



GV Standard PitchVent

Installation Manual



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Introduction

Delivery

The product should arrive on site in undamaged packaging consisting of sterling board edge protection and polyfoam to protect the glass. The complete package should be securely wrapped using Glazing Vision branded packing tape. A separate box containing the installation hardware should be received, and also a second package containing the flashing kit if specified. Please inspect the packaging and unit and advise Glazing Vision within 48 hours from signing the receipt of your delivery of any damage or shortfall.

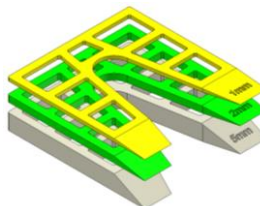
Standard Installation Hardware

Enclosed within the hardware box for each unit you should find the following:

Stainless steel round head
woodscrews



Plastic packers



(various sizes)

Polybutyl tape



(8mm diameter)

Low modulus silicone



Flashing Kit

If a flashing kit is specified, the following items should also be included:

Lead sheet



Head flashing (150mm wide)
Cill flashing (450mm wide)
Lead for soakers (450mm wide)

Roofing underlay



Head apron (1m wide)
Jamb aprons (1m wide)

Polybutyl tape



(50mm wide)

Pre-Installation

Please ensure all pre-installation checks are carried out prior to commencing installation.

CAUTION!



These products can be very heavy. Due consideration should be given to getting the product onto the roof safely and extreme care taken during installation.

Pre-Installation Roof Checks

After checking you have received the required installation hardware and product(s) it is important to ensure that the area of installation is suitably prepared. The area surrounding the aperture should be clear to provide safe access during the installation works. Note that even though this product is mechanically fixed into the roof structure from the inside, it will be necessary to work on the outside and therefore suitable provisions should be made for safe handling of the product, including all relevant PPE and safety systems for working at heights if required. The supporting rafters and horizontal trimmers, or alternative support frame for the product, should be checked for specification and dimensional accuracy. The aperture should be prepared as described below prior to installation.

Preparation of the roof prior to installation will vary depending on roof type and roofing materials. A few common scenarios are included in this manual. Please follow the applicable steps for your configuration. Glazing Vision strongly recommends a 'dry run' (without any silicone or polybutyl) before committing to the final installation.

Sales Drawings



Sales drawings should accompany this installation manual. If you do not have them then **do not** continue the installation without them.

Sales drawings can be obtained by downloading them from our website (www.glazingvision.co.uk/resources) or by contacting Glazing Vision. The following pages on preparation of the roof recommend the relevant sales drawings for each installation type. Study them carefully before beginning the installation.

Preparation of the Roof – Standard Installation

Typically for cold-roof construction – the product will sit directly upon the outside of the rafters.

Sales drawings:

Installation: 202-ASS-002

Fixing dimensions: 202-ASS-001

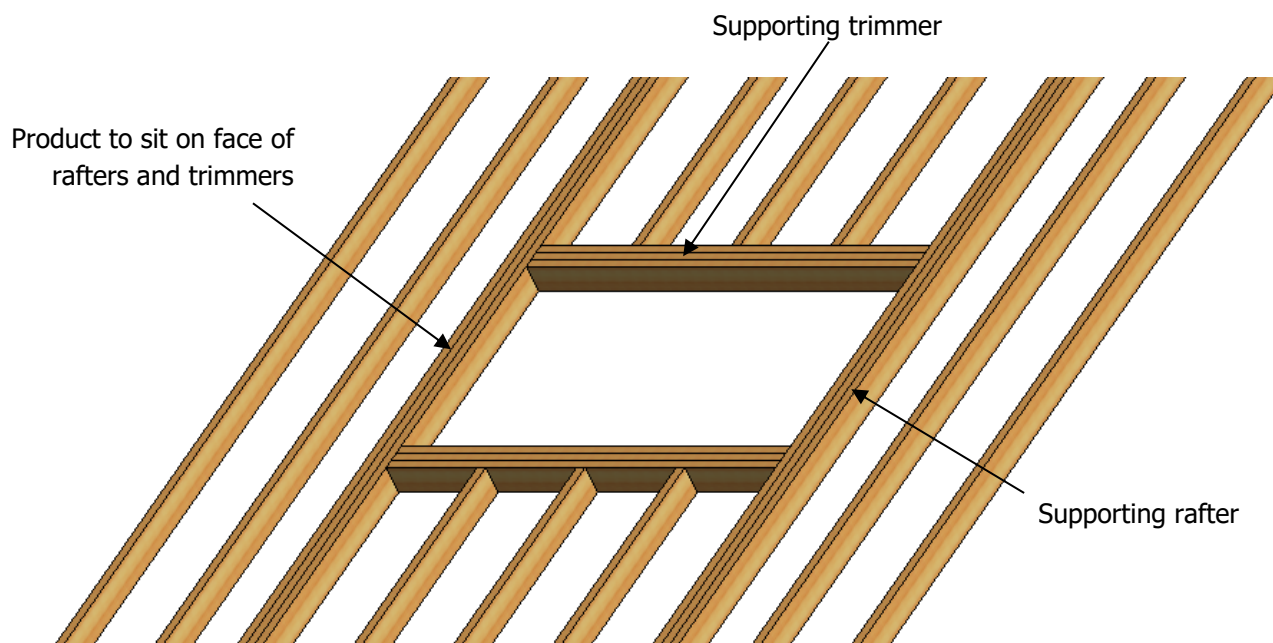


Fig. A – Example of standard installation

When preparing rafters, consider how the ends of the battens will be supported at the jambs of the product. Study the sales drawings of the product carefully when designing the size of the aperture. Figure A is for illustrative purposes only and may not be suitable for your installation.

CAUTION!



These products can be very heavy. Glazing Vision strongly recommends that a structural engineer is consulted when designing the structure(s) that will support the product and the surrounding roof. Nothing in this manual constitutes a structural proposal.

Before continuing onto the installation instructions:



The rafters and horizontal trimmers that will support the product **should** be complete and in place.



The surrounding roof **should not** yet be felted or battened, this will be covered in the installation instructions.

Preparation of the Roof – Sunken Installation

Typically for cold-roof construction with thin roofing materials, such as slate – the product will sit on the outside of a separate frame sunken below the outside level of the rafters.

Sales drawings:

Installation: 202-ASS-003

Fixing dimensions: 202-ASS-001

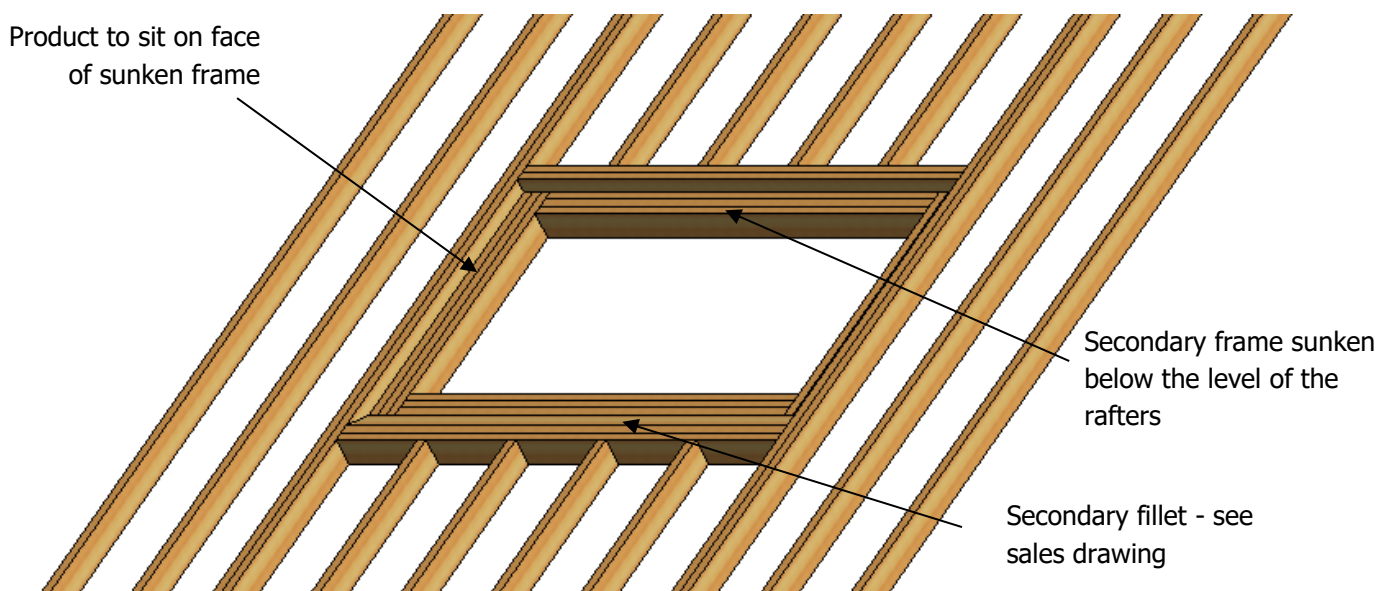


Fig. B – Example of sunken installation

Study the sales drawings of the product carefully when designing the size of the main aperture and secondary sunken frame. Figure B is for illustrative purposes only and may not be suitable for your installation.

CAUTION!



These products can be very heavy. Glazing Vision strongly recommends that a structural engineer is consulted when designing the structure(s) that will support the product and the surrounding roof. Nothing in this manual constitutes a structural proposal.

Before continuing onto the installation instructions:



The sunken frame that will support the product, and the surrounding rafters and horizontal trimmers, **should** be complete and in place.



The surrounding roof **should not** yet be felted or battened, this will be covered in the installation instructions.

Preparation of the Roof – Raised Installation

Typically for warm-roof construction – the product will sit on a frame built up from the rafters.

Sales drawings:

Installation: 202-ASS-004

Fixing dimensions: 202-ASS-001

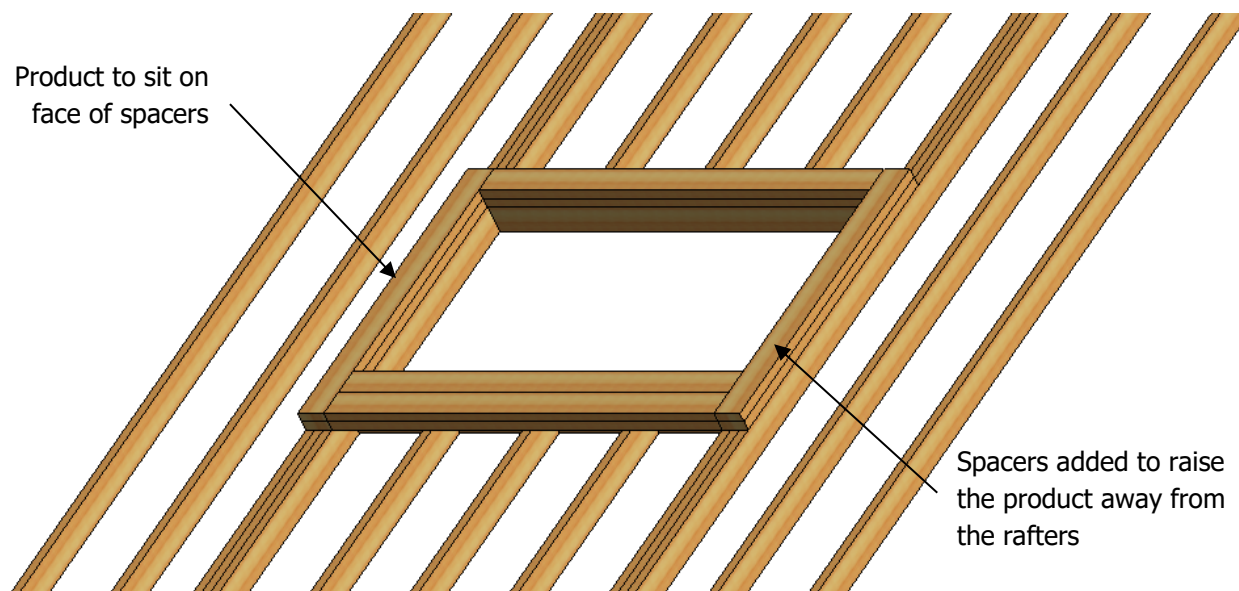


Fig. C – Example of raised installation

When preparing rafters, consider how the insulating sarking and the ends of the battens will be supported at the jambs of the product. Study the sales drawings of the Product carefully when designing the size of the aperture and spacers. Figure C is for illustrative purposes only and may not be suitable for your installation.

CAUTION!



These products can be very heavy. Glazing Vision strongly recommends that a structural engineer is consulted when designing the structure(s) that will support the product and the surrounding roof. Nothing in this manual constitutes a structural proposal.

Before continuing onto the installation instructions:



The raised frame that will support the product, and the surrounding rafters and horizontal trimmers, **should** be complete and in place.



The insulating sarking (the insulation installed outside the rafters) and the counter-battens of the surrounding roof **should** be complete and in place.



The surrounding roof **should not** yet be felted or battened, this will be covered in the installation instructions.

Installation Instructions

Before committing to installation, Glazing Vision strongly recommends that a 'dry run' is completed of the installation process, without using silicone.

Note that the installation shown here is a standard installation, using tiles at 120mm gauge. Other installations differ superficially, but the installation process is similar.

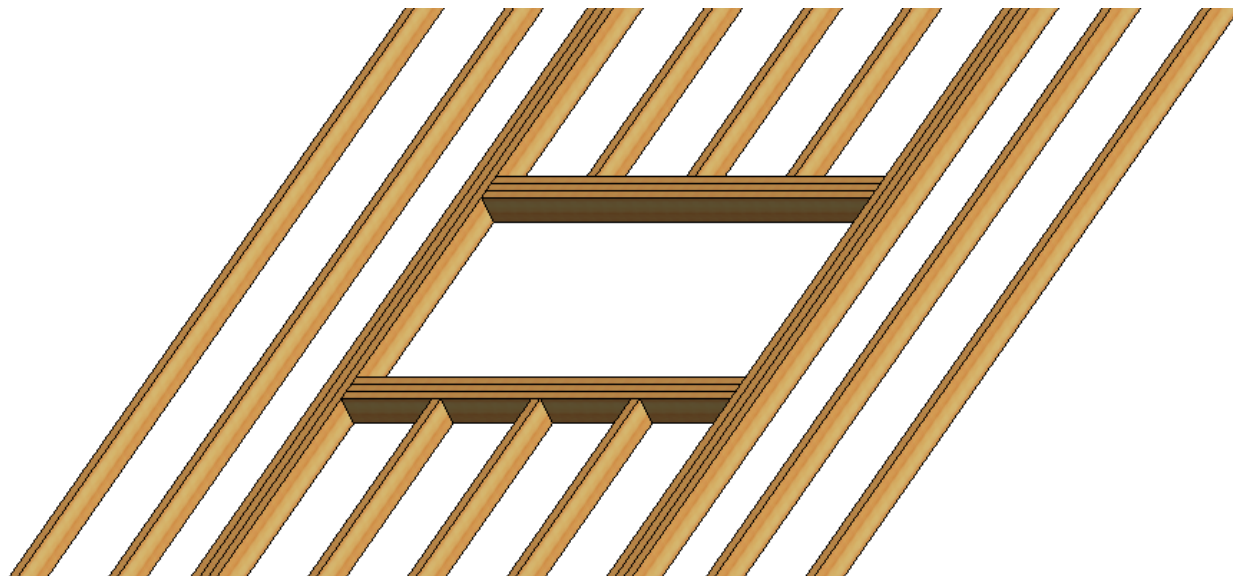


Fig. D – Example of standard installation (duplication of Fig. A)

All of the images in this guide are diagrammatic. They should be used as a reference only, and may not be a true representation of your installation.



Ensure that you have **read and understood** the entire installation instructions section **before** starting.



Glazing Vision strongly recommends that the installation is carried out by competent roofers and lead workers.

Step 1. – Install, trim and finish the roofing underlay (felt or membrane)

- Trim and then fold the underlay back on itself as shown
- The underlay should be folded back on the structure that will support the product – see sales drawing
- If desired, a layer of silicone can be used to seal the cut edge down
- If a sunken installation is used, the secondary fillet should be underneath the underlay – see sales drawing

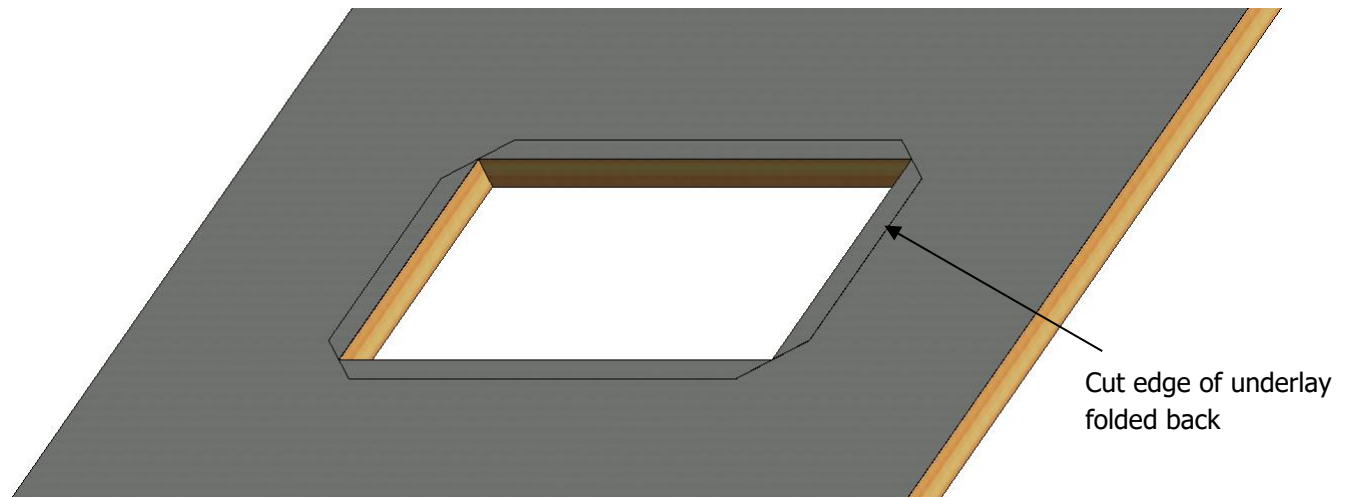


Fig. 1 – Roofing underlay installed and prepared

Step 2. – Install the cill tilting fillet

- Install a tilting fillet as shown (not supplied) - Glazing Vision recommends that a hardwood or treated softwood fillet is used
- Fix the fillet to the rafters
- Consider the distance required between the cill of the Product and the fillet (fig. 2 – gap A) – see sales drawing

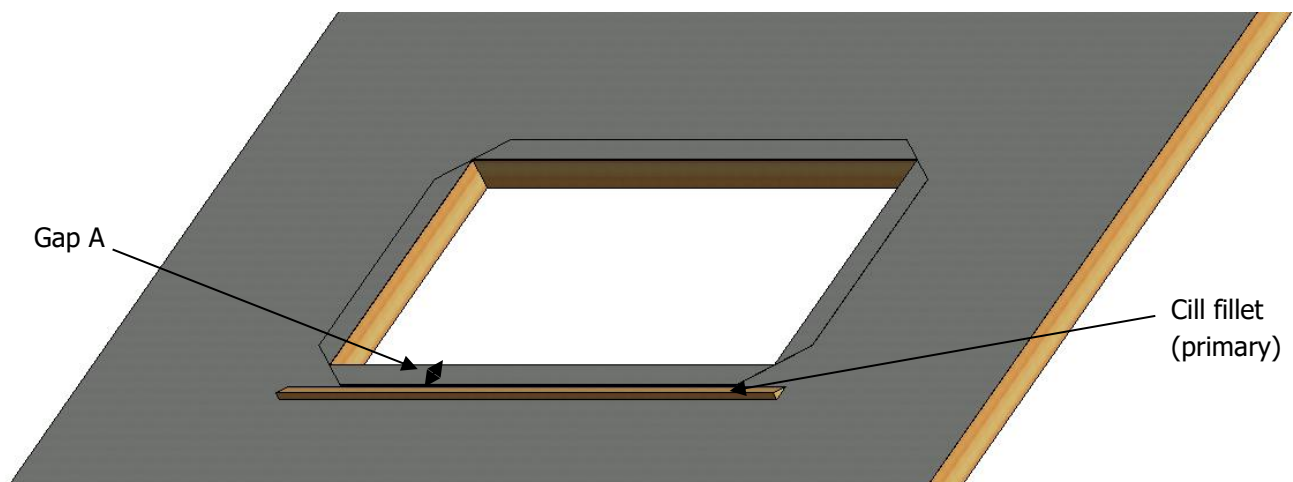


Fig. 2 – Cill tilting fillet installed

Step 3. – Prepare and install the cill flashing

- Place the cill flashing as shown
- Use the cill flashing supplied as part of the flashing kit (if specified), otherwise use code 4, nominally 1.8mm thick flashing lead
- The flashing should be at least 300mm longer than the external width of the product and should be installed centrally – for sunken installations please ensure that the lead extends beyond the sunken detail on either side (fig. 3b)
- The flashing should lap under the cill of the product by at least 50mm
- Apply silicone underneath the flashing, and if required fix the flashing in place using brass or stainless steel tacks (not supplied)

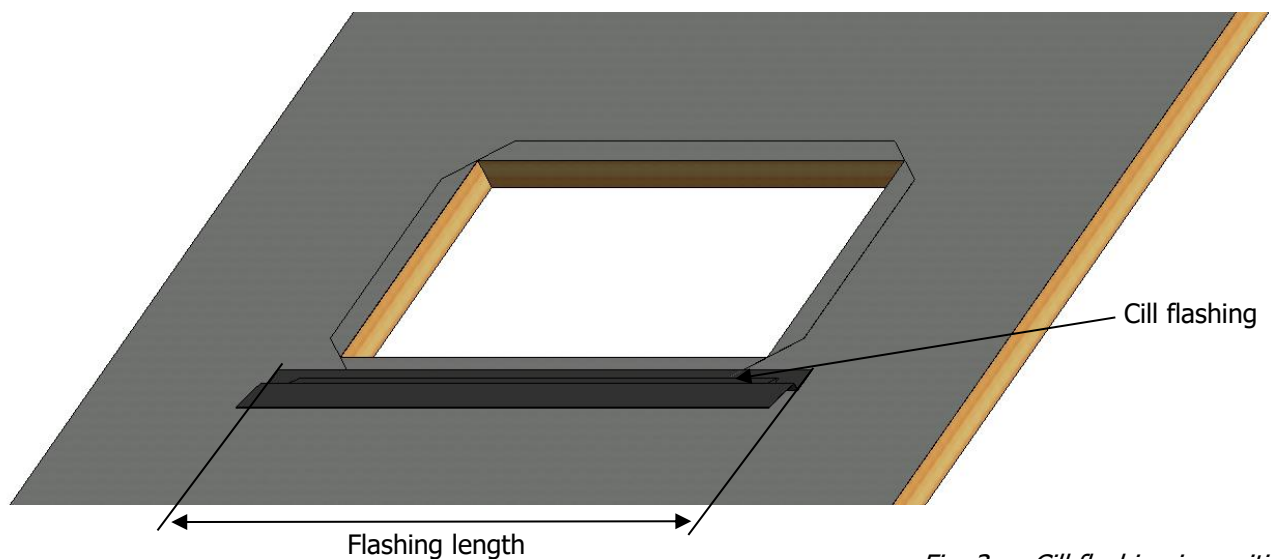


Fig. 3a – Cill flashing in position

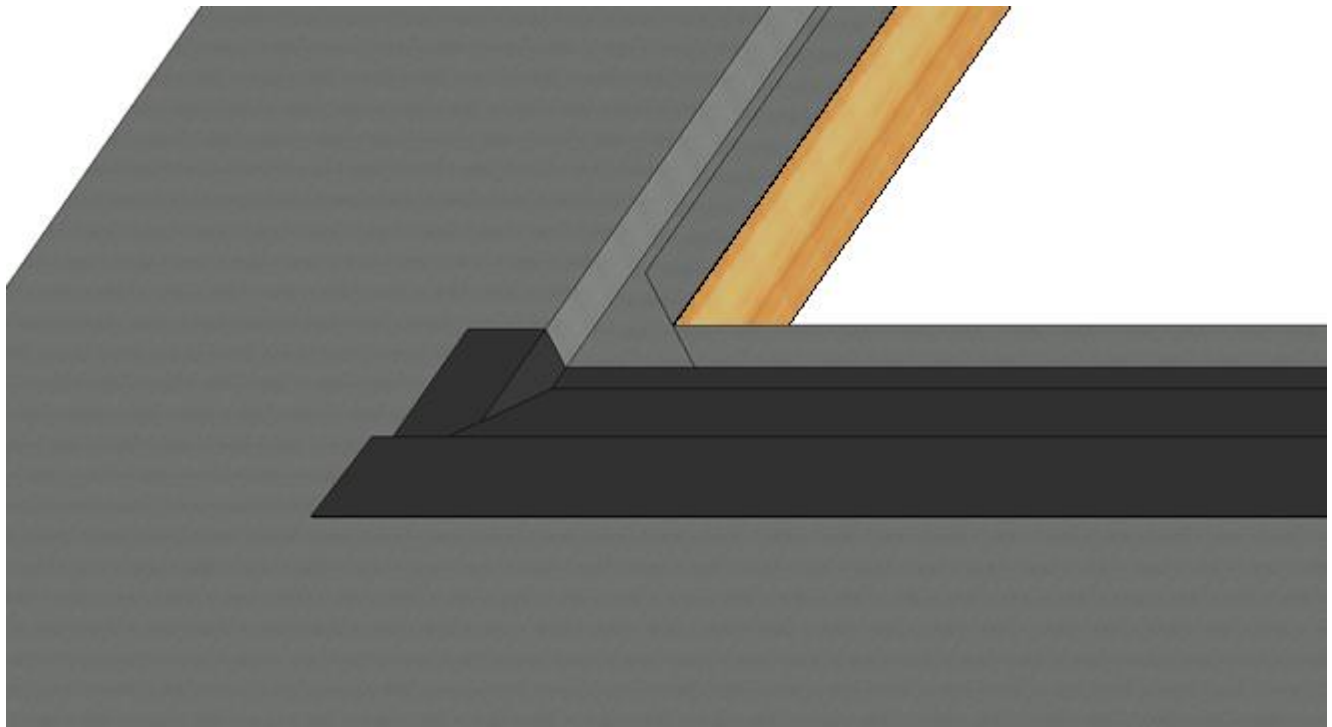


Fig. 3b – Cill flashing detail for sunken installation

Step 4. – Place and fix the product in position



These products can be very heavy. Due consideration should be given to getting the product onto the roof safely and extreme care taken during installation.



Before attempting to lift the product, please check that the yellow transport plate(s) are securely attached to the product.



If the product is an electric variant (eg. chain actuated), be mindful of the cable and ensure that it is not damaged. Note that the cable needs to be on the inside of the building.

- If fixing to a support structure made from a material other than wood, ensure the correct type of screws or fixings have been sourced prior to this step
- Apply a continuous loop of 8mm diameter polybutyl (supplied) to the underside of the product (fig. 4a)
- Lay a large, continuous bead of silicone (supplied) onto the underlay approximately 65mm from the internal aperture (fig. 4b)
- Using masking tape, tape the plastic packers (supplied) along the jambs and cill (fig. 4c), ensuring that the product will sit centrally in the aperture – there should be a nominal 10mm gap on all sides (filled with packers)
- Place the product over the aperture (fig. 4d)
- Positioning the packers as needed, to ensure that the product is centrally positioned, fix the product into place using the appropriate fixings (woodscrews supplied) (fig. 4e) - if doing a dry fit, screws through some of the fixing holes into the rafters can be used to temporarily hold the product in place
- If required, using the product fixing holes as a guide, drill a pilot hole for each screw prior to fixing
- Once fixed in place, remove any excess polybutyl and/or silicone from around the edge of the product



If performing a dry run, the position of the product can be marked and the product removed. The installation can then be begun.



If using any temporary fixing screws, do not remove any that are holding the product in position until all of the other screws have been installed.

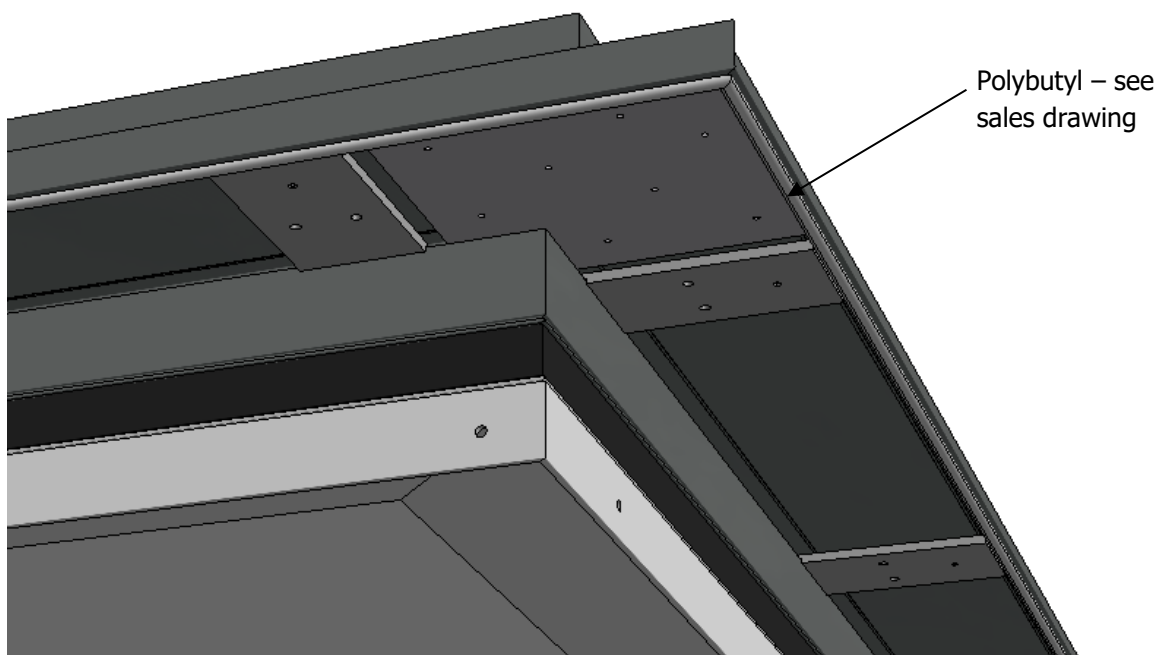
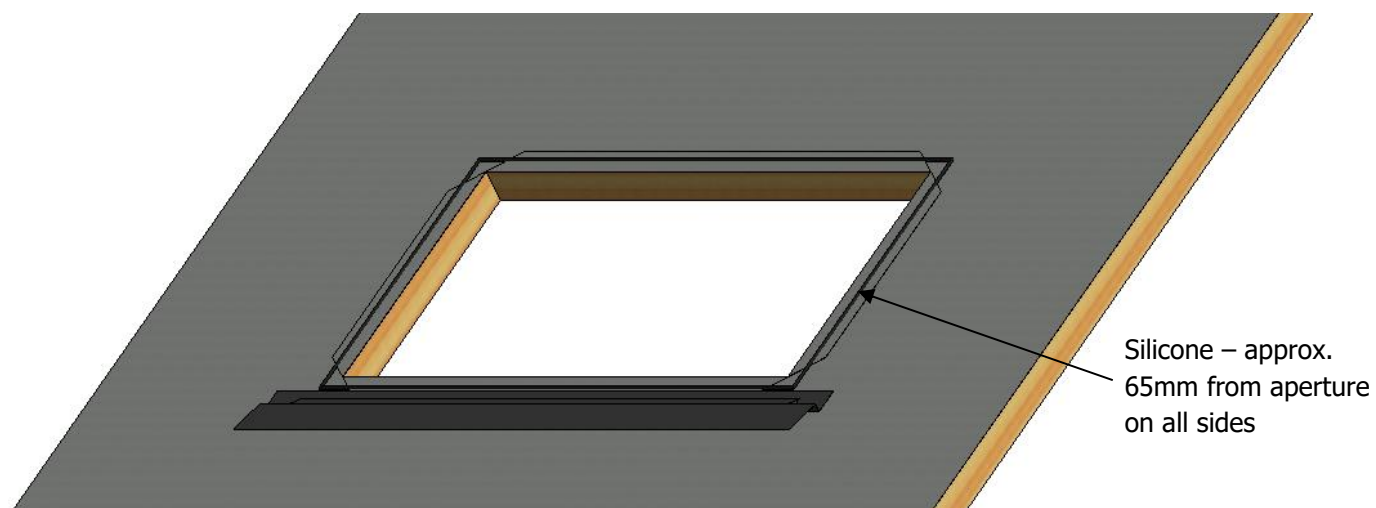


Fig. 4a – Continuous polybutyl loop on the underside of the product



Silicone – approx.
65mm from aperture
on all sides

Fig. 4b – Continuous silicone bead on top of underlay

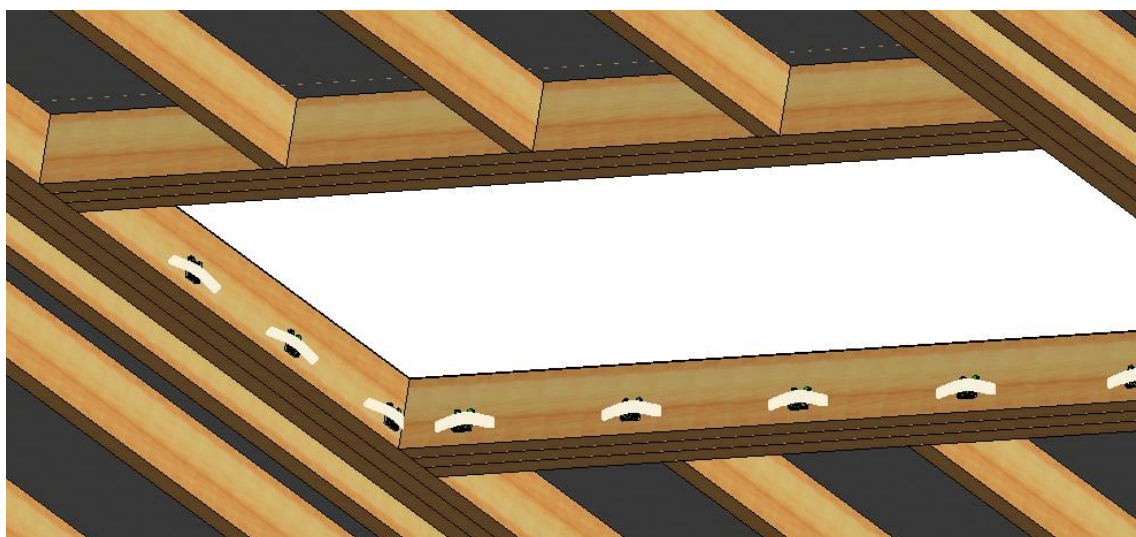
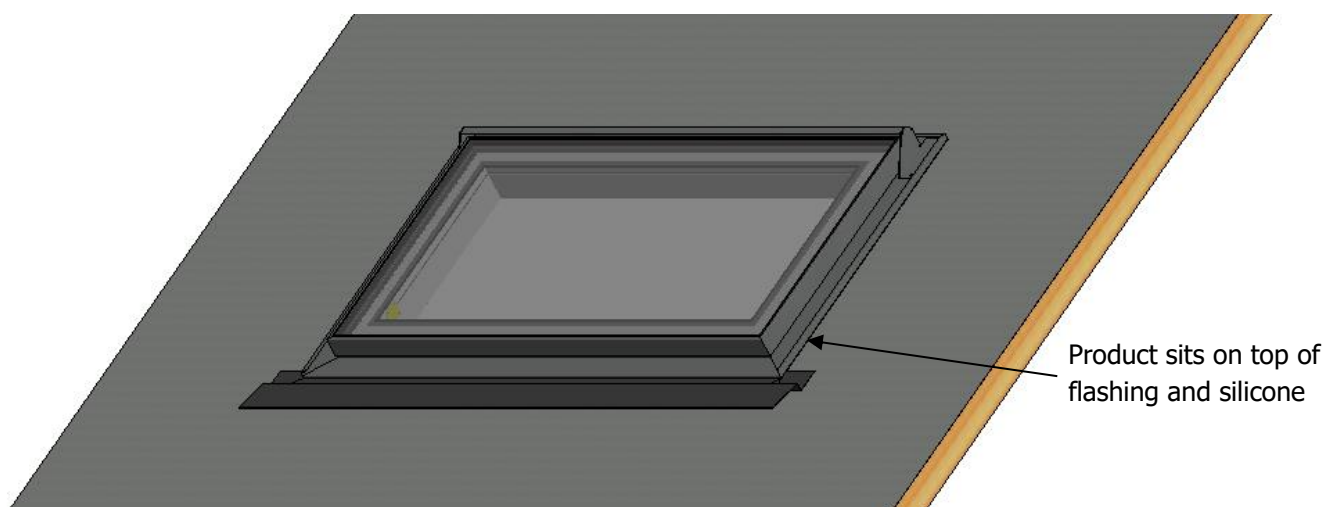
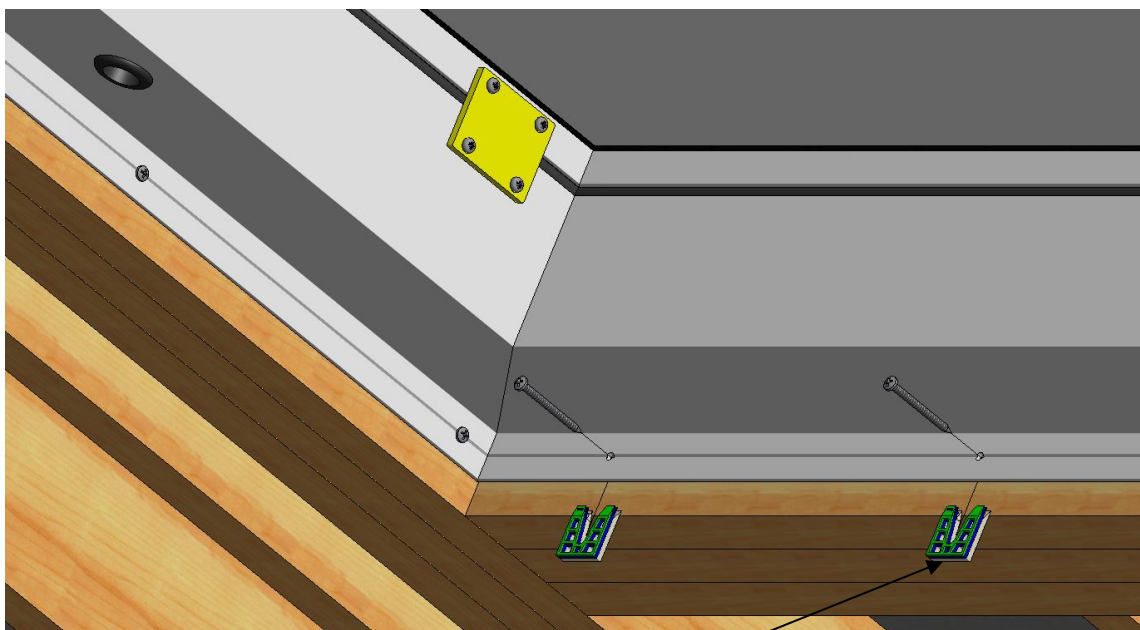


Fig. 4c – Tape plastic packers along jambs and cill



Product sits on top of
flashing and silicone

Fig. 4d – Place product centrally into aperture

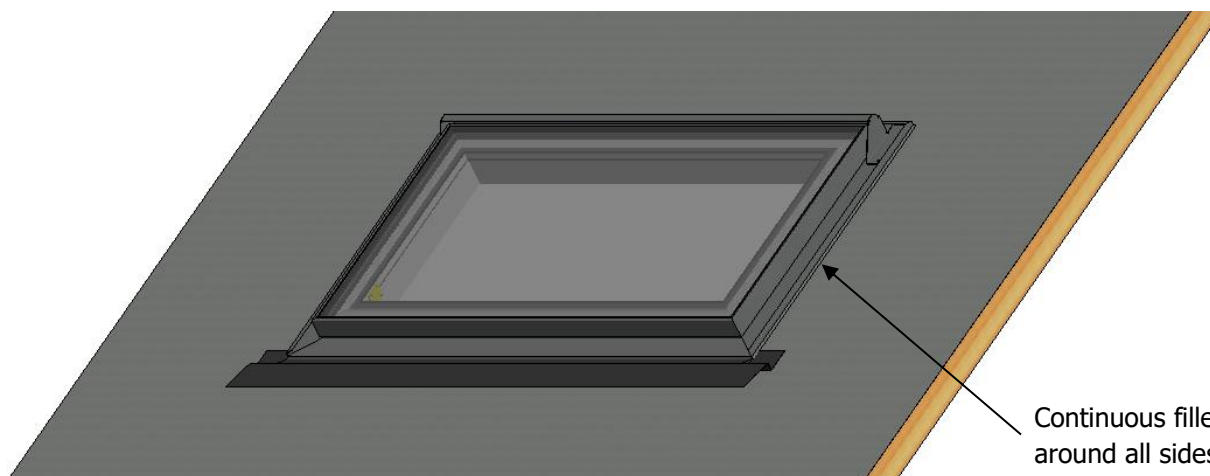


Use as many/few
packers as required

Fig. 4e – Fixing detail (from inside)

Step 5. – Silicone the sides and fixings

- Run a continuous thick fillet of silicone (supplied) along the entire length of the head, the cill and both jambs



Continuous fillet of silicone
around all sides

Fig. 5 – Sides siliconed



Whilst still wet, excess silicone can be cleaned from the product by spraying on a small amount of soapy water and wiping with a cloth or paper towel.

Step 6. – Apply the polybutyl tape to the jambs

- Apply 50mm polybutyl tape (supplied as part of flashing kit if specified, otherwise use approx. 1.5mm double-sided butyl tape) to the full length of the gutter lip on both jambs (sides)

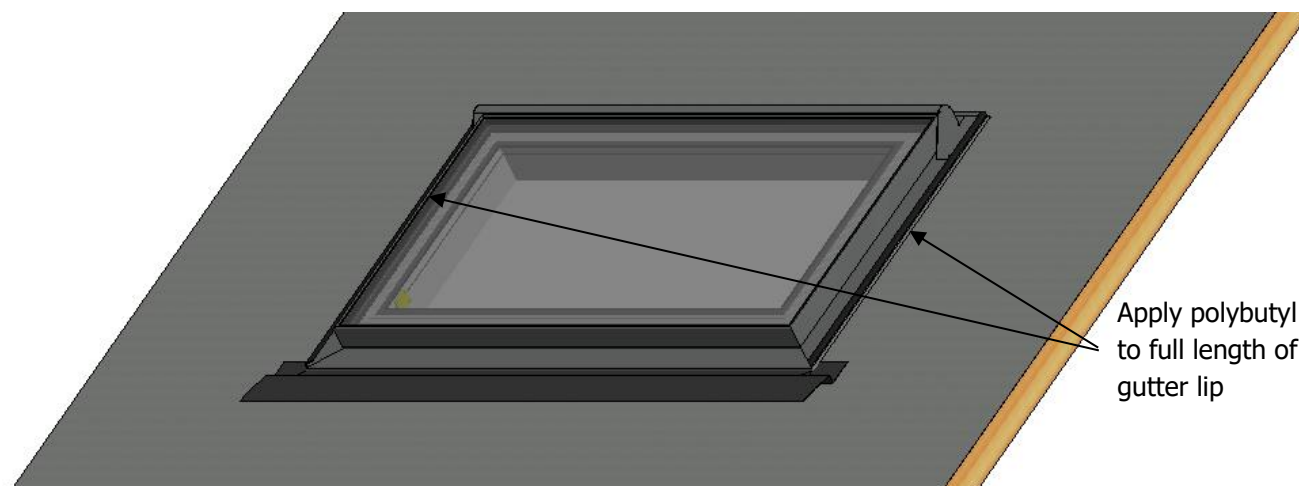


Fig. 6a – Polybutyl tape applied to jambs

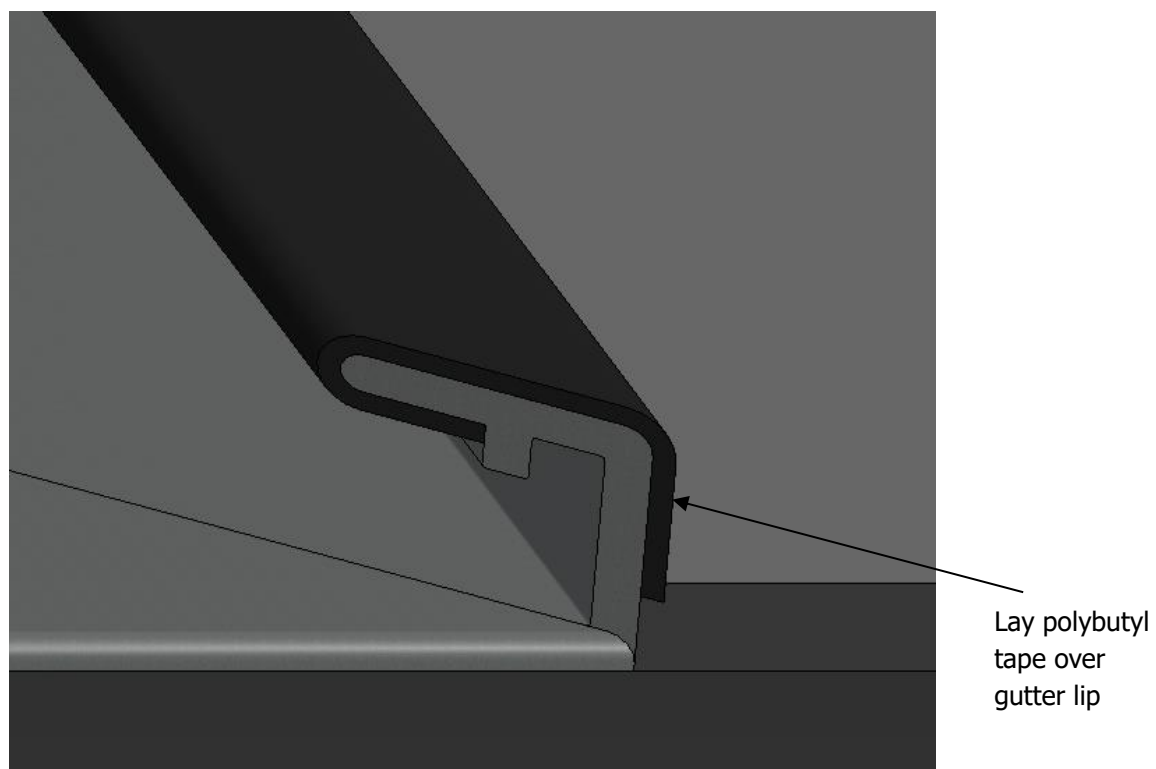


Fig. 6b – Polybutyl tape applied to jamb

Step 7. – Place the jamb aprons in position

- Place the jamb aprons (use the roofing underlay supplied as part of the flashing kit if specified, otherwise use roofing underlay of at least 1m in width) in position
- The apron should be at least 150mm longer than the external span of the product
- The bottom edge of each apron should lap over the cill flashing and should align with the bottom edge of the product cill
- The aprons may be tacked in position to the rafters/counter-battens below

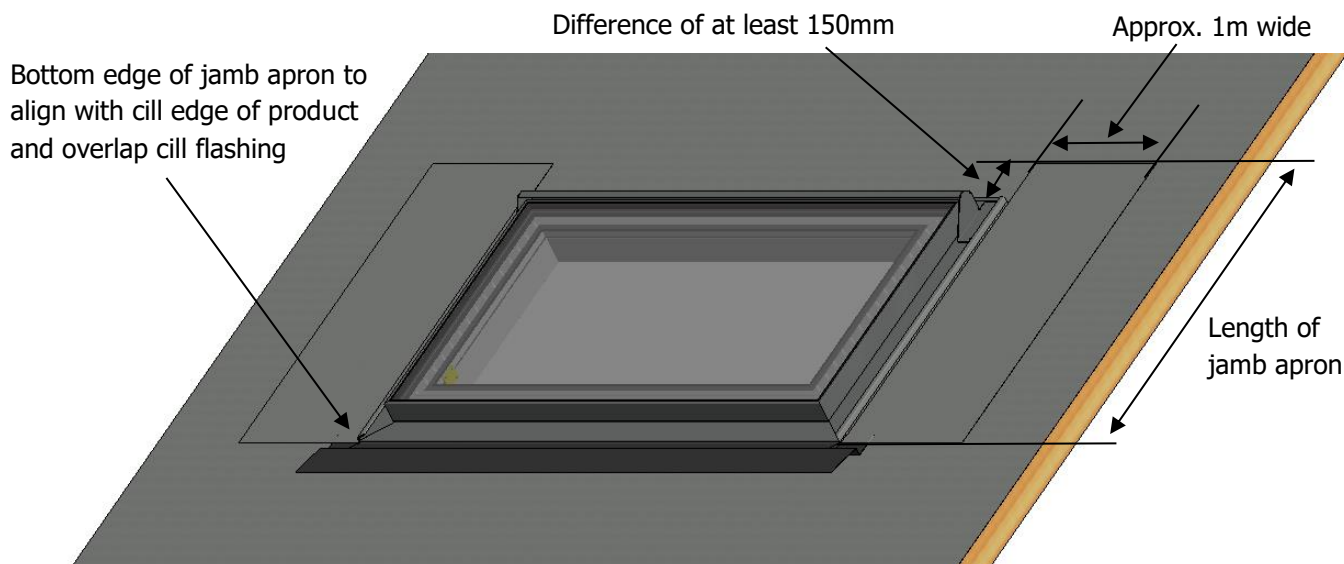


Fig. 7a – Jamb aprons positioned

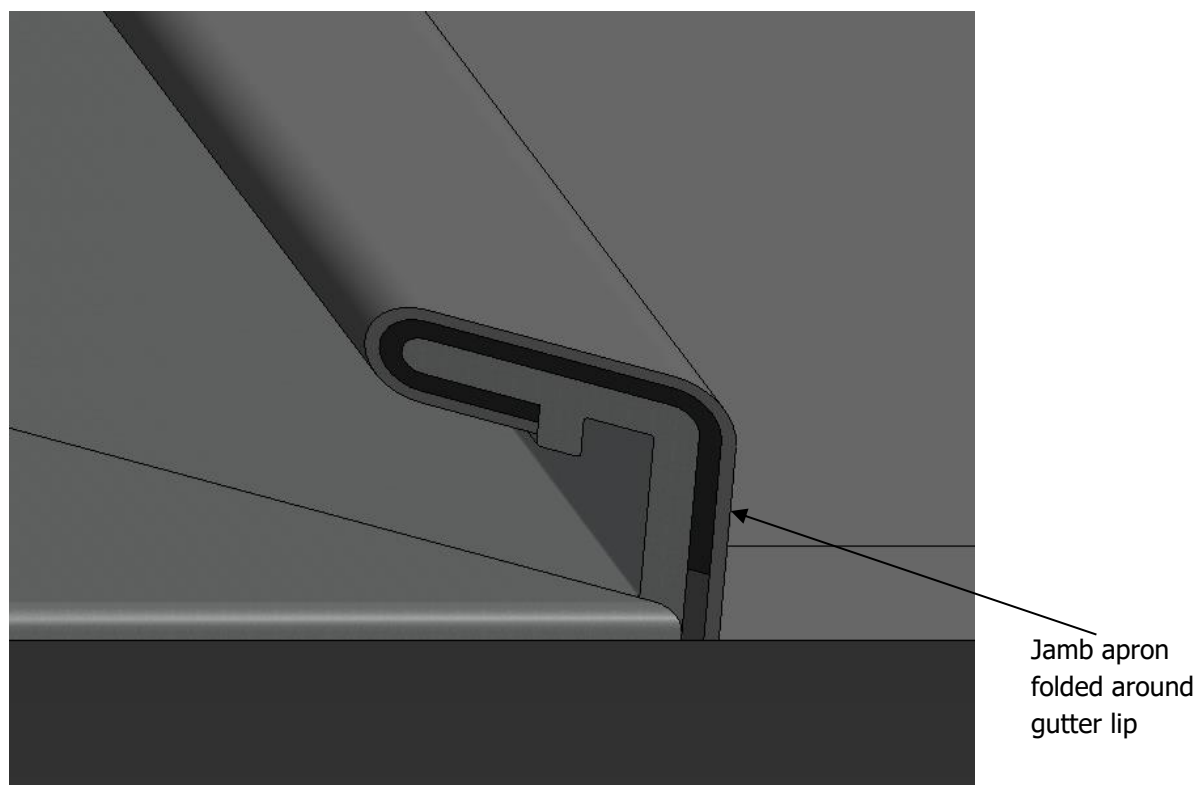


Fig. 7b – Jamb apron adhered to polybutyl tape

Step 8. – Install the head tilting fillet

- Install a tilting fillet as shown (not supplied) - Glazing Vision recommends that a hardwood or treated softwood fillet is used
- Fix the fillet to the rafters

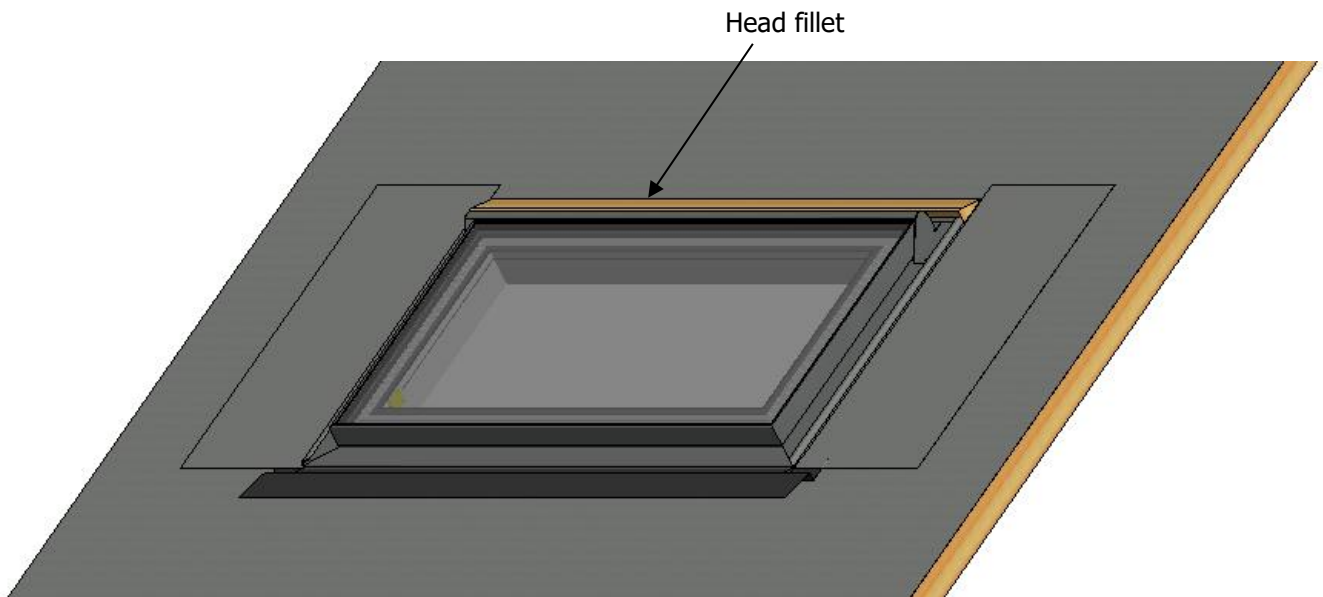


Fig. 8 – Head tilting fillet installed

Step 9. – Install the head flashing

- Install the head flashing (use the lead flashing supplied as part of the flashing kit if specified, otherwise use code 4, nominally 1.8mm thick lead)
- The flashing should be at least 300mm longer than the external width of the product and should be installed centrally

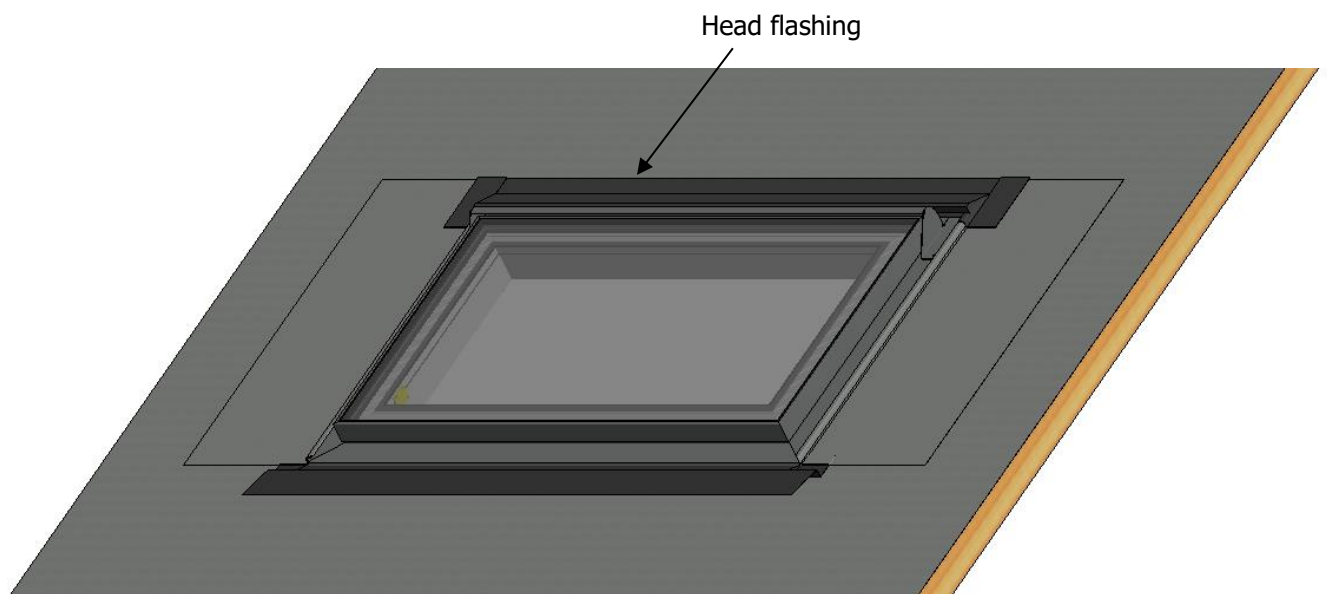


Fig. 9a – Head flashing installed

Head flashing tucked into
head gutter of product

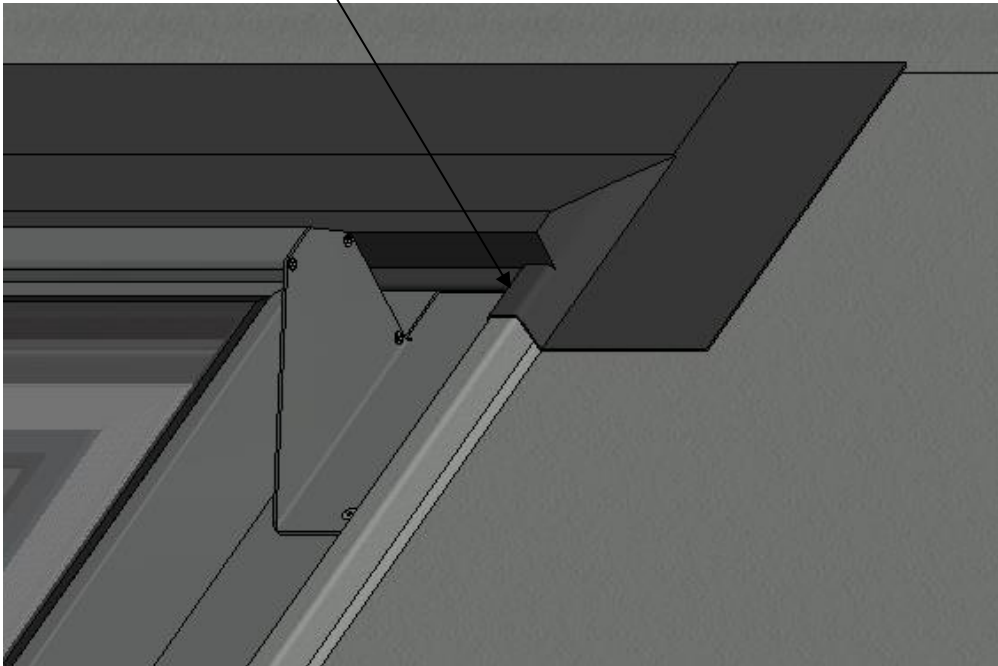


Fig. 9b – Head flashing installed

Step 10. – Install the head apron

- Place the head apron (use the roofing underlay supplied as part of the flashing kit if specified, otherwise use roofing underlay of at least 1m in width) in position
- The apron should cover the tops of both jamb aprons entirely
- The bottom edge of the apron should lap over the head flashing by at least 50mm, and the top edge should lap under the underlay of the roof by at least 50mm
- If the underlay supplied/recommended does not reach, then a second piece should be used as an intermediary, lapped over the original piece and lapped under the underlay of the roof



The head apron must be lapped into the roof underlay as described in this step. See also the sales drawing.

Head apron lapped
over head flashing

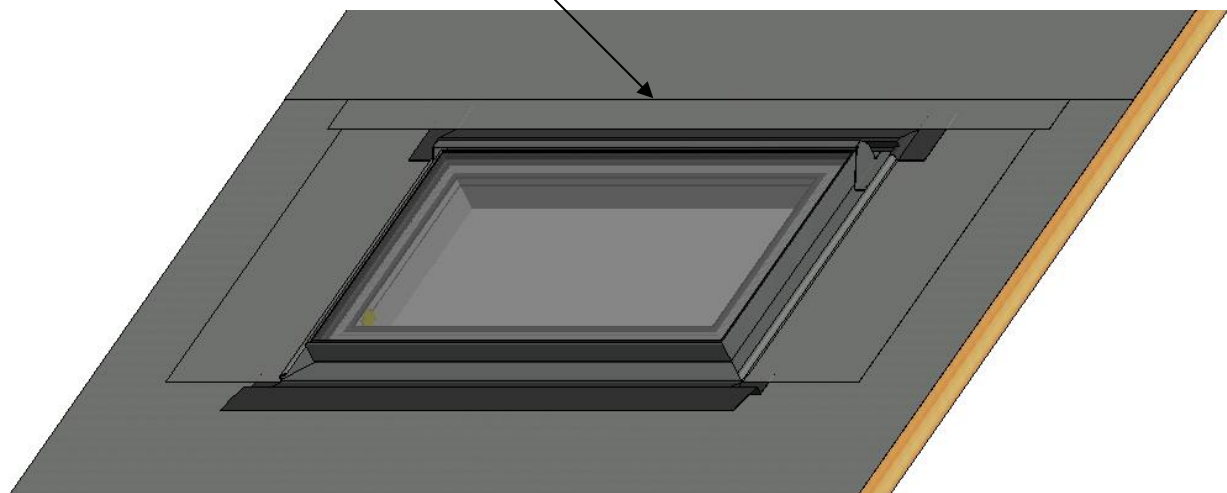


Fig. 10 – Head apron installed

Step 11. – Batten the roof

- Batten up to the cill - in addition to normal considerations, consider how the tiles/slates will fit around the product when determining the gauge of the battens
- The battens should be fixed in place ready for tiling/slating
- Batten to either side of the product and then batten the roof above the product

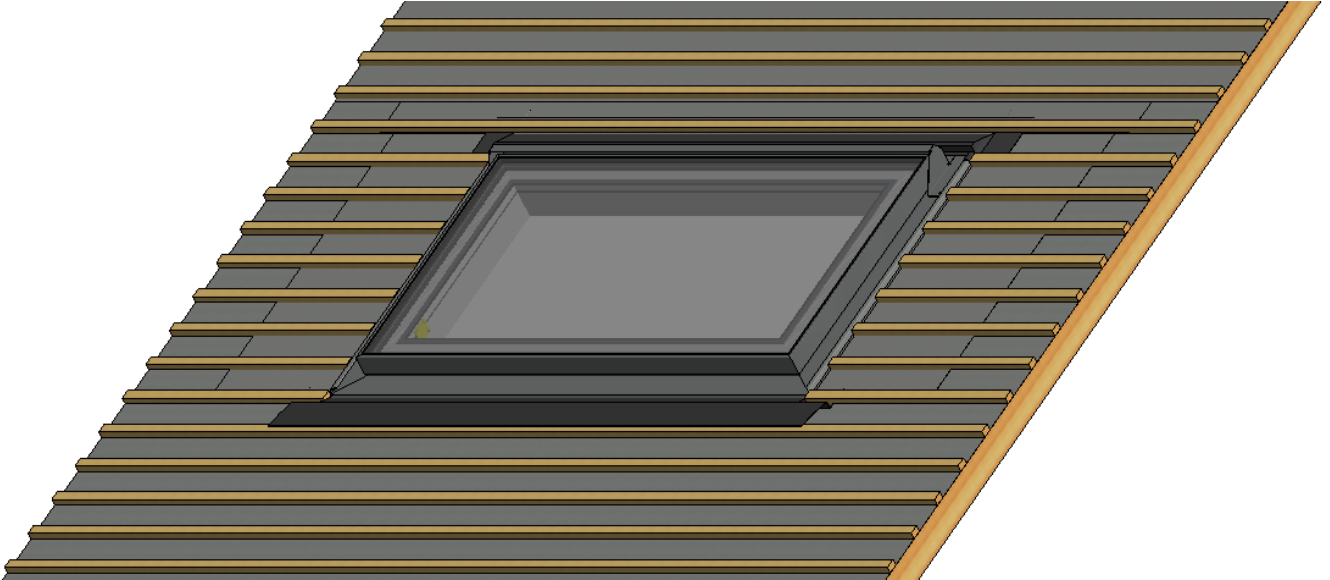


Fig. 11 – Battens installed

Step 12. – Prepare the lead soakers

- The soakers should tuck approximately 100mm between the tiles/slates, should fold under the gutter of the product and should overlap by at least 50mm (fig. 12a)
- Use the flashing lead supplied as part of the flashing kit if specified, otherwise use code 4, nominally 1.8mm thick lead.

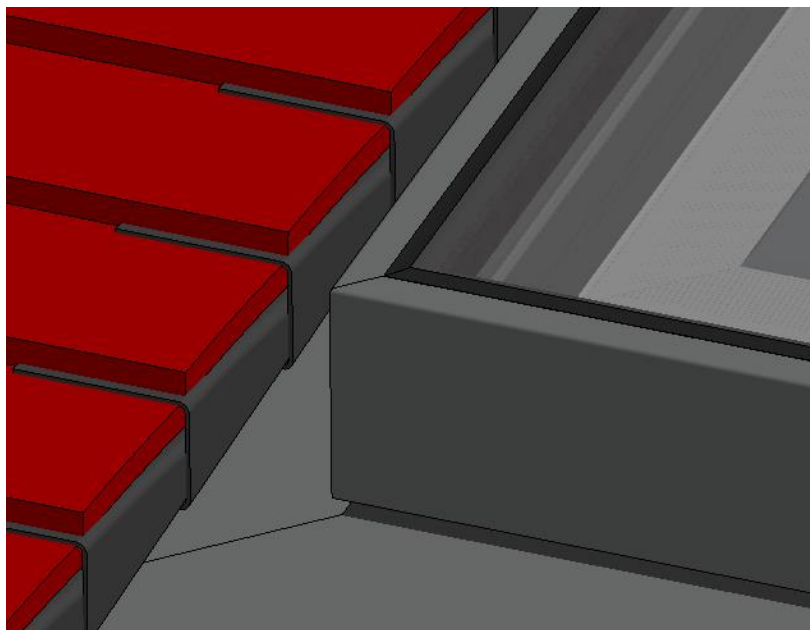


Fig. 12a – Example of installed soakers

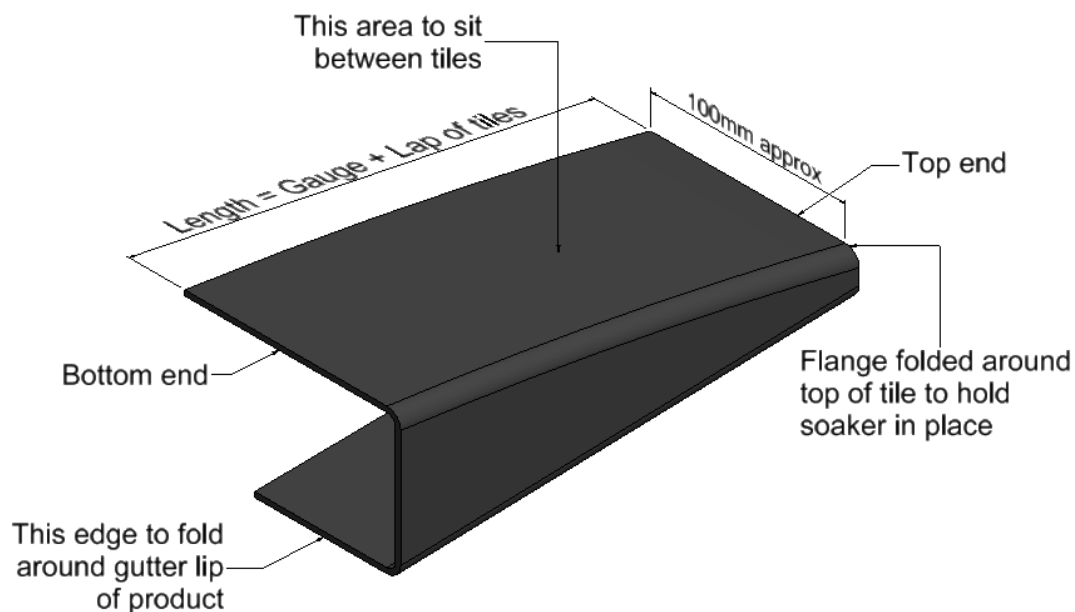


Fig. 12b – Example of soaker



Glazing Vision strongly recommends that the manufacture and installation of soakers is carried out by a competent lead-worker.



Fig. 12a is presented only as an example. The soakers described in fig. 12b may not be suitable for your roof.

Step 13. – Tile the roof and install soakers



Before tiling, take the opportunity to check the weathering (overlap) of the aprons and flashings and to check the silicone sealing the jambs.

- Tile up to the batten below the product
- Fold and boss the cill flashing into final position
- Tile to either side of the product, installing the soakers
- Tile above the product - Glazing Vision recommends that eaves tiles are used immediately above – see sales drawing

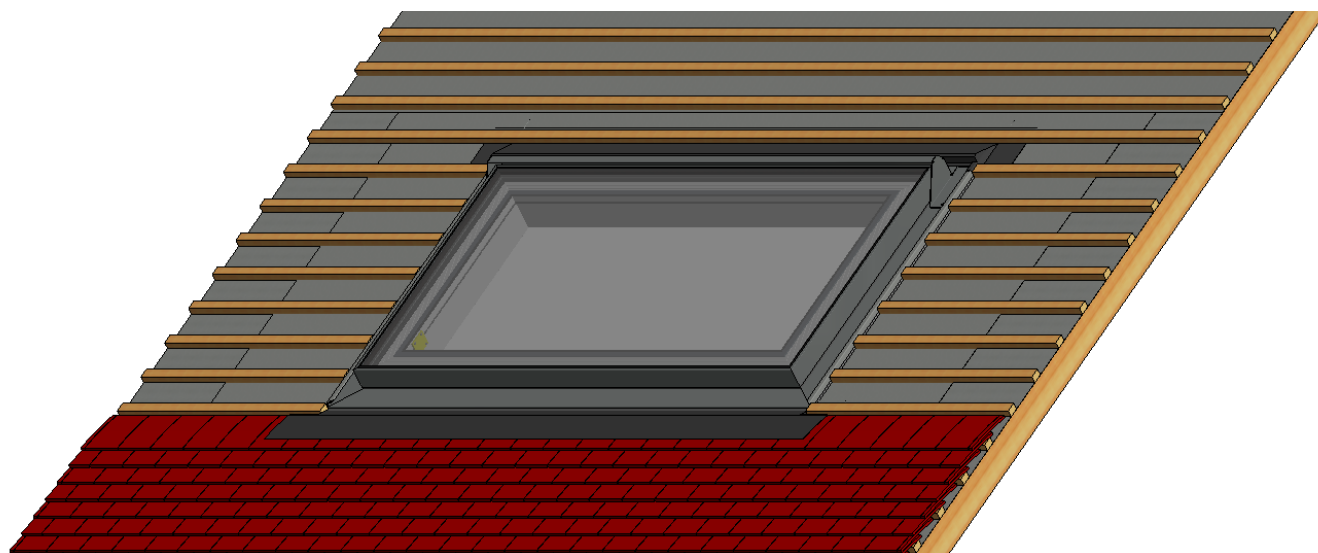


Fig. 13a – Cill tiled and cill flashing finished

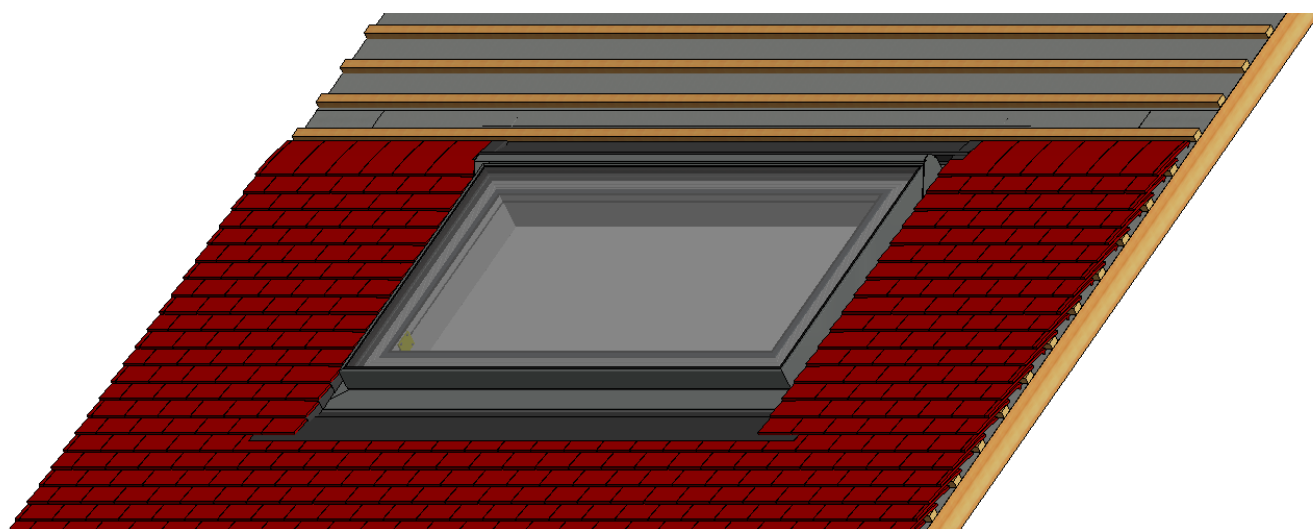


Fig. 13b – Jambs tiled and soakers installed

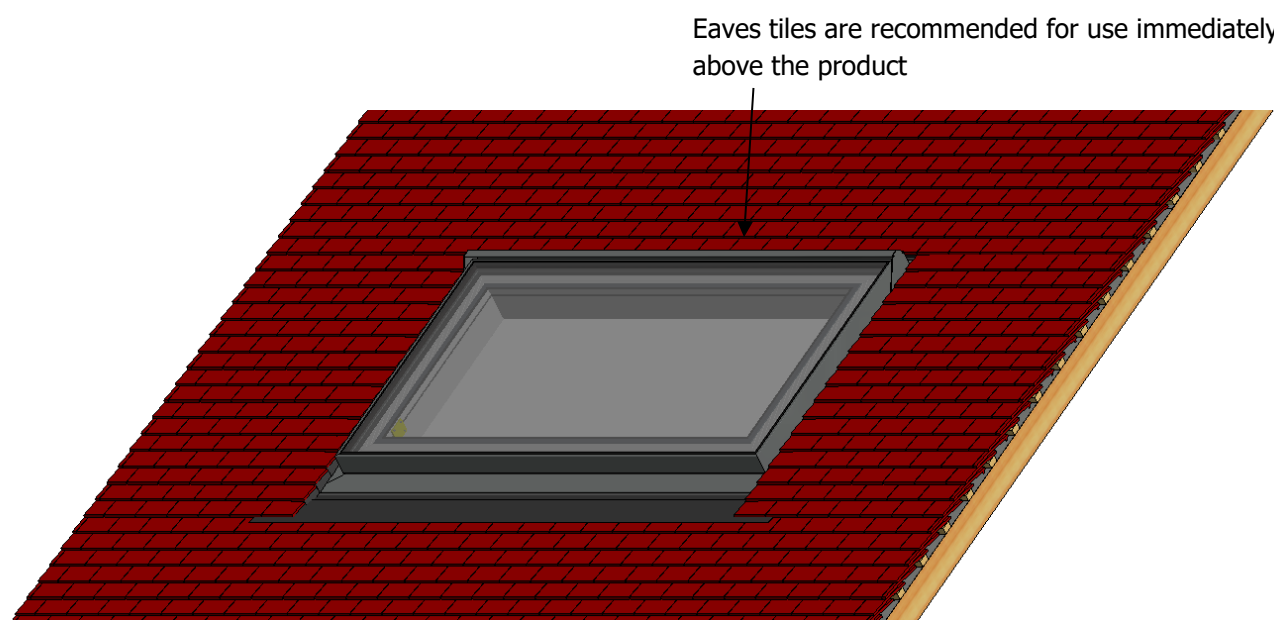


Fig. 13c – Roof tiled above the head

Do not apply any interior finishes yet. To set up mechanisms go to the following pages:

For a manual crank PitchVent, refer to page 21.
For a chain actuated PitchVent, refer to page 25.

Manual Crank PitchVent Setup



Before continuing, please check the type of product that is being fitted is a **manual crank PitchVent**, and that installation onto the roof has been completed correctly.

Step 1. – Remove the transportation plate

- Check both the external and internal areas surrounding the product for obstructions that may prevent the product from opening, or could cause damage to the product
- Working from inside the building, remove the yellow transportation plate from the cill (fig. 14a)

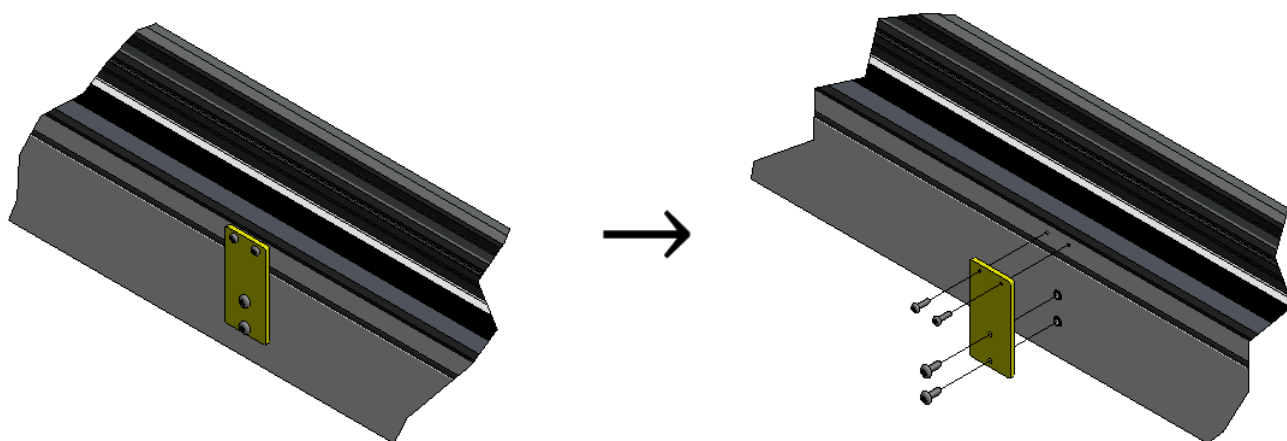


Fig. 14a – Transportation bracket removed

Step 2. – Attach the brackets for the spindle

- Attach the base bracket and spacer (supplied) to the base frame of the product using the supplied screws (these are the same as the ones removed in the previous step) – ensure that the parts are correctly orientated (fig. 14b)
- Attach the lid bracket (supplied) to the lid frame of the product using the supplied screws – ensure that the bracket is correctly orientated (fig. 14c)

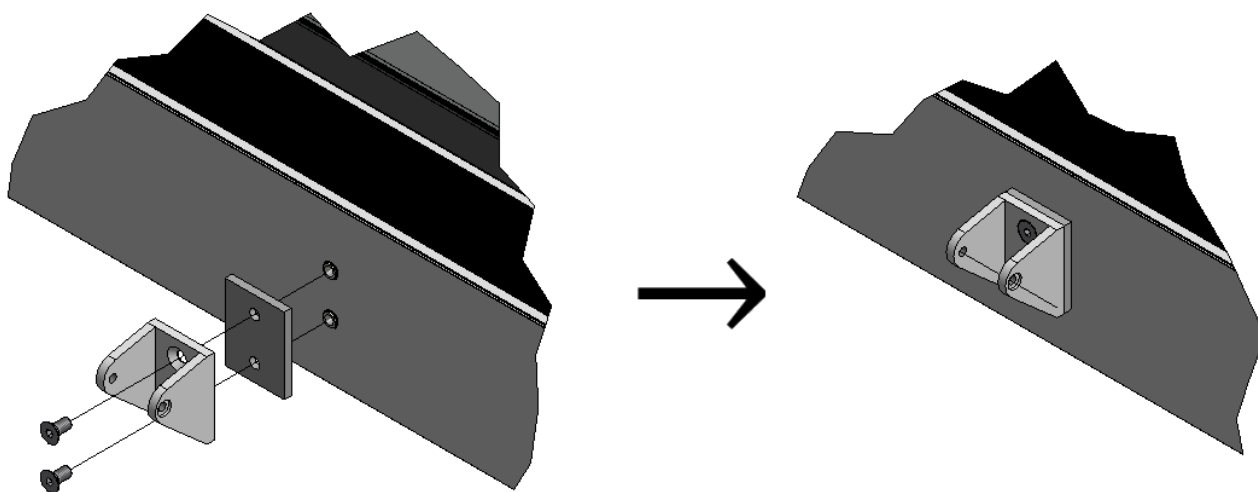


Fig. 14b – Base bracket attached

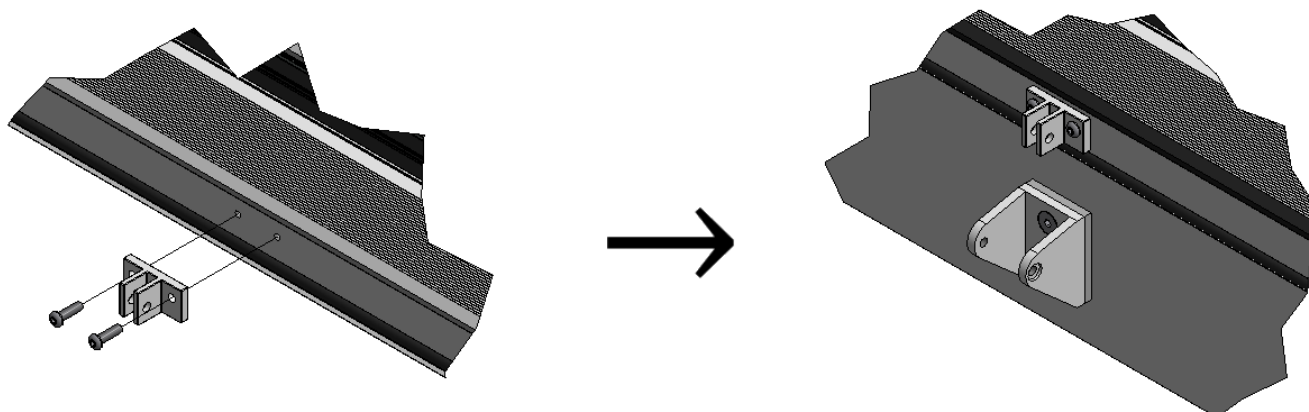


Fig. 14c – Lid bracket attached

Step 3. – Connect the spindle

- The collar will probably have to be wound all the way to the top (against the shoulder) before attaching the spindle to the brackets, as when the lid is closed the glass will be in the way
- Attach the spindle to the base bracket using the supplied fixings – ensure that it is correctly orientated (fig. 14d)
- Attach the spindle to the lid bracket
 - If not already done, rotate the wide part of the spindle downwards until it hits the spindle collar (fig. 14e)
 - Making sure that the shoulder of the spindle sits hard against the collar, unscrew a small length of the inner spindle, until it can connect to the lid bracket (fig. 14f)
 - Connect the spindle to the lid bracket using the supplied fixings (fig. 14g)

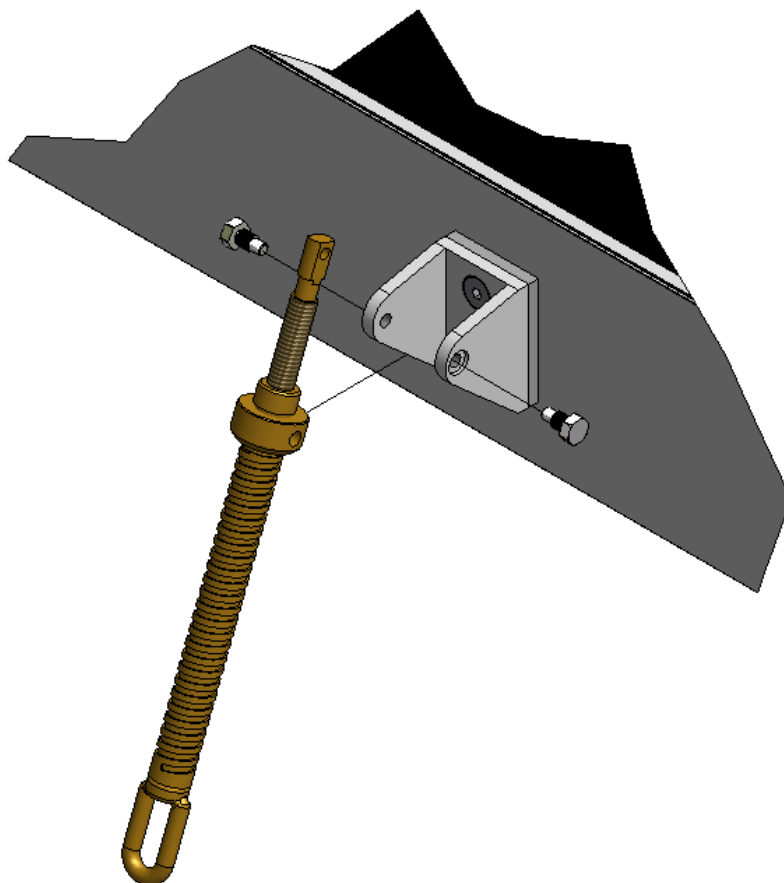


Fig. 14d – Spindle connected to base bracket

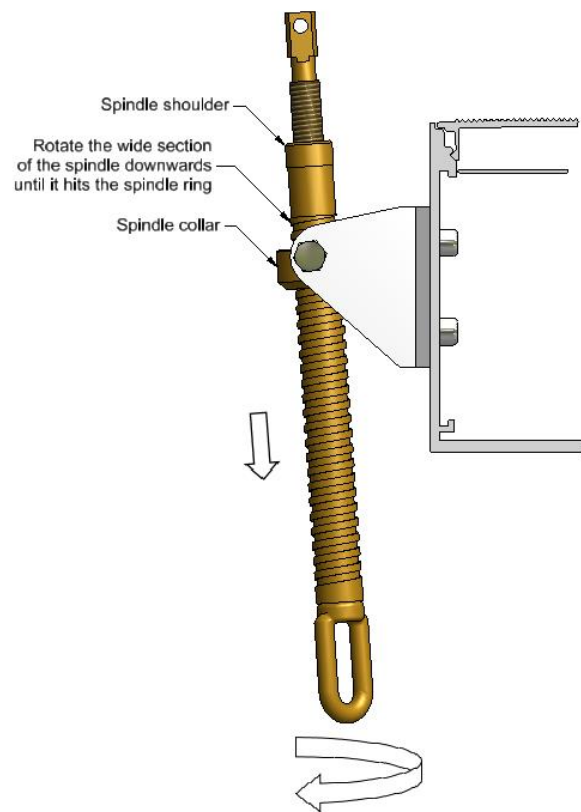


Fig. 14e – Wind the spindle downwards

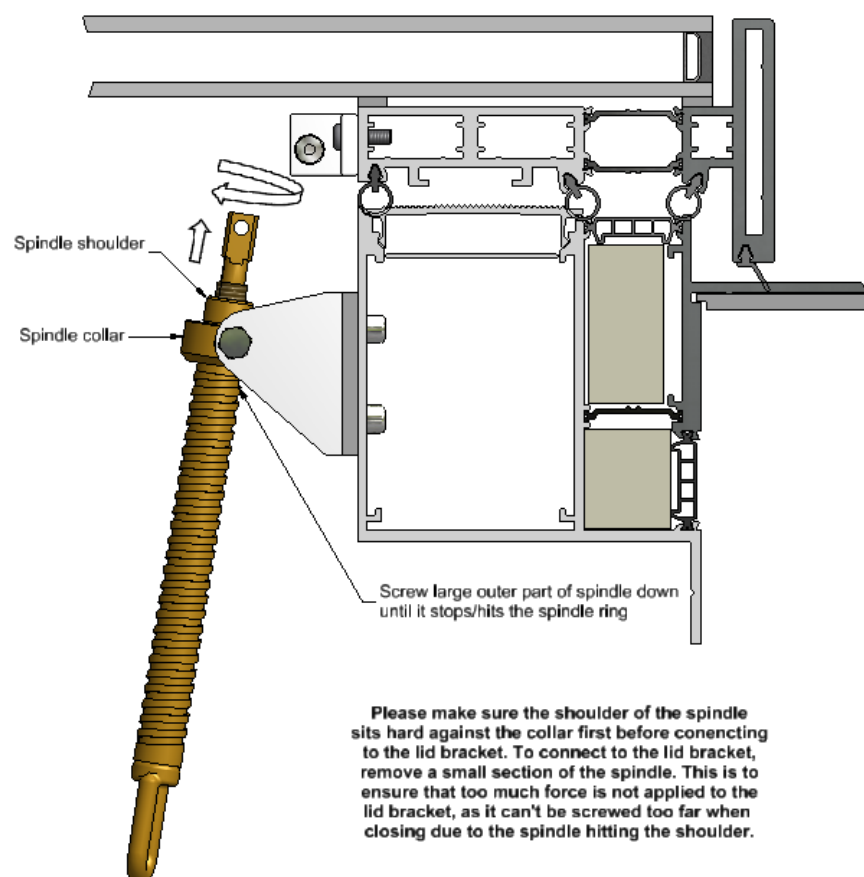


Fig. 14f – Raise the smaller part

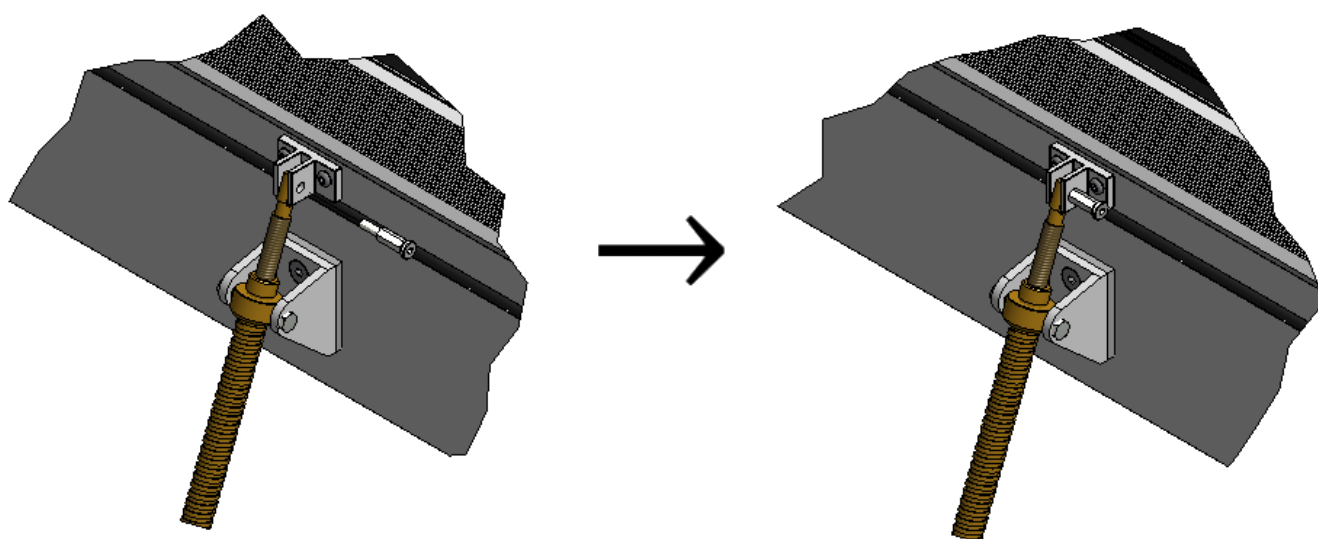


Fig. 14g – Spindle attached to lid bracket

Step 4. – Finishing up

- Once everything has been fully attached, check product functionality by completely opening and closing the product at least once
- Interior finishes can now be applied (see page 27 and refer to relevant sales drawing) – consider the internal finishes carefully and ensure that they will not interfere with the mechanism

Chain Actuated PitchVent Setup



Before continuing, please check the type of product that is being fitted is a **chain actuated PitchVent**, and that installation onto the roof has been completed and done correctly.

Step 1. – Remove the transportation plates

- Check both the external and internal areas surrounding the product for obstructions that may prevent the product from opening, or could cause damage to the product
- Check also that the cable and framework has not been damaged
- Working from inside the building, remove the two yellow transportation plates (one on either side)
- Insert the small blanking caps (supplied) into the fixing holes for the transportation plates

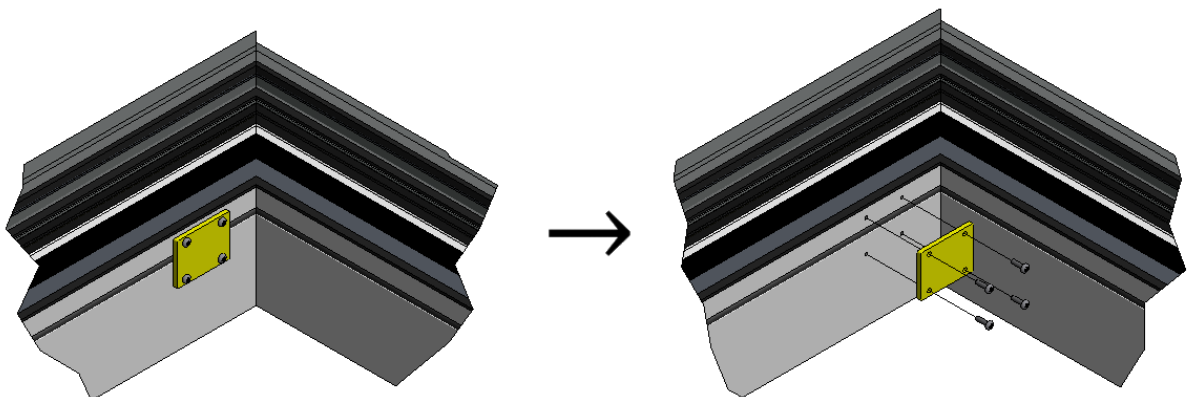


Fig. 15a – Transportation brackets removed

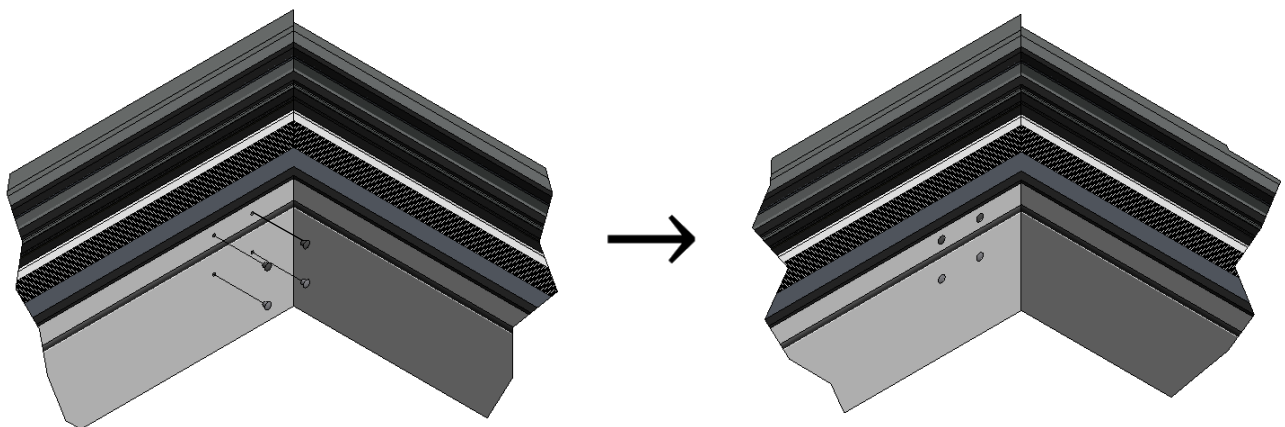


Fig. 15b – Blanking caps inserted

Step 2. – Wire the product in

- Using the wiring diagram (202-ASS-009) for reference (if not supplied, please contact Glazing Vision before proceeding), wire in the product and any switches and/or optional extras

Step 3. – Finishing up

- Once everything has been fully wired in, switch on the power and check product functionality by completely opening and closing the product at least once
- Interior finishes can now be applied (see page 26 and refer to relevant sales drawing)

Interior Finishing

Glazing Vision does not specify the finishes permitted except for the following stipulations:

- The finish must be built up to the internal dimension of the product – see sales drawings
- No interior metal component (for example edging strips for plastering) may touch any part of the product framework that is the outer colour (RAL 7015 grey as standard)
- Nothing should be fixed directly to the product



Contravention of either of these stipulations will severely undermine the thermal efficiency of the product.

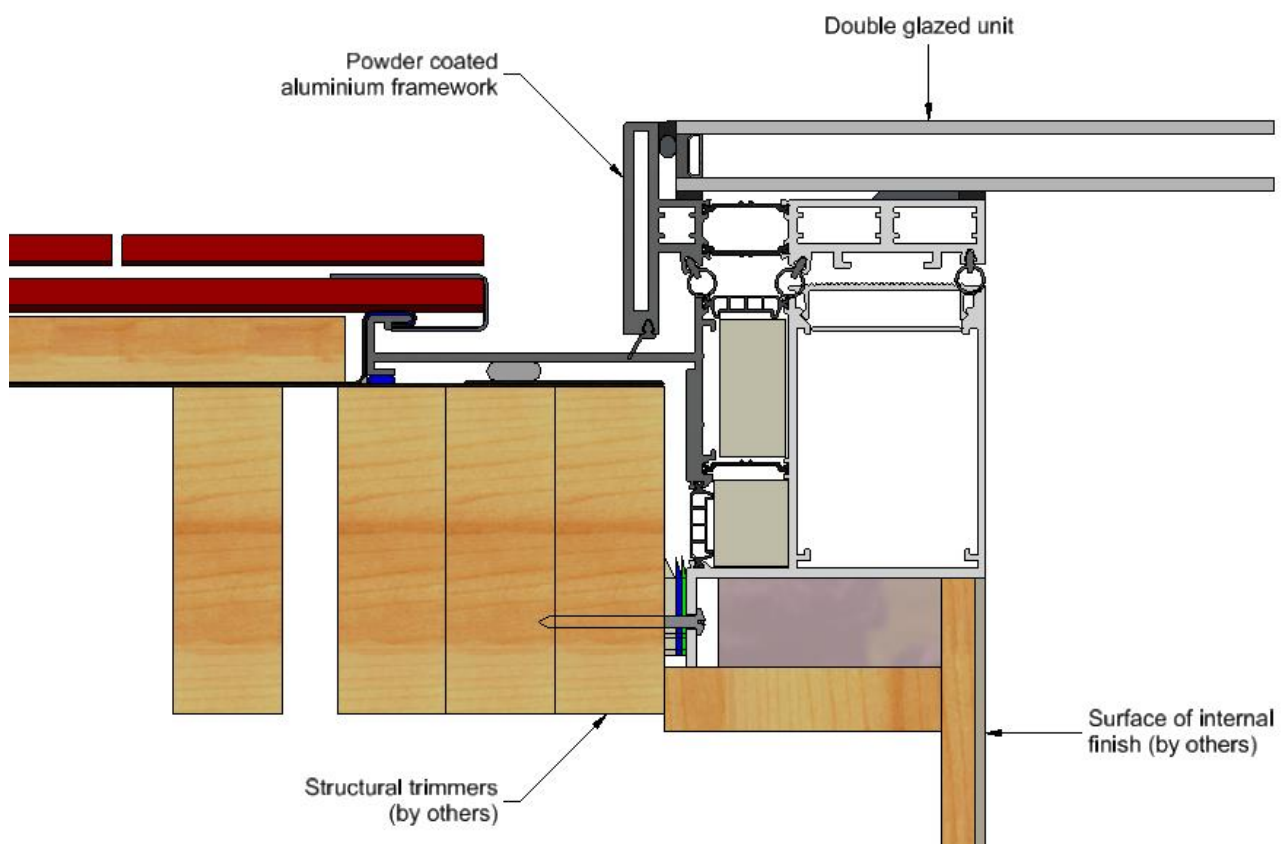


Fig. E – Example section detail of a double glazed unit with standard installation

Conformity



EN 14351-1:2006+A2:2016

For more, refer to the separate declaration of performance documentation, or see the marking affixed to the Product.