

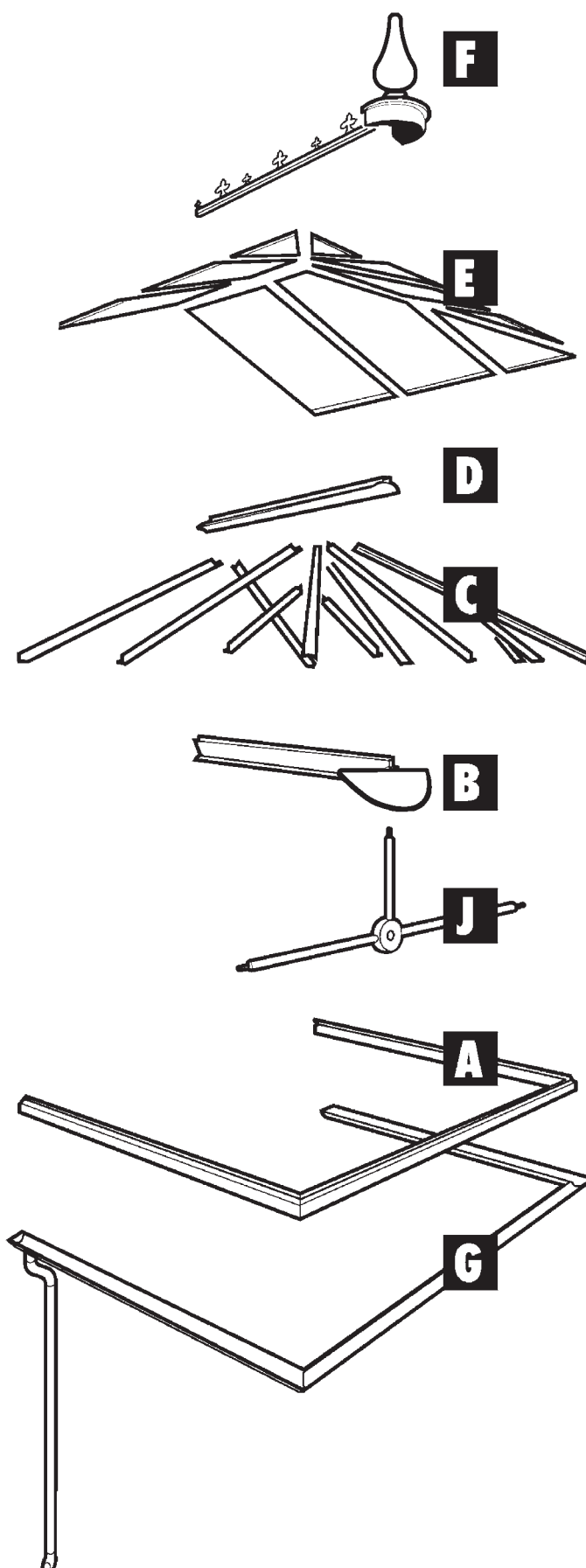


Installation Guide



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BEFORE YOU START



The following installation guide has been created to assist in constructing a ZOOM conservatory roof. Please note however, each roof has been individually designed to meet specific criteria and to suit the shape and dimensions specified.

Section 1 of this guide gives a step-by-step approach detailing the construction of a Victorian/Edwardian style roof, but when used in conjunction with the subsequent sections, it can also be used as a guide to construct most simple conservatory roof styles.

The roof will be supplied in kit form, consisting of a number of packages and boxes. You will also be supplied with a roof layout plan and a copy of this guide.

Roof layout plan

Please ensure you refer to the roof layout plan before beginning the construction of your ZOOM roof as it provides essential information regarding size and positioning. It is also important to check the roof fits the window frame layout and that all the components are present. To assist with the construction, each component is numbered to correspond with its position on the roof plan.

Care of products

When storing, handling or erecting your Zoom roof, please keep the following in mind:

- When unwrapping, take care not to damage products with a knife
- PVC-U components should not be left out in freezing conditions
- Do not leave brown foiled components in their wrapping in direct heat or sunlight
- Store polycarbonate roof panels in a dry safe area

Sealing

At important roofing junctions, it is vitally important that you use a low modulus, neutral cure sealant to ensure a water tight joint.

Tools required

The following tools are required to install the ZOOM roof:-

- 10mm socket and ratchet
- White rubber headed mallet
- Silicon gun
- 13mm open ended spanner
- Spirit level
- Stanley knife
- Roofing square
- Tape measure
- Power drill with HSS and masonry bits
- Hack saw
- Cordless screw driver with Pozi bits

contents



Assembly of a Victorian or Edwardian roof



Assembly of a Lean-To roof



Valley assembly



Box gutter assembly



Gable front assembly



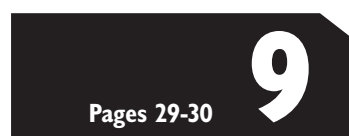
Assembly of hips on a Lean-To roof



Glazing a glass roof



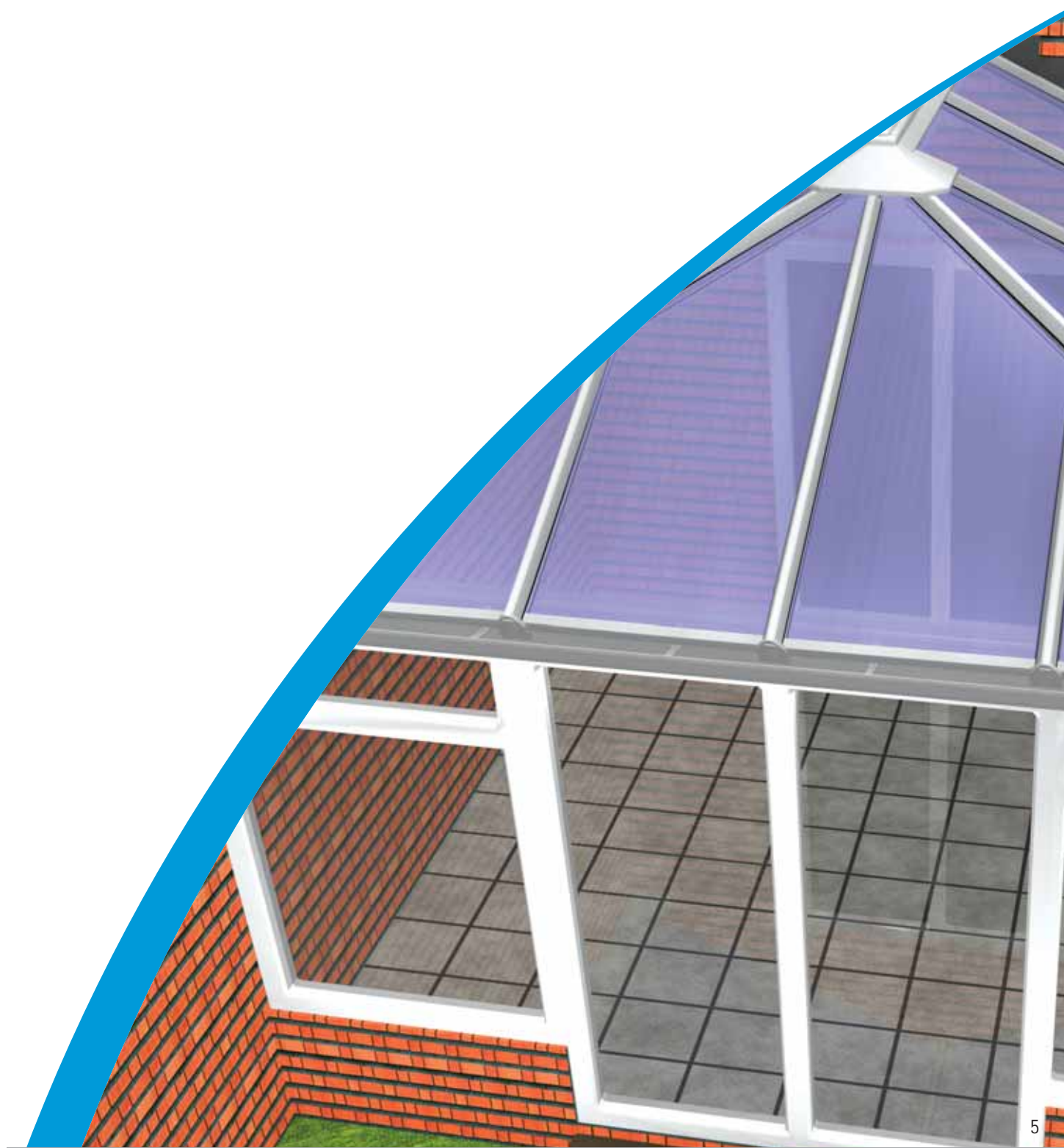
Fitting tie bars



Guttering installation

ASSEMBLY OF A VICTORIAN OR EDWARDIAN ROOF

1



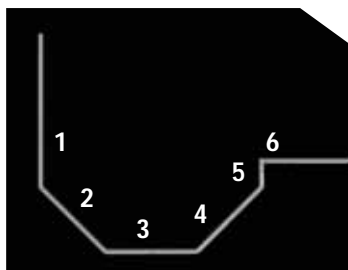
I • I Eaves Beam



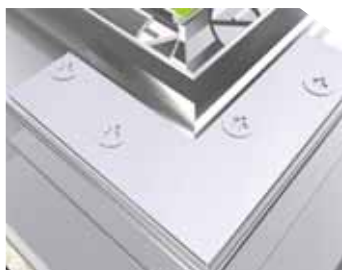
After ensuring the frames are square and level, run a line of low modulus silicone along the external rebate in the frame.



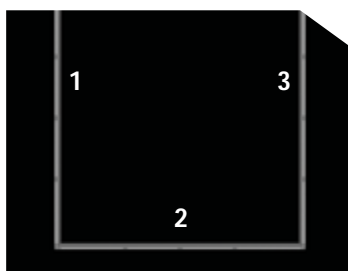
Seal the profile end of the eaves beams using low modulus silicone prior to fitting the next section.



The eaves beams will be marked numerically from the left hand side or from the back of the roof, example:



Connect the eaves beams together at the joints using the eaves beam cleats provided.



Ensure glazing bar bolts are located into the eaves beam pivot.

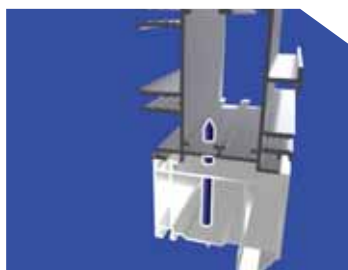
I • 2 Ridge & Glazing Bars



Obtain and fit Eaves Beams in order, ensuring the inside edge of each aligns with the inside edge of the Window Frames.



Raise and support the ridge assembly with props.



Fix eaves beam to the frames from the inside of the windows using 5.0mm diameter screws at 150mm from the corners and a maximum of 500mm from the centres.



Remove protective film from the bottom caps. Fit sufficient glazing bars to support the ridge.

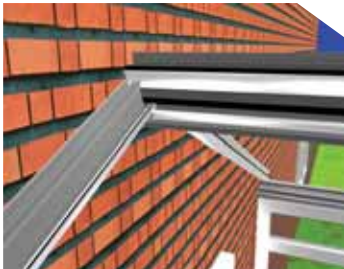


Loosely fix the nuts at each end of the glazing bars.

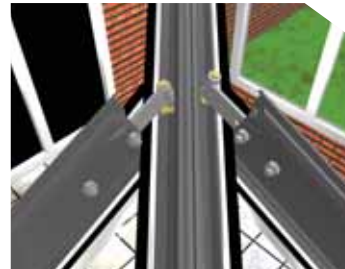


The jack rafter pivot bar should be loosened to facilitate movement, but do not fully unscrew.

Position the pivot bolt and turn through 90 degrees to provide retention.



Fix the wall end bars to the eaves beam and ridge, ensuring the ridge is plumb.



Align the jack rafter with the hip bar, ensuring the correct position is obtained on the glazing bar at 90° to the eaves beam.



Loosely fit the remaining glazing bars to the ridge and eaves beam, the bars are numbered as per the layout plan, ensure glazing bar centres are maintained on both ridge and eaves beam.



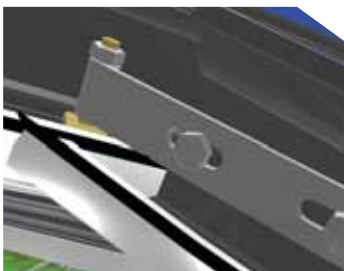
Aligning the jack rafter on the hip can be achieved by correcting the bar spacing at the eaves beam.



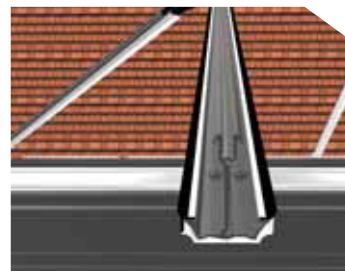
Align the hip bars and any spider bars to the centre line of the D ring (M10 threaded hole denotes the centre line).



Fully tighten the jack rafter arm and the pivot bolt nut.



Any jack rafters on the roof should be fitted at this stage.



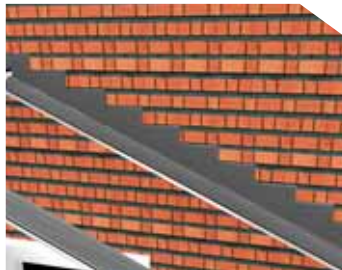
Fully tighten nut on the jack rafter to the eaves beam.

I•2 Ridge & Glazing Bars [cont.]



Fix the wall end bar to the host wall using propriety fixings.

Tighten all the glazing bars starting from the back left hand side.



Fit lead into the slots and flashing channel in the wall end bars.



Cut slots into the brickwork to receive the lead flashing above the wall end bars.

At this point the lead flashing should be dressed on the wall end bars and the flashing preparation completed for the ridge top cap.

I•3 Lead Flashing

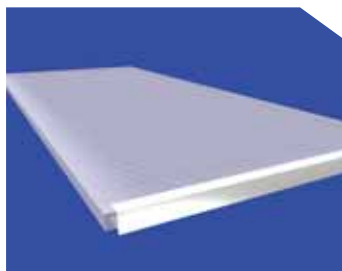


Cut a slot into the brickwork to receive lead flashing above the ridge, using the ridge flashing trim as a guide to the height of this slot.

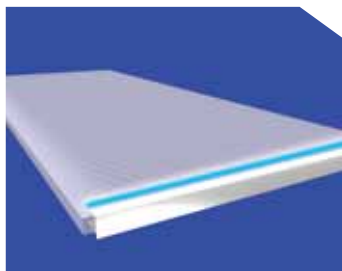


Run a continuous bead of silicone between the wall and the wall end bars.

I•4 Glazing



If using polycarbonate panels peel protective tape away from the edge, apply a bead of silicone on the top inside edge of the glazing end trim.



Push the glazing end trim onto the glazing panel finally applying a bead of silicone along the outer edge join.



The glazing panels supported by the hip bars should be glazed first, thus enabling the sealing of the radius end without climbing on the roof. Jack rafter top caps should be sealed to the hip bars at this point using low modulus silicone.

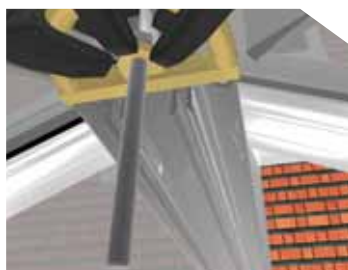
Prior to completing the remaining glazing panels the radius should be sealed.



Insert foam weather seal over the D ring junction.



Apply a bead of silicone around the outer edge of the foam weather seal following the profile contours.



Screw the M10 stud into the D ring from the under side to allow fitment of the internal D cover at a later stage.



Apply a bead of silicone between the ridge cover and the ridge flashing trim. Slide the ridge flashing trim into the ridge cover. Locate the ridge cover onto the ridge by tapping down with a rubber mallet.



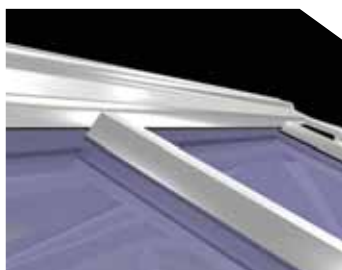
Slide the cresting along the ridge cover channel from the D ring end of the ridge. Finally slide into place the finial.



Complete lead flashing over the ridge flashing trim prior to glazing the wall end panels.

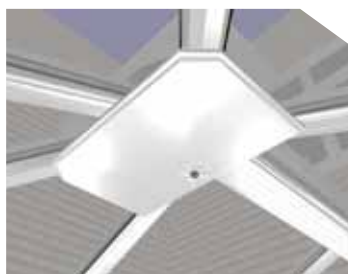


Glaze the remaining panels starting with the panels adjacent to the wall end bars. Remove the protective tape and ensure the panels are fully inserted into the ridge and onto the double sided tape of the weather strip.



Fit the glazing bar top caps, and ensure the caps are butted up to the ridge.

I•5 Internal Trims



Fit the ridge bottom cladding and internal radius end cover. The internal boss end cover fits to the bottom of the M10 threaded stud situated in the D ring. The nut holding the internal boss end cover should be concealed using the nut cover supplied.



Fit the internal eaves beam covers to the eaves beam.



Fit the eaves beam cover cloak trims to the corners, gluing in place.

I•6 Glazing Bar End Caps



Fit the glazing bar end caps using the self tapping screws provided, pull down and tighten.



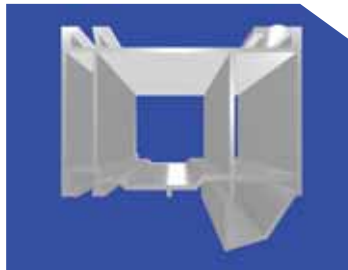
Fit the logo plates to the glazing bar end cap once the final position of the glazing bar end cap has been achieved.

ASSEMBLY OF A LEAN-TO ROOF

2



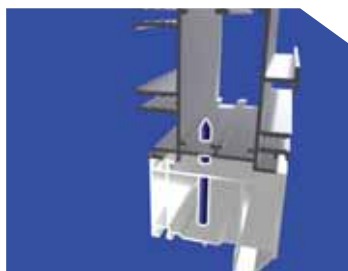
2.1 Eaves Beam



After ensuring the frames are square and level run a line of low modulus silicone along the external rebate in the frame.



Obtain and fit the eaves beams in order, ensuring the outside edge aligns with the outside edge of the frames.



Fix the eaves beam to the frames from the inside of the windows using 5.0mm diameter screws, at 150mm from the corners and a maximum of 500mm from the centres.



Seal the end of the eaves beam using low modulus silicone prior to fitting the next section.

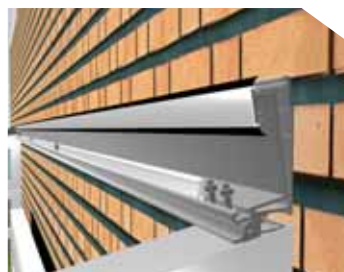


If required connect the eaves beams together at the joints using the eaves beam cleats provided.

2.2 Wall Plate and Glazing Bars



Fix the wall plate to the wall at 500mm centres with propriety fixings at the height shown on the roof plan.



Fit the wall plate wing into the wall plate body.

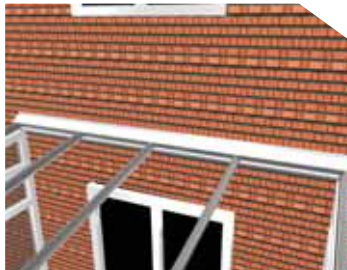


Fix the wall end bars to the wall plate and the eaves beam, and fix to the wall/angle frame if required.



Fit the remaining glazing bars to the wall plate and eaves beam - the bars are numbered as per the layout plan.

2.3 Lead Flashing



At this point the lead flashing should be completed on the wall plate and if required on the wall end bars.



Fix the wall plate external half ridge cover.



Cut a slot into the brickwork above the wall plate and end bars to receive the lead flashing.

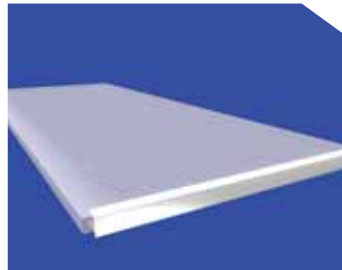


Apply a continuous bead of Silicone between the wall and the wall plate external half ridge cover and the end bar.
Fit the lead flashing into the cut out of the brickwork and fold over wall plate external half ridge cover.



Fit the lead flashing into the cut out slots of the brickwork and fold into the flashing channel of the wall end bar.

2.4 Glazing



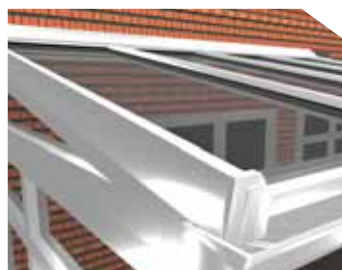
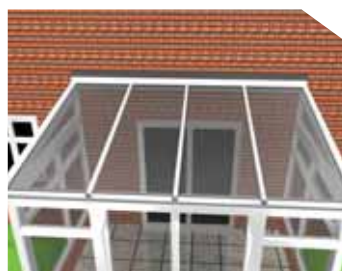
If using polycarbonate panels peel protective tape away from the edge, apply a bead of silicone on the top inside edge of the Glazing End Trim.



Glaze the panels starting with the panels adjacent to the wall end bars. Ensure the panels are fully inserted into the wall plate and onto the weather strip double sided tape.



Fit the glazing bar top caps, as numbered on the roof plan.



Fit the wall end bar cloaking trim, the eaves beam and the wall plate end caps (if required).

2.5 Internal Trims



Fit the internal eave beam covers to the ring beam.



Fit the glazing bar end caps using the self tapping screws provided, pull down and tighten.

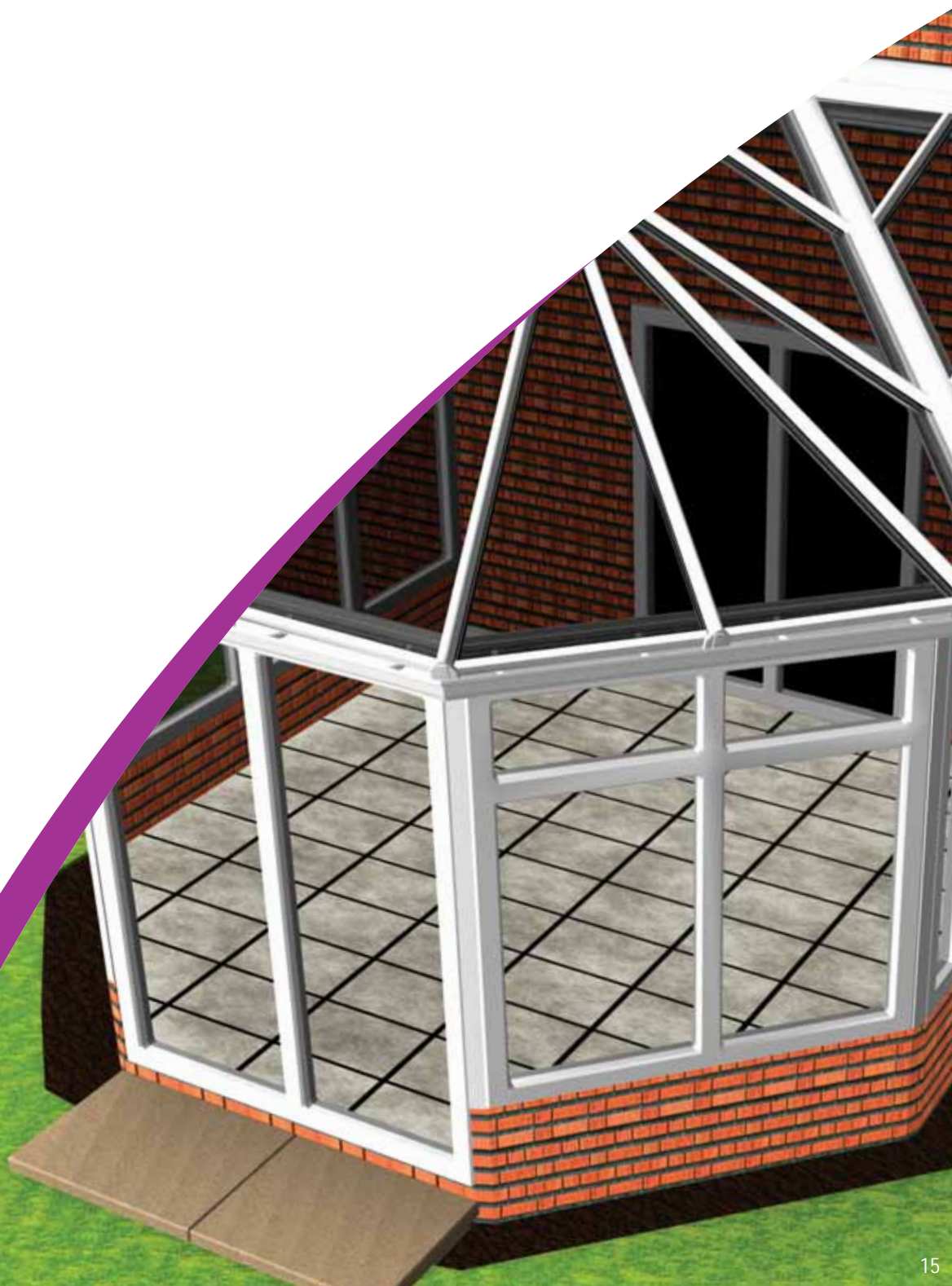
2.6 Glazing Bar End Caps



Fit the logo plates to the glazing bar end cap once the final position of the glazing bar end cap has been achieved.

VALLEY ASSEMBLY

3



3.1 Fitting the Aluminium Valley Sections



On roofs with valleys, the valley should be fitted after the ridge and wallplate have been fitted and supported. This is before all the glazing bars are fitted.



Prior to fitting the aluminium valley sections it is necessary to seal along the eaves pivot where the valley sits using a low modulus silicon.



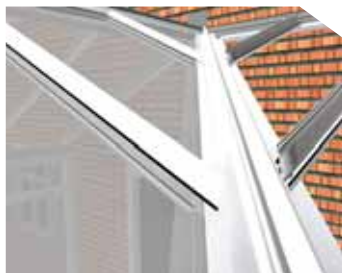
The valley assembly should now be aligned at the ridge, wall plate and eaves beam with the fixing bolts. Secure the valley wings using M6 nuts.



Start locating the glazing bars between the ridge and valley again using the M6 bolts provided.

When all of the bars are located check bar spacing are correct and secure using M6 nut provided.

3.2 Glazing Valley Panels



Glaze the first panel either side of the valley at the ridge wall plate intersection. Silicone seal the void at this intersection, continue glazing either side of the valley.



Prior to fitting the glazing bar top caps the glazing trim should be fitted to each valley wing. (the picture shows the section with no glazing for clarity) Apply a bead of silicone on the top inside edge of the glazing trim and push into place.

3.3 External Top Cap



Fit top caps to all of the glazing bars attached to the valley.



The external valley top cap can now be fitted along the valley section. Finally fit the valley end cap using the screws and cover caps provided.

BOX GUTTERS

4



4.1 Fitting the Aluminium Box Gutter Section

The box gutter section will be supplied connected to the eaves beam.
If joining is required this should be completed before the box gutter is installed.



The box gutter wall bracket should be positioned at the host wall with the lower edge sitting 2mm below the window frame height. Ensure the wall bracket is sufficiently packed off the wall to maintain straightness.



Fix the wall bracket at maximum 600mm centres with propriety fixings. The box gutter and eaves beam can then be hooked onto the wall bracket and secured above the lip of the box gutter with self tapping screws.



Cut a slot in the brickwork above the box gutter to receive the lead flashing. Apply a bead of silicone along the upper edge of the wall bracket and the host wall.

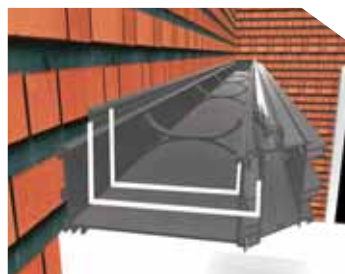


Fit the lead flashing into the slot of the brickwork and fold into the box gutter.

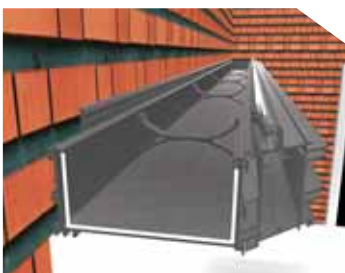
Connect adjoining eaves beams as described in section 1.1

4.2 Box Gutter Adaptors

The box gutter connectors should be fitted whilst the box gutter is dry.



Apply two lines of box gutter sealant on all three surfaces of the box gutter and then slide the connector fully into place.

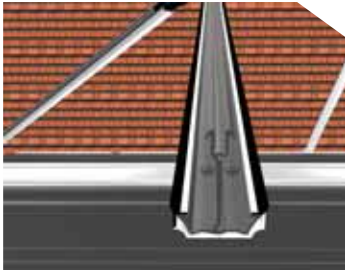


Apply sealant at the joint between the box gutter and the connector. Allow for sealant to set prior to attaching the remaining gutter.

4.3 Glazing Bars & Glazing



When fitting the glazing bars onto the eaves beam that are connected to the box gutter, it is recommended that the end caps are fitted to the bars prior to fixing to the eaves beam.



All other glazing bar fitting and glazing processes are the same as fitting a standard roof.

4.4 Internal Trims

The box gutter is clad using the internal eaves beam cover, the universal gutter trim and the box gutter under cladding.

The box gutter utilises the eaves cover, eaves trim and the box gutter under cladding



Firstly clip into place the eaves trim to the underside of the box gutter nearest to wall.

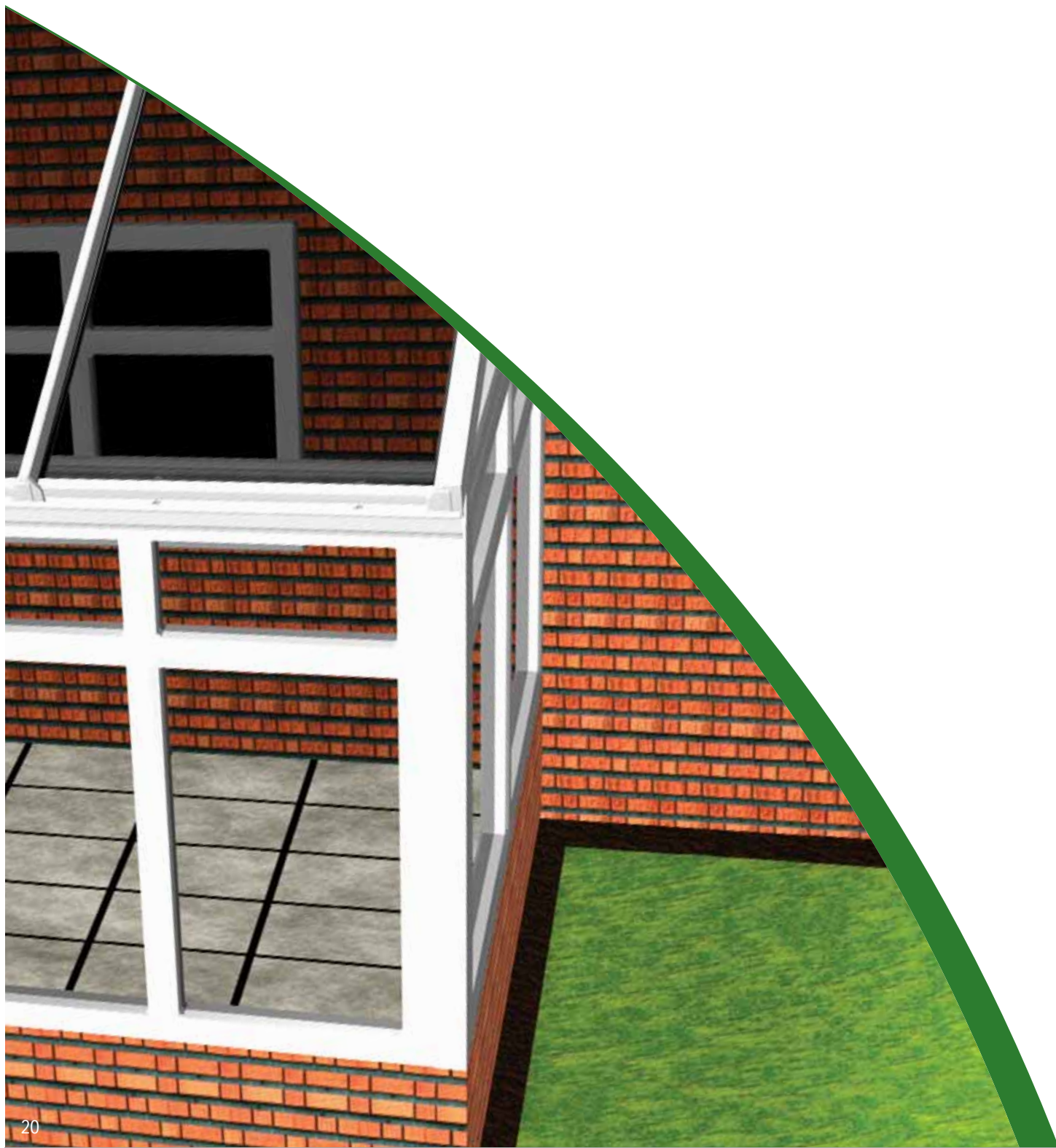


Slide the box gutter under cladding between the eaves trim and the box gutter.



Finally clip the eaves cover into the eaves section ensuring the box gutter under cladding is retained.

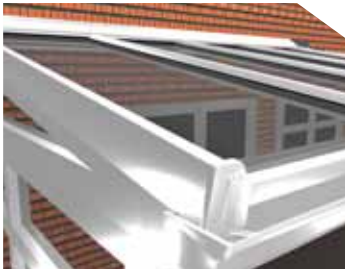
5 GABLE FRONT ASSEMBLY



5.1 Fitting the Gable End External Trims



The gable end wall end bars are finished with a cloaking trim and a gable end plate.



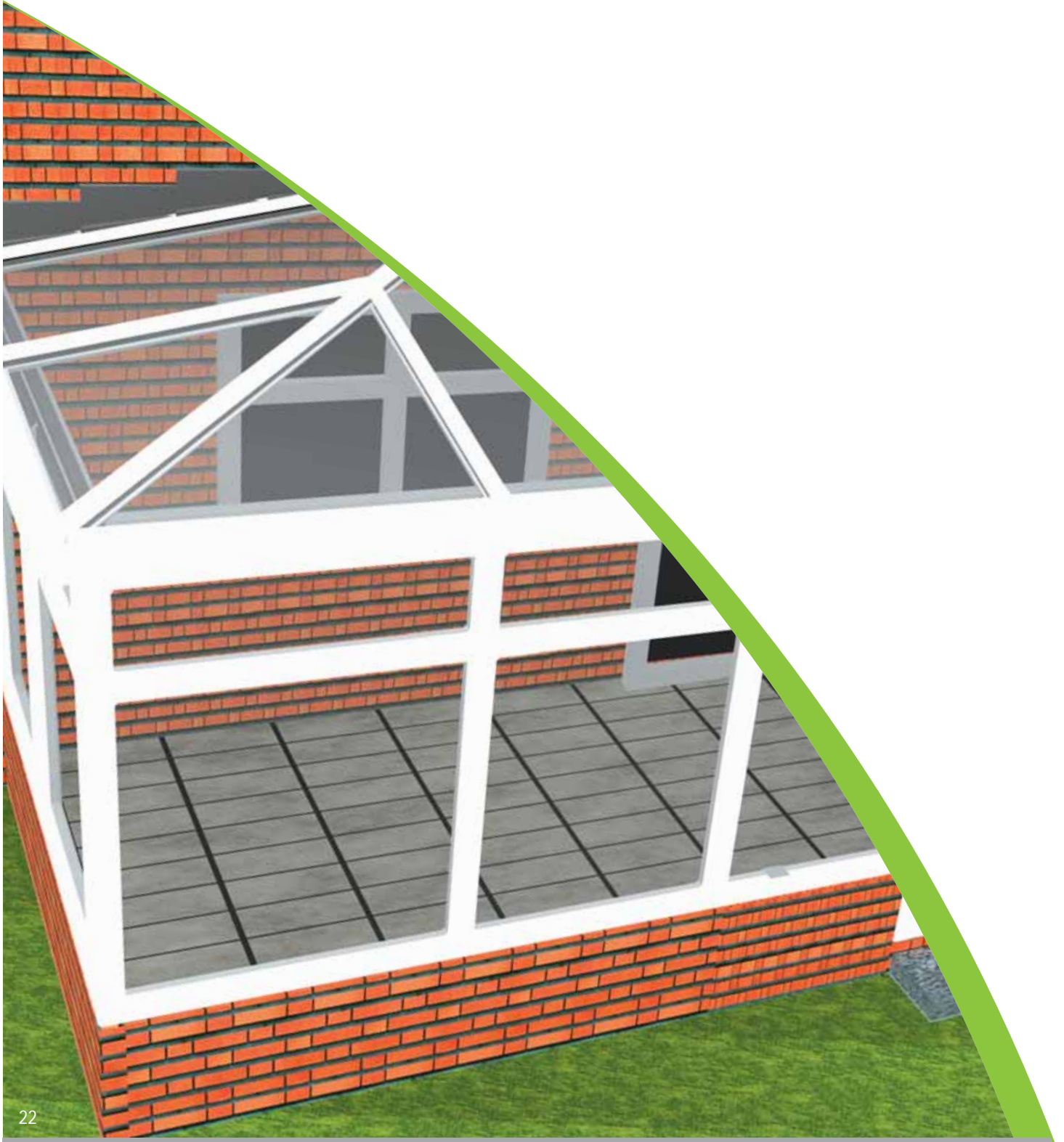
The cloaking trim clips over the wall end bar top cap and into the side of the wall end bar.



The gable end plate is screwed into the end of the ridge and is finished off with a logo plate and screw caps.

6

ASSEMBLY OF HIPS ON A LEAN-TO ROOF

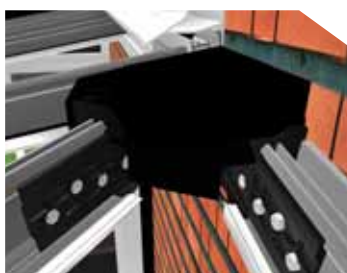


6.1 Lean-To Hips

The wall plate should be fitted as per the instructions in the Lean-To installation guide.



Connect the glazing bars to the D ring and fix down onto the eaves beam. Insert glazing panels around D ring and fit glazing bar top caps.



Insert the foam weather seal over the half D ring junction. Apply a bead of silicone around the outer edge of the foam weather seal following the profile contours.



Screw the M10 stud into the half D ring from the under side to allow fitment of the internal half D cover at a later stage. (for clarity the glazing bars are omitted)

Locate external half ridge cover into the top of the wall plate. Fix through external half ridge cover up-stand in to wall at 600mm centres using propriety fixing.

The internal boss cover fits to the bottom of the M10 stud situated in the half D ring. The nut holding the cover should be concealed using the nut cover supplied.

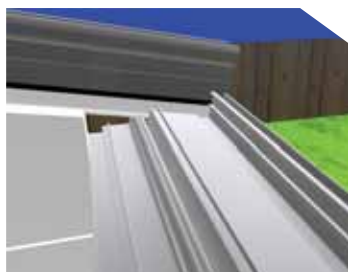
7

GLAZING GLASS ROOFS

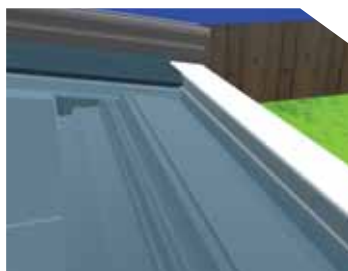


7.1 Glass Roofs

A glass roof is supplied with a **glazing retainer** and **glazing trim**, which replaces the **glazing support** and **glazing end trim**.



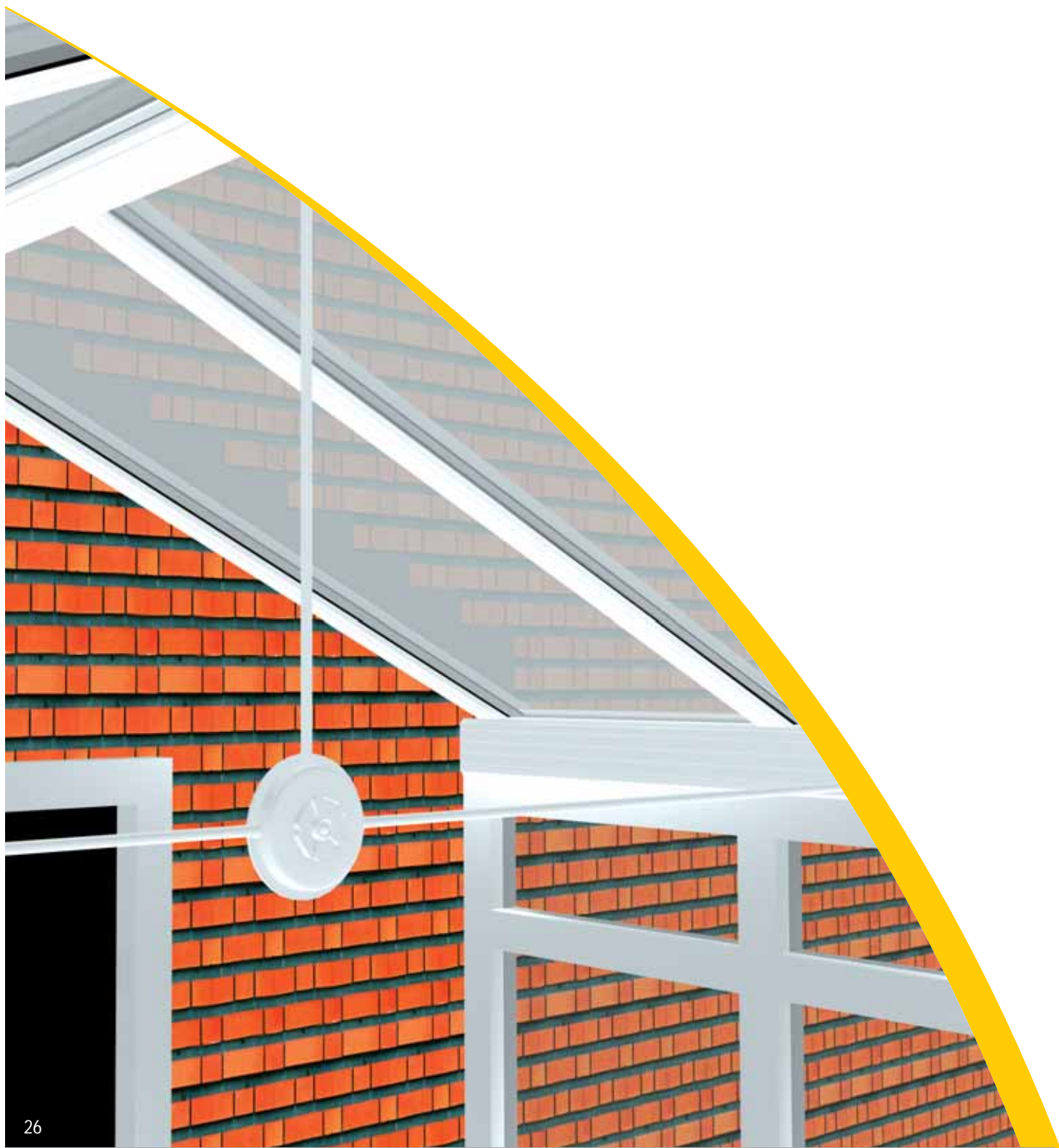
The glazing retainer should be inserted within the eaves pivot between the glazing bars. Complete the glazing sequence as with the polycarbonate method. You will note the glazing end trim is omitted.



When the glass panel has been positioned the glazing retainer can be rotated upwards until the glass panel is resting on the inside edge of the glazing retainer. Apply a bead of silicone on the top inside edge of the glazing trim and push into the glazing retainer.

The glazing bar top caps can now be fitted.

8 TIE BARS



8.1 Function

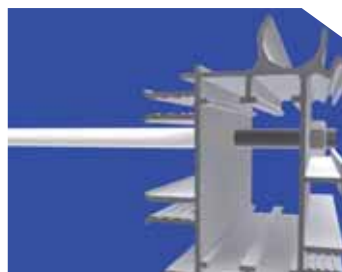
Tie bars are designed to provide structural support to both conservatory panels and roofs. This prevents the outward movement of frames, thus preventing the downward movement of the roof.

When a tie bar has been supplied with the roof kit, the design or size of the roof deems it necessary to fit a tie bar to improve the structural integrity of the conservatory.

Positioning of the Tie Bar will vary by roof style, but should generally be located behind the Finial or one panel rearward to maximise effectiveness.

8.2 Fitting

Tie bars must be fitted prior to the glazing of the roof.



The eaves beam should be pre-drilled from the internal face through to the external face. Insert the horizontal rod through the eaves beam and secure it at the external face with a M10 nut.

Measure the position of the tie bar on to the eaves cover ensuring the correct height is achieved in relation to the hole in the eaves beam and drill a 10mm hole.

Pass the eaves cover over the tie bar stud and fix onto the eaves beam.

Continue this on all eaves beam with a tie bar located.



The vertical tie bar stud passes through the pre-drilled ridge body and is secured again with a 10mm nut.

As with the eaves beam cover the internal ridge cover needs to be drilled to accept the tie bar stud. This is carried out by the same method as the eaves beam cover.

Pass the internal ridge cover over the tie bar stud and fix onto the ridge body.



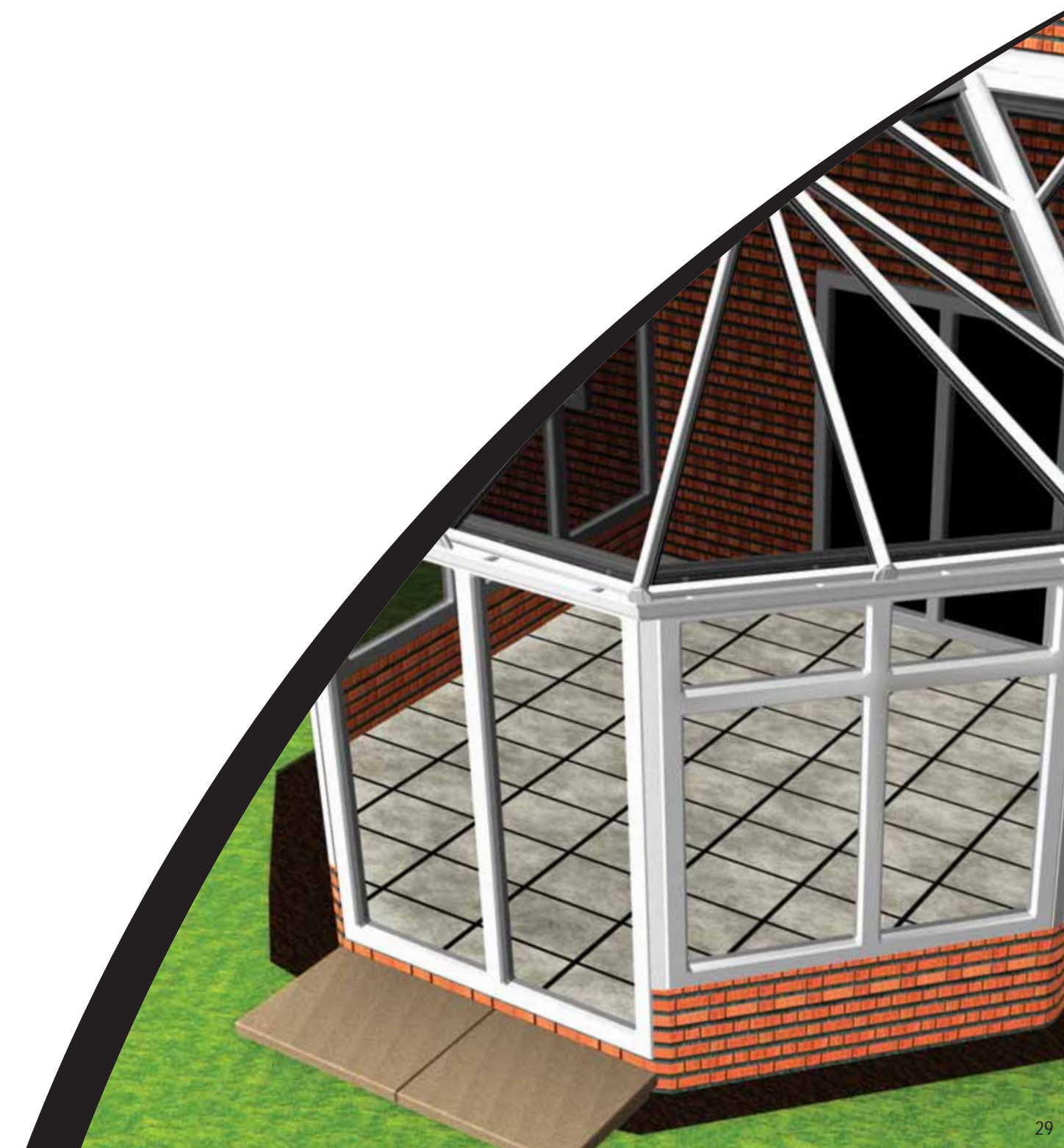
When all of the tie bar stud covers are located pass the tie bar studs into the holes of the aluminium tie bar ring. Secure using the M10 nuts provided.

Ensure the tie bar is horizontal by adjusting the M10 nuts secured on the tie bar studs. Also ensure the tie bar stud is not visible and is concealed by the tie bar stud covers.



Cover the aluminium tie bar ring with the circular covers provided. Seal the M10 nuts on the external face of the eaves beam with a low modulus silicone.

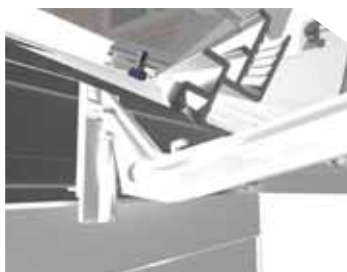
GUTTERING 9



9.1 Guttering



The eaves trim must be fitted prior to the guttering.



Fit the gutter brackets by hooking the serrated clip into the eaves beam slot at approximately 600mm centres. It is advisable to place gutter brackets either side of gutter connectors to provide support.

It is recommended to attach the gutter connectors to one piece of guttering prior to clipping into place.



Located front edge of the gutter onto the gutter brackets and rotate upwards into the gutter bracket. Continue process on all sides.

Position and connect down-pipe fixings with brackets supplied.



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