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# INSTALLATION GUIDE

K2. THE COMPLETE CONSERVATORY COMPANY



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Thank you for purchasing your K2 Conservatory Roof System, which has been prefabricated by one of our skilled craftsmen prior to delivery.

The following instructions will ensure an efficient and easy installation of your conservatory roof. These instructions cover both glass and polycarbonate roofs in 24/25mm and 35mm glazing.

A little time spent looking through the instructions prior to commencement will help to give an understanding of the structure and the processes involved and will help to avoid complications during assembly.

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\* All measurements in this guide are in mm unless otherwise stated.

### For your safety when installing your conservatory roof you should observe the following points:

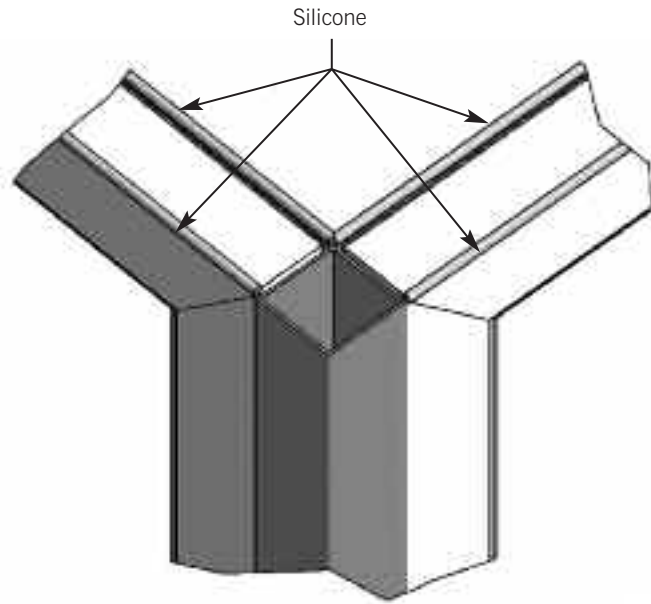
- Always use relevant 'Personal Protective Equipment' (i.e. gloves, helmet, goggles, safety shoes etc.) when erecting the conservatory.
- All power tools used outdoors should be 110 volt and connected through a transformer.
- Window frames supporting the conservatory roof should be installed strictly in accordance with the system manufacturer's instructions.
- The use of a stable working platform (scaffold or trestles) is highly recommended for any conservatory installation.
- Do not rely upon incomplete structures to support your weight (either directly or via ladders).
- Frequently check the window frames for 'square, line and plumb' during installation.
- Only use '**Low Modulus, Neutral Cure**' Silicone for sealing PVCU to brickwork, concrete or Lead.
- In situations where product is to be sealed to glass, i.e. Muntin Bars, Glazing Bars, Roof Vents and Glazing Sheet Closures, it is the responsibility of the installer to ensure that the correct/compatible sealant is used for the right application.
- Check tightness of all fixings prior to glazing roof or frames.
- Building sites (whether large or small) are dangerous places. As such, the general public (particularly children) should be kept away until the installation is complete.
- Remove all debris from the site upon completion.

#### Tools required:

- Drill
- Screwdrivers
- Drill Bits
- Silicone Gun
- Step Ladder or Scaffold
- Spirit Level
- 8 and 10mm Nut Runner

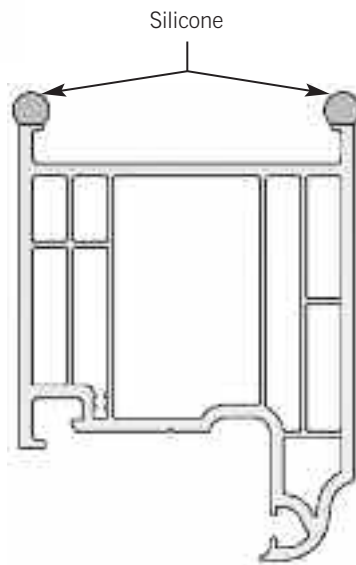
## WINDOW FRAME PREPARATION

INSTALLATION GUIDE



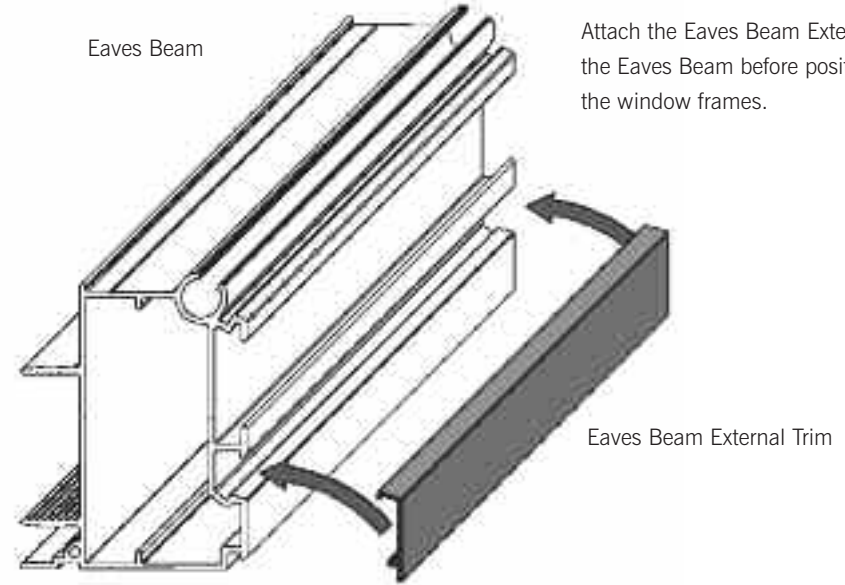
### N.B.

Apply a continuous bead of Low Modulus, Neutral Cure Silicone to the front and rear edges of the window frames.

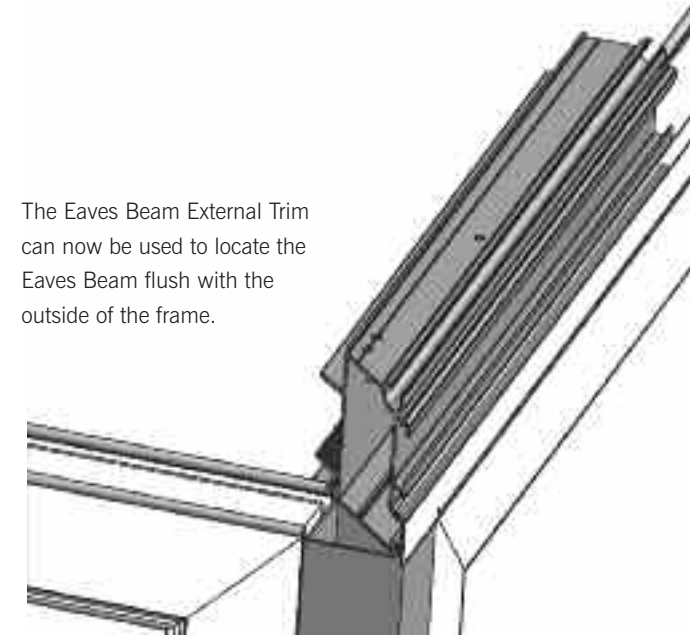


## EAVES BEAM PREPARATION

INSTALLATION GUIDE



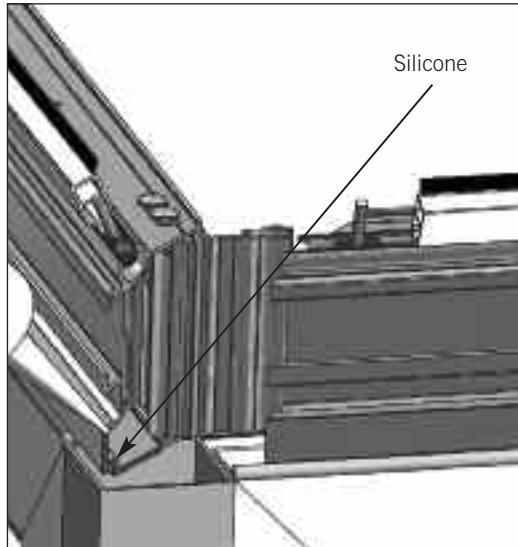
Attach the Eaves Beam External Trim to the Eaves Beam before positioning onto the window frames.



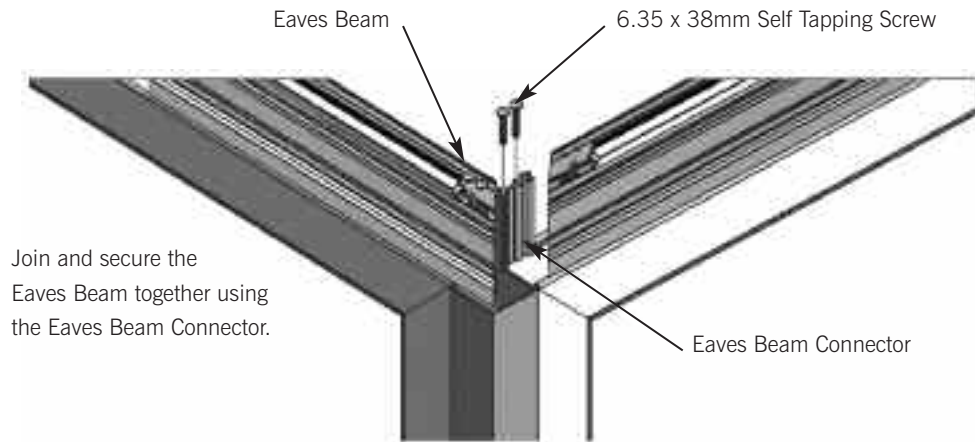
The Eaves Beam External Trim can now be used to locate the Eaves Beam flush with the outside of the frame.

# EAVES BEAM INSTALLATION

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Apply a bead of Silicone to the cut faces.



Join and secure the Eaves Beam together using the Eaves Beam Connector.

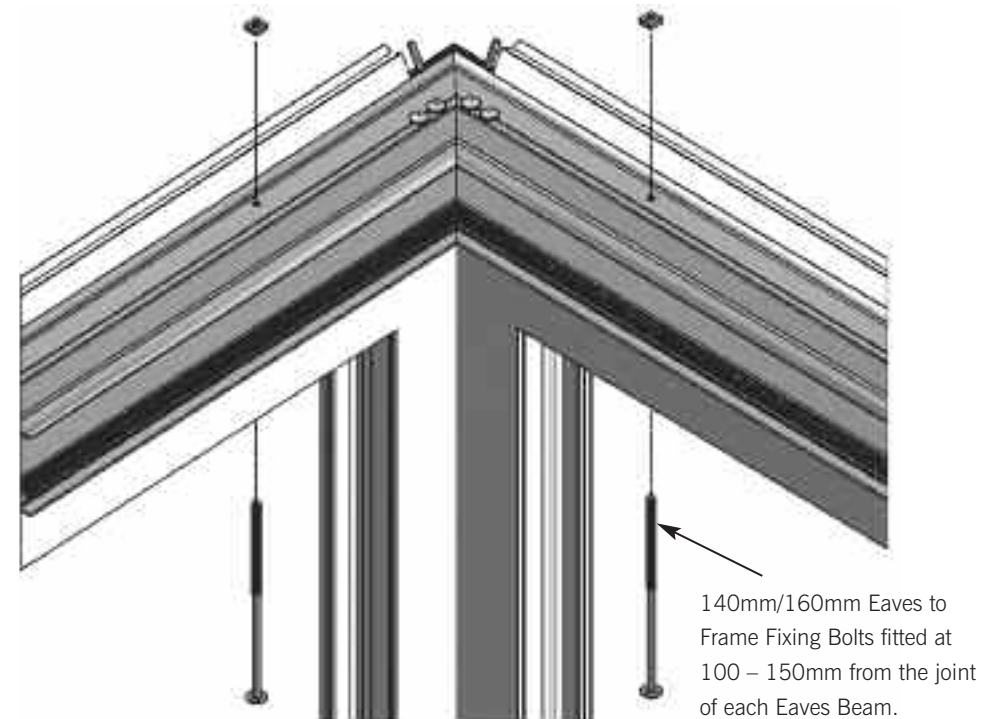
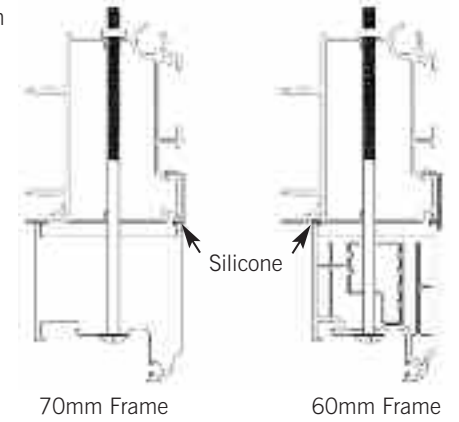
**N.B.** Before connecting the Eaves Beam, ensure all Bolt Carriers are in position.



# EAVES BEAM INSTALLATION

INSTALLATION GUIDE

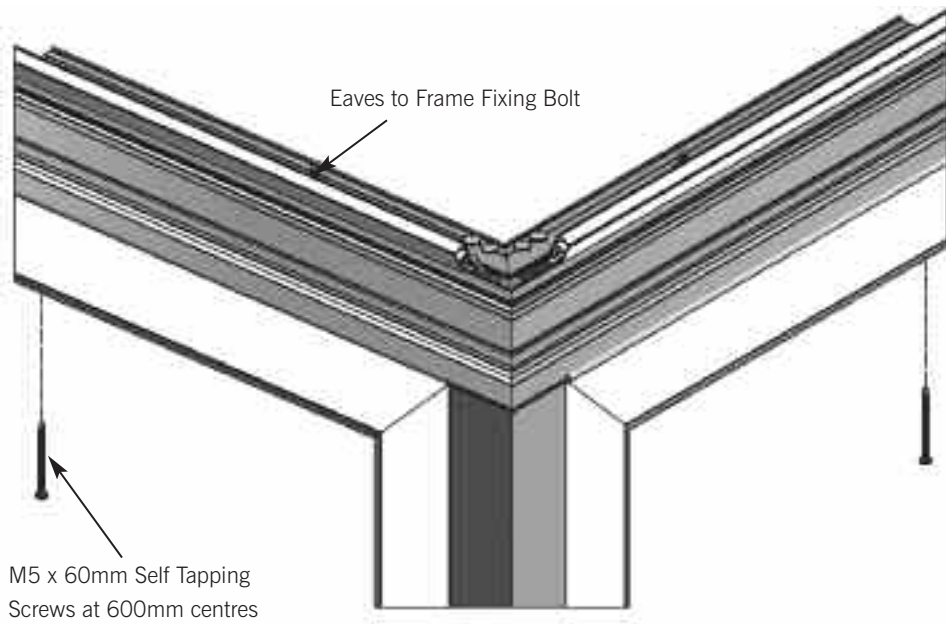
Fit the Eaves to Frame Fixing Bolts 100 – 150mm from the joint of each Eaves Beam.



## EAVES BEAM INSTALLATION

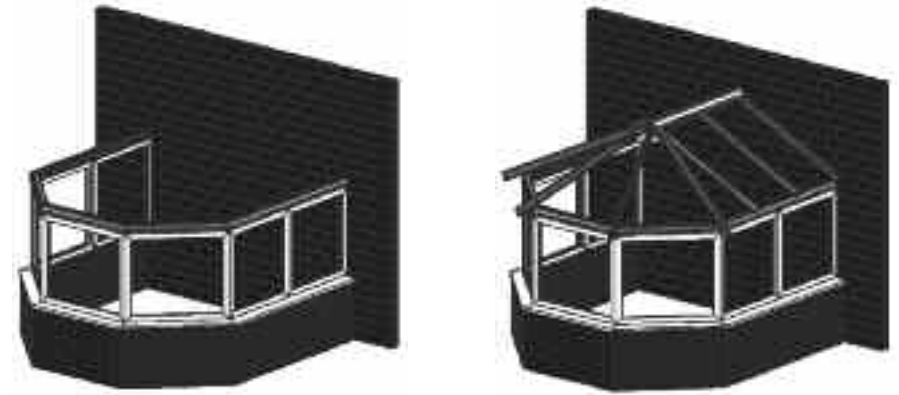
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Once the Eaves to Frame Fixing Bolts have been secured, the Eaves Beam should be further fixed to the window frames using M5 x 60mm screws at 600mm centres (if the Eaves Beam exceeds 3 metres in length an additional Eaves to Frame Fixing Bolt should be fitted centrally).



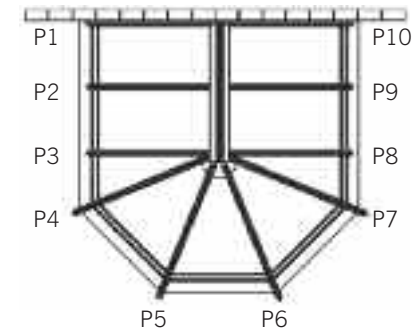
## HIP & GLAZING BAR INSTALLATION

INSTALLATION GUIDE



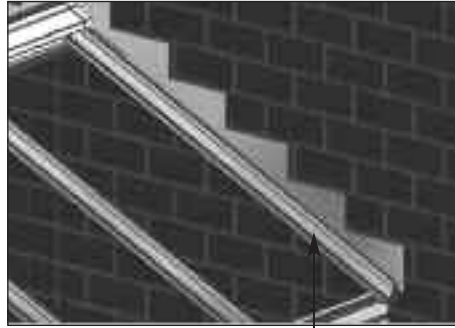
Place the Ridge centrally on an access tower or platform at approximately the required height. Loosely connect the Bar (P1 or P10) to the Eaves Beam and rest it on the Ridge body.

Do the same with the Transom nearest to the Boss End. (P3 or P8). Repeat on the opposite side. Slowly lift and tilt the Ridge to allow the Glazing Bars to locate on the Ridge Wing (this may require two people depending on the Ridge length). The Ridge is now self-supporting. If the Glazing Bars are not in the correct position, reposition them now. Now, fit the Hip Bars in sequence as stated on the paperwork followed by all remaining Transoms. Finally, tighten all the Glazing Bar Nuts whilst constantly checking that the Ridge is still level.



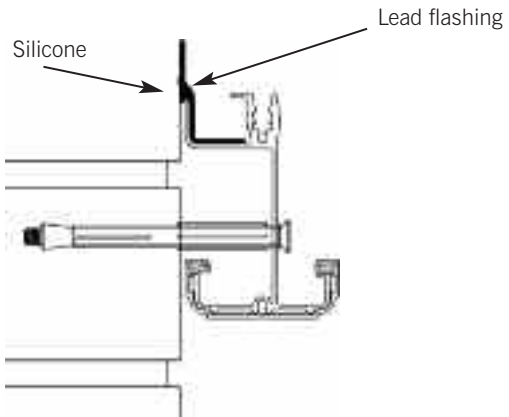
## GLAZING BAR INSTALLATION

INSTALLATION GUIDE



Wall End Bar

Wall End Bars should now be secured to the wall using appropriate fixings within 100 – 150mm of the Ridge and the Eaves Beam and no more than 600mm apart. **N.B. Fixings must be of suitable length and diameter for the substrate used. Always refer to the fixing manufacturer for recommendations.** If not already completed, chase out the Lead flashing at this stage.



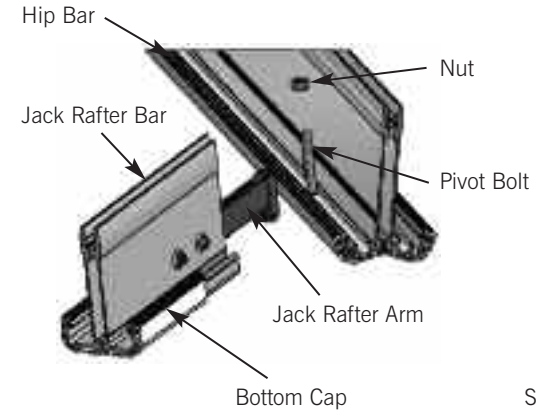
Seal the Wallbar to the wall with a continuous bead of “Low Modulus Neutral Cure Silicone” prior to lead flashing.

If a Wallbar of the type shown is being used, install the Lead Flashing.



## JACK RAFTER INSTALLATION

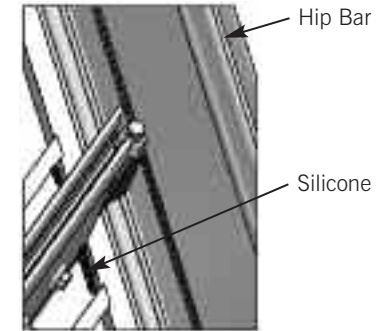
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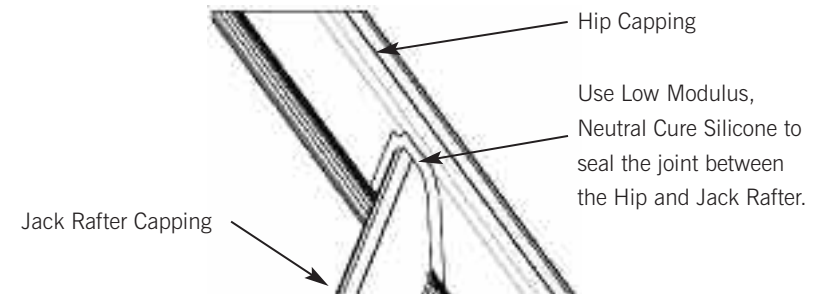
Slide Bottom Cap back to allow arm to hook on the Bolt.



Slide the Bottom Cap up, attach the nut and tighten.



To seal the joint, apply a continuous bead of Silicone between the Hip and the Jack Rafter.

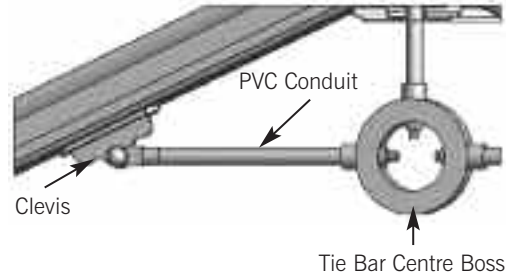


Use Low Modulus, Neutral Cure Silicone to seal the joint between the Hip and Jack Rafter.

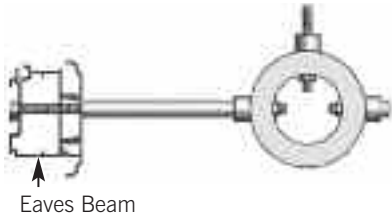
**N.B. Tie bars must be fitted prior to glazing the roof.**

Cut and attach all horizontal Threaded Bars, screwing one end into a Clevis fixing or into the Eaves Beam, keeping Tie Bar Boss Ring central. Loosely assemble onto the Tie Bar Centre Boss and cut all the remaining Tie Bar covers to length and install.

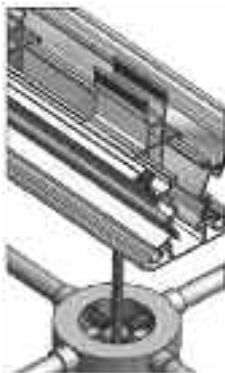
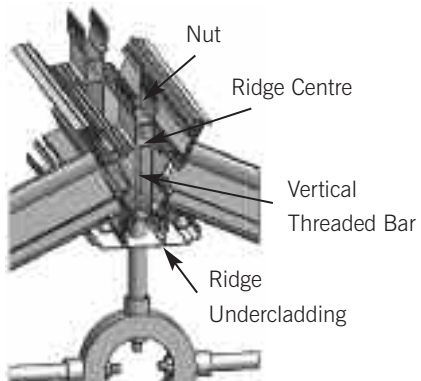
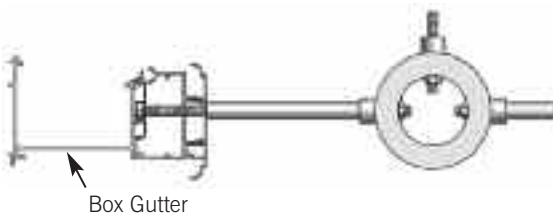
### Clevis Fixing



### Eaves Beam Fixing

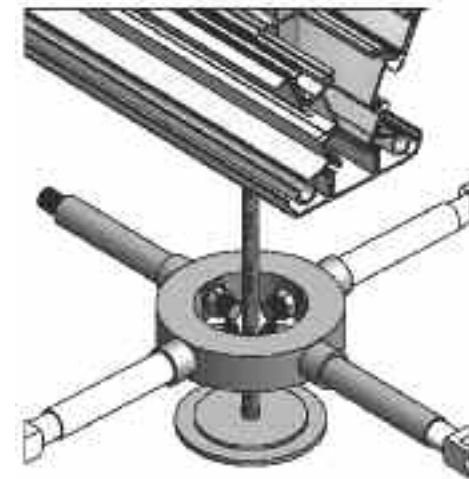
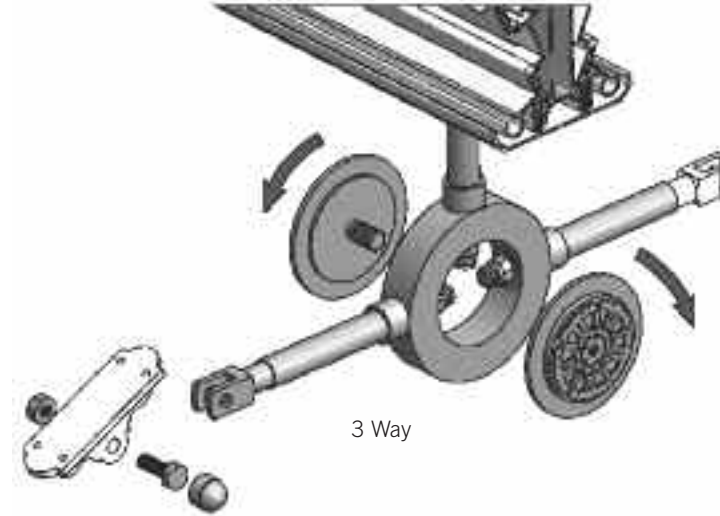


### Box Gutter Fixing



Drill the Ridge Centre Spacer using a 10mm drill bit top and bottom. Attach a nut to vertical Threaded Bar and lower through the Ridge Centre. Drill the Undercladding to slide over the Tie Bar. Cut the vertical Threaded Bar to length and attach the Tie Bar Centre Boss.

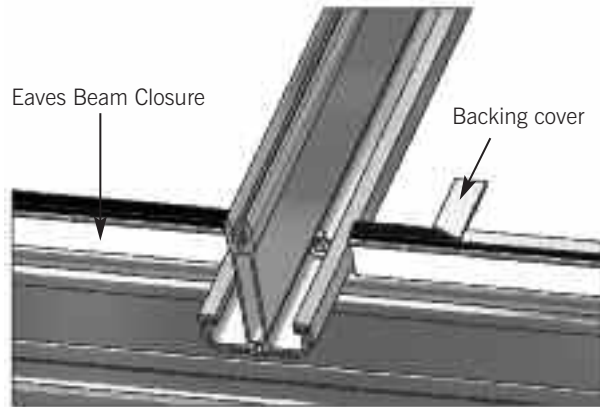
Attach the Tie Bar Centre Boss Covers.



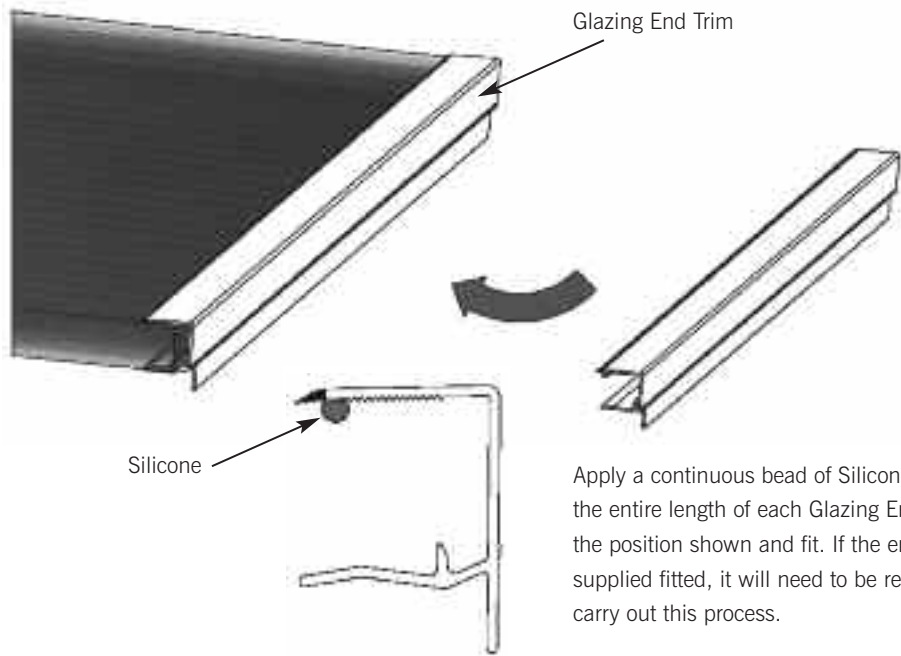
5 Way

## PREPARING GLAZING PANELS

INSTALLATION GUIDE



Before fitting each Glazing Panel, pull back a small piece of the backing cover of the Eaves Closure Tape as shown. Do not remove completely at this stage.



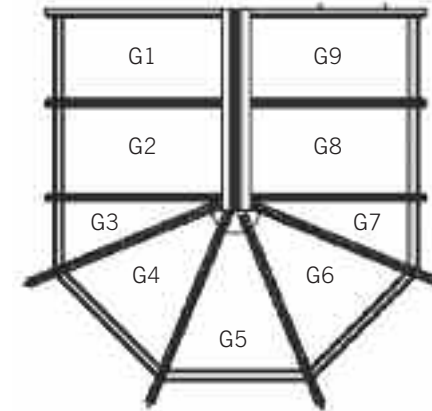
Apply a continuous bead of Silicone along the entire length of each Glazing End Trim in the position shown and fit. If the end trim is supplied fitted, it will need to be removed to carry out this process.

It is the responsibility of the installer to ensure that the correct/compatible sealant is used for this application.

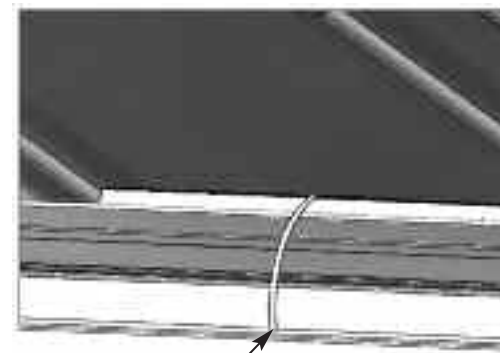
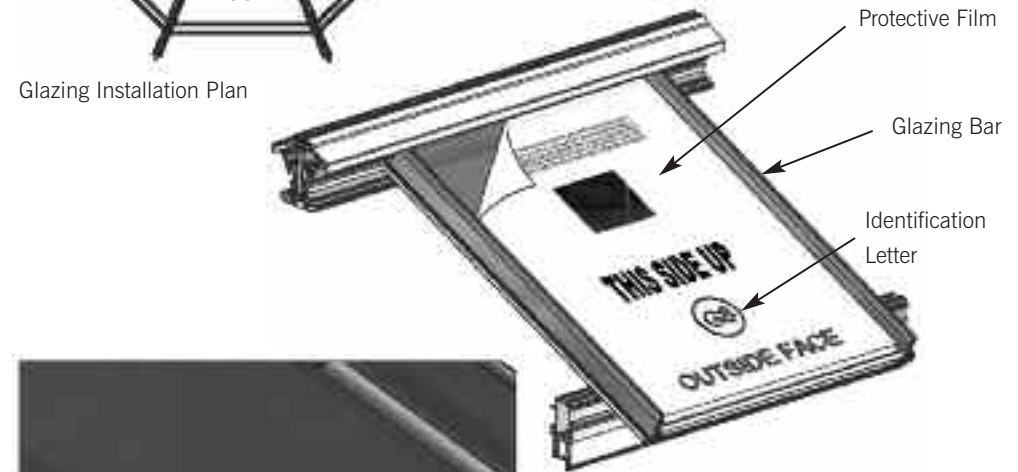


## INSTALLING GLAZING PANELS

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Each panel has an identification letter which corresponds to the location plan. Remove the protective film ensuring the external face of the panel is to the outside, centralise the panel and push firmly between the Ridge Cloaking Trims.



Remove the remainder of the Eaves Closure backing tape and press the panel down onto the Eaves Closure.

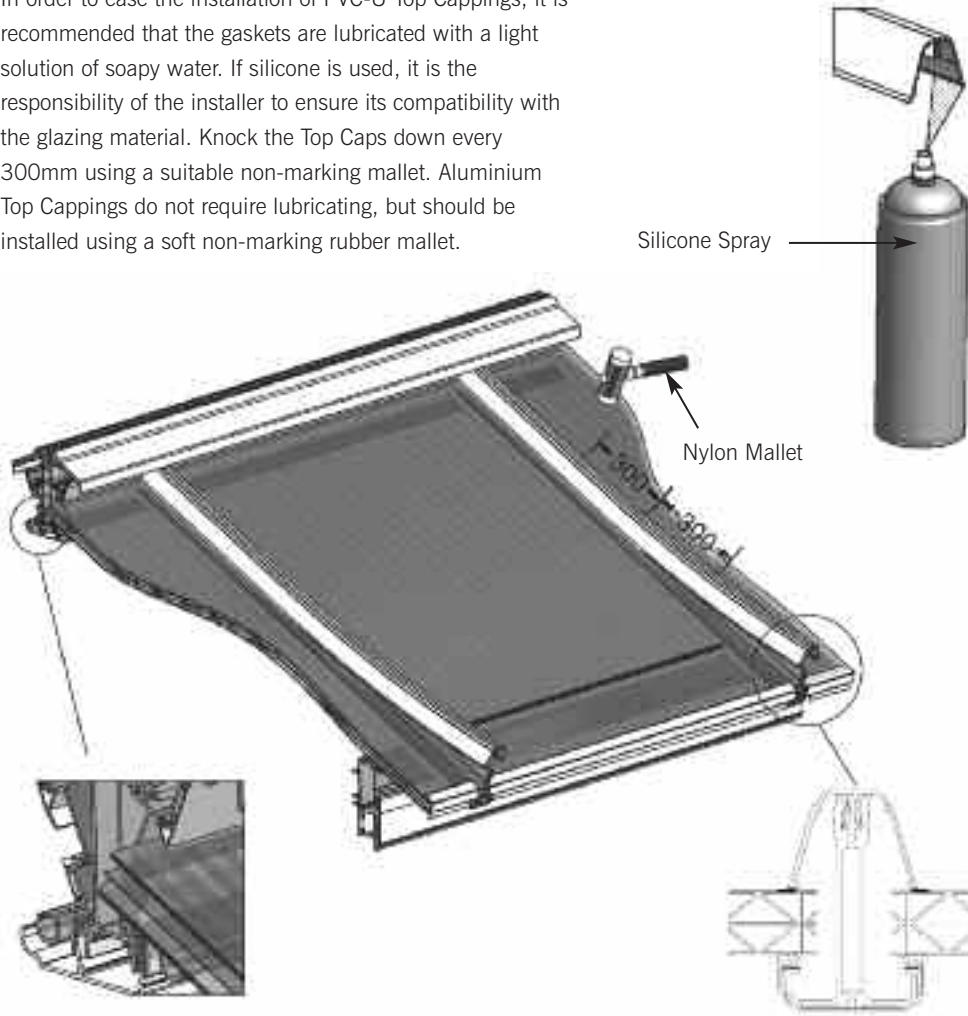
Eaves Closure Backing Tape



## INSTALLING GLAZING PANELS

INSTALLATION GUIDE

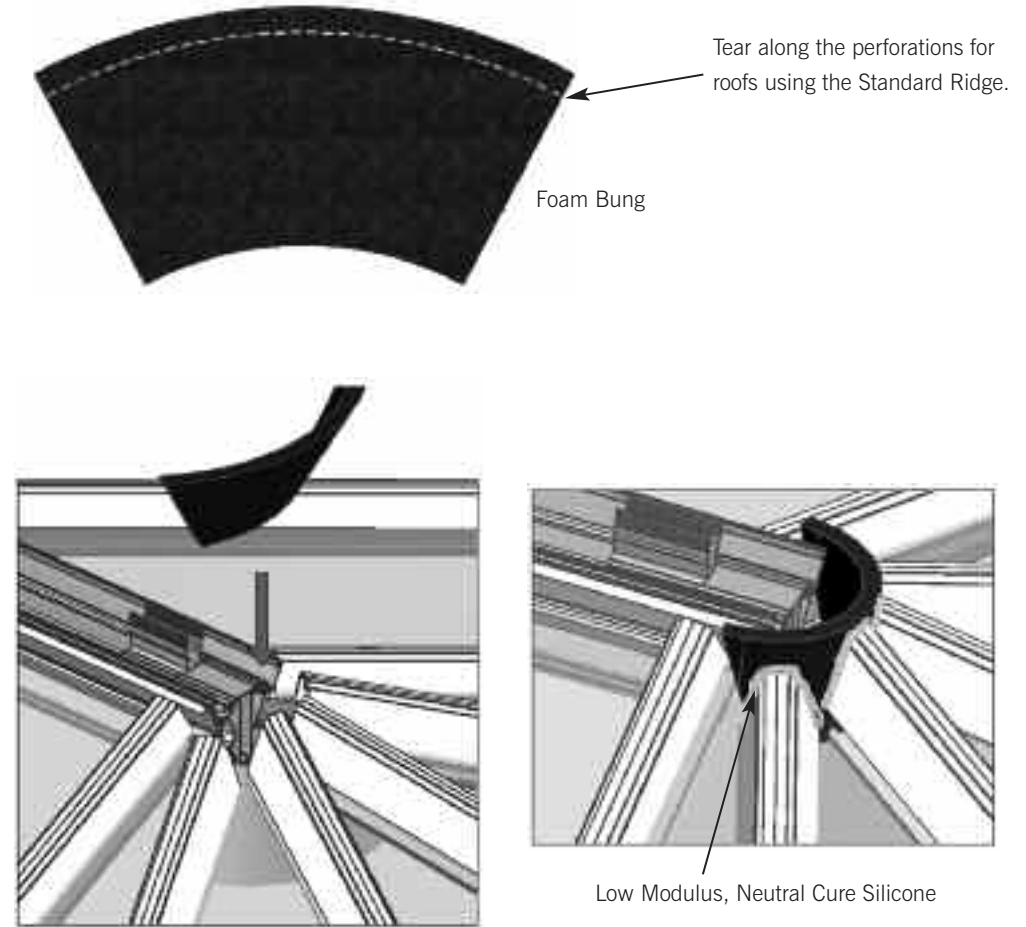
In order to ease the installation of PVC-U Top Cappings, it is recommended that the gaskets are lubricated with a light solution of soapy water. If silicone is used, it is the responsibility of the installer to ensure its compatibility with the glazing material. Knock the Top Caps down every 300mm using a suitable non-marking mallet. Aluminium Top Cappings do not require lubricating, but should be installed using a soft non-marking rubber mallet.



Top Caps must be located as shown along their entire length.

## INSTALLING THE GLAZING PANELS

INSTALLATION GUIDE



Bend and insert the Foam Bung into the void on the Boss End.

Ensure that the last Victorian or Georgian Hip Cappings are mitred into the side of the cloaking Trims and then seal with Silicone. Apply a bead of Silicone around each Glazing Bar Top Capping.

## PREPARING THE RIDGE TOP CAP

INSTALLATION GUIDE

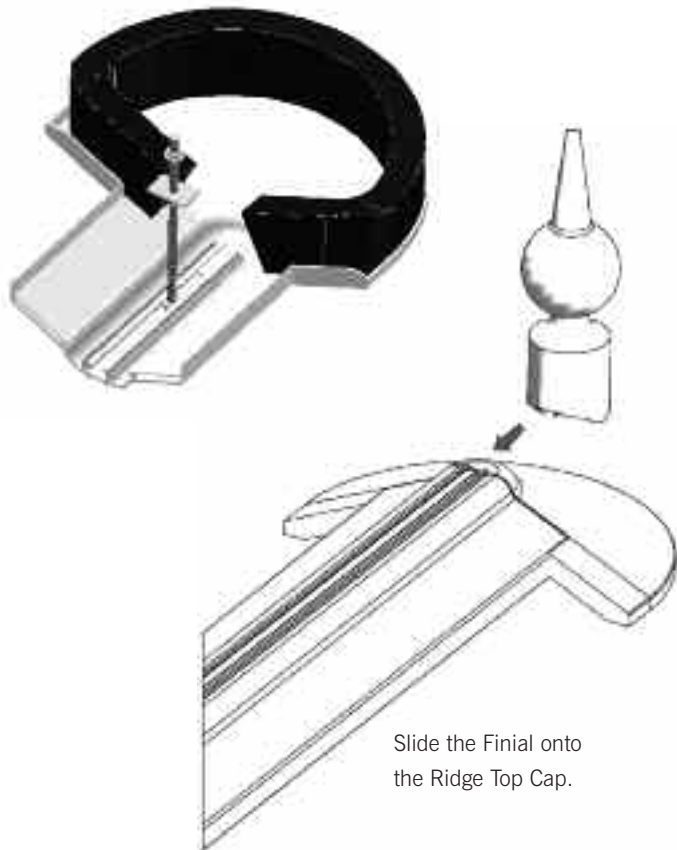
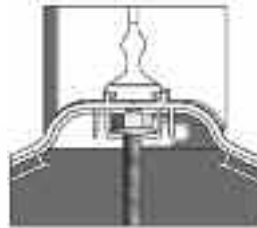
Prior to the Ridge Top Cap and Boss End assembly being fitted, the Boss End Foam Trim must be attached to the underside of the Boss End Cover.

To attach the Foam Trim, the adhesive backing tape must be removed. Press the foam onto the underside of the Boss End Cover starting from the middle and working the Foam Trim around the edge pressing down firmly.

Before the complete assembly is fitted, make sure that the Ridge Holding Down Bolts are fitted in place at centres of no more than 500mm.



Boss End Foam Trim

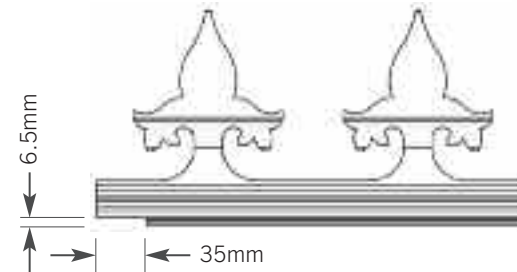


Slide the Finial onto the Ridge Top Cap.

## PREPARING THE RIDGE TOP CAP

INSTALLATION GUIDE

Slide the first Cresting into the channel and up to the Finial. The last section of Cresting will require notching to allow the Flashing Trim to be fitted.



Cut back the last Cresting as shown.

Apply a generous bead of Silicone to the area shown.

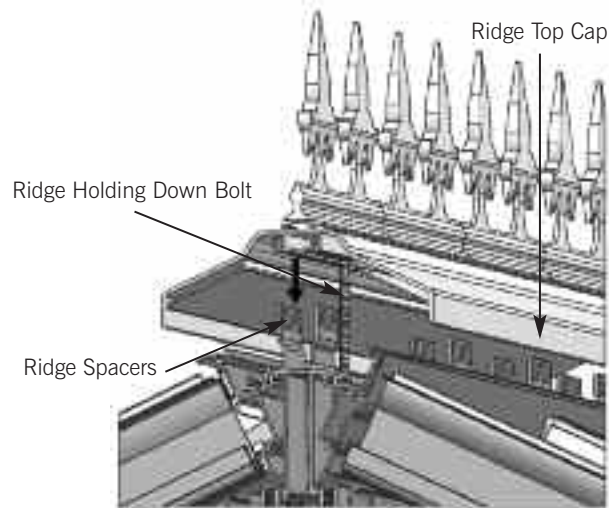


Push fit the Ridge Flashing Trim onto the end of the Ridge Top Capping and Silicone point.

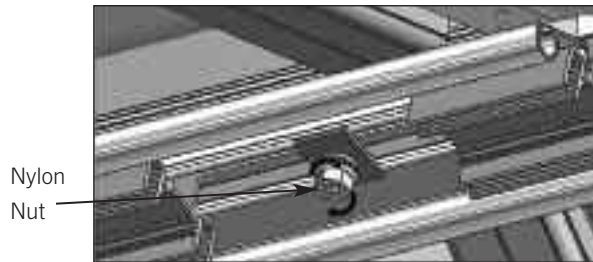
## INSTALLATION OF RIDGE TOP CAP

INSTALLATION GUIDE

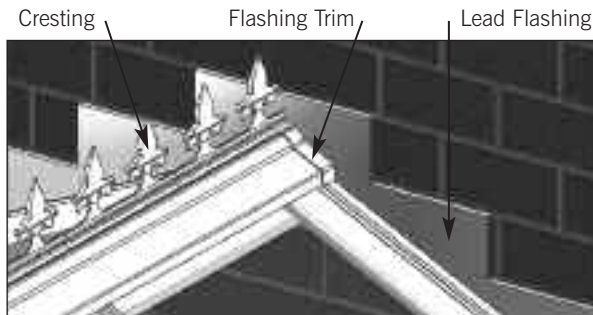
Align the Ridge Top Cap with the Aluminium Ridge Spacers and push into place.



Screw Nuts and square washer onto the Ridge Holding Down Bolts and finger tighten.



Dress Lead over the top of the flashing Trim behind the Cresting.

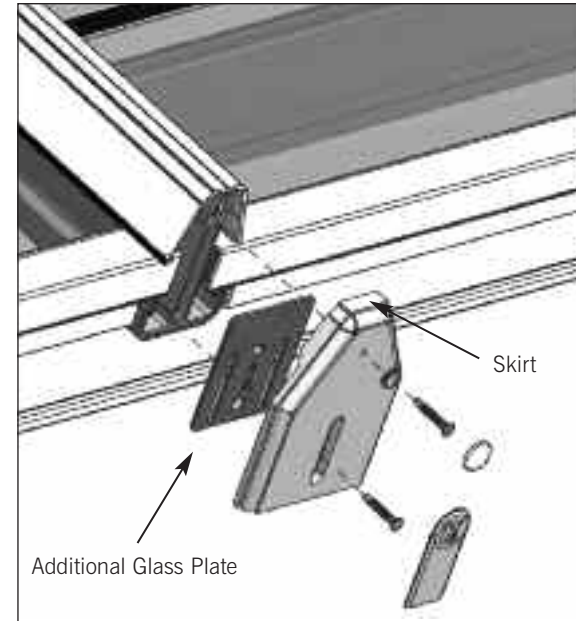


## INSTALLING END CAPS

INSTALLATION GUIDE

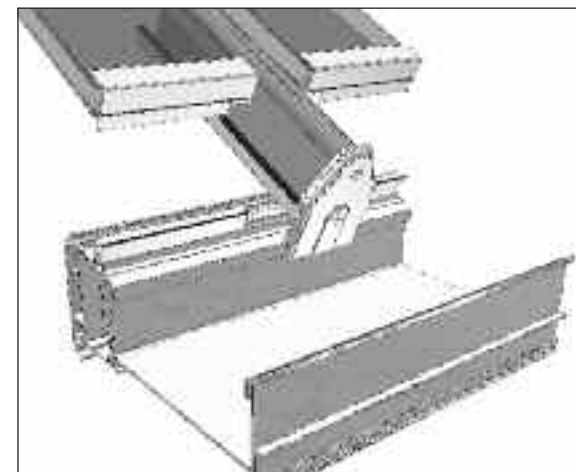
### Glazing Bar End Caps

- Glazing Bar End Caps – KDC9038
- Glass Plate - KDC9039
- M4 x 25mm Screws for End Caps



Special Glazing Bar End Caps without skirt should be fitted to bars entering the Box Gutter. It is highly recommended that these End Caps are fitted prior to the installation of the Glazing Bars

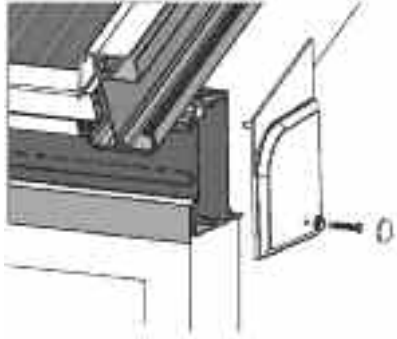
- Glazing Bar End Caps – KDC9063 in Box Gutters



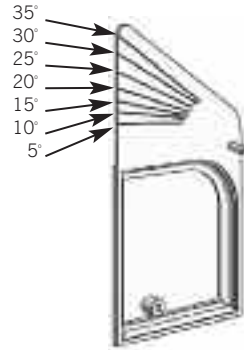
**N.B.** When fitting a Wallbar to the wall, the End Cap will require trimming.

# INSTALLING END CAPS

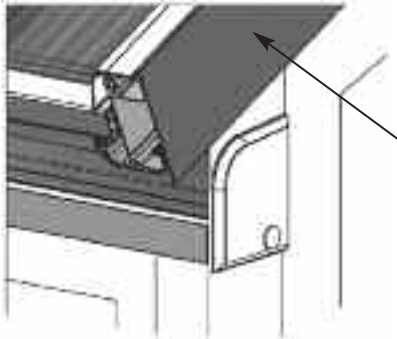
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Trim and attach the Eaves Beam End Cap as shown.

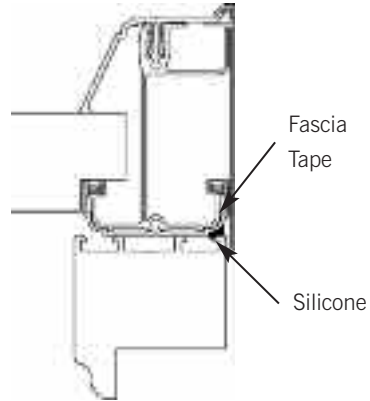


Eaves Beam End Cap



Wallbar  
Fascia Trim

Attach the Wallbar Fascia Trim.



Fascia  
Tape  
  
Silicone

The joint between window frame and Starter Bar should be sealed with a continuous bead of "Low Modulus Neutral Cure Silicone". Fascia Trim Tape must be applied to the Glazing Bar Bottom Cap in the position shown prior to fitting the Fascia trim.

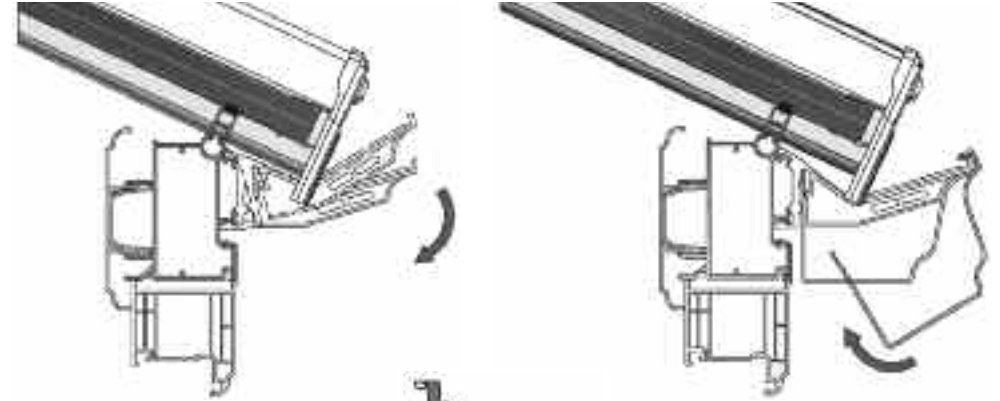


Attach the Half Ridge Wallplate End Caps.



# INSTALLING THE GUTTERS

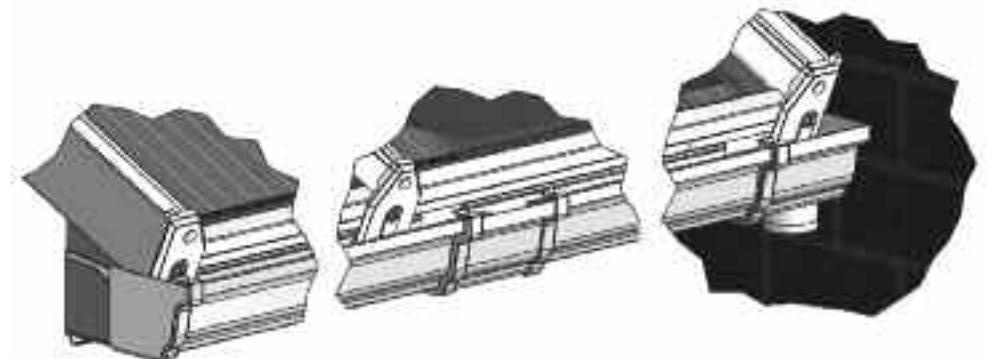
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Fit the gutter brackets as shown, at no more than 600mm centres.



Clip Detail



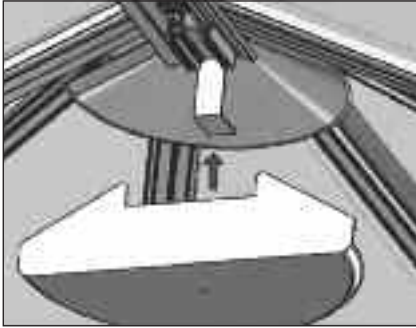
Stop End

Gutter Union

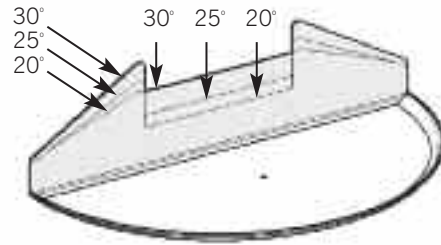
Stop End Outlet

# INSTALLATION OF BOSS END INTERNAL COVER

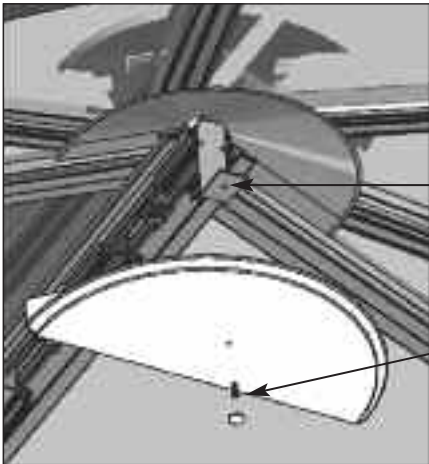
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Offer up the Internal Boss Cover and trim to the correct pitch if necessary.

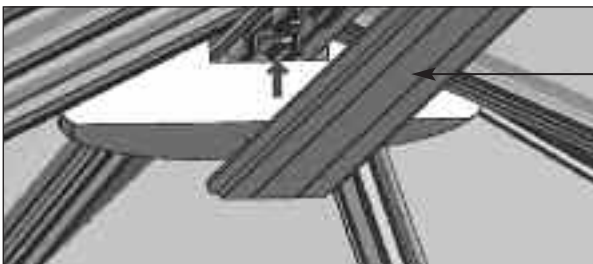


Screw the Internal Boss Cover into the 'L' shape bracket.



'L' Shape Bracket

M4 x 25mm Self Tapping Screw and Cover Cap



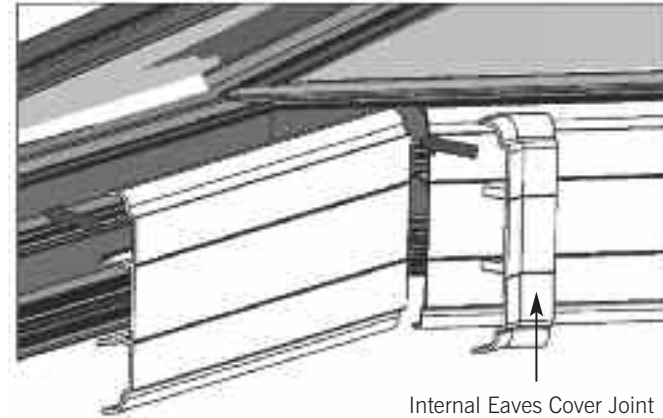
Clip on the Internal Ridge Cover.

Internal Ridge Cover

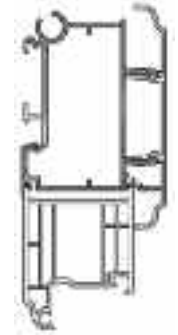


# FITTING INTERNAL EAVES COVERS

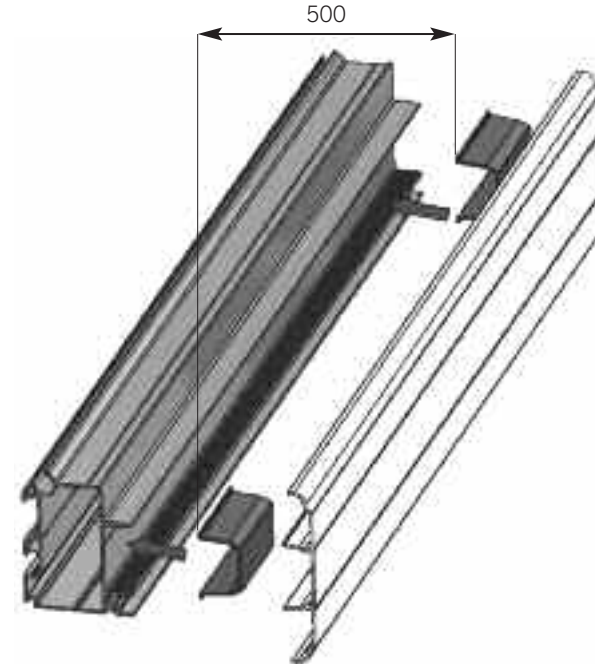
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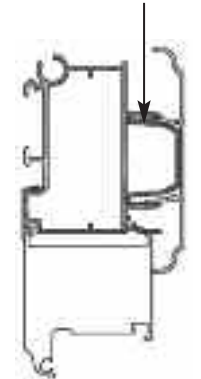
Internal Eaves Cover Joint



60mm Frame



Eaves Beam Packer

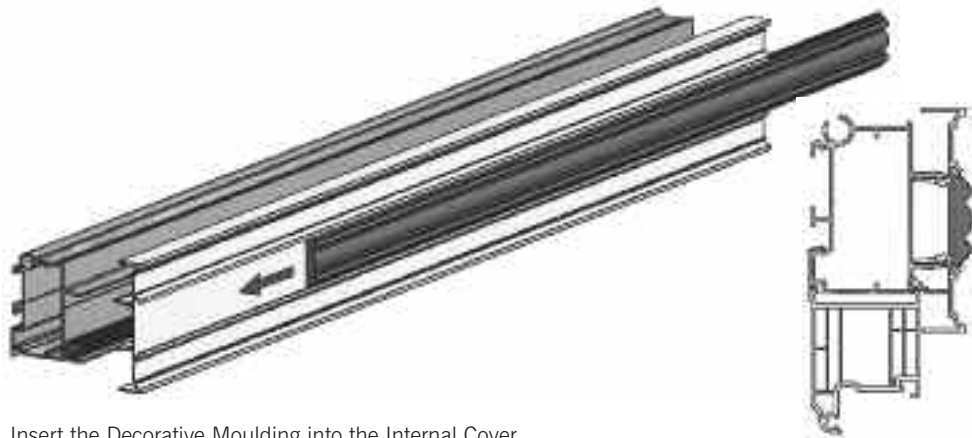


70mm Frame

For 70mm frames the use of an Eaves Beam Packer is required.

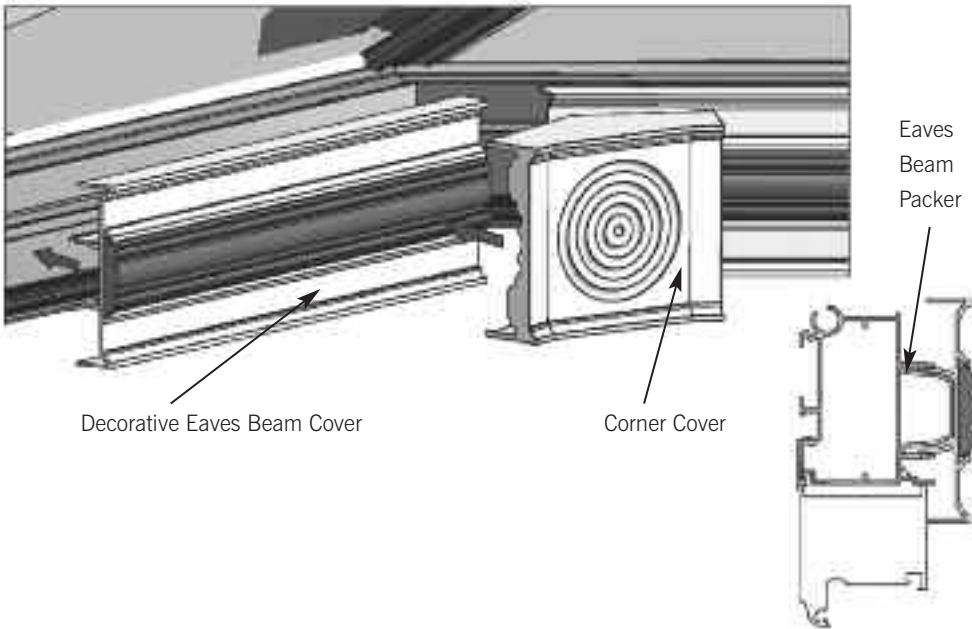
# DECORATIVE EAVES BEAM COVER

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Insert the Decorative Moulding into the Internal Cover as shown above.

60mm Frame



Decorative Eaves Beam Cover

Corner Cover

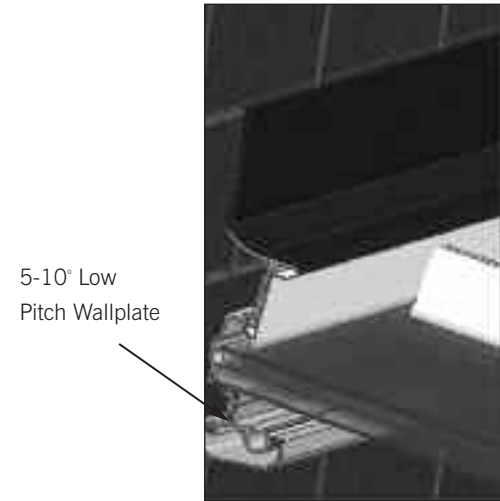
Eaves Beam Packer

70mm Frame



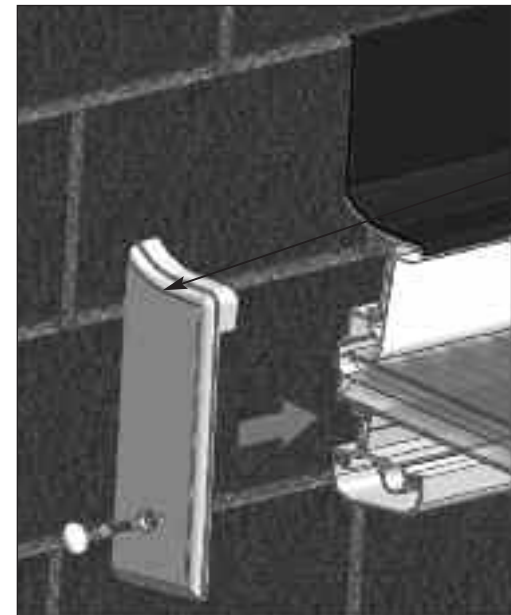
# LOW PITCH WALLPLATE 5-10°

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Lead Flashing

5-10° Low Pitch Wallplate

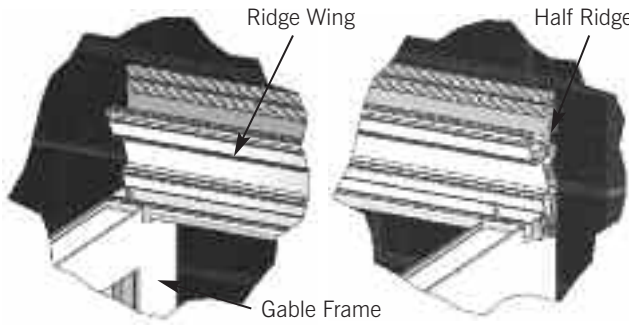


Low Pitch Wallplate End Cap

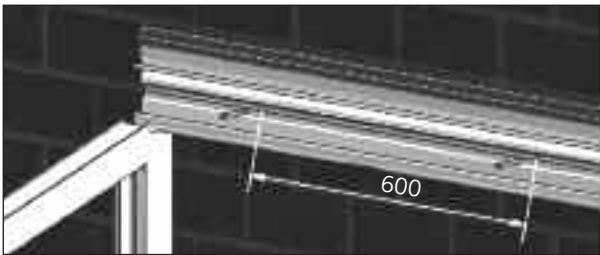
**N.B.**  
When installed, the Lead Flashing will overlap the End Cap.

# INSTALLATION OF HALF RIDGE WALLPLATE

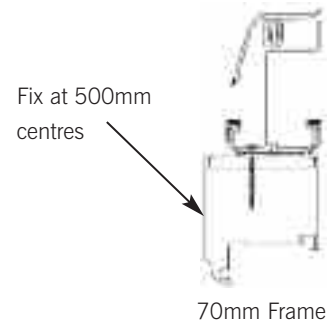
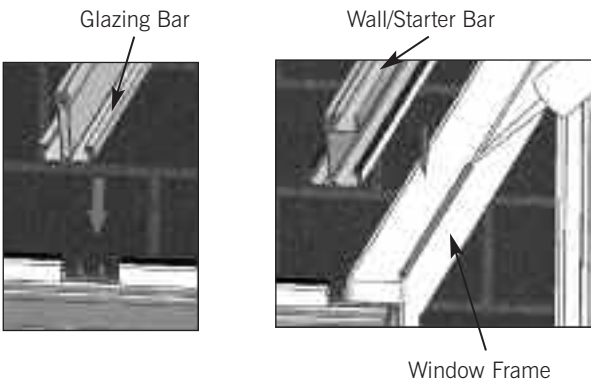
INSTALLATION GUIDE



The Half Ridge Wallplate and Variable Wing should be offered up to the house wall ensuring that the aluminium is flush with the outside face of the Gable Frames. The Gable Frames should be notched as shown.



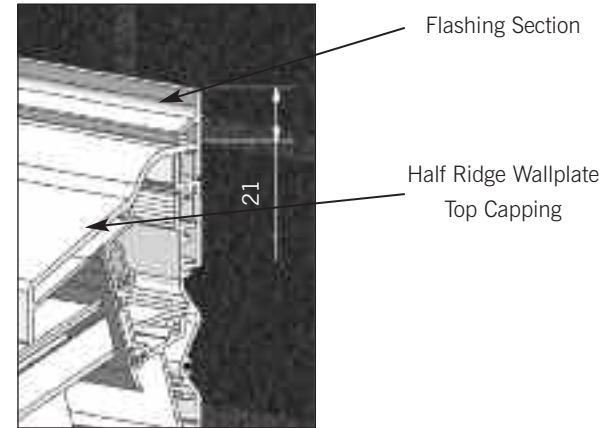
Remove the Variable Wing and secure the Half Ridge Wallplate to the wall using suitable fixings at 600mm centres.



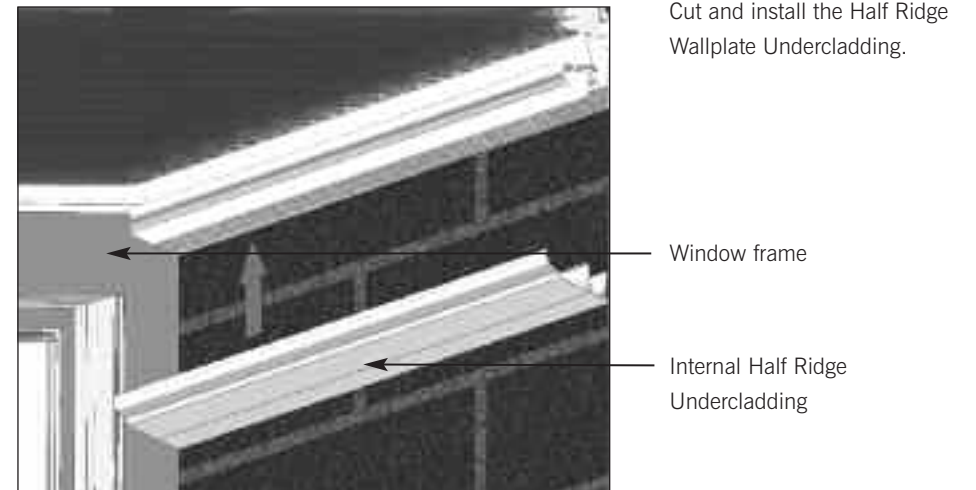
Replace the Variable Wing and install the Glazing Bars and Wall/Starter Bars. Prior to attaching the Wall/Starter Bars, apply a continuous bead of Silicone sealant to the top of the window frames/ Firrings (as shown). Place the Wall/Starter Bar onto the Firrings ensuring the outside edge of the Wall/Starter Bar is 2mm proud of the window frames or 4.5mm proud of the K2 Firrings. Fix the Wall/Starter Bar to the window frame/Firring at 500mm centres.

# INSTALLATION OF HALF RIDGE WALLPLATE

INSTALLATION GUIDE



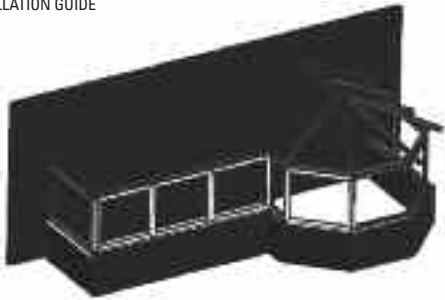
Prior to attaching the Half Ridge Top Capping and Flashing section, chase out the wall for Lead Flashing. Install the Glazing Panels and Top Cappings (see section 2 'Installing Glazing Panels').



Cut and install the Half Ridge Wallplate Undercladding.

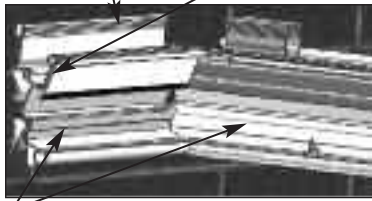
# VALLEY INSTALLATION

INSTALLATION GUIDE

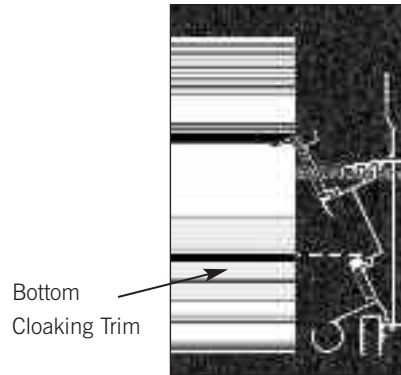


When assembling a 'P' shaped roof, assemble as much of the Victorian/ Georgian as possible, levelling the main Ridge and tightening the Glazing Bars.

Half Ridge Wallplate Variable Wing



Bottom Cloaking Trim

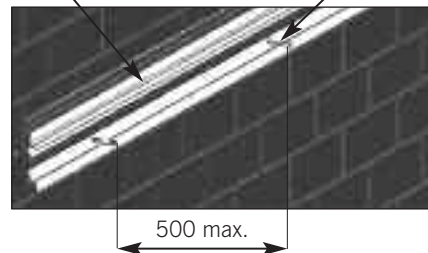


Bottom Cloaking Trim

Offer up the Half Ridge Wallplate (including the Ridge Wing) to the house wall and position to the side of the main Ridge. It is important to ensure that the top of both Bottom Cloaking Trims (main Ridge and Variable Wing) are level to each other.



Wallplate Half Ridge Anchor fixings



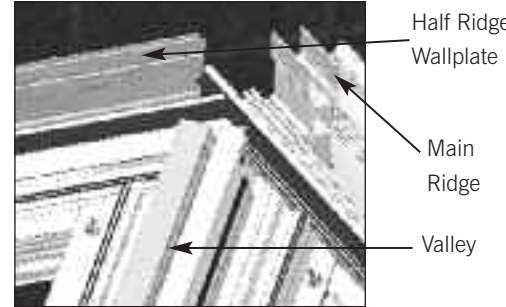
500 max.

This is usually completed by locating several Glazing Bars on to the Lean-to section (do not tighten Glazing Bars at this time). Mark the position of the Wallplate on the wall, remove the Glazing Bars and Ridge Wing and fix the Wallplate to the house wall using suitable Anchor fixings.



# VALLEY INSTALLATION

INSTALLATION GUIDE



Half Ridge Wallplate Main Ridge Valley

Offer the Valley up to the roof and bolt to the main Ridge and Wallplate



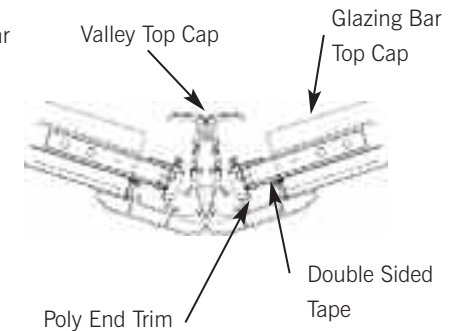
Eaves Closure Tape

Bolt the Valley to the Eaves Beam ensuring Eaves Closure Tape is adhered to both Valley Wings.



Valley Glazing Bar

Valley Glazing Bars should now be bolted into position. Prior to glazing, peel back a small piece of protective tape as shown.



Valley Top Cap

Glazing Bar Top Cap

Poly End Trim

Double Sided Tape



Flashing Trim

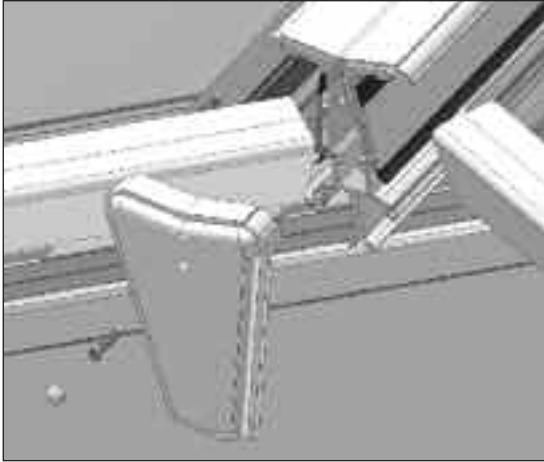
Welded Half Ridge/Ridge Top Capping

Cut the Valley Top Capping to length. Note the Valley Top Capping will require scribing into the joint between the Ridge Top Cap and the Half Ridge Top Cap. The Flashing Trim will also need trimming as shown.

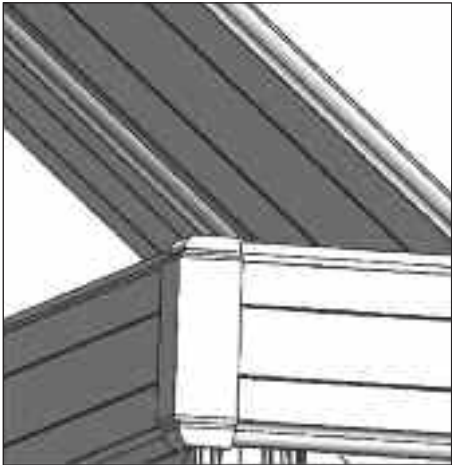


## VALLEY INSTALLATION

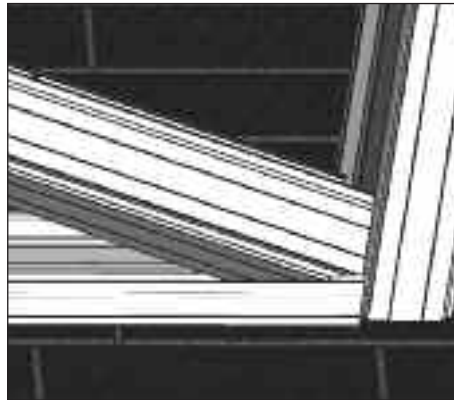
INSTALLATION GUIDE



Fit the Valley End Cap.



Mitre the Valley Undercladdings into the Eaves Beam.

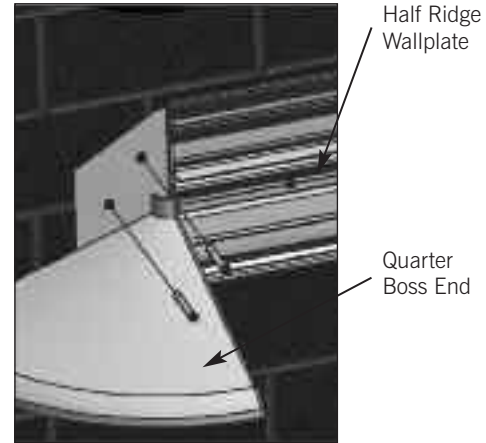


Scribe the Valley Undercladdings into the Half Ridge Wallplate and Ridge Undercladdings.

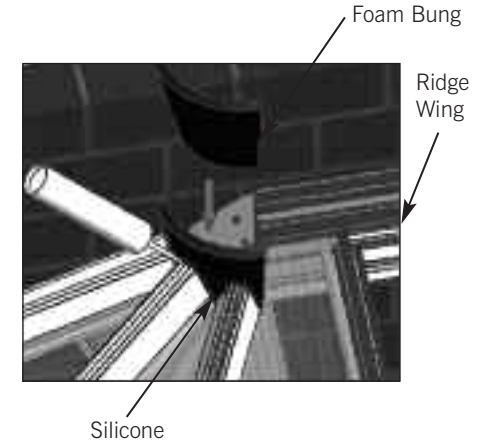


## QUARTER BOSS

INSTALLATION GUIDE

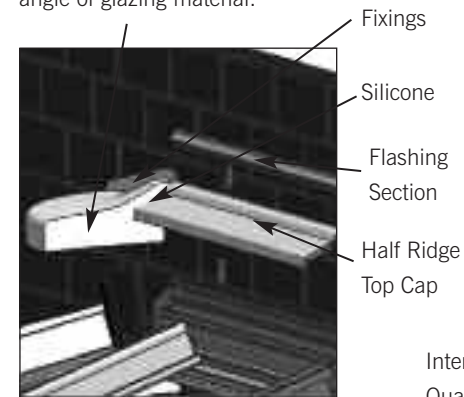


Fix the Half Ridge Wallplate and Aluminium Quarter Boss End to the house wall using suitable fixings.

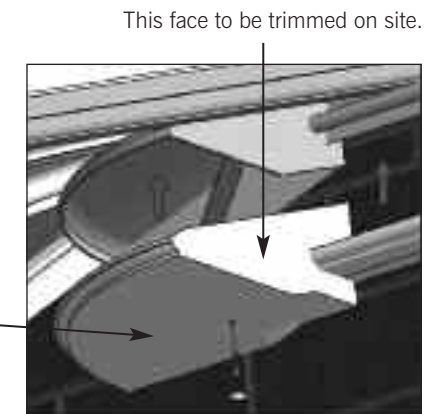


Install the Ridge Wing, Transoms, Wallbars and glazing (see previous section). Seal the Top Caps and glazing to the Foam Bung using Silicone sealant.

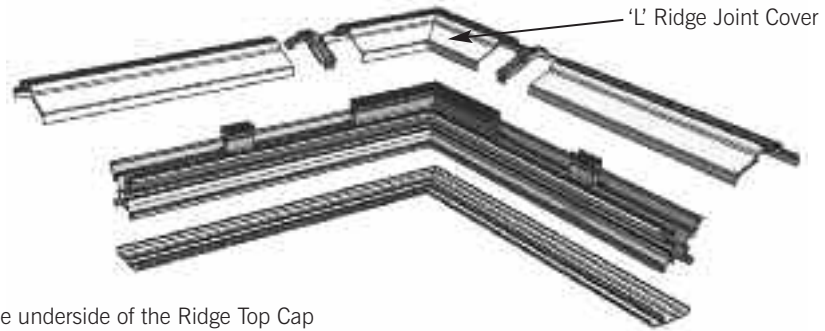
External Quarter Boss Cover. This face to be trimmed to suit angle of Wallplate and angle of glazing material.



Install the External Quarter Boss Cover. Fix the Boss Cover through the upstand using suitable Fixings. Seal Cover against Half Ridge Top Cap.

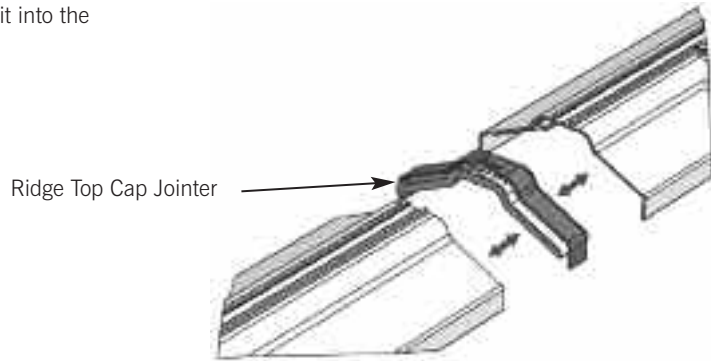


Install the Internal Quarter Boss End and Wallplate Undercladding as shown.

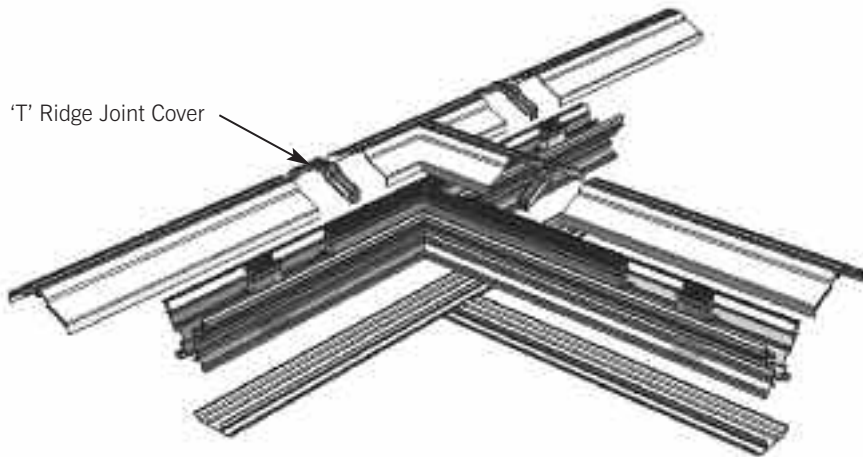


'L' Ridge Joint Cover

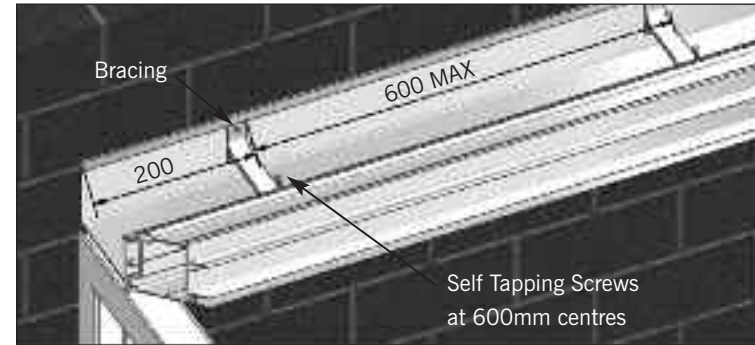
Trim the underside of the Ridge Top Cap back by 20mm and push fit into the Jointer as shown.



Ridge Top Cap Jointer



'T' Ridge Joint Cover



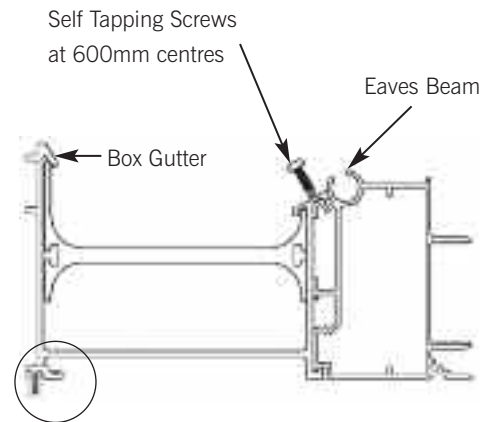
Bracing

600 MAX

200

Self Tapping Screws  
at 600mm centres

Ensure the Braces are positioned at maximum centres of 600mm.



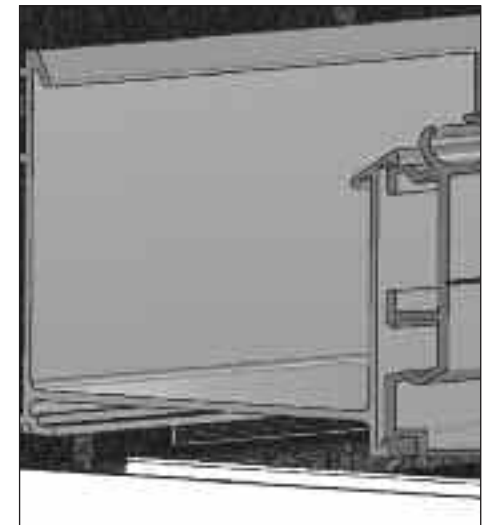
Self Tapping Screws  
at 600mm centres

Eaves Beam

Box Gutter



Remove the nib (locally) to allow the Box Gutter to sit flush on top of the window frames.



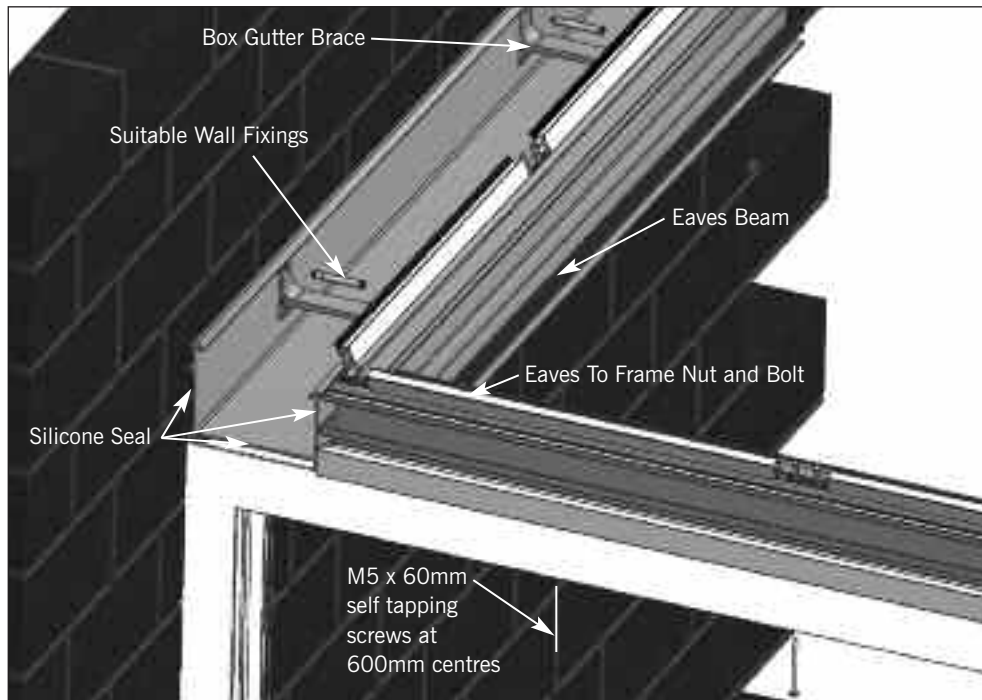
## BOX GUTTER INSTALLATION

INSTALLATION GUIDE

The Box Gutter should sit flush with the end of the window frames and be bedded on to two beads of Silicone (as the Eaves Beam).

Ensure the Box Gutter is level and fix through the Braces (at 600mm) into the house wall.

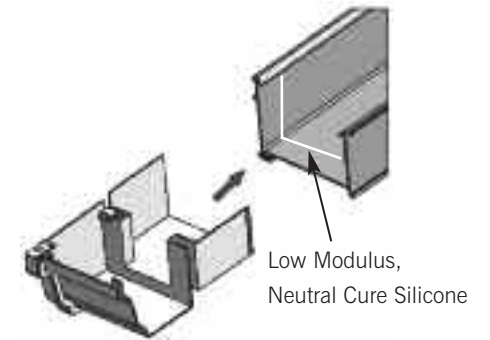
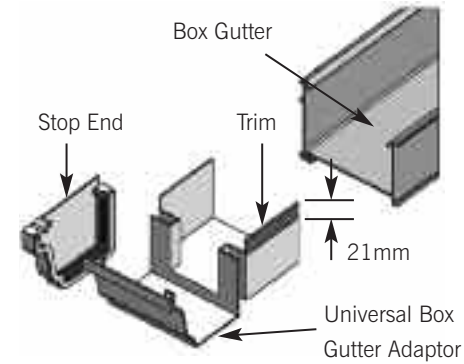
Eaves Beams should now be joined using Connectors (see page 6), then bolted and screwed to the window frames beneath.



Always ensure that the gaps between the Box Gutter and Eaves Beam and between the Box Gutter and window frame are fully sealed prior to fitting the Box Gutter Adaptor. Similarly, the Box Gutter should be sealed to the wall using "Low Modulus Neutral Cure Silicone".

## BOX GUTTER ADAPTOR INSTALLATION

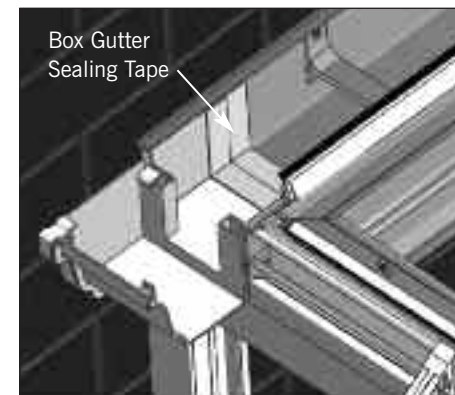
INSTALLATION GUIDE



Ensure both the Box Gutter and Adaptor fit. If necessary, Trim the Adaptor as shown. Attach the Stop End.

Thoroughly clean the inside of the Box Gutter at the position of the Adaptor.

Apply a continuous bead of Silicone to the sides and bottom face of the Box Gutter and insert the Adaptor. Ensure all excess Silicone has been removed and once again clean the aluminium with wire wool, ensuring the surface is clean and dry.

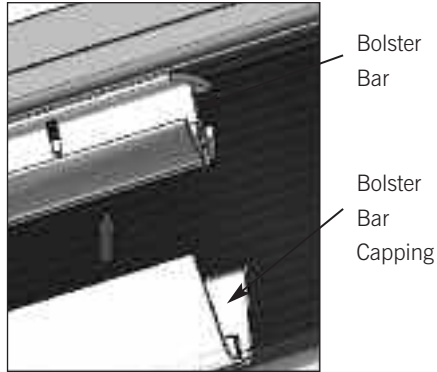
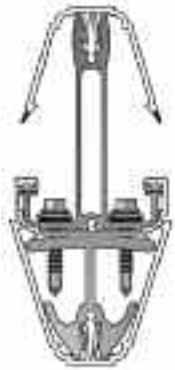


Using a heat gun, warm the aluminium to remove any moisture that may prevent good adhesion.

Remove the backing of the special Sealing Tape. Position the Tape centrally over the joint, pressing firmly across the Adaptor and Box Gutter. Ensure no air pockets are present, working well into the corners and sides using a roller or blunt tool.

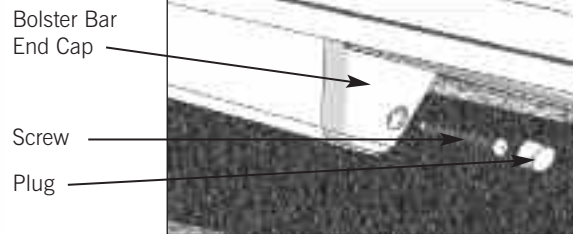
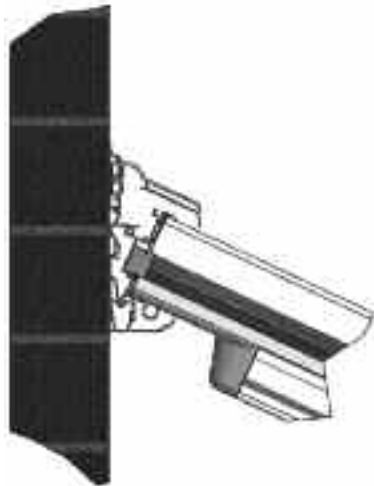
## BOLSTER BAR INSTALLATION

INSTALLATION GUIDE

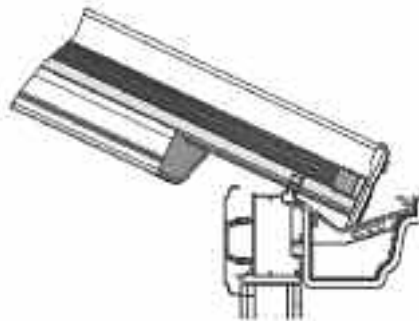


The Bolster Bar is suitable for Heavy Duty Transoms and Victorian and Georgian Hips.

Fit the Bolster Bar Cover and End Cap as shown prior to installing the Glazing Bar.



Secure the Bolster Bar End Caps using the Screw and Plug (supplied).



**N.B.** The Bolster Bar Covers will require notching at the position of Jack Rafters.

## MUNTIN BARS

INSTALLATION GUIDE



It is the responsibility of the installer to ensure that the correct/compatible sealant is used for this application.

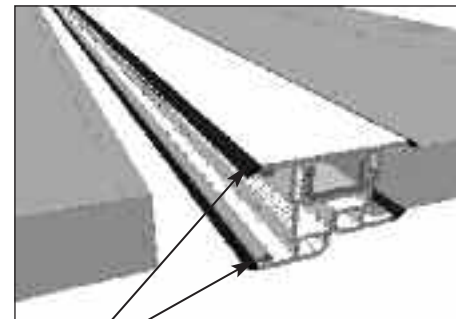
Muntin Bars should be cut the same width as the glazing sheet

Muntin Bar Beads are always installed on the inside of the conservatory

Prior to installation, always ensure that the Muntin Bar will completely cover the tape on the glazing panel. If necessary cut back the tape, but take care not to expose the hot melt seal on glass units.

### Installation Procedure

1. Locate the top glazing panel into the Ridge or Wallplate and centralise.
2. Apply a continuous bead of a compatible sealant to the Muntin Bar and Beads in the position shown.
3. Position the Muntin and bead onto the glazing panel and clamp the assembly together.
4. Clean off any excess sealant.
5. Partially clip the remaining Bead into position.
6. Fully locate the lower glazing panel into the recess created by the installed Muntin Bar and Bead.
7. Whilst supporting the Muntin from above, tap the Bead into position.



Silicone