



# CAPELLA MODULAR ORANGERIES

K2 INSTALLATION GUIDE

**This document features pages extracted from the  
K2 Complete Conservatories Installation Guide.**

**Please ignore any references to other sections of that guide,  
as this document can be used as a stand-alone guide  
to installing the Capella system.**

Please Note: This guide is updated regularly, to reflect the latest system developments.  
It is recommended that you check online at [www.k2conservatories.co.uk/downloads](http://www.k2conservatories.co.uk/downloads)  
(look for the category "Installation Guides") for the latest version as a PDF download,  
in case there are any changes that affect your build.

**This is Version 1.5, produced in October 2013.**

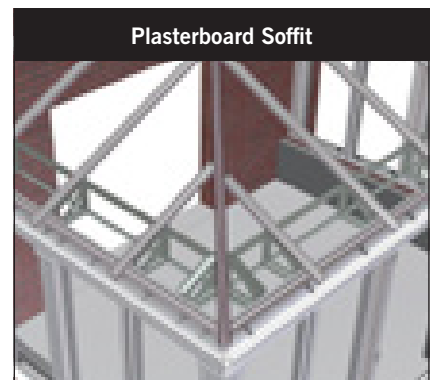
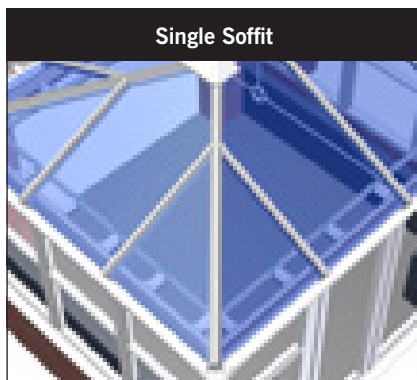
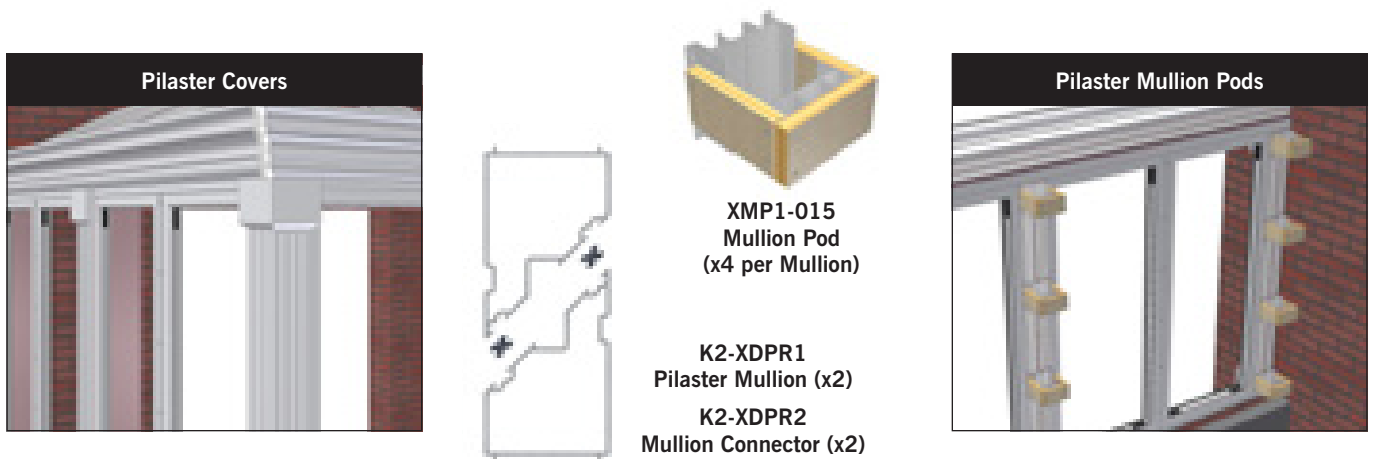
THIS SECTION IS FOR AN OPTION THAT MAY NOT BE PART OF YOUR INSTALLATION (ONLY READ IF APPLICABLE TO YOUR SPECIFICATION).

# CAPELLA SYSTEM: INTRODUCTION

K2 INSTALLATION GUIDE

Capella is a modular system used to create an orangery style conservatory. It allows for varied configurations of gutter, soffit and decorative options.

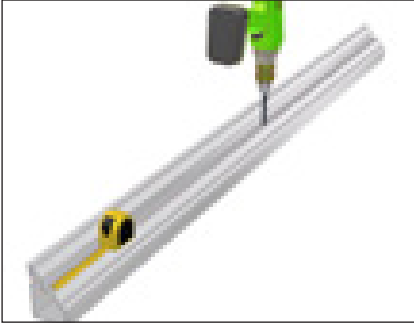
Please ensure you use the following sections as appropriate to your specification. It is advised that you read ALL relevant sections before commencing build, so you can be sure to follow the stages in the correct order.



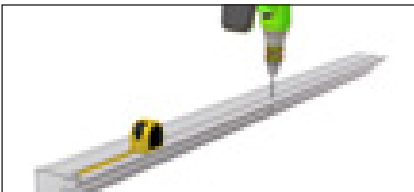
## CAPELLA SYSTEM: PILASTERS, MULLIONS & MULLION PODS

### K2 INSTALLATION GUIDE

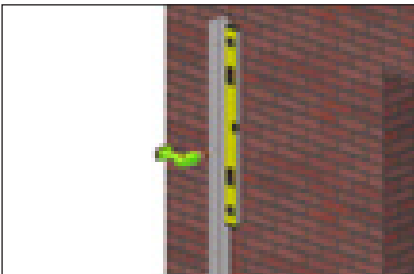
#### Setting position for Pilaster Mullion (wall)



Identify pilaster mullions x2 (K2-XDPR1), mark and drill (8Ø) the position for the Frame Anchors (SC031), approximately 100-150mm from each end, then equally space others. (3 Anchors for dwarf wall models). Check prior to drilling that the holes do not land on a mortar joint; adjust accordingly.



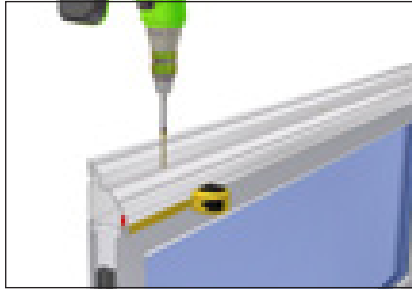
Mark and drill (4Ø) positions for the Pilaster Reinforcement Fixing Screws 4.8mm x 50mm (SH52), approximately 150mm from each end and centrally, when marking and drilling the opposite Pilaster ensure that the holes are staggered



Position the pilaster mullion onto the cill. Ensure that it is parallel with the vertical line previously marked when fitting the cill. Mark & drill and attached the pilaster to the house wall.

**Important: Ensure the Pilaster Mullion is plumb prior to fixing, packing may be required.**

Identify the first window and the opposing Pilaster Mullion for installation.



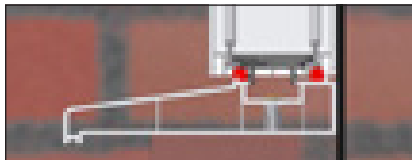
**Important: When installing any frame, ensure that the drainage slots in the bottom are always to the outside of the conservatory.**

Place the pilaster mullion onto the connecting side of the window. The bottom of the window should protrude 3mm further than the pilaster mullion.

Mark, drill (4Ø) and screw 4.8mm x 90mm (SH56) the Window to the Pilaster Mullion at approximately 100-150mm from each end and centrally, when marking and drilling adjust the centres to miss any previous holes drilled to avoid intersecting fixings.



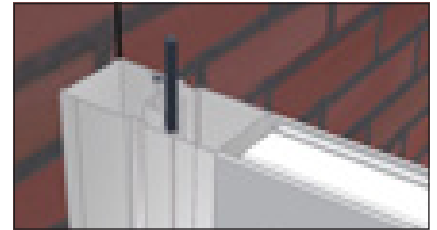
**Important: Check the orientation of the Pilaster Mullion prior to fixing.**



Position the window and pilaster close to the starter pilaster attached to the wall. The legs of the cill support blocks should line up with the channel of the cill (inside face of window will be parallel with inside of cill).

**Note: It may be advisable to spray the Cill with a light solution of soapy water to assist with sliding the window.**

Push or tap window firmly downwards to clip into place, (The base of the window should sit firmly down onto the cill). Then push or tap the window along the cill to meet the starter Pilaster.



Select x2 pilaster mullion connectors (K2-XDPR2) and slide down the mullions to lock together.

**Note: The Pilaster Mullion Connectors are used to hold the Aluminium section together until they are screw fixed. It may be necessary to cut the Pilaster Mullion Connectors (K2-XDPR2) down to 1500mm (2x @ 1500mm per assembled mullion).**

A light solution of soapy water can be used to assist with sliding Connectors.

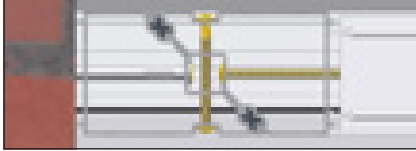


Finally, screw fix 4.8mm x 50mm (SH52) the pilaster mullions together through the holes previously drilled in the fixing channels on both faces.

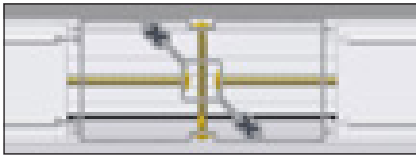
# CAPELLA SYSTEM: PILASTERS, MULLIONS & MULLION PODS

## K2 INSTALLATION GUIDE

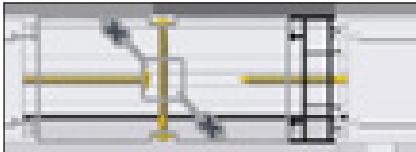
### Starter Pilaster Mullion



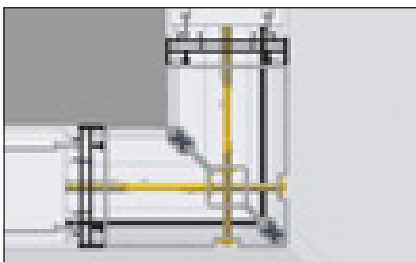
### Inline Pilaster Mullion



### Inline Pilaster Mullion (Double Doors)

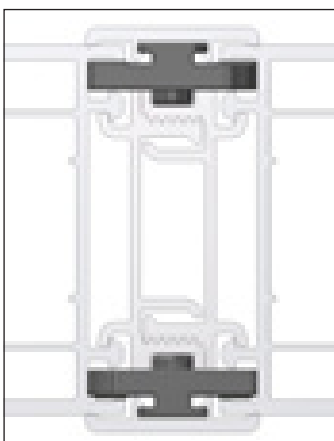


### 90° Corner Pilaster



**Important:** 25mm Frame Extenders (5EX71) are required when fitting Double Doors to an Inline Pilaster Mullions. 15mm Frame Extenders (5EX72) are required when fitting windows to Corner Pilasters. Secure together using 4.8mm x 100mm screws (SC038).

### Adjustable Inline Connector

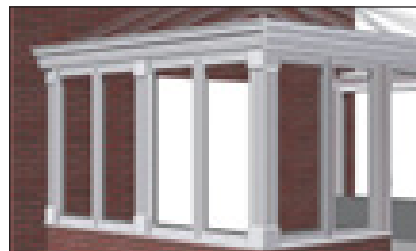


Continue to fit all pilasters in the same method as described previously. Other Inline coupling methods may have been designed within the conservatory (refer to Installation Guide on fitting Adjustable Inline Connectors).

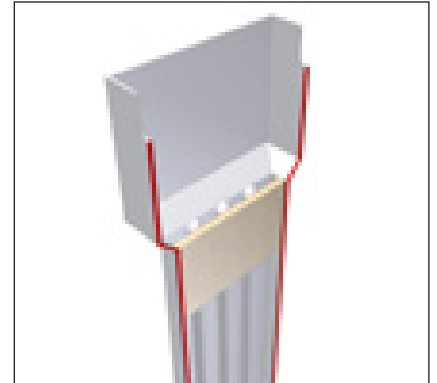
**You should now follow the instructions in the section “Capella System: Gutter with Fascia” before returning to this point.**

Once all fascia gutter sections and corner covers have been installed, proceed to fit the pilaster mullion covers.

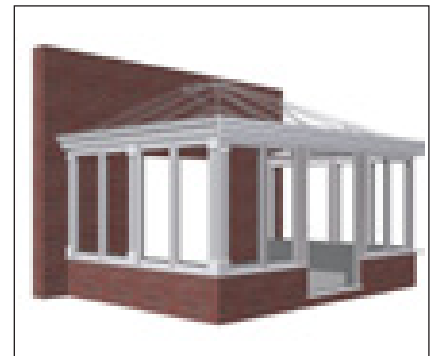
### Installing Pilaster Mullion Covers



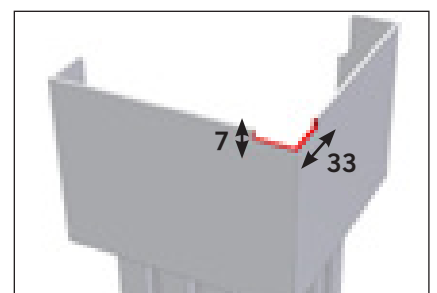
On the inside face of the pilaster mullions, mark and drill (6Ø) to match the centre of each timber insert, ensure the pilot holes line up with the die lines.



Prior to installing the Pilaster Mullion Cover (K2-XDP1 Inline), apply a bead of silicone down each internal reveal. Once fitted, remove and clean any excess sealant.



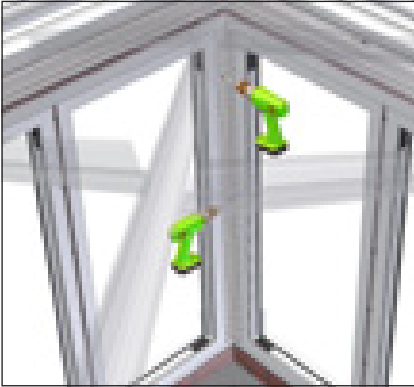
Centrally locate the Pilaster Cover (K2-XDPR1) with the Mullion and fix from the inside using 2x M5 x 90mm Woodscrew screws (XM590WS) per timber insert.



## CAPELLA SYSTEM: PILASTERS, MULLIONS & MULLION PODS

### K2 INSTALLATION GUIDE

If the Corner Pilaster (K2-XDPC) has not been factory notched, it may be necessary to trim the Corner Pilaster Cover to fit around the External Fascia Corner Cover (X90E), carefully using a Hacksaw and file.



Fix the pilaster corner cover in the same way, drilling (6Ø) pilot holes from the inside faces of the pilaster mullions (ensure that the holes line up with the die lines), secure using 2x M5 x 90mm Woodscrew Screws (XM590WS) and washers (XRE1) per timber insert.

**Prior to installing mullion pods (XMP1-015), it is recommended that an Eaves Soffit is installed first.**

**Please follow the instructions appropriate to the Eaves Soffit you have purchased (Single/Double Standard Soffit or Plasterboard Soffit) before returning to this point.**

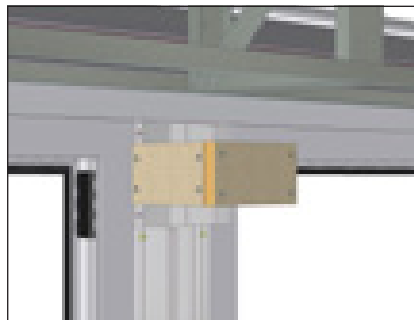
#### Installing Mullion Pods



4 x Mullion Pods (XMP1-015) can now be fitted to each starter and inline pilaster mullions. These pods will be positioned centrally and equally spaced up the pilaster mullion.



Position the first pod with the aluminium part flush with the bottom of the windows (this will allow clearance when fitting window boards (not supplied)).



Position the last pod with the aluminium part flush with the top of the windows (this will allow clearance when fitting plasterboards (not supplied)).

Secure each pod to the pilaster mullions using 4x 4.2mm x 19mm Screws (XM420P).



Once all soffits and pods have been installed, finish with 12.5mm Plasterboard (supplied by others) and skim with plaster to finish.

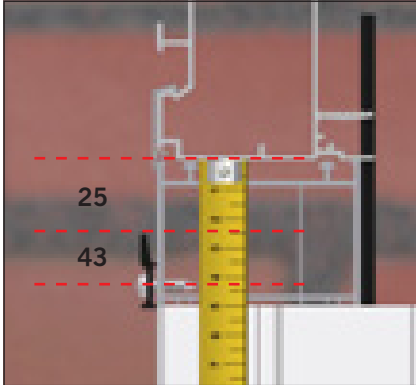
#### Finishing off Internal 90° Pilasters



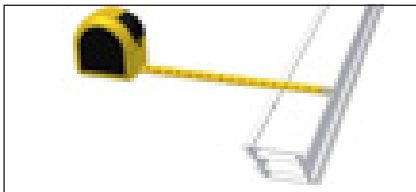
## CAPELLA SYSTEM: ALUMINIUM FASCIA ON PVC-U GUTTER

### K2 INSTALLATION GUIDE

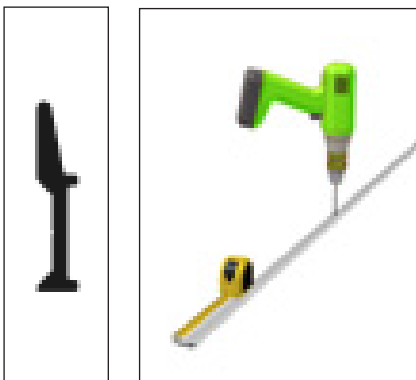
#### Eaves, 50mm Extension & Fascia Clip



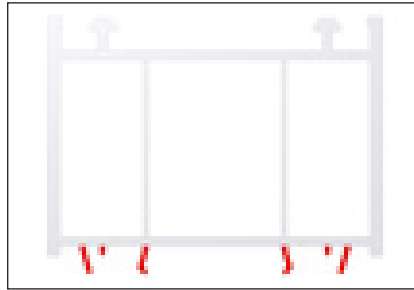
Identify the 50mm Extension's (5EX73), on the external face, measure 43mm down (25mm to top of Fascia Clip) and mark full length (fixing location for the Aluminium Fascia Clip (XGUTFC)).



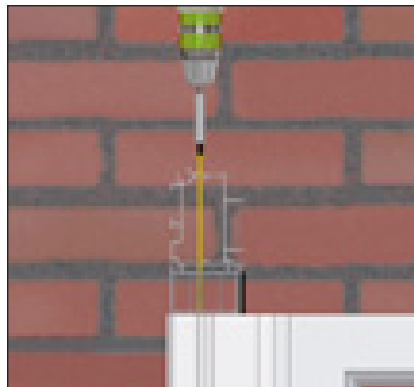
Identify the Aluminium Fascia Clips. Prior to installation mark and drill ( $4\emptyset$ ) at approximately 50mm from each end and 600mm centres.



**Important:** Position the 50mm Extension (5EX73) with the marked lines facing outside and clip into place (prior to installing the legs of the extensions will require locally trimming off with a sharp chisel or knife at any mullions, couplings and corner posts).



Select the first Eaves Beam and place onto the 50mm Extension. Using a 6mm long reach drill bit, drill through the eaves beam (A5080) and Extension (5EX73) approximately 100mm from the edge of each panel (i.e. two holes per window).



Power drill the 6mm x 180mm Eaves to Frame screws through the holes to secure the Frame, Extension and Eaves Beam together.

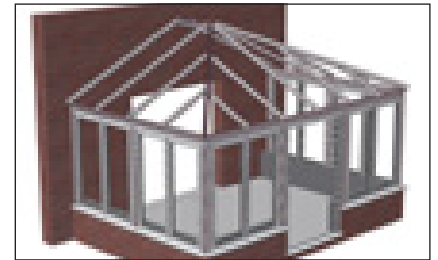
**Important:** Refer to the Eaves Beam section of this guide for further information on jointing and sealing of the Eaves Beams.



Once all the extensions and eaves beams have been securely fixed, select and position the corresponding Aluminium Fascia Clip (XGUTFC) with the mark on the 50mm extension (previously done).

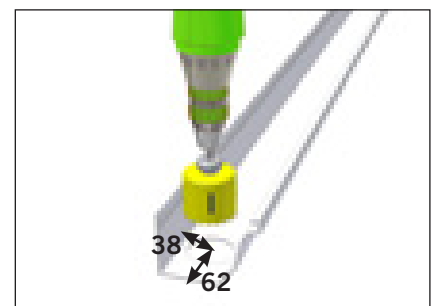
Using 4.8mm x 19mm screws (XM4819SS), screw fix the clip into place (ensure that the clip is horizontal when fixing). Work around the perimeter of the conservatory installing all the Aluminium Fascia Clips.

**Proceed and install the conservatory roof, referring to the appropriate sections of this guide.**



Secure the aluminium gutter brackets to the eaves beams using 2x 4.8mm x 25mm Screws (XM4825SS). Position the first and last bracket from each end at 200mm then approximately 600mm centres.

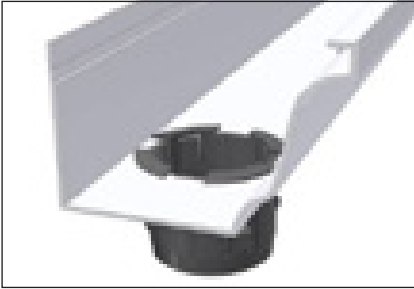
**Prior to fitting any guttering, ensure that all Glazing Bar and Hip End Caps have been securely fixed.**



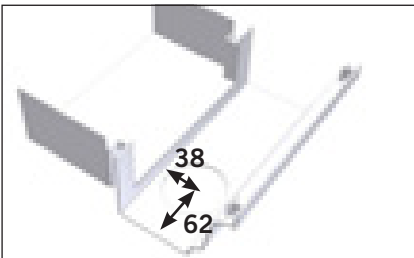
## CAPELLA SYSTEM: ALUMINIUM FASCIA ON PVC-U GUTTER

### K2 INSTALLATION GUIDE

Prior to fitting the gutter, establish the position required for the (C9077) multi positional outlet. Mark the gutter 38mm in and 62mm along the base, cut a hole through the selected gutter using a 60Ø hole saw.

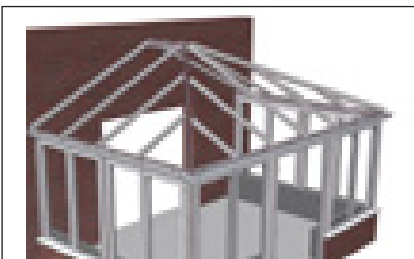


Fit the (C9077) multi positional outlet into the hole and push until it bottoms out on the gutter.

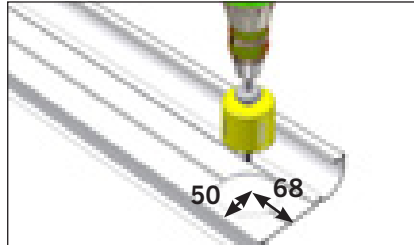


If the conservatory has been designed with a box gutter then prior to fitting, establish the position required for the (C9077) multi positional outlet in the box gutter adaptor (C9441). Mark 38mm in and 62mm along the base, cut a hole through the selected gutter using a 60Ø Hole saw.

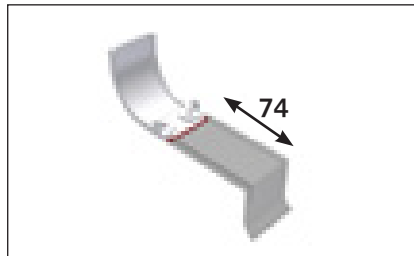
Refer to your "Complete Conservatory Installation Guide" for fitting the PVC Gutter.



Work around the conservatory fitting all PVC-u Gutters, stop end's and corners.

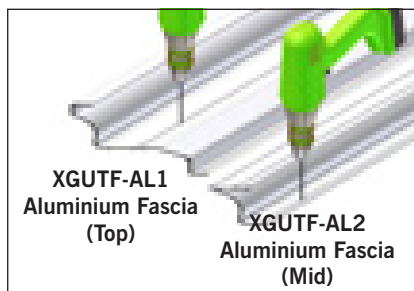


Identify the (XGUTF-AL3) bottom Aluminium Fascia, mark 50mm in and 68mm along the base, cut a hole through the selected gutter using a 75Ø hole saw.



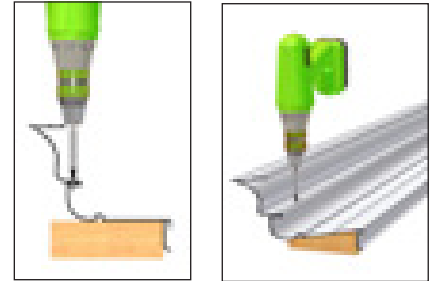
When installing next to any downpipe/outlets it is necessary to cut down any (X180E) by 74mm prior to fitting.

### Assembling Top, Mid and Lower Aluminium Fascia

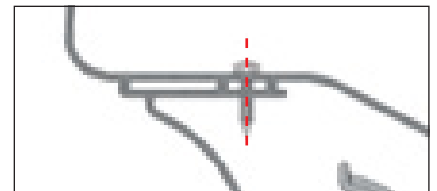


Prior to installation, select the Aluminium Fascia sections for each facet of the conservatory. These sections require drilling with 4Ø pilot hole at 100mm from each end and at approximately 500mm centres.

Note: Aluminium Fascia – (XGUTF-AL1) length will have been reduced by 6mm to accommodate the end plate and fixings.



Fix Aluminium Fascia mid section (XGUTF-AL2) to Aluminium Fascia-bottom section (XGUTF-AL3) using 4.8mm x 19mm Stainless steel screws (XM4819SSP). Ensure that the sections are supported and care is taken to not damage the outer face.



**Note:** When assembling the Top, Mid and Bottom Fascia Gutter together, it is important that they are located correctly.

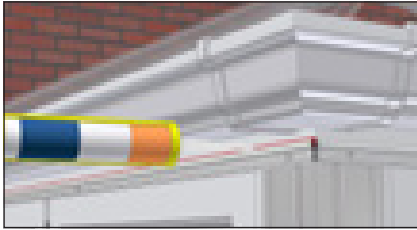


Select and screw fix the end plate (XGUTF-PLT) to the corresponding Aluminium Fascia –top (XGUTF-AL1) using 4.8mm x 19mm Stainless Steel Screws (XM4819SSP). Once fixed apply a bead of silicone to the inside.

**THIS SECTION IS FOR AN OPTION THAT MAY NOT BE PART OF YOUR INSTALLATION (ONLY READ IF APPLICABLE TO YOUR SPECIFICATION).**

# CAPELLA SYSTEM: ALUMINIUM FASCIA ON PVC-U GUTTER

## K2 INSTALLATION GUIDE



Prior to fitting the Fascia Gutter - bottom (XGUTF-AL3), apply a bead of silicone along the top of the entire Aluminium Fascia Clip (XGUTFC) on each side.



Position the assembled Aluminium Fascia (Mid and Bottom) below the PVC-u gutter and hook over the Aluminium Fascia Clip (XGUTFC).

Work around the conservatory, fitting all the pre-assembled sections.

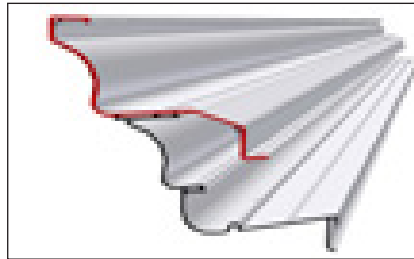


Next, install the fascia gutter top section to the relevant side, through the pilot holes previously drilled.

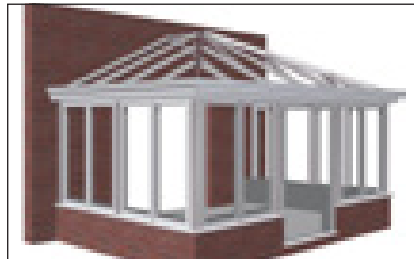


Working along each side, screw the fascia gutter top section (XGUTF-AL1) to each of the fascia gutter brackets (C9569) using 2x 4.8mm x 19mm stainless steel screws (XM4819SSP). The screws should be

located into the receiving slots in the gutter brackets (C9569) to secure.



Note: It is recommended that a bead of Silicone is applied to the Aluminium Fascia Top section (XGUTF-AL1) cut ends prior to joining.



Work around the conservatory fitting all the fascia gutter top sections in the same manner.



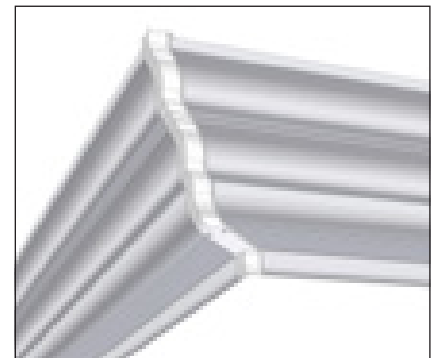
Fit one of the inline fascia cover-top castings (X180E) at the start of the gutter and secure onto the fascia gutter (top) Section using 2x 4.8mm x 19mm stainless steel screws (XM4819SSP).



Select the previously cut down inline fascia cover (bottom) and secure into place using 2x 4.8mm x 19mm stainless steel screws (XM4819SSP).



When the fascia gutter is split, the joint will be covered by using an inline fascia cover (X180E). Fit and fix as previously described.



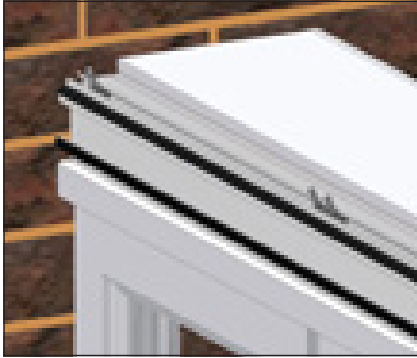
Mitred joints will be finished off with angled covers, 90° external fascia corner cover (X90E) or 135° external fascia corner cover (X135E). Fit and fix as previously described.



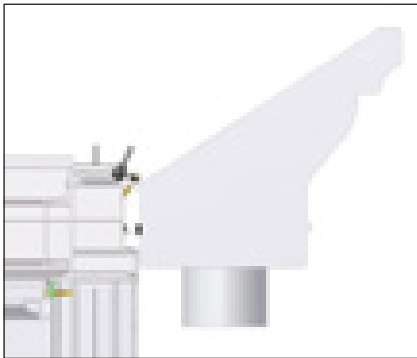
## CAPELLA SYSTEM: K2 ALUMINIUM GUTTER

### K2 INSTALLATION GUIDE

Prior to attaching the guttering, apply the Thermal Break Tape (C9485) along the two faces of the Eaves Beams.



Ensure that the tape is firmly pressed into position prior to removing the protective film.



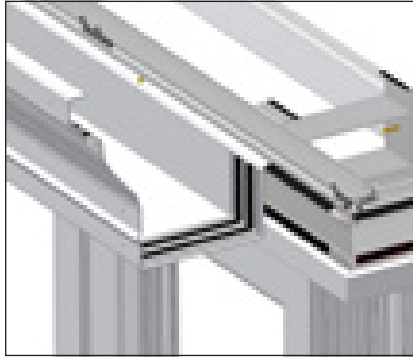
Place the guttering into position so that it sits tightly against the pivot channel of the Eaves Beam. Check the gutter for being level and square to the Eaves Beam.



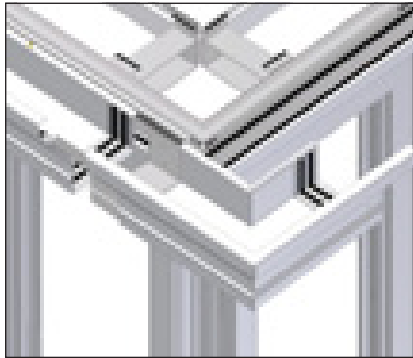
Once the guttering is in position, secure it using the Gutter Fixing Screws (C9479) 50mm from each end and at approximately 450mm centres.

Cut 2x strips (approx 435mm long) of the Butyl Tape (C9482) and place the first

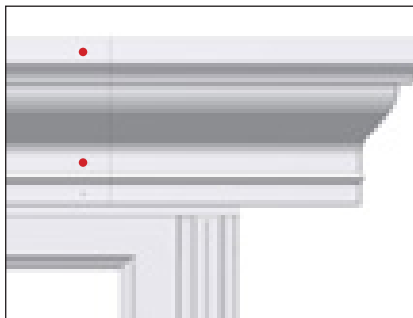
tape approximately 15mm into the gutter and the second leaving a 10mm gap between the two.



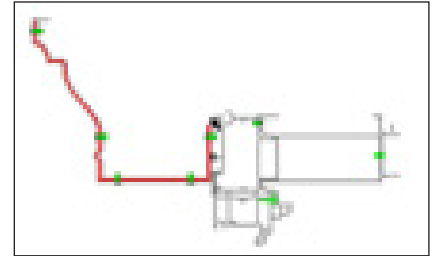
Once the tapes are pressed firmly into position, apply a liberal amount of silicone between the Butyl Tapes so it sits proud (no excess silicone is to be removed at this point).



Place the Gutter Corner (with jointer) into position and is firmly bedded onto the silicone/Butyl tape joint. Clamp and compress the joint together prior to drilling and fixing.



Mark the drilling positions. It is important that the drilled holes pass through the silicone filled channel between the Butyl Tapes and the jointer.



When riveting the back face of the gutter, ensure that it is riveted from inside.

Once drilled, permanently fix the joint together using rivets (C9480).



Fix the Gutter Corner to the Eaves Beam using the Gutter Fixing Screws (C9479) approximately 25mm from each end and in from the corner.



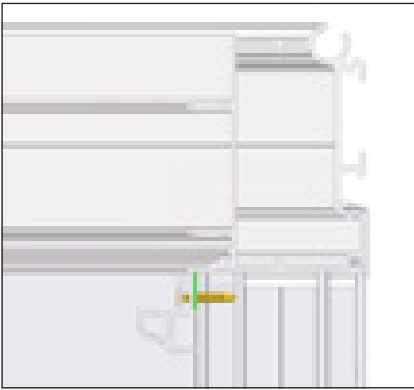
Working around the orangery, fix each joint using the same method. Clean off any excess silicone once permanently fixed together.

Finish the installation by applying touch up paint (C9484) to each rivet head.

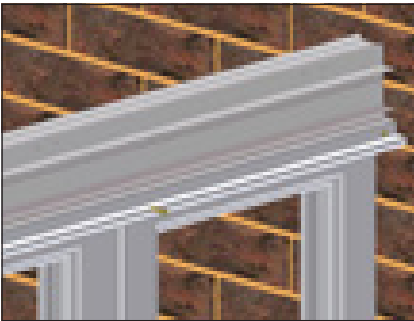
## CAPELLA SYSTEM: STANDARD INTERNAL SOFFIT

### K2 INSTALLATION GUIDE

Fix the “Capella” soffit trim (P6095) tight to the underside of the eaves beam and screw fix (C9489) to the inside face of the window (50mm from the ends and at approximately 450mm centres), ensuring that 1mm packers are placed between the trim and windows. It is recommended that the soffit trim should be pre-drilled with a clearance hole prior to installation.



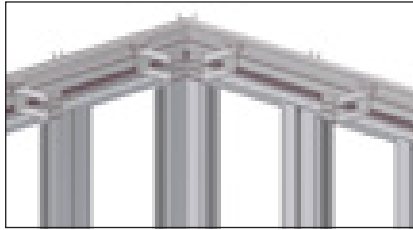
Fit the “Capella” soffit trims around the internal perimeter of the orangery (ensuring that the mitres are tightly together in the corners).



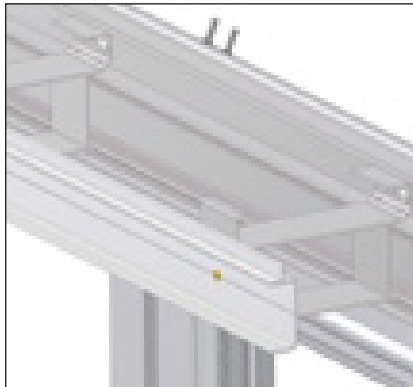
If not already fitted, fix the “Capella” soffit bracket (C9463) to the pre-drilled holes in the upper face of the Eaves Beam using the pop rivets supplied (C9480).



Continue to fix all the soffit brackets around the internal perimeter.



Once the soffit brackets installed, If not already fitted, fix the Eaves Beam Cover Adaptor (A5148). The adaptor should be centrally located into the recess on each bracket prior to fastening permanently using either pop rivets (C9480) or screws (C9489).



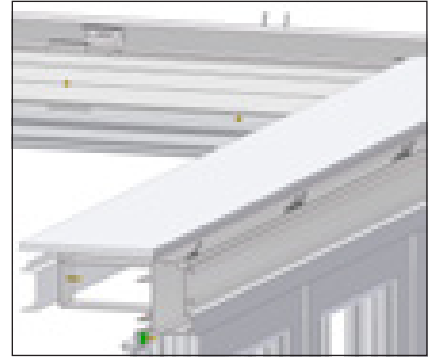
Continue to fix the adaptors around the internal perimeter, ensuring that the mitres are tightly together in the corners.



Once the Soffit Brackets are installed, apply strips of double-sided tape to the top of each bracket prior to fitting the Upper Soffit Cladding into place.



Position the back edge of the (175mm wide) upper Soffit Board (C9486) using the upstand on the top of the Eaves Beam.

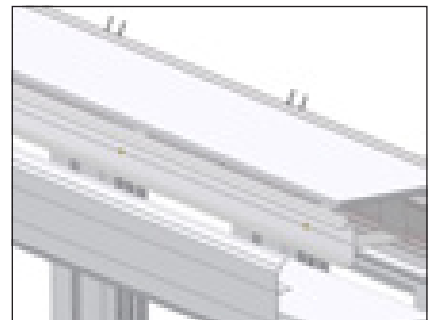


Fit the upper soffit claddings around the internal perimeter of the orangery, ensuring that the mitres are tightly together in the corners.



Clip the Eaves Beam packers (C9118) into position in the Eaves Beam Cover Adaptor (A5148) at approx 600mm centres.

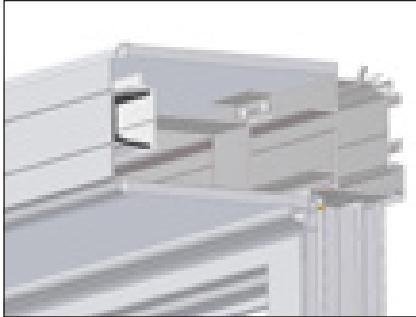
Locate the (150mm wide) lower soffit cladding onto the soffit trim and clip the Internal Eaves Beam Cover (P6042) into the Eaves Beam Cover Adaptor (A5148).



Check along the length of the Internal Eaves Beam Cover (P6042) to ensure that it has correctly located into the adaptor (A5148), if any adjustments are required, gently squeeze the top and bottom of the Eaves Beam Cover (P6042) and place in position before releasing.

## CAPELLA SYSTEM: STANDARD INTERNAL SOFFIT

K2 INSTALLATION GUIDE



When fitting the Eaves Beam Cover (P6042) ensure that a gap is present in the corners to allow fitting of the Internal Eaves Cover Joint Trim (C9108). Push fit the joint trims into place.



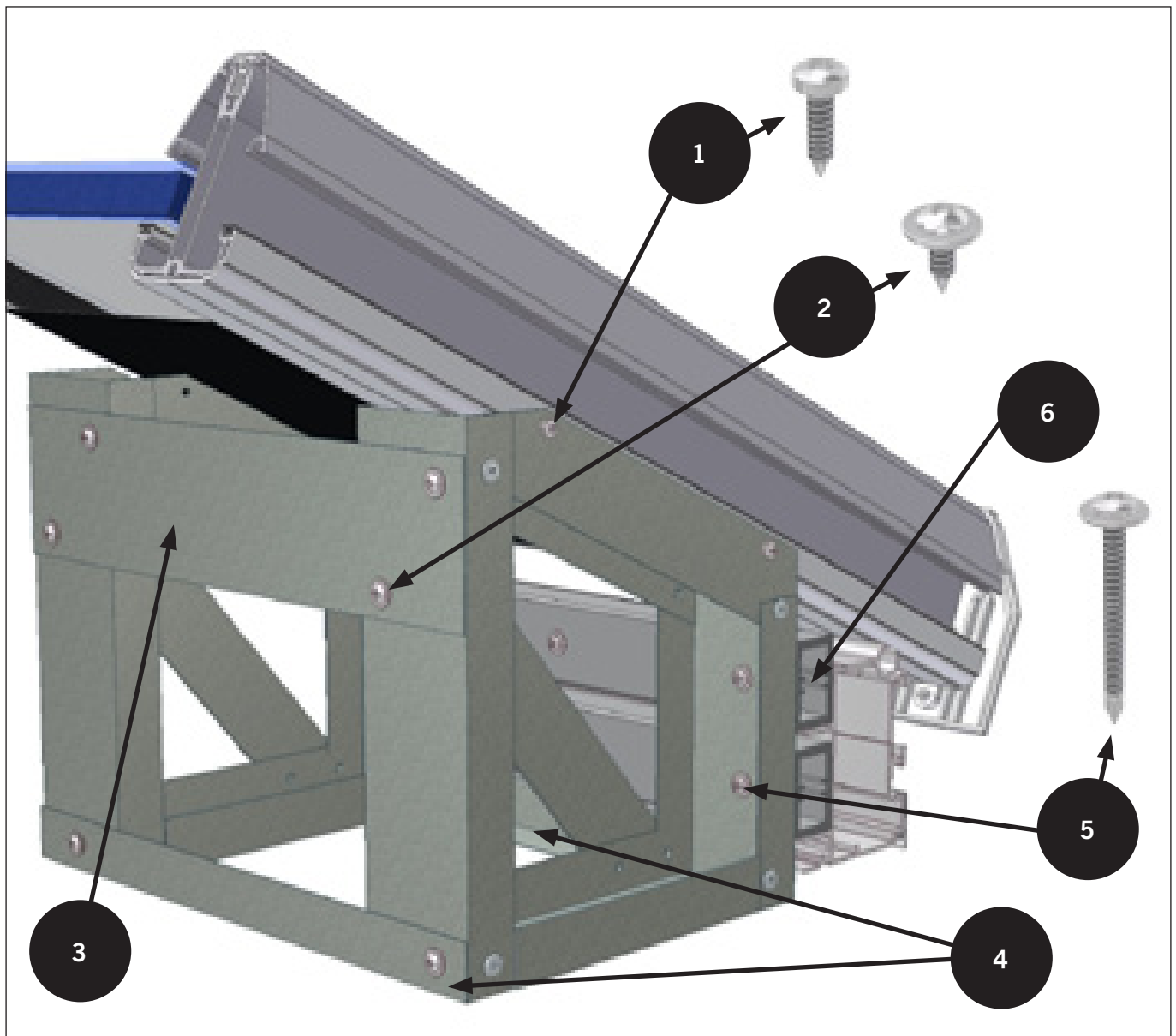
THIS SECTION IS FOR AN OPTION THAT MAY NOT BE PART OF YOUR INSTALLATION (ONLY READ IF APPLICABLE TO YOUR SPECIFICATION).

# CAPELLA SYSTEM: PLASTERBOARD INTERNAL SOFFIT

K2 INSTALLATION GUIDE

## COMPONENTS

Item No.	Item Description
1	C8018 Frame Fixing Screw (3.8mm x 16mm Self Drill, Pan Head)
2	Angle & Strap Fixing Screw
3	70mm Fixing Strap
4	25mm x 25mm Angle
5	C9509 Frame Fixing Screw (4.8mm x 50mm Self Drill, Wafer Head)
6	C9565 Soffit Packer (PTi8)



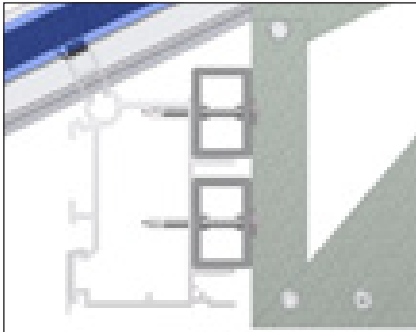
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# CAPELLA SYSTEM: PLASTERBOARD INTERNAL SOFFIT

## K2 INSTALLATION GUIDE



Install roof, leaving tie bars and glazing out at this stage.



### Soffit Packer fixing position

(If not already fitted) Select and position Soffit Packer (C9565) onto the lower Eaves Beam leg, screw fix (C9509) approximately 200mm in from each end. Continue to fit packers around the internal perimeter.



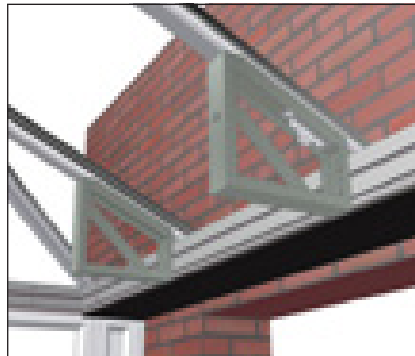
(If not already fitted) Select and position Soffit Packer (C9565) onto the upper Eaves Beam leg, screw fix (C9509) approximately 200mm in from each end. Continue to fit packers around the internal perimeter.



Once all Soffit Packers have been fitted, continue and fit soffit frames.



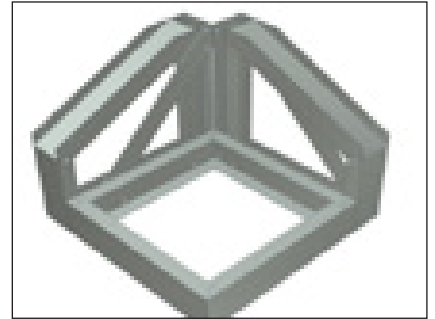
Push Soffit Frame tight against glazing bar and Soffit Packer, ensuring that the frame wraps around the bar. Screw fix (C8018) through frame up-stand into the side of the bar (on both sides. Fix through the face of the Soffit Frame, Soffit Packer and into the Eaves Beam.



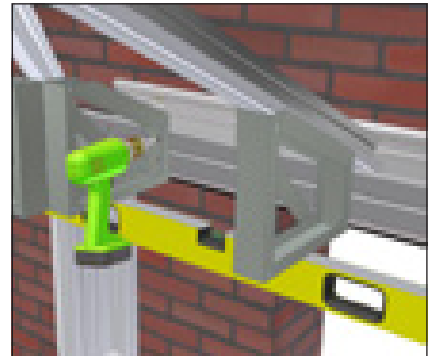
Soffit Frames fitted at Tie Bar positions have been prepared to allow for the bracket and rod to pass through.



Work around the conservatory fitting all Soffit Frames to all Transom and Jack Rafters only.



Identify and assembly Corner frames (If not already assembled) prior to installation. Screw together using C8018 screws.



Push Soffit Corner Frame tight into the corner and against the Soffit Packers, ensuring the frame is level. Screw fix (C9509) through the face of the Corner Soffit Frame, Soffit Packer and into the Eaves Beam.



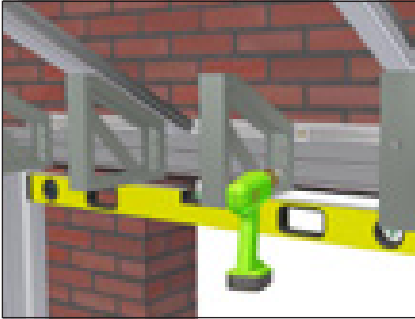
Ensure that the corner frame is level prior to screw fixing (C9509).

Continue to install all corner frames.

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# CAPELLA SYSTEM: PLASTERBOARD INTERNAL SOFFIT

## K2 INSTALLATION GUIDE



If supplied, install the intermediate Soffit Frames, position centrally to each glazing aperture (if down lights are to be installed, offset the Soffit bracket to suit), these are screw fixed to the Eaves Beam Packers only.



70mm Fixing Strap requires fixing to the internal upper perimeter edge of each Soffit Frame (this may require cutting to size using Tin Snips).



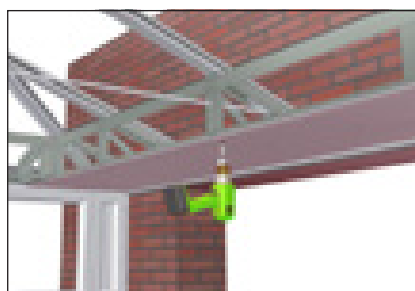
25mm x 25mm Angle requires fixing to the internal perimeter edge of each Soffit Frame (this may require cutting to size, using Tin Snips).

If the Angle or Strap requires cutting, the join must be central to a Soffit Frame.



Once all frames are fitted proceed with the installation of the Tie Bars, Capella Gutter (before glazing) and glazing of the roof.

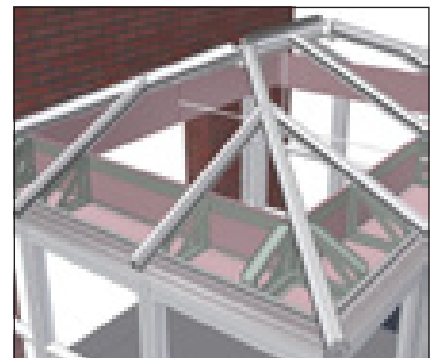
25mm x 25mm Angle requires fixing to the external perimeter edge of each Soffit Frame (this may require cutting to size using Tin Snips).



(Plaster board supplied by others, recommend 12.5mm board) When installing plaster board, it is recommended that the horizontal boards are fitted first (ensure horizontal plaster board extends past the frames by the thickness of the board being used – this creates a ledge onto which the vertical board can be located). Always screw fix the boards to the Soffit Frames attached to glazing bars first, continue to fix to the intermediates (if supplied), Angles and Straps.



When fixing the vertical plaster board, always fix to the Soffit Frames attached to glazing bars first, continue to fix to the intermediates (if supplied), Angles and Straps.



Prior to plastering, it is recommended that corner and stop beads are fitted (beads supplied by others).