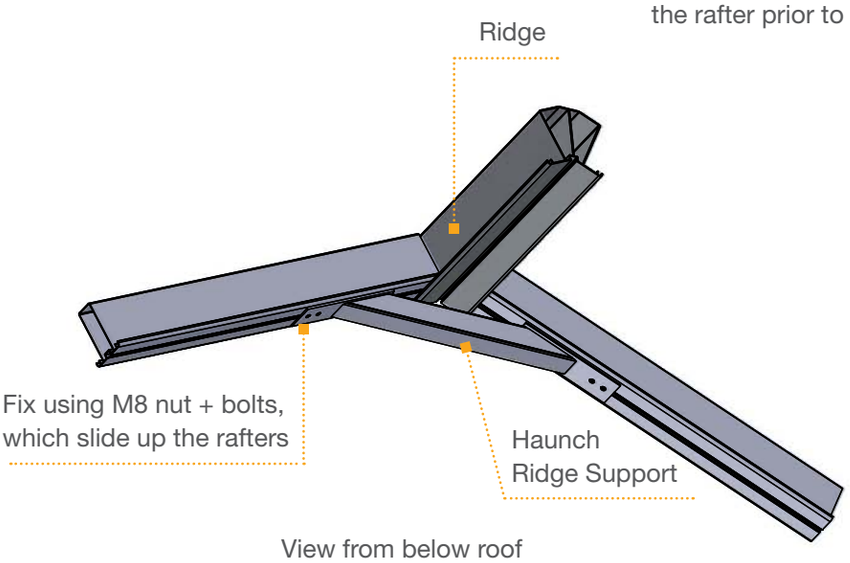
RIDGE SUPPORT

RIDGE SUPPORT DETAIL

Alternative Options:

- Timber Truss
- Tie Bar

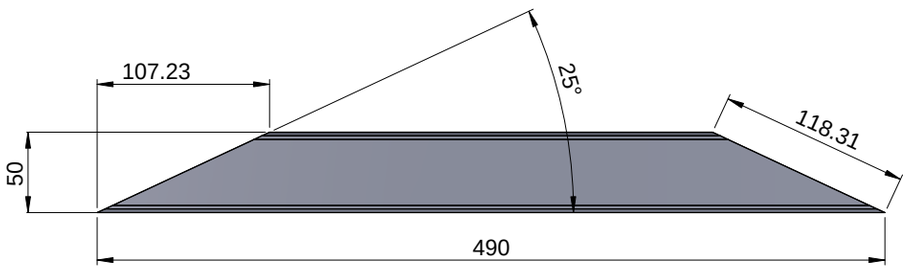
All options follow same process of installing the M8 bolts into the rafter prior to installation.



View from below roof

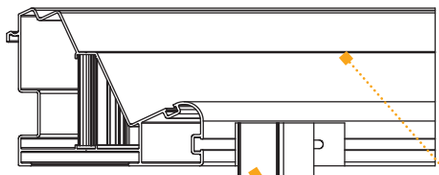
The ridge support beam can be used on all style of roofs except lean to's

How the Ridge Support will arrive on site.

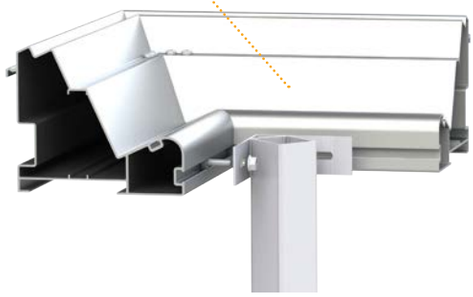


Ridge Support sizes based on 25 degree roof

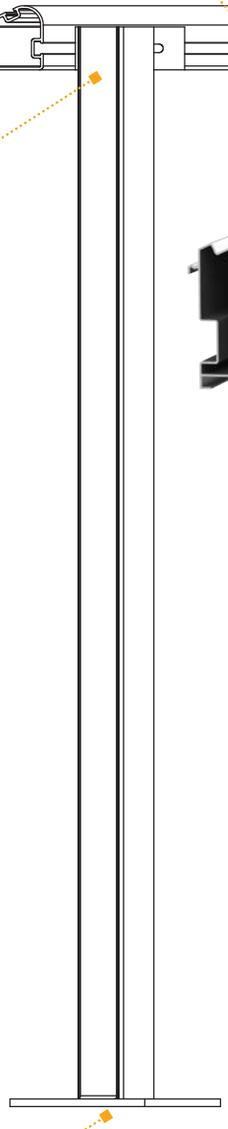
STRUCTURAL MULLION



Fix the angle iron using M8 fixings



Ensure you have installed the M8 fixing bolts prior to fixing eaves beams to the frames



Fix the bottom plate onto a substantial, stable base

Structural Mullions are a special order item. When fitting, ensure the frames are plumb prior to installing. These will act as support for the frames and not to support the roof independently.

ENGINEERING SIMPLICITY & PERFORMANCE

CORGI Certification
SupaLite are the first tiled roof company to be assessed and issued with membership of the respected CORGI Fenestration scheme for supply chain quality and continuity.

www.supaliteroof.co.uk

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