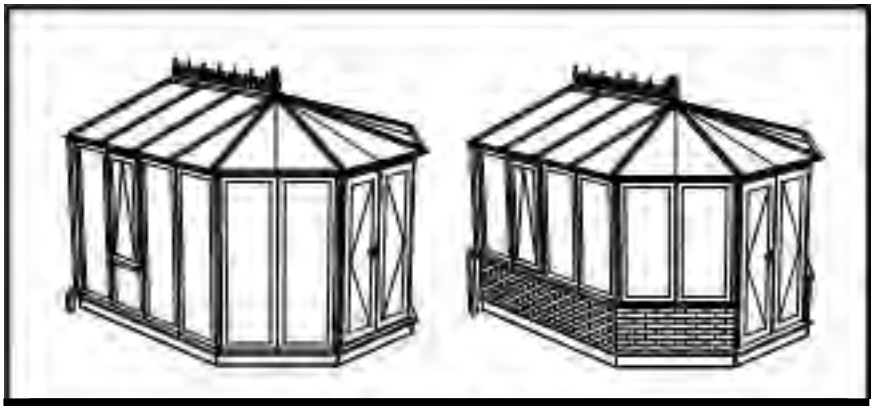


The Victorian

For Customer Services (parts & delivery enquiries only) call: **01254 683 079**

For Technical Support (installation queries) call: **0871 574 7293**

Technical support calls cost 10p per minute from BT landlines, other carriers and mobile networks may vary.

Please note that the conservatory product is complex, and often bespoke in nature. Accordingly, while this document attempts to demonstrate the full installation procedure, it should be seen a guide to method and technique, rather than a strict step-by-step guide. Methods and components are subject to change without notice, and no responsibility will be accepted for any issues arising from such changes.

Printed installation guides for our products are supplied as necessary upon purchase however, due to the limitations of promptly updating printed copies, the PDF versions available online at www.k2conservatories.co.uk should be considered to supercede the printed versions.

HOW TO USE THIS GUIDE, TOOL & TIPS

Using this Installation Manual –
READ THIS SECTION CAREFULLY

Contained within this Installation Manual are step-by-step instructions to guide you through the installation of your conservatory to successful completion. Each build stage has been broken down into sections and you will see an overview of these build stages immediately following this section.

IMPORTANT
Read ALL the instructions completely BEFORE commencing any work, more than one reading may be necessary. Understanding these instructions and familiarity with procedures will make the build process much easier and an enjoyable project to undertake.

Cross Referencing

Your conservatory is supplied as several items of packaging, some of which will be immediately apparent (such as windows and doors) other items will be labelled as a particular package reference. Contained within the same pack as these instructions is a set of component checklists, which you will use to identify the items contained within each pack. Within the checklists is a 'Roof Plan'. This diagram is very important as it contains information specific to your conservatory, such as, width, projection, height, etc. Throughout this manual will be references to your 'Roof Plan', please ensure that you refer to this plan whenever requested to ensure all dimensions, etc. correspond.

Working through the sections

The first part of the manual is an 'Order of Assembly' chart, outlining the build stages for your conservatory. Each diagram gives an indication of what your conservatory will look like at the end of each stage. Each section in this manual is numbered to correspond with the build stages and is structured as follows:

- ***Component reference page –***

Here you will see a diagram showing details of the parts required to complete the section.
The table shows an item number, description and any specific comments if necessary.
The descriptions and item numbers are shown on your checklists (along with another graphic for identification) so you may sort out these parts prior to commencing each section. You will not need to collate any other parts from your packaging until it is outlined in a 'component reference page'. The only exception is silicone sealant, (as this is needed continually as you work through the build process) which will be outlined in the text as required.

- ***Section instructions pages –***

Following the component reference page will be the detailed step-by-step instructions to complete the section. Once each section is complete the format is re-produced again for the next section, and so on. If at any point you feel you require any assistance, the telephone number for our technical helpline is shown at the bottom of each page.

INSTALLATION TIPS

- All windows are a two person lift.
- Treat PVC-U in much the same way as timber; however, use a finer saw when cutting.
- All windows and doors can be either internally or externally beaded, but consistent throughout the conservatory. When fitting the windows it is essential that they are facing the correct way. Use the drainage slots present along the bottom of each window to determine the outside of each window. The slots will always be positioned to the outside face.
- When fitting your door outer frame, it should be considered as a window and fitted in the same manner.
- Ensure when fitting the door outer frame that it is plumb and square. To check this, the width must be constant all the way up and the height constant all the way across. In addition a diagonal measurement across the corners must be the same. If this is not addressed correctly, it will most probably cause problems when it comes to fitting your doors.
- Try to avoid fitting opening windows against the property wall. This will avoid any conflicts with the openers and gutter down pipes, etc.
- Ensure all drainage slots on windows are at the bottom when positioning windows.
  All windows and doors are internally reinforced at various positions with steel sections. You may therefore feel additional resistance when screwing into the PVC as it cuts into the reinforcement.

RECOMMENDED TOOLS

- Tape measure (5m min.)
- 2.5m (8') step ladder.
- 3.7m (12') ladder – 2 sections.
- Electric drill (hammer action).
- Steel drill bits: 3.0mm, 6.0mm long reach (min. 120mm) & 8.0mm
- Masonry drill bits (min 200mm reach): 8.0mm.
- Cordless screwdriver (12v min.).
- 3 Clamps (G-Clamp or similar, one-handed operation if possible).
- 1.2m (4') spirit level.
- Silicone sealant gun.
- Plastic mallet.
- Work bench.
- Gasket pliers/cutters.
- Hacksaw
- Extension lead.
- Screwdrivers.
- Superglue.
- Cleaning materials.
- Cleaning equipment.
- Paper Towels.

HEALTH, SAFETY AND ENVIRONMENTAL ISSUES

As with any type of construction work, there are inherent dangers when assembling a conservatory. The following supplement is designed to supply the installer with general health, safety and environmental information that may be required during the assembly of a conservatory. The appendix offers a guide to "best practice" but cannot be considered as comprehensive. You are advised to work safely at all times.

1. General Site Safety

All sites are different and have different hazards. Have a general regard to what potentially can cause harm. The construction site itself should be made a restricted area. Particularly at risk are children and animals. You also need to consider the security issue. Organise your space. Don't open boxes haphazardly and leave components lying around that can get damaged, lost or pose a trip hazard. Be aware of the weather forecast. Wet and hot conditions cause specific hazards. Put controls in place to manage any possible vehicular movement on site. Protect the environment by avoiding fugitive waste. Dispose of your rubbish appropriately.

2. Personal Protective Equipment

The following PPE should be worn throughout the construction:

A hard hat.
Safety foot wear.

The following PPE should be worn under certain conditions:
(follow machinery guidelines where applicable)

Anti slip gloves (when handling glass roof glazing units)
Wrist guards (when handling glass roof glazing units)
Glass suction cups (when handling glass roof glazing units)
Safety glasses (when handling glass roof glazing units)
Hearing protection when drilling.
Dust mask if dust is likely to be generated.
Disposable or rigger gloves as applicable.
Advisable to keep arms and legs covered.
Fall arrest equipment if working above 2 metres in height.

When using a pre-fabricated steel base please refer to the installation guide provided with the base fixing kit for reference to safety recommendations.

It is advisable to have a first aid kit handy – just in case.

3. Working at Height

Be aware that Health and Safety legislation states that fall protection measures must be put in place by the employer of any person working at a height of 2 metres or more where a fall hazard exists. If it isn't feasible to eliminate the hazard using a collective system then a personal protective equipment system must be selected and used, be it for restraint, work positioning or fall arrest purposes.

For further information, a useful specialist company to contact for fall arrest guidance is Bacou-Dalloz on 01256 693200

Some height work is inevitable during construction. The majority of this work will probably be done from a ladder.

USE OF LADDERS

You are advised to adopt the following rules at all times:

- Assess whether an alternative means of access is more suitable. Take into account the nature of the work, duration, height being worked at, movements required, equipment and materials being used, type of ladder available etc.
- Ladders ideally should be of the "Class 1" type.
- Place them on a firm, stable and level surface which is capable of supporting the ladders and any intended load. They must be erected so as to ensure they won't become displaced.
- Prior to use always check visually whether the ladder is in good condition and free of slippery substances such as oil or mud.
- Check facilities for securing against slipping – tied at top, secured at bottom, or footed by a second person if no more than 3m-height access is required.
  IF ABOVE 3 METRES IN HEIGHT, THEY MUST BE SECURED.
- The correct angle of rest is 75 degrees. E.g. for every 4 metres in height, move the base of the ladder out 1 metre.
- Metal ladders (and wooden ones when wet) conduct electricity and should not be used or carried near overhead power lines.
- Ladders must be positioned the correct way up – metal ladders often have rungs with both flat and curved surfaces – the flat surface is the one on which the user's feet should rest.
- The use of ad hoc and "botched" safety devices must be avoided. For example plywood base plates are not to be used. If you require plant, equipment or devices to do the job safely you are to hire/buy them and not manufacture them. This is a short cut to having an accident.
- Never feel pressured to go up a ladder if you are unhappy about its safety.
- Only use the ladders for the purpose for which they were intended.
- Anyone below you? They could be injured if you drop something.

If scaffolding is to be erected, this should be done only by a suitably qualified contractor. You are advised to ask the contractor to show you an appropriate certificate of qualification. Ensure any scaffold is "scaff - tagged".

4. Tools

The tools you use are your responsibility. We advise:

- Check the condition of your tools prior to use, for obvious damage. Get them checked out if you are in doubt. Arrange for your tools to have a portable appliance test.
- Any electric hand tools are 110 volt or used in conjunction with a residual circuit breaker.
- Don't use tools other than for their intended purpose.
- Follow manufacturer's guidelines as applicable.

FORMAL PROCEDURE FOR THE USE OF KNIVES AND CHISELS

i. Ensure when using a knife / chisel you always keep your hand that isn't in use BEHIND the blade. Ensure that you cut away from your body - NEVER towards yourself.
ii. Ensure the position of others is away from the cutting direction.
iii. Keep the tooling in a sharp condition so you don't have to exert excessive force to cut / slice.
iv. Always pick up the tool by the handle.
v. Always ensure the tool is stored safely where a sharp edge cannot cause injury.
i. Only use the tooling for its intended purpose where possible.

5. Manual Handling

As a general guideline, follow the "2 man lift" stickers on the boxes. Lift correctly.

STOP AND THINK. Plan the lift.

Where is the load going to be placed?

Use appropriate handling aids if possible.

Do you need help with the load?

Remove obstructions such as discarded wrapping materials. For a long lift – such as floor to shoulder height – consider resting the load mid-way on a table or bench in order to change grip.

- **PLACE THE FEET.**

Feet apart, giving balanced and stable base for lifting. Leading leg as far forward as is comfortable.

- **ADOPT A GOOD POSTURE.**

Bend the knees so that the hands when grasping the load are as nearly level with the waist as

possible. Don't kneel or over-flex the knees. Keep the back straight and lean forward slightly over the load if necessary to get a good grip. Keep the shoulders level and facing in the same direction as the hips.

- **GET A FIRM GRIP**

Try to keep the arms within the boundary formed by the legs. The optimum position and nature of the grip depends on the circumstances and individual's preference, but it must be secure.
A hook grip is less fatiguing than keeping the fingers straight. If it is necessary to vary the grip as the lift proceeds, do this as smoothly as possible.

- **DON'T JERK**

- **MOVE THE FEET**

- **KEEP CLOSE TO THE LOAD**

- **PUT DOWN, THEN ADJUST**

If precise positioning of the load is necessary, put it down first, and then slide it into the desired position.

- **TEAM LIFTING**

It is important team members are physically evenly matched. One person should take responsibility and co-ordinate their actions.

- **ADEQUATE VISION**

Clear vision may mean multiple trips with smaller loads, but it is safer.

6. Control of substances harmful to health

The chemicals supplied by us for use when assembling your conservatory are:

- SILICONE: Safety data sheet provided.

7. COMPLAINTS PROCEDURE – IMPORTANT – PLEASE READ ON DELIVERY

Using your check list
It is recommended that all boxes are opened on delivery to ensure that all components listed on your Customer Check List are present. This should be done before the specified F.O.C. buffer period expires. The check list consists of quantities and component pictures to aid the identification of parts. Use the check list to cross reference, examine and quantify your components.

Missing and damaged components will have a cost implication after the specified buffer period for F.O.C. parts after delivery. The F.O.C. buffer period will be noted on your delivery check sheet.

If any components *are* missing, please contact the store where the conservatory was purchased and provide the following;

- Your 6 digit order number – e.g. **177047**
- The part reference code from your installation manual – e.g. **C101**
- The part description from your installation manual – e.g. **150mm Sill End Caps**
- The page where the part is described in the installation manual – e.g. **Page 9**

Delivery damage
It is also recommended that all components are checked for delivery damage. On receipt of delivery please check the packaging carefully prior to signing the delivery note. It is also good practice to check your components prior to assembly to avoid your installation being halted. This should also be done before the specified F.O.C. buffer period expires.

If any components *are* damaged, please contact the store where the conservatory was purchased and provide the following;

- Your 6 digit order number – e.g. **177047**
- The part reference code from your installation manual – e.g. **C101**
- The part description from your installation manual – e.g. **150mm Sill End Caps**
- The page where the part is described in the installation manual – e.g. **Page 9**

8. QUERIES AND REQUESTS – IMPORTANT – PLEASE READ ON DELIVERY

If during your installation you are puzzled on any aspect of how components may fit together or be positioned, you may call our Technical Assistance phone line which is highlighted at the foot of every page.

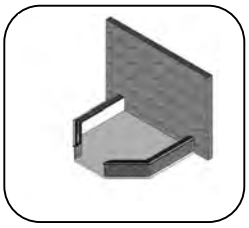
There are two variations of the Victorian style conservatory. The equally proportioned Victorian and the stretch Victorian. These conservatory styles each have subtle differences. Highlighted below are the variation differences.

The Equally Proportioned Victorian

The equally proportioned Victorian style is so called because the angled side sections of the roof are the same size as the front section of the roof. All three sections will have the same amount of bars.

The Stretch Victorian

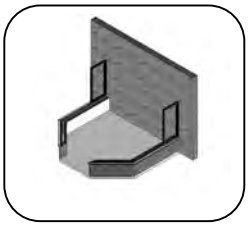
The stretch Victorian style is not equally proportioned around the front as the angled side sections of the roof are not the same size as the front section of the roof. The front section of the roof will usually have more bars than the angled side sections. There may also be 'jack rafters' present.



STAGE 1

BASE SILL INSTALLATION

Pack selection; Pack A & Pack B



STAGE 2

FITTING FIRST PANELS

Pack selection; Pack A & Pack C

STAGE 3

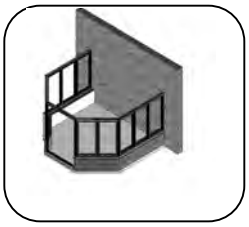
FITTING PANELS IN A STRAIGHT RUN

Pack selection; Pack A & Pack C

STAGE 4

FITTING 135° CORNER POSTS

Pack selection; Pack A & Pack C



STAGE 5

EAVES BEAM

Pack selection; Pack A, Pack Di & Pack Dii

STAGE 6

RIDGE INSTALLATION

Pack selection; Pack A, Pack Di & Pack E

STAGE 7

MAIN BARS INSTALLATION

Pack selection; Pack A & Pack E

STAGE 8 – STRETCH VICTORIAN ONLY

JACK RAFTER INSTALLATION

Pack selection; Pack A, Pack F & PACK G

STAGE 9

GLAZING INSTALLATION

Pack selection; Pack A & Pack G

STAGE 10

BAR CAPS INSTALLATION

Pack selection; Pack A

STAGE 11

RIDGE CAPS INSTALLATION

Pack selection; Pack A & Pack G

STAGE 12

FRENCH DOORS INSTALLATION

Pack selection; Pack A & Pack G

STAGE 13

TRIMS AND FINISHING

Pack selection; Pack A & Pack G

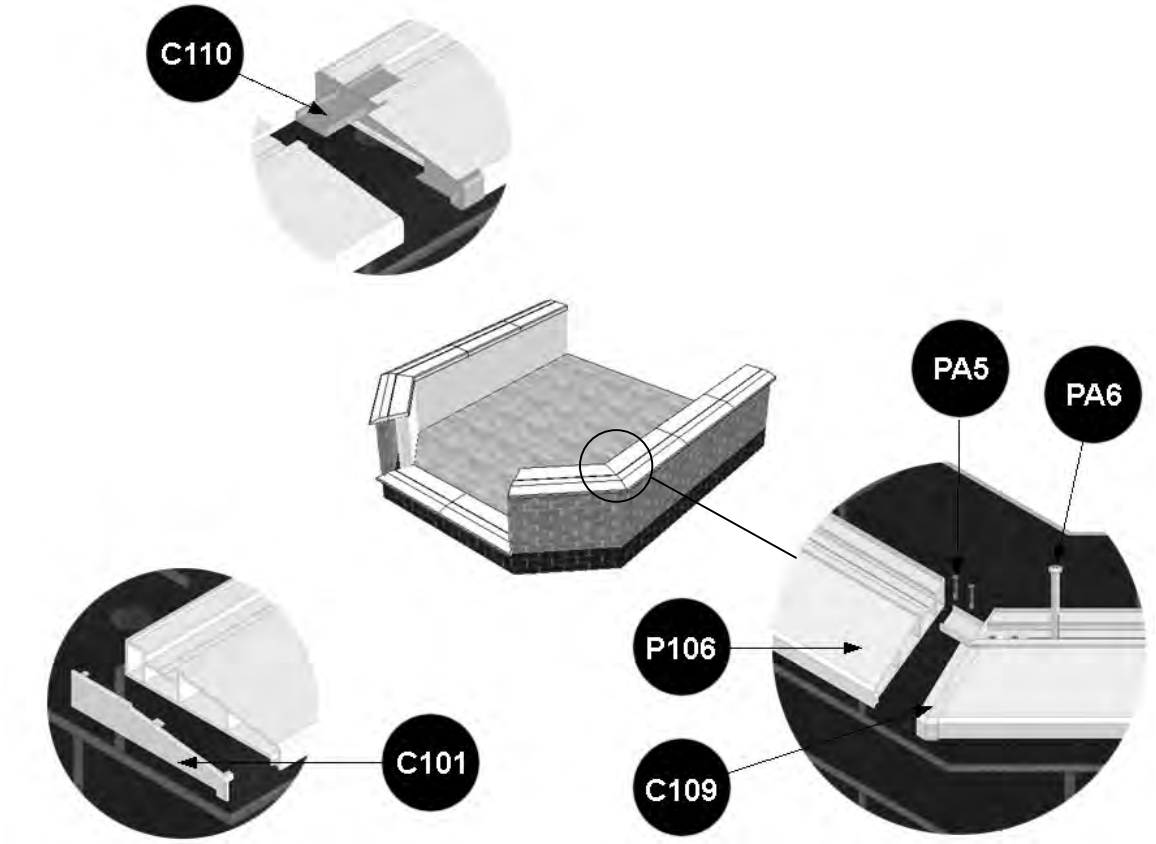
STAGE 14

GUTTERING INSTALLATION

Pack selection; Pack A & Pack G

1 - BASE SILL COMPONENT REFERENCE

Item No	Item Description	Pack	Comments
P106	150mm Sill	B	
C101	150mm Sill End Caps	A	
C109	External 135° Sill Connector	A	
C110	In-line Sill Connector	A	Specific models
PA5	3.9 x 16mm Reinforcing Screws	A	
PA6	100mm Fixing Bolts	A	



Having already inspected the base for LEVEL AND DIMENSIONAL ACCURACY (against base plan), lay out the 150mm sill pieces (P106) as per the conservatory plan.

Using Sealants

Wherever PVC-U is joined to PVC-U, ensure that all jointing faces are silicone sealed using a **low-modulus, neutral cure** silicone sealant. The following sealants are recommended:

Low-modulus silicone (brown): for sealing woodgrain finish PVC-U conservatories to dark brick or stone walls.

Low-modulus silicone (white): for sealing white PVC-U to PVC-U.

Acrylic: for internal use where paint is to be used. All recommended sealants remain soft for 15-20 minutes (sufficient time for repositioning if necessary). If excess sealant is not removed immediately, wait until the sealant is fully cured (about 24 hours) before peeling the excess away cleanly.

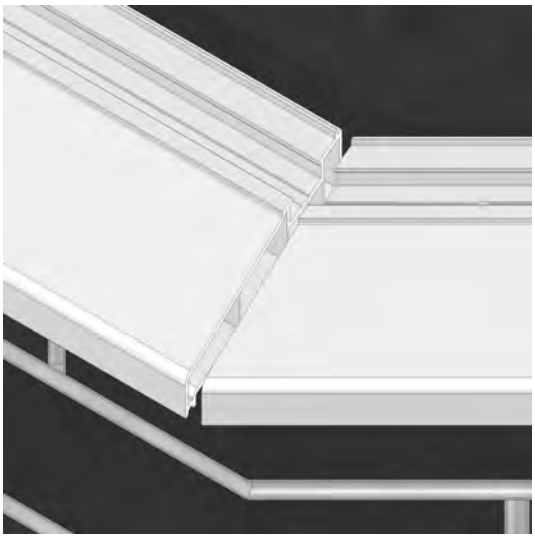
When using sealant as a filler bead, mask both sides of the bead area with masking tape. Run a bead of sealant along the bead area, exerting an even pressure on the sealing gun.

Always refer to the manufacturers' instructions for removing excess sealant.

Fitting the Sill

Referring to your base plan diagram lay all 150mm sill pieces (P106) onto the base. Approximate positioning is adequate at this stage.

On dwarf wall models you will have to measure the gap left for the French doors and cut your 150mm sill (P106) by use of a hacksaw, to fit. The 150mm sill (P106) should be cut 4mm shorter than the gap in the dwarf wall.

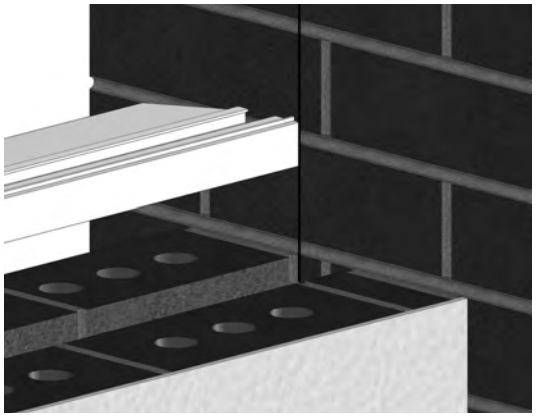


It is recommended that the inside edge of the 150mm sill (P106) is drawn onto the host wall. This guide line will ease in the positioning of the 150mm sill (P106) and the first panels.

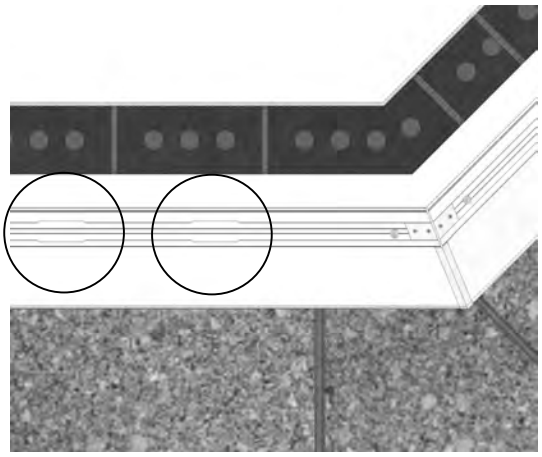
Place a spirit or digital level against the inside face of the external brickwork and make plumb.

Take a wax or similar crayon and draw a line along the inside edge of the spirit level.

Position the inside face of the 150mm sill (P106) against this line and onto the base.



Ensure that every run of 150mm sill (P106) has two 70mm sections on one end of the sill milled out as shown in the image below **(with the exception of a cut sill for a French door opening which is described in the next paragraph).** This will allow the panels to be slid into the groove of the 150mm sill (P106) throughout installation.

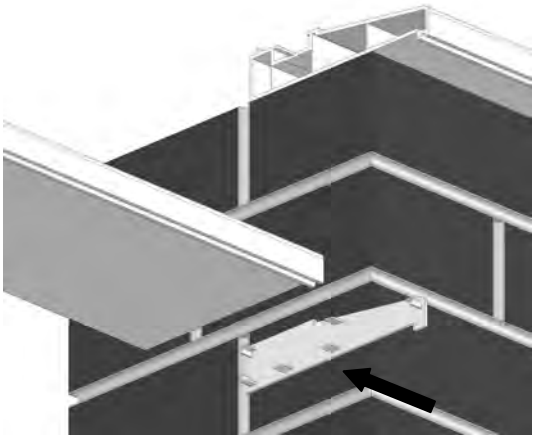


Preparing the 150mm Sill for French Doors in Dwarf Wall Models.

On dwarf wall models you will have to cut the run of 150mm sill (P106) with a hacksaw where the French door is positioned. The pieces of 150mm sill (P106) which sit *on* the dwarf wall are cut so they overhang into the space for the French door by 2mm on each side.

This is to compensate for the 150mm sill end caps (C101) which when fitted will create an overall overhang of 5mm over the faces of the brick work.

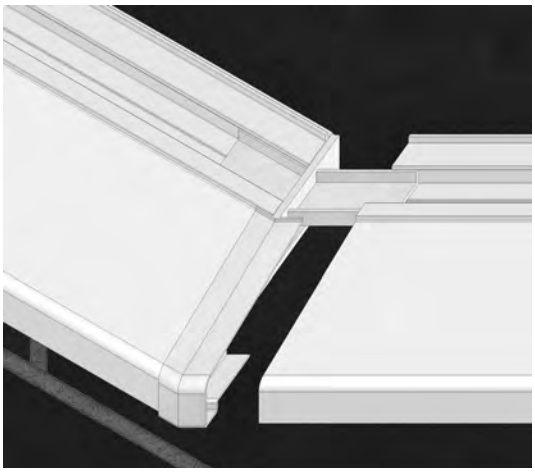
A separate length of 150mm sill (P106) is supplied to fit between the dwarf walls. This piece of 150mm sill (P106) is cut 4mm shorter than the gap in the dwarf wall.



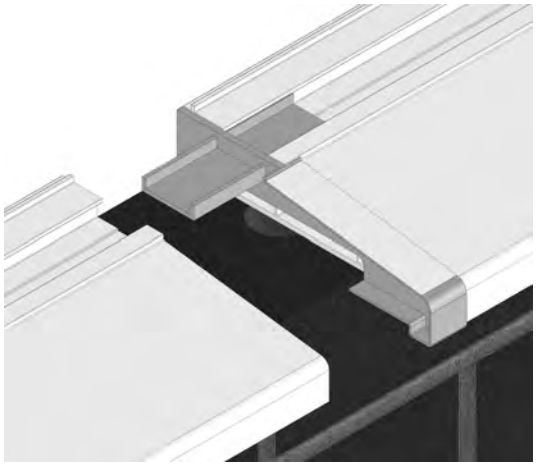
Do not fit the 150mm sill end caps (C101) to the open ends of the 150mm sill either side of the dwarf wall opening until all panels are fitted (with the exception of the French door outer frame which should be positioned last).

Sill Connectors

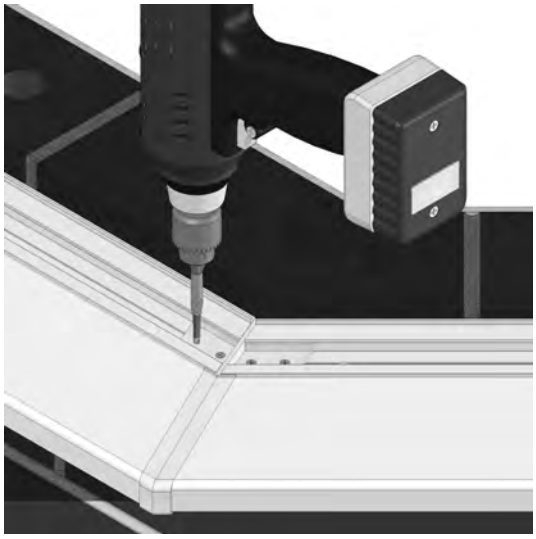
Progressively join the 150mm sill sections (P106) together with the external 135° sill connector (C109).



Note: Some sections may require joining by using in-line sill connector (C110).

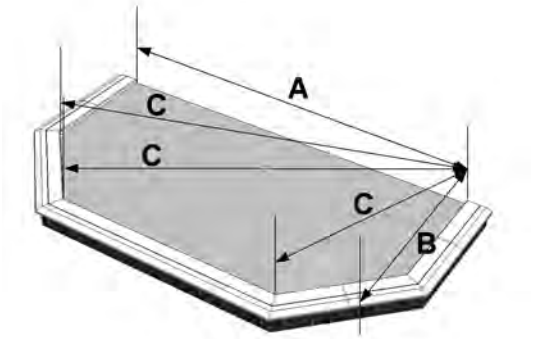


Ensure that the external 135° sill connector (C109) is silicone sealed on all contact areas: top, bottom and sides.
Fix all sill connectors (C108/C110) to 150mm sill (PA1) with 3.9 x 16mm reinforcing screws (PA5) as shown below.



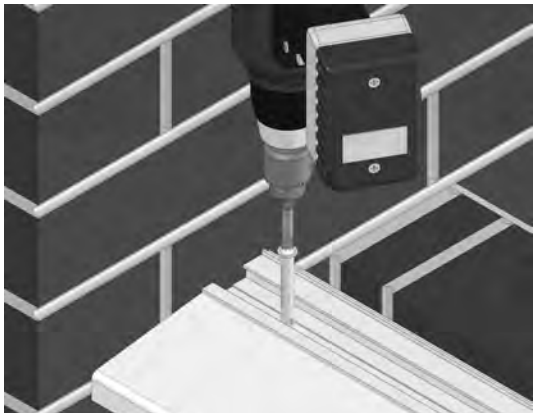
IMPORTANT: Time spent getting the base sill layout correct will save time later in the installation, as paying attention to the base sill dimensions, positioning, and making sure it is level will ensure the correct fitting of the rest of the conservatory.

Lay the 150mm sill (P106) in position and by use of your roof plan (located with your check list images on box A) ensure that dimension A (front and rear) is equal, Dimension B (both sides) are equal, and Dimensions C (three diagonal measurements) are equal as shown below and from opposite corner.



Once level and in the correct position, using the relevant drill bits, drill through the 150mm sill (P106) and into the base to at least 100mm deep.

Now permanently fix through the 150mm sill (P106) to the base using the 100mm fixing bolts (PA6).



The 100mm fixing bolts (PA6) should be positioned 100mm from each end of the 150mm sill (P106) and equally spaced between.

Two 100mm fixing bolts (PA6) are used to fix the 150mm sill (P106) to the base between the French door opening in dwarf wall models. This however is done at the same time as the French door outer frame is positioned as described in the next section.

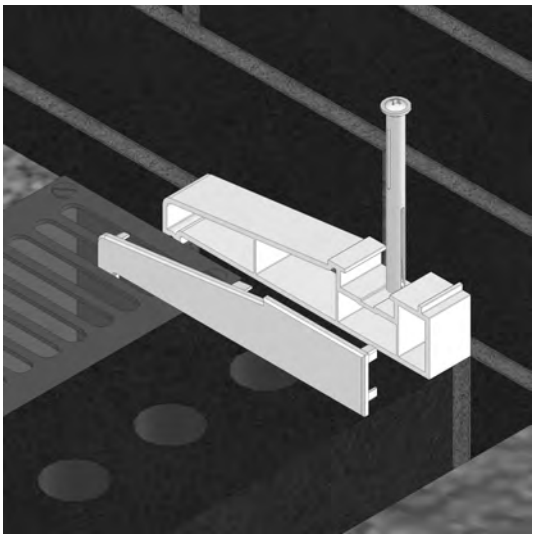
Check your sill layout again for square.

Positioning 150mm sill for Aluminium Low Threshold's positioned against host wall.

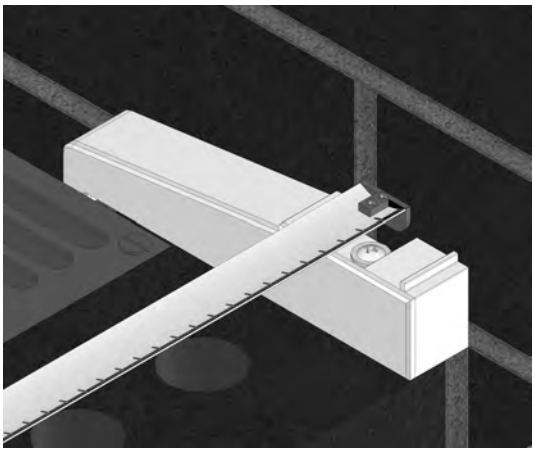
If your conservatory has an aluminium low threshold (A103) against the host wall, a small piece of 150mm sill (P106) should be installed. This is described below.

Cut a piece of 150mm sill (P106) 23mm in length from your left over pieces. A sill end cap (C101) should be attached to the open end which is *not* against the host wall.

Pre-drill the 150mm sill (P106) as previously described and permanently fixing to the base to a minimum depth of 100mm by use of the 100mm fixing bolts (PA6).



A quick measurement check between the host wall/start position and the 150mm sill end cap (C101) should show 26mm.



Sill End Caps

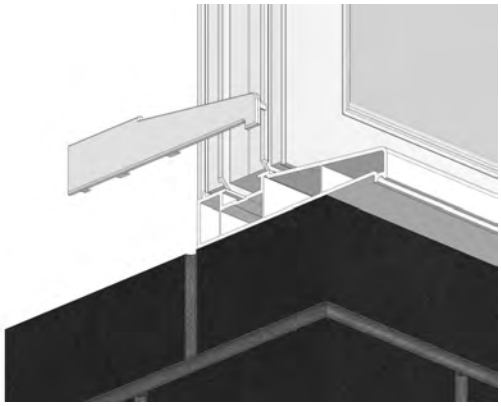
On dwarf wall models, the 150mm sill (P106) between the gap in the Dwarf wall should finish 4mm inset from the external faces of the dwarf wall to allow for the 150mm sill end cap (C101).

The first set of 150mm sill end caps (C101) are attached to both ends of the 150mm sill (P106) which is positioned underneath the French door outer frame (as described earlier).

The final set of 150mm sill end caps (C101) are attached when all the panels have been fitted (with the exception of the French door outer frame which will be the last panel to be fitted after the 150mm sill end caps (C101) have been attached).

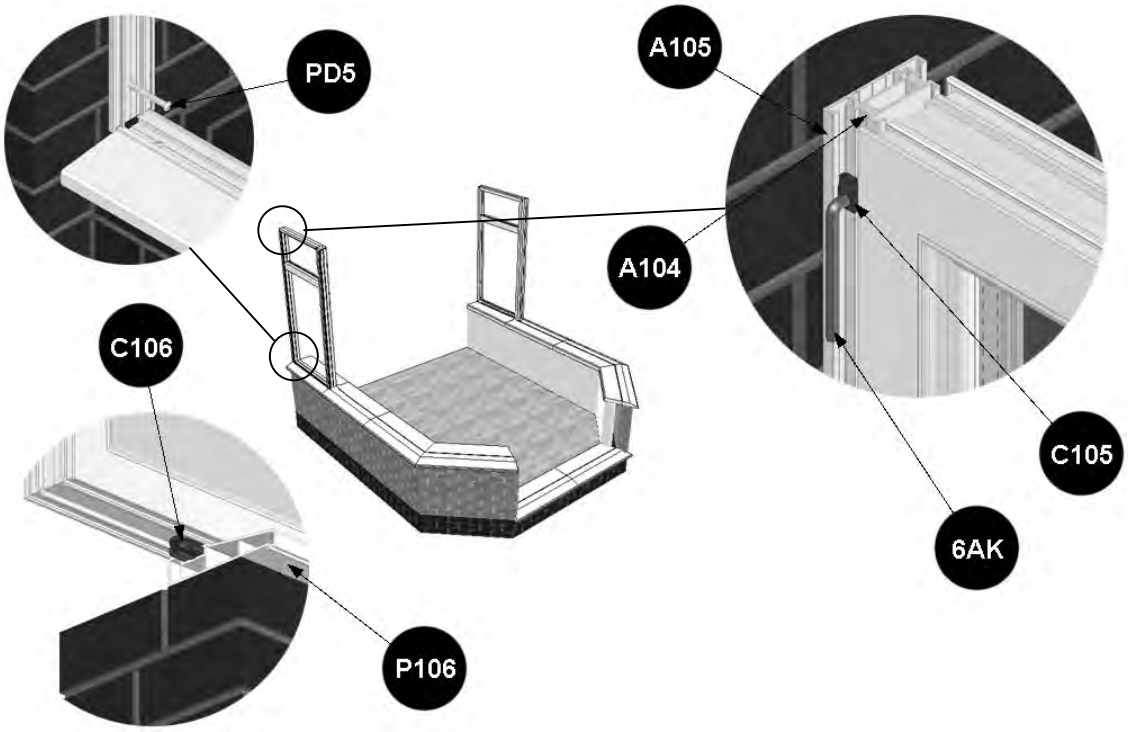
The 150mm sill end caps (C101) are attached to the open ends of the 150mm sill (P106) on either side of the opening for the French door.

Apply a bead of low modulus neutral cure silicone to the end face of the 150mm sill (P106) and push fit the 150mm sill end caps (C101) to seal wiping off excess silicone.



2 - FIRST PANELS COMPONENT REFERENCE

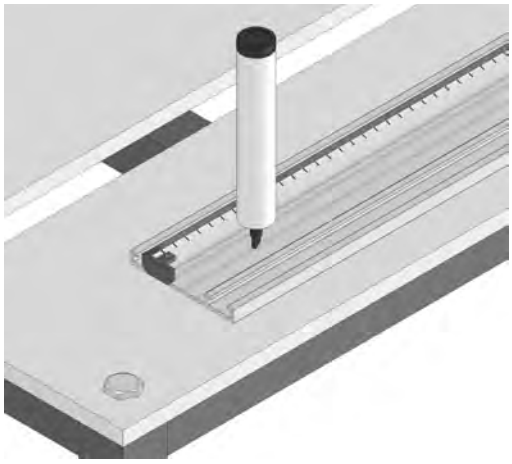
Item No	Item Description	Pack	Comments
A112	Two-Part Connector	C	
A105	26mm Wall Connector	C	
C105	Quarter Turn Button	A	Pre-Assembled
C106	Sill Support Block	-	
PD5	60mm Fixing Bolts	A	
6AK	6mm Allen Key	A	



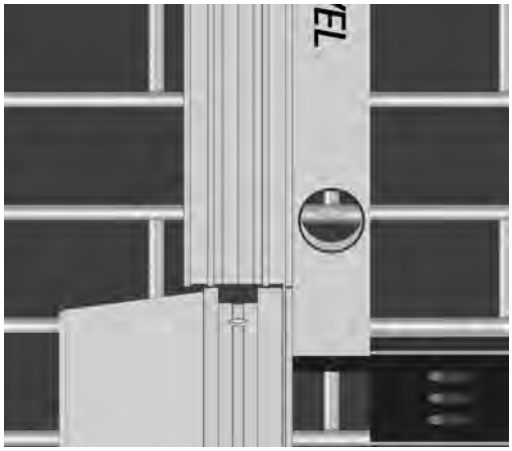
Setting Position for Wall Connectors

Select the 26mm wall connector (A105) and lay out on a work bench or the conservatory base. Use a marker pen or similar tool to mark out the position of the 60mm fixing bolts (PD5).

The first and last 60mm fixing bolt (PD5) should be positioned 50mm from the top and bottom faces of the 26mm wall connector (A105) and the rest should be equally spaced between. A total of five 60mm fixing bolts (PD5) are used on full height models and 3 for a dwarf wall model per 26mm wall connector (A105).



Again, using the scribed vertical line drawn on the wall earlier, position the 26mm wall connector (A105) so that the internal edge is in line with the scribed line on the wall. You will notice that the inside edge of the 26mm wall connector (A105) is in line with the internal face of the 150mm sill (P106). Use a spirit level to check for plumb.



If any marked positions for the 60mm fixing bolts (PD5) land on mortar joints adjust accordingly so that they locate over solid brick. Holding the 26mm wall connector (A105) in position and ensuring that it rests onto the 150mm sill (P106), pre drill through the 26mm wall connector (A105) and into the masonry using an 8mm steel drill.

Please note that in dwarf wall models the 26mm wall connector (A105) should be cut to size unless a set of French doors are to be positioned against the wall in which case they are left full height. The French door outer frame is then fitted in the same way as any other panel.

Important: Ensure that the 26mm wall connector (A105) is at 90° to the base by packing if required (this should have been accounted for when setting out the base).

Fix the 26mm wall connector (A105) with 60mm fixing bolts (PD5).

Repeat for the connector on the opposite side of the conservatory.

Silicone Sealing the Sill

Prior to the positioning of the panels and to prevent water ingress, a bead of silicone should be run along the full length of the 150mm sill (P106). The position is shown below.

The 150mm sill (P106) should however, be wiped free of dust or dirt before application of the silicone.

Fitting the First Panel.

If your conservatory is against a side wall as well as the rear your roof will require a box gutter. If so, it is important that you re-read the Box Gutter Installation section at the back of this installation guide paying particular attention to the size of the box gutter panels before you continue to erect your roof.

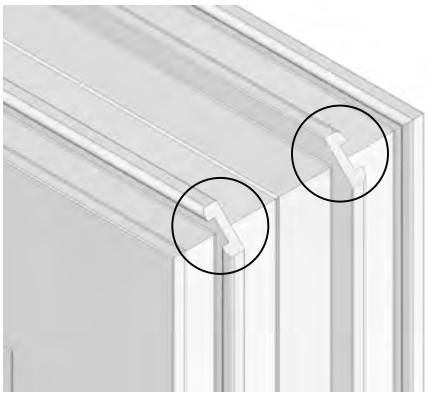
IMPORTANT – When fitting your French door frame it must be positioned the right way. To ensure this, check that the drainage slots at the bottom of frame are facing outward.

Select the panel to fit against the property wall. **It is imperative that the drain slots in every panel are located at the bottom of the panel and facing front as shown at the top of the next column.**

Please also note that two sill support blocks (C106) are attached to the bottom of every panel also shown below with the exception of the French door outer frame.

Before installation commences check each panel for any defects such as scratches or bowing. If you find any defects please follow the complaints procedure highlighted at the front of this manual.

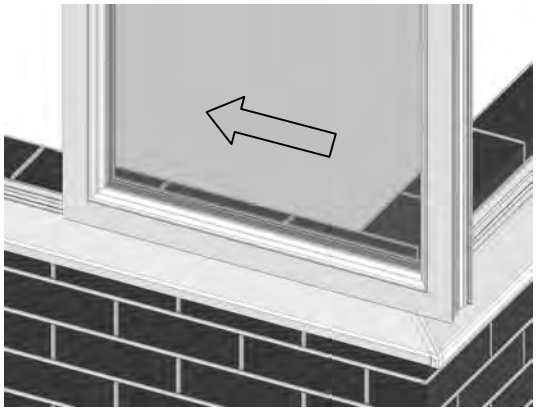
You will notice that each panel corner has the inner legs on the panel detail notched away. It is imperative that this detail is present to ensure that all 18mm inline couplings (A104) can slide into position. The notch detail is highlighted below.



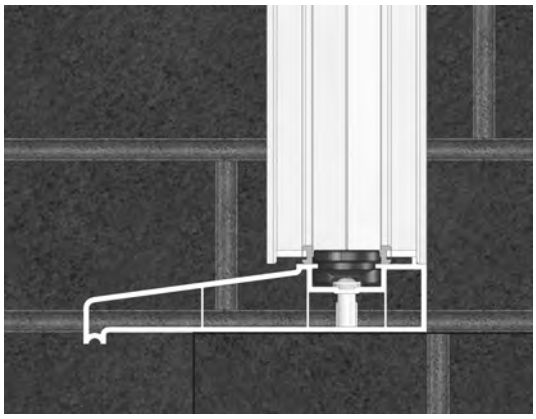
Fitting First Panel

Check that the 150mm sill (P106) is clear of dust or dirt then line up the sill support blocks (C106) with the milled out sections at the end of the 150mm sill (P106).

Position the panel onto the 150mm sill (P106) and slide into position.



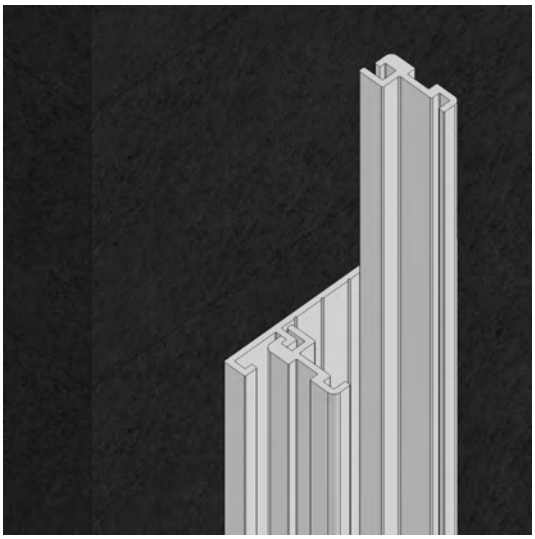
The sill support block (C106) will sit in the 150mm sill (P106) as shown below.



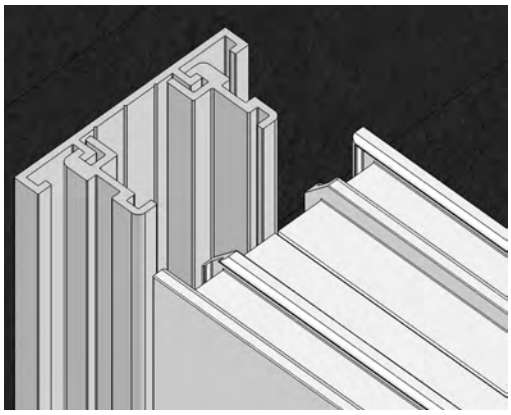
Fitting the Two-Part Connectors

The first panel is connected to the 26mm wall connector (A105) by use of the two-part connectors (A112). Two are used per 26mm wall connector (A105).

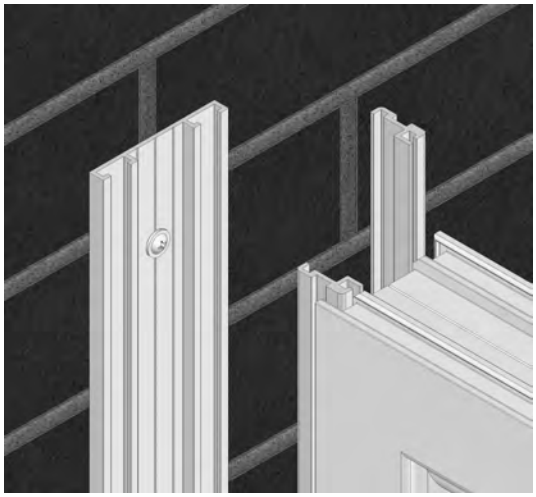
Select a two-part connector (A112) and slide it downwards and over the legs on the 26mm wall connector (A105) ensuring that the legs inter lock.



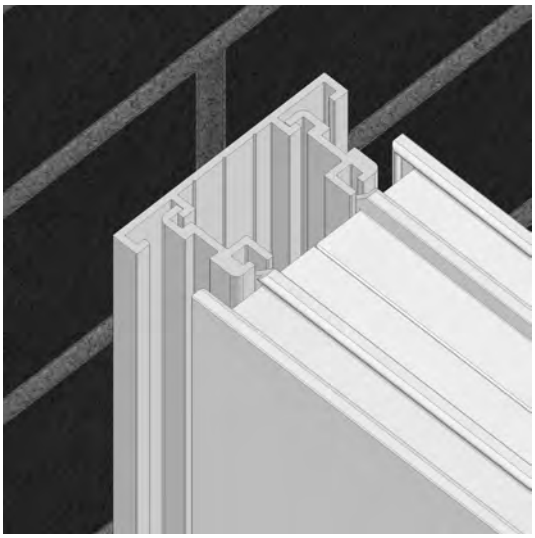
When the two-part connectors are in position, slide the panel towards the 26mm wall connector A105). The leg detail of the two-part connectors (A112) will automatically mate with the leg detail of the forthcoming component. The standard detail is shown on the following page.



If there is an obstruction above the 26mm wall connector (A105) which prevents the two-part connectors (A112) being slid onto the 26mm wall connector (A105) from above, slide the two-part connector onto the panel instead and in the same manner – from above and ensuring that the legs interlock with those of the panel.



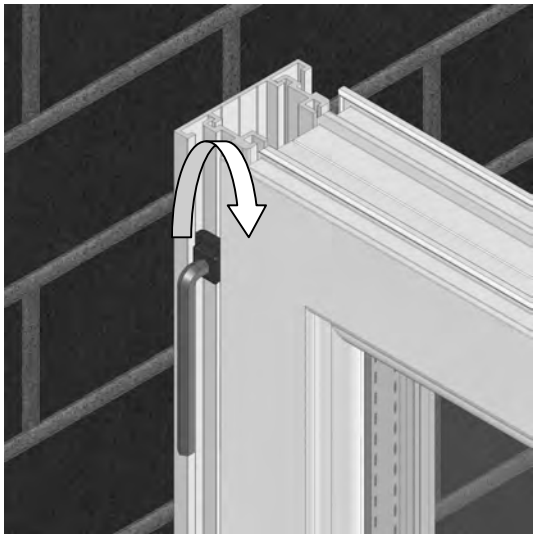
When the two-part connectors are in position, slide the panel towards the 26mm wall connector A105). The leg detail of the two-part connectors (A112) will automatically mate with the leg detail of the forthcoming component.



Select a quarter turn button (C105) and the 6mm Allen key (6AK).

The quarter turn buttons (C105) are positioned longitudinally into the gap between the panel and the 26mm wall connector (A105) approximately 50mm from the top and bottom faces of the panel.

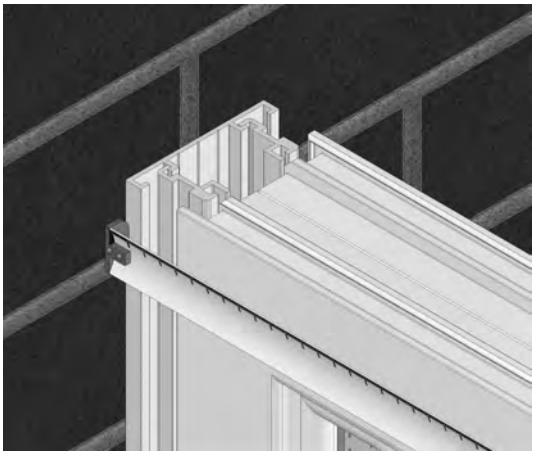
When the quarter turn button (C105) is in position and resting against the two-part connector (A112), turn the 6mm Allen key (6AK) 90° clockwise. The quarter turn button (C105) will 'click' into position.



Continue to fit the rest of the quarter turn buttons (C105) into the two-part connector (A112) as described.

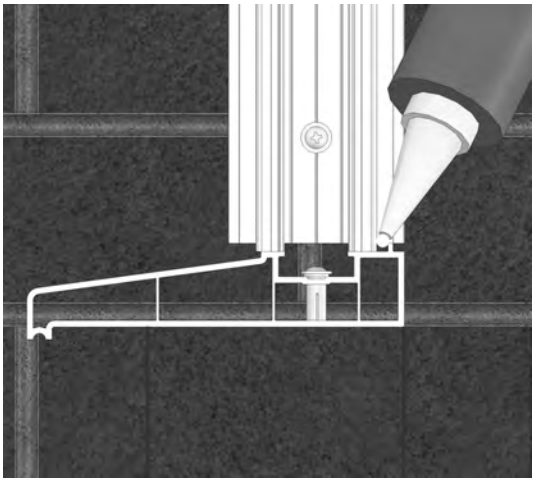
Six quarter turn buttons (C105) per face of the two-part connector (A112) should be attached on dwarf wall models inside and out, and eight quarter turn buttons (C105) per full height model conservatory, again eight inside and eight on the outside.

A quick check between the back face of the 26mm wall connector (A105) and the wall face of the panel should show 26mm.



An application of silicone should be made to the 150mm sill (P106) where the two-part connector (A112) has made contact.

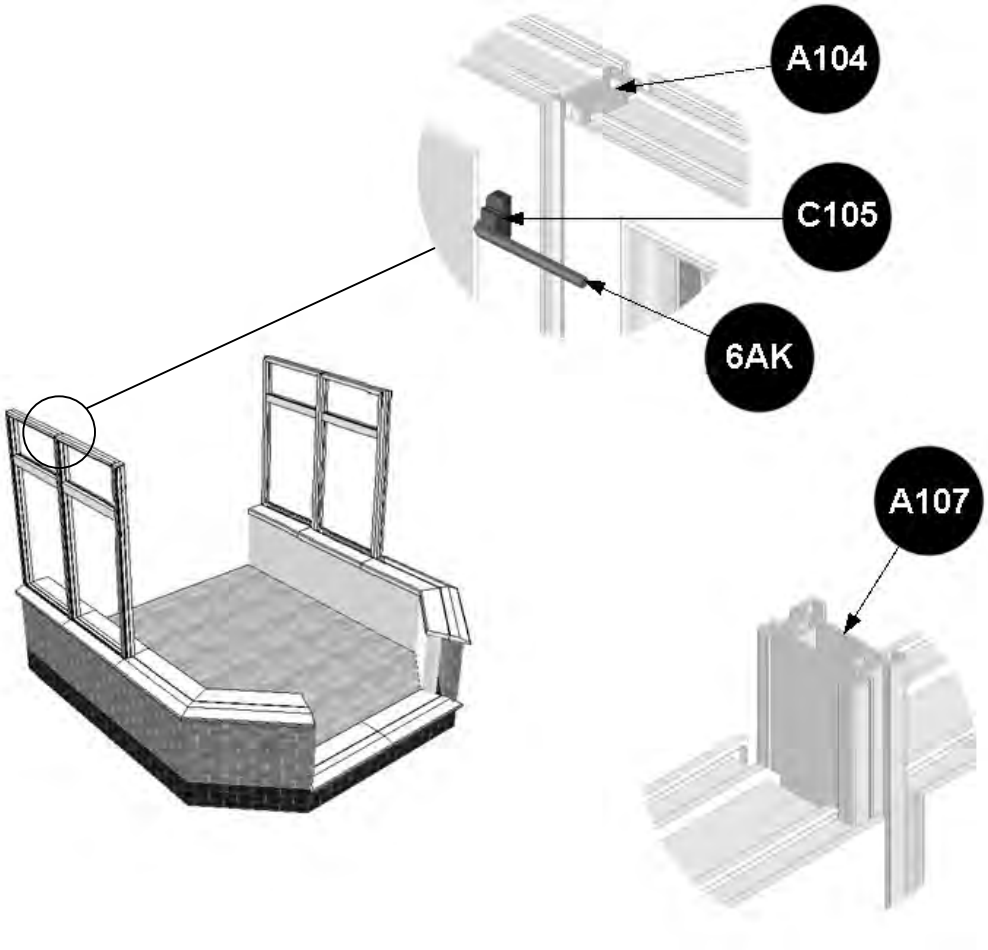
This should be a bead at the back of the two-part connector (A112) positioned as shown below.



Repeat the entire process for the opposite panel.

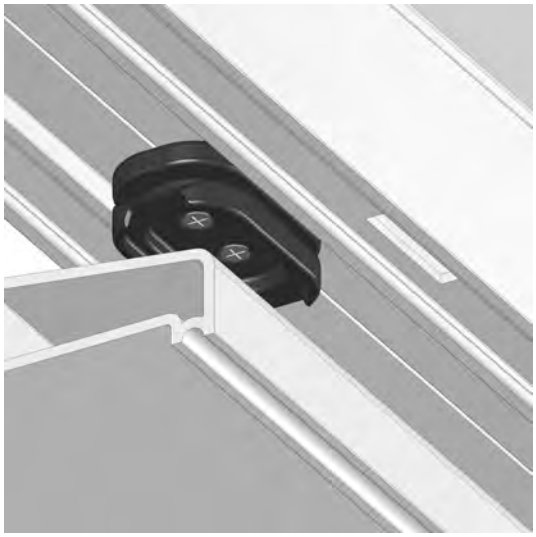
3 - STRAIGHT RUN PANELS COMPONENT REFERENCE

Item No	Item Description	Pack	Comments
A104	18mm Inline Coupling	C	
C105	Quarter Turn Button	A	
C106	Sill Support Block	-	Pre Assembled
6AK	6mm Allen Key	A	
A107	Adjustable Inline Coupling	C	
70fix	70mm Fixing Screw	A	



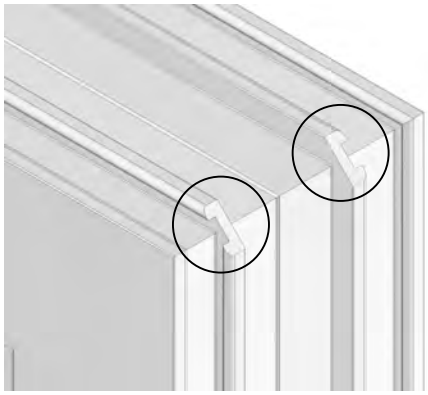
Select the panel to fit against the previously installed panel. **It is imperative that the drain slots in every panel are located at the bottom of the panel and facing front as shown below.**

Please also note that two sill support blocks (C106) are attached to the bottom of every panel also shown below with the exception of the French door outer frame.



Before installation commences check each panel for any defects such as scratches or bowing. If you find any defects please follow the complaints procedure highlighted at the front of this manual.

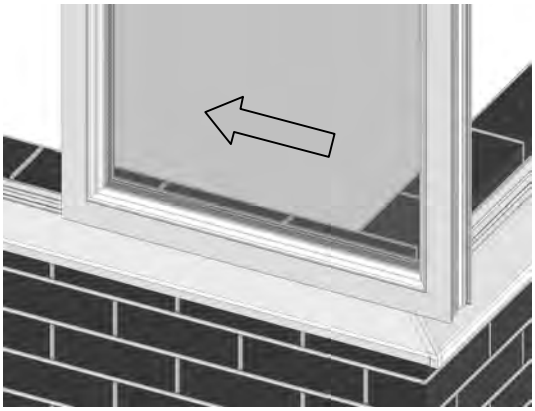
You will notice that each panel corner has the inner legs on the panel detail notched away. It is imperative that this detail is present to ensure that all 18mm inline couplings (A104) can slide into position. The notch detail is highlighted below.



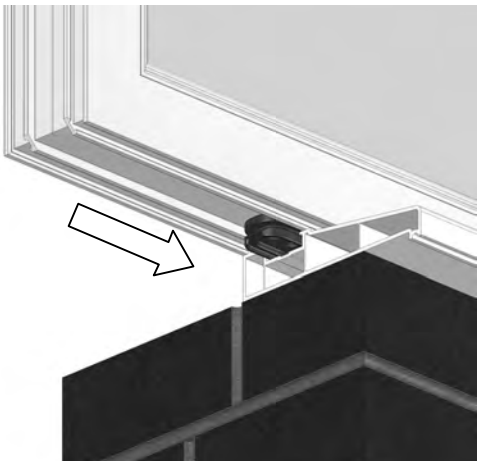
Fitting the Intermediate Panel

Check that the 150mm sill (P106) is clear of dust or dirt then line up the sill support blocks (C106) with the milled out sections at the end of the 150mm sill (P106).

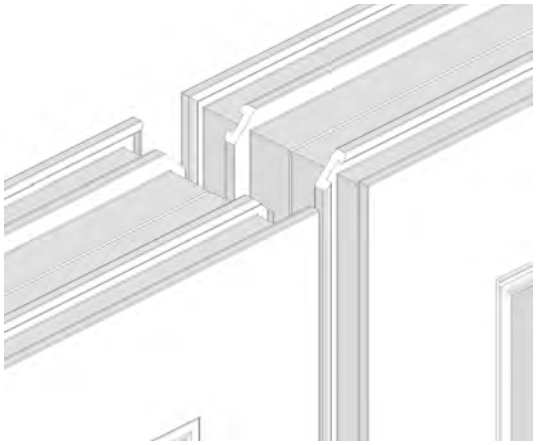
Position the panel onto the 150mm sill (P106) and slide into position.



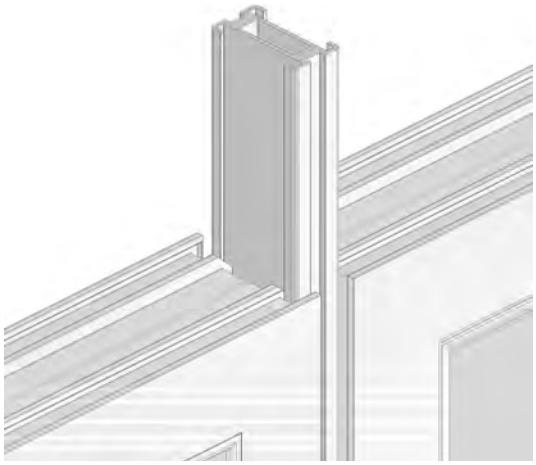
If you have a dwarf wall model conservatory and you have had to cut the 150mm sill (P106) for a French door opening, the first panel, and any subsequent ones between the host wall and the French door opening, are slid on through the open face of the 150mm sill (P106) as shown on the next page.



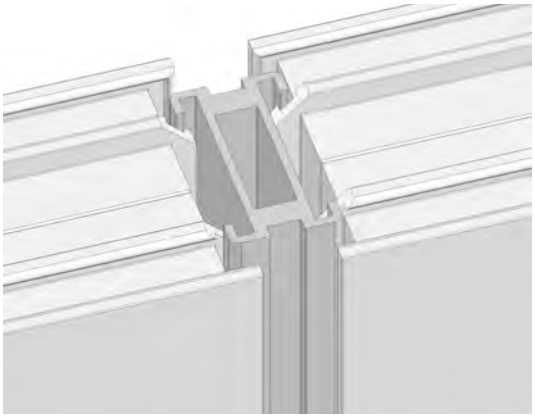
The panel is slid along the 150mm sill (P106) until it is approximately 18mm away from the last panel to be installed.



Select the 18mm inline coupling (A104) sliding downwards and through the gap between the two panels until it rests on the 150mm sill (P106) at the foot of the panel.



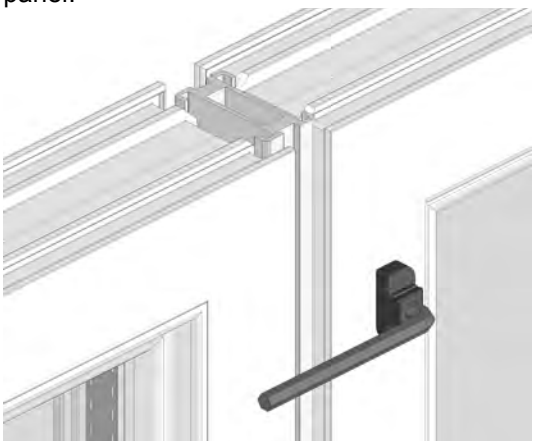
IMPORTANT: As the 18mm inline coupling (A104) is being positioned check that the legs on the 18mm inline coupling (A104) interlock with the leg detail on the panels as shown below.



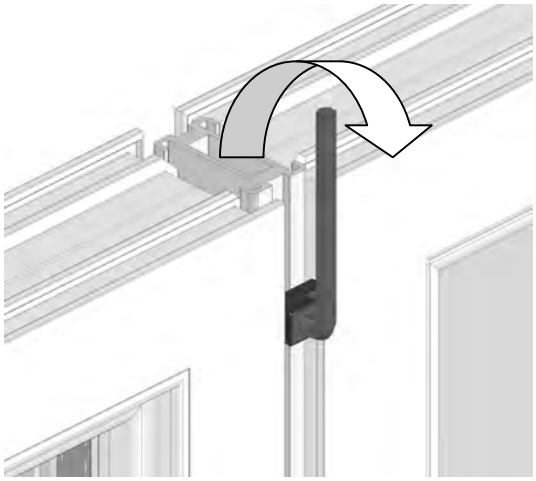
Remember to silicone seal around the bottom of the 18mm inline coupling (A104) when in position.

Select a quarter turn button (C105) and the 6mm Allen key (6AK).

The quarter turn buttons (C105) are positioned longitudinally into the gap between the panels and approximately 50mm from the top and bottom faces of the panel.



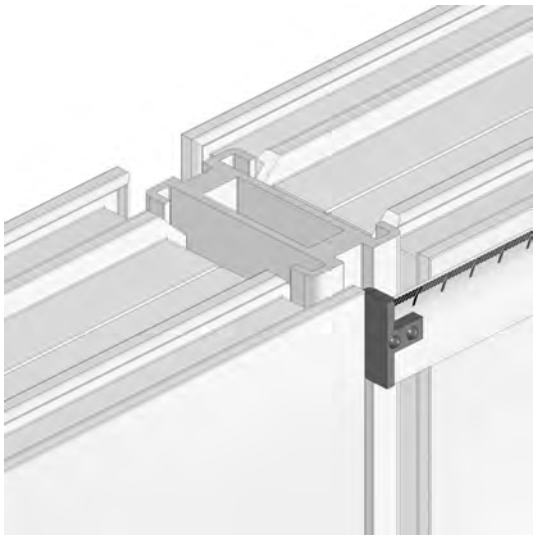
When the quarter turn button (C105) is in position and resting against the 18mm inline coupling (A104), turn the 6mm Allen key (6AK) 90° clockwise. The quarter turn button (C105) will 'click' into position.



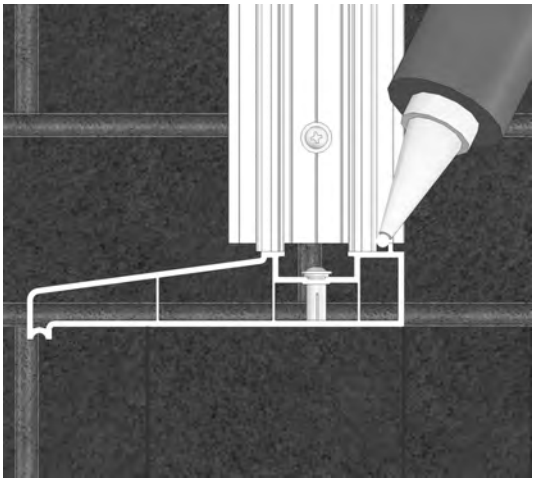
Continue to fit the rest of the quarter turn buttons (C105) into the 18mm inline coupling (A104) as described.

Six quarter turn buttons (C105) per face of the 18mm inline coupling (A104) should be attached on dwarf wall models inside and out, and eight quarter turn buttons (C105) per full height model conservatory, again seven inside and seven on the outside.

A quick check between the two panels should show 18mm.



Another application of silicone should be made to the 150mm sill (P106) where the 18mm inline couplings (A104) make contact. This should be a bead 18mm in length and positioned as shown below.



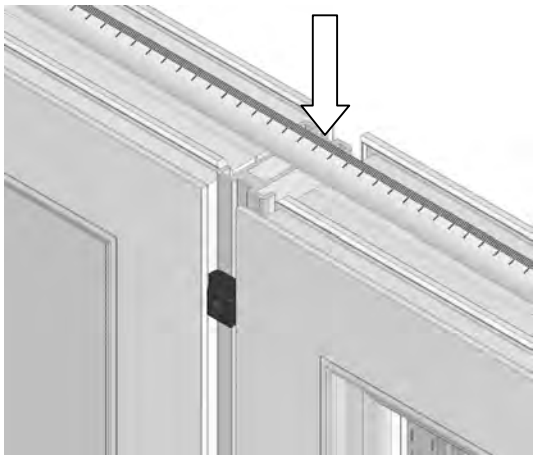
Continue the entire process for all panels and 18mm inline couplings (A104).

Adjustable Connectors

After every third 18mm inline coupler (A104) along a run of connected panels and in every angled facet, an *adjustable* inline coupling (A107) is supplied. These adjustable inline couplings (A107) allow for adjustment to ensure that the panels will finish in the correct position at the end of a run of panels when connecting to a corner post or wall connector.

Due to the way that the panels are manufactured any adjustments you *may* need to undertake will be to *increase* the 18mm gap between two adjacent panels.

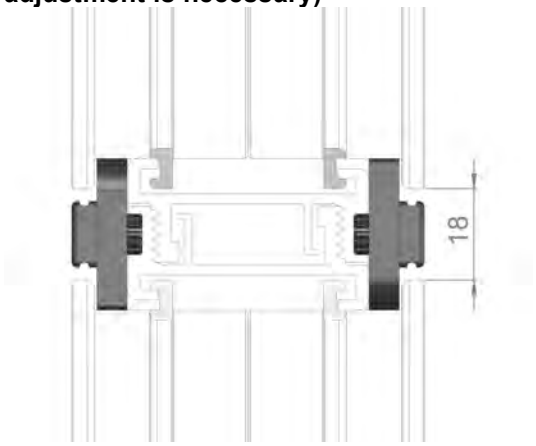
After the third panel has been assembled along a straight run of panels, it is recommended to check the dimension from the start of the 26mm wall connector (A105) to the centre line of the previous 18mm inline coupler (A104).



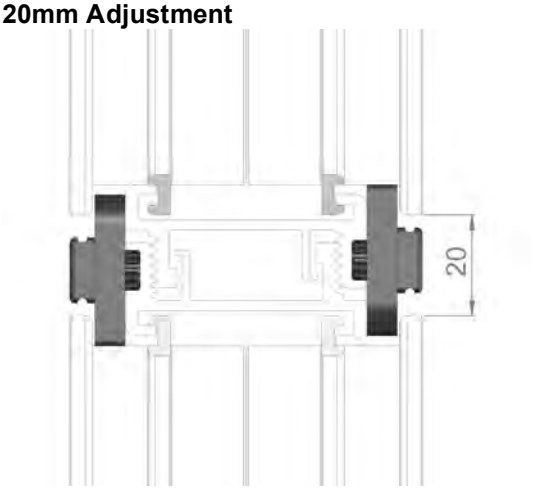
Check this dimension by referring to your roof plan. This will tell you whether your panels are still set at the correct increments or require adjustment.

The two halves of the adjustable inline couplings (A107) slide together in 3 variant positions as shown below and should be interlocked prior to assembly.

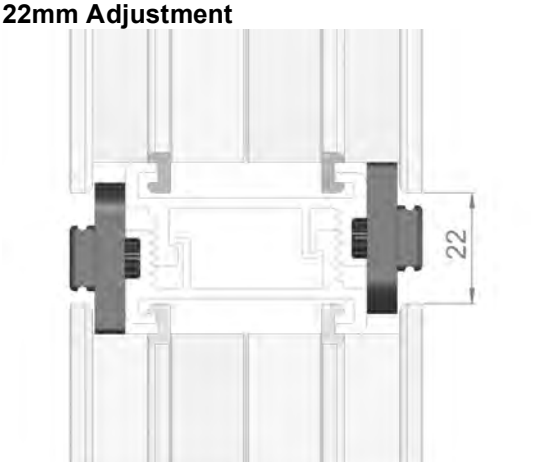
18mm Adjustment (if no further adjustment is necessary)



20mm Adjustment

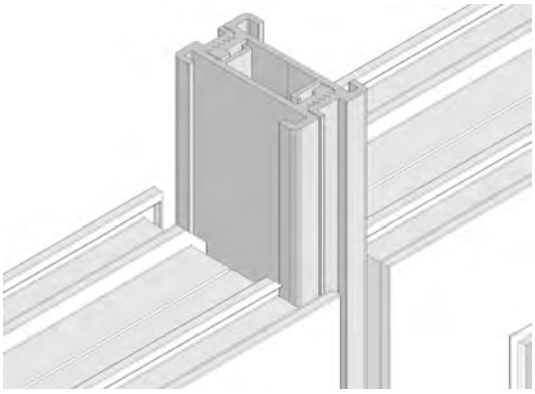


22mm Adjustment

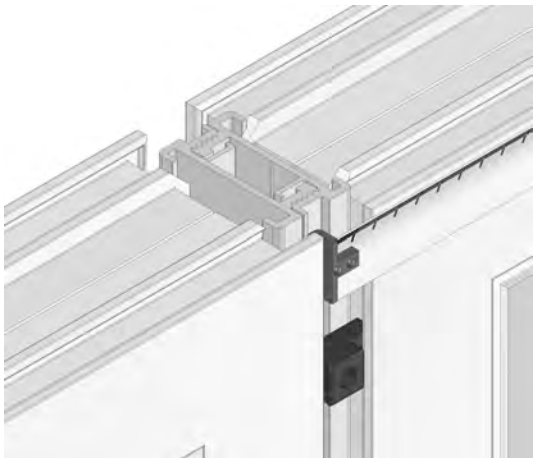


When the adjustable inline couplings (A107) are interlocked to the required setting they are slid between the two adjacent panels in the same way as the 18mm inline couplings (A104).

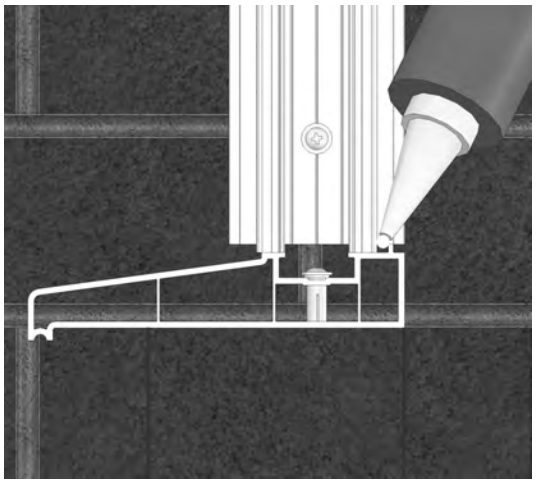
Remember to silicone seal around the bottom of the adjustable inline couplings (A107) when in position.



The quarter turn buttons (C105) are again used to lock the panels together in the same positions and quantities as the 18mm inline coupling (A104). A dimensional check is then performed to ensure that the required setting has been achieved.



Another application of silicone should be made to the 150mm sill (P106) where the 18mm inline couplings (A104) make contact. This should be a bead 18mm in length and positioned as shown below.

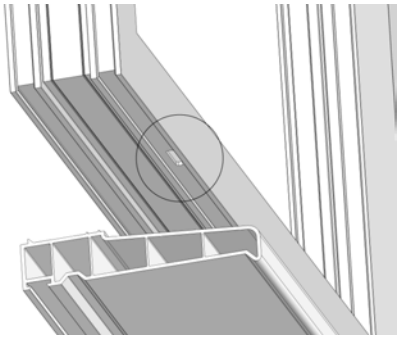


Fitting French Door Outer Frames for Dwarf Wall Models.

The French door outer frame is the last panel to be fitted.

Remove the French doors from the French door outer frame prior to installation.

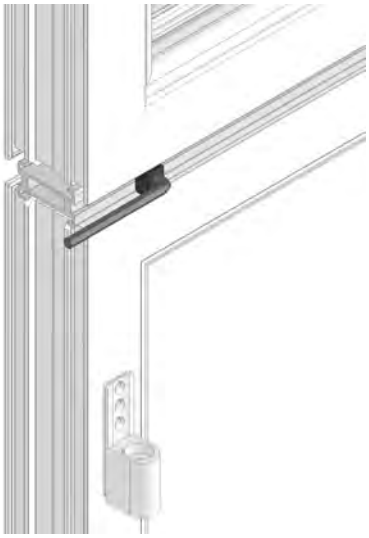
Ensure that the outer frame is positioned correctly by checking the following;
The drainage holes are at the bottom of the panel and facing outward. You will also notice that the sill support blocks (C106) will be absent from the bottom face of the French door outer frame.



If you have 'TP Panels' these have to be attached to the French door outer frame prior to installation.

The 'TP Panels' are joined to the top of the French door outer frame by use of an 18mm inline coupling (A104) which is positioned from the side.
Ensure that the legs on the 18mm inline coupling interlock with the legs on the 'TP Panel' and the French door outer frame.

The panels are permanently fixed together in the same way as any other panel using the quarter turn buttons (C105) and the 6mm Allen Key (6AK) as described previously.



The French door outer frame is positioned like all other panels with the exception that the French door outer frame is not slid onto the 150mm sill (P106) but simply placed into position.

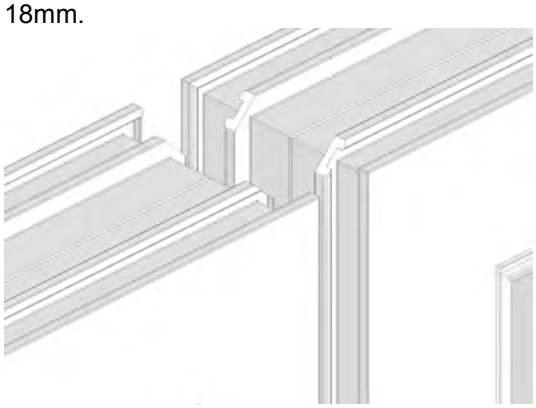
Again, check that the inner legs on the outer frame panel detail are notched to allow the 18mm inline couplings (A104) to interlock with the panels as indicated below.

On dwarf wall models, the 18mm inline couplings (A104) which attach the French door outer frame to the adjacent panels are to be cut to size as they must rest on top of the 150mm sill (P106) as shown below.

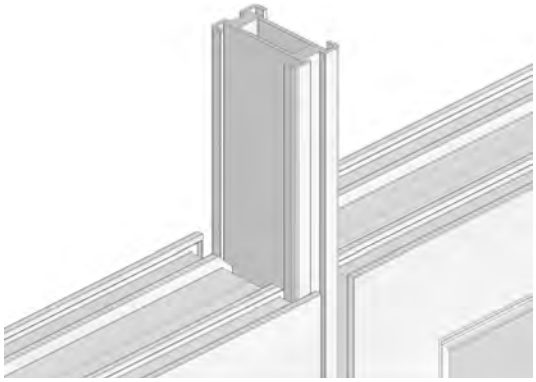
Locate the French door outer frame position by ensuring that the internal face of the French door outer frame is in line with the internal face of the 150mm sill (P106).

When the French door outer frame is in position on top of the 150mm sill (P106) the gap between the adjacent panel and the

French door outer frame is approximately 18mm.



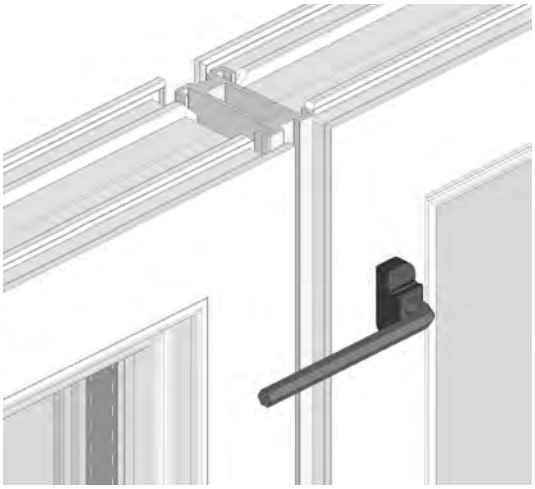
Select the 18mm inline coupling (A104) or adjustable inline coupling (A107) and slide downwards through the gap between the two panels until it rests on the 150mm sill (P106) on the dwarf wall.



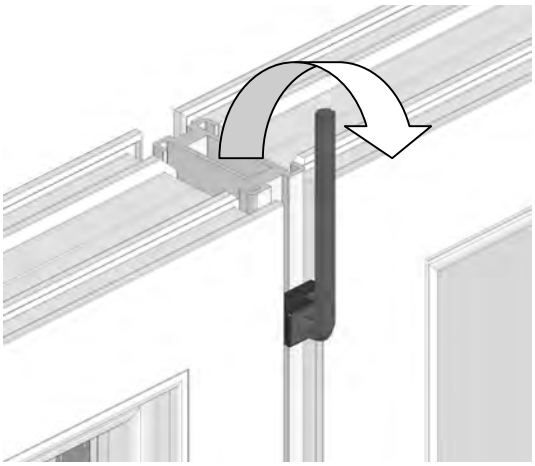
Remember to silicone seal around the bottom of the 18mm inline coupling (A104) when in position.

Select a quarter turn button (C105) and the 6mm Allen key (6AK).

The quarter turn buttons (C105) are positioned longitudinally into the gap between the panels and approximately 50mm from the top and bottom faces of the panel.



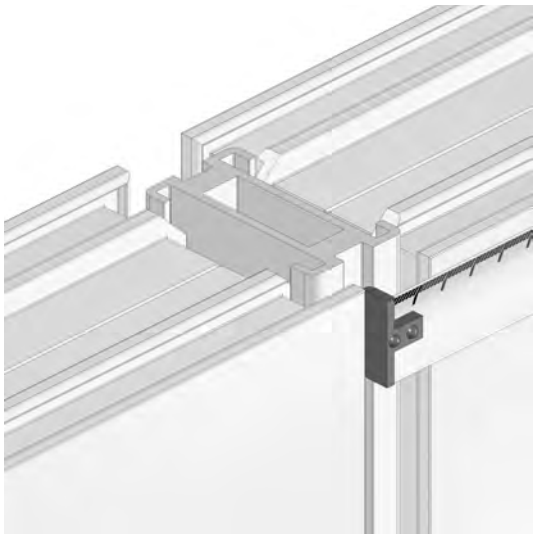
When the quarter turn button (C105) is in position and resting against the 18mm inline coupling (A104), turn the 6mm Allen key (6AK) 90° clockwise. The quarter turn button (C105) will 'click' into position.



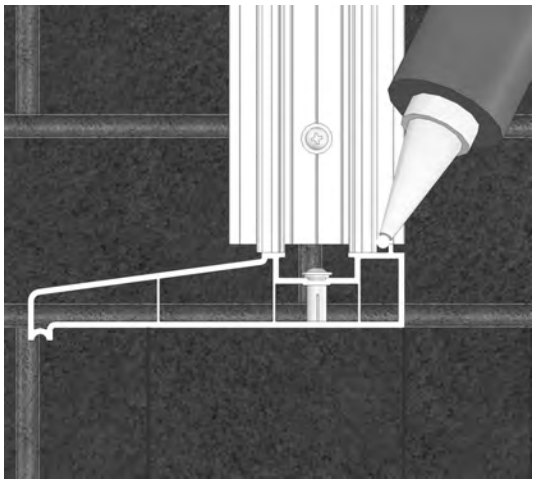
Continue to fit the rest of the quarter turn buttons (C105) into the 18mm inline coupling (A104) as described.

Six quarter turn buttons (C105) per face of the 18mm inline coupling (A104) should be attached on dwarf wall models inside and out, and eight quarter turn buttons (C105) per full height model conservatory, again eight inside and eight on the outside.

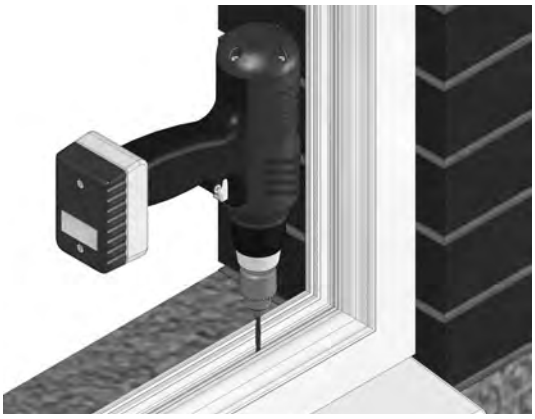
A quick check between the two panels should show 18mm.



Another application of silicone should be made to the 150mm sill (P106) where the 18mm inline couplings (A104) make contact. This should be a bead 18mm in length and positioned as shown below.



Once level and in the correct position, fix the French door outer frame to the 150mm sill (P106) by use of four 70mm fixing screws (70fix), two positioned on each side of the shoot bolt keeps at the foot of the French door.



In dwarf wall models use the relevant drill bits to pre-drill two holes through the French door outer frame, as indicated below and then into sound masonry positioned 50mm in from the top and bottom of the dwarf wall.

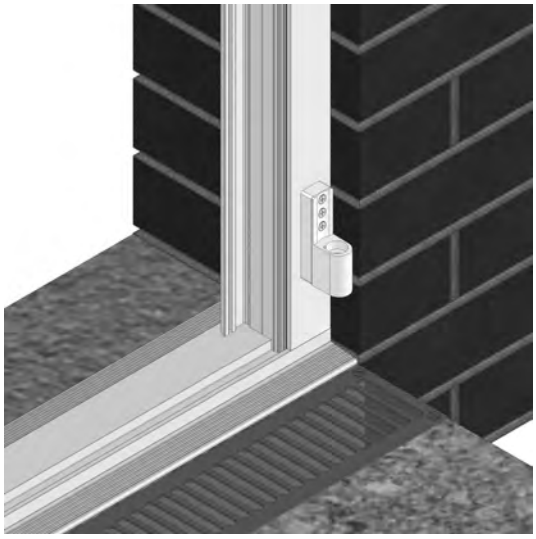
Now permanently fix the French door outer frame to the sides of the dwarf wall with two 100mm fixing bolts (PA6).

Fitting the French Door Outer Frame in Low Threshold Models

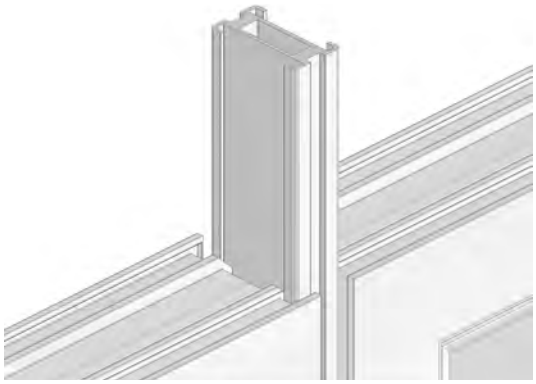
The French door outer frame for low threshold doorways differ from regular French door outer frames as it is pre-assembled to the aluminium low threshold (A103).

It is recommended that a drain is installed onto the top of the access ramp to prevent pooling of water and subsequent water ingress.

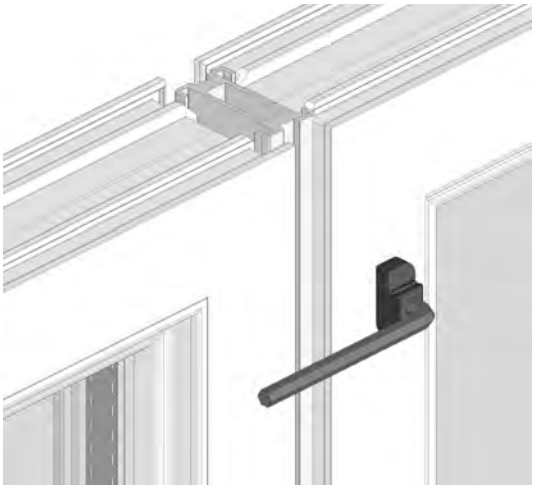
The whole low threshold assembly should be positioned approximately 18mm from the adjacent panels.



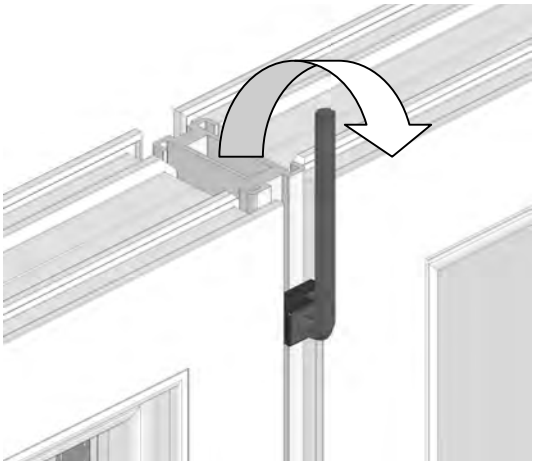
The 18mm inline couplings (A104) are assembled into the gap between the French door outer frame. **Remember to silicone seal around the bottom of the 18mm inline coupling (A104) when in position.**



The quarter turn buttons (C105) are positioned longitudinally into the gap between the panels and approximately 50mm from the top and bottom faces of the panel.



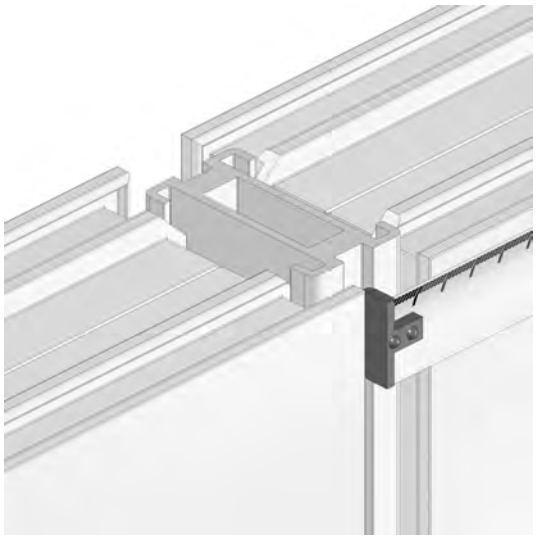
When the quarter turn button (C105) is in position and resting against the 18mm inline coupling (A104), turn the 6mm Allen key (6AK) 90° clockwise. The quarter turn button (C105) will 'click' into position.



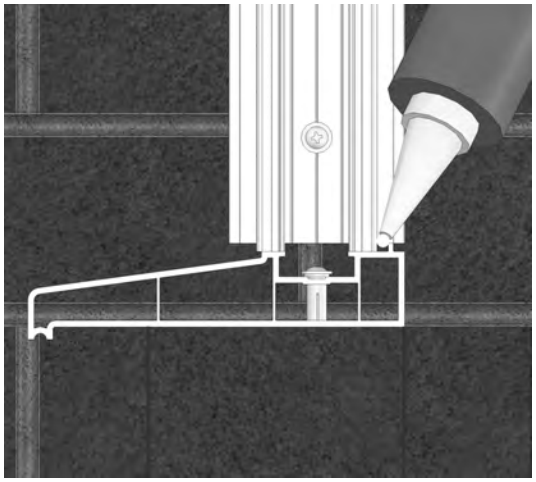
Continue to fit the rest of the quarter turn buttons (C105) into the 18mm inline coupling (A104) as described.

Six quarter turn buttons (C105) per face of the 18mm inline coupling (A104) should be attached on dwarf wall models inside and out, and eight quarter turn buttons (C105) per full height model conservatory, again eight inside and eight on the outside.

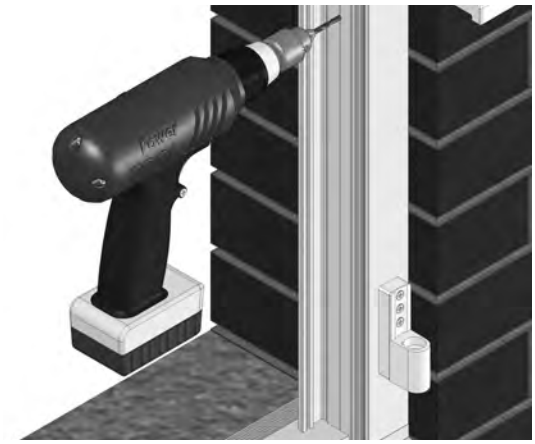
A quick check between the two panels should show 18mm.



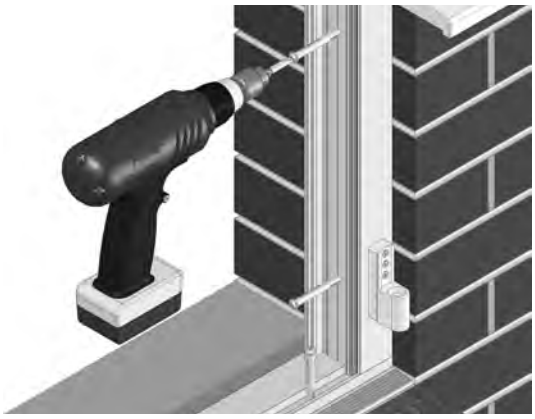
Another application of silicone should be made to the 150mm sill (P106) where the 18mm inline couplings (A104) make contact. This should be a bead 18mm in length and positioned as shown below.



In dwarf wall models and when the 18mm inline couplings (A104) are in position, pre-drill two holes through the French door outer frame and into the side faces of the dwarf wall 50mm from the bottom and top faces of the dwarf wall.
Like wise, pre-drill two holes on each side of the shoot bolt keeps located in the aluminium low threshold (A103) and into the base to at least 100mm deep.

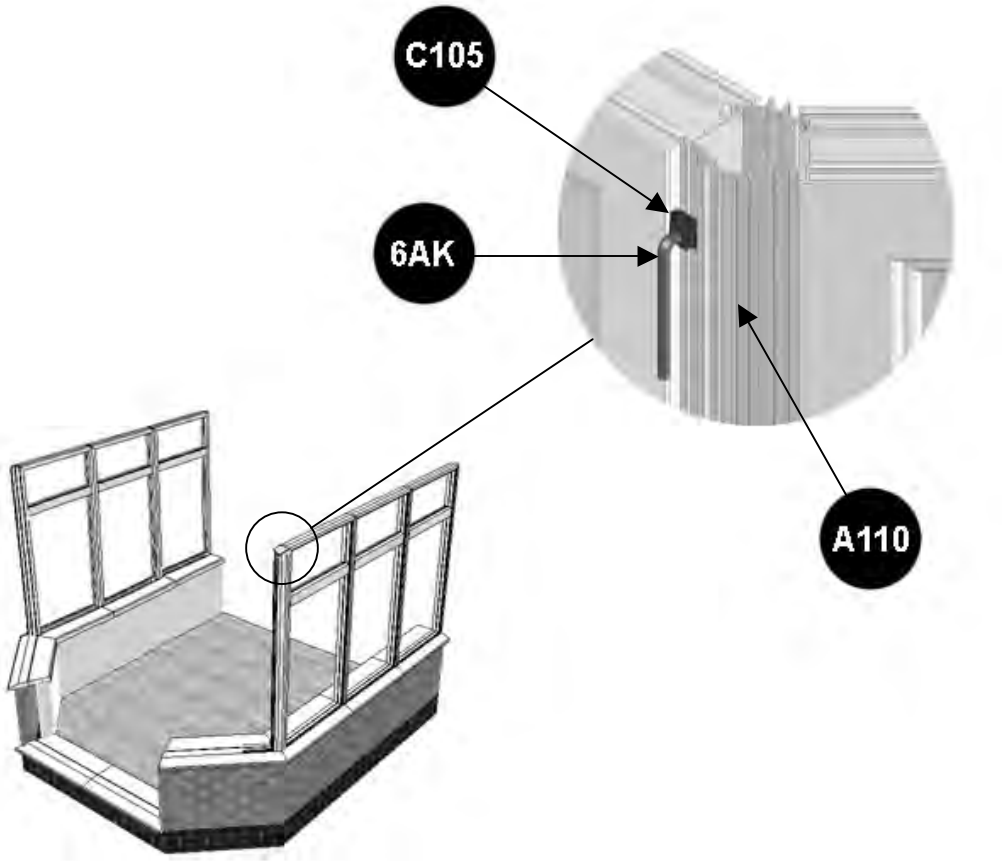


Permanently fix the aluminium low threshold (A103) to the base by use of the 100mm fixing bolts (PA6). The French door outer frame is also permanently fixed to the faces of the dwarf wall by use of the 100mm fixing bolts (PA6).



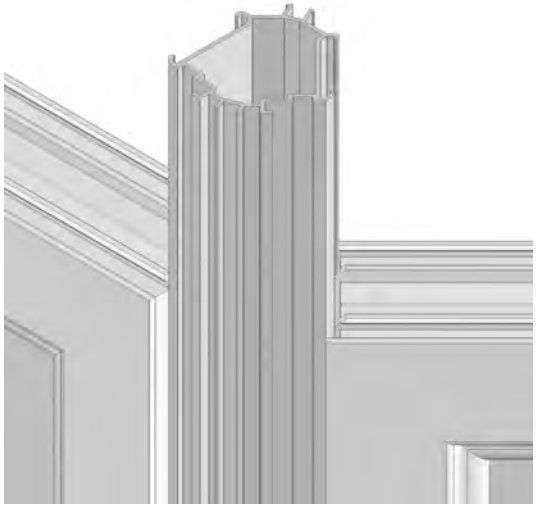
4 - 135° CORNER POST COMPONENT REFERENCE

Item No	Item Description	Pack	Comments
A110	135° Corner Post	C	
C105	Quarter Turn Buttons	A	
6AK	6mm Allen Key	A	

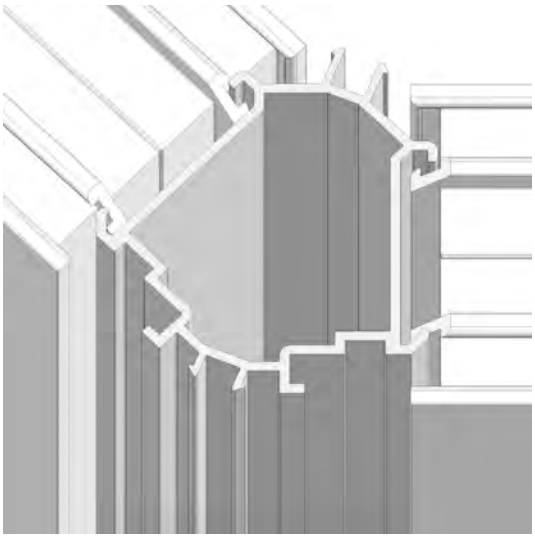


The panels which sit either side of the 135° corner post (A110) should be positioned at the approximate position as shown below so that the external corners of the panels are approximately 75mm apart.

Select the first 135° corner post (A110) and from above, slide between the two adjacent panels. The large angled face section of the 135° corner post (A110) is positioned to the outer corner of the 150mm sill (P106) as shown below. **Bed onto a bead of silicone positioned onto the 150mm sill (P106).**



Ensure that the leg detail on the 135° corner post (A110) interlocks with the leg detail on the panels as shown at the top of the next column.



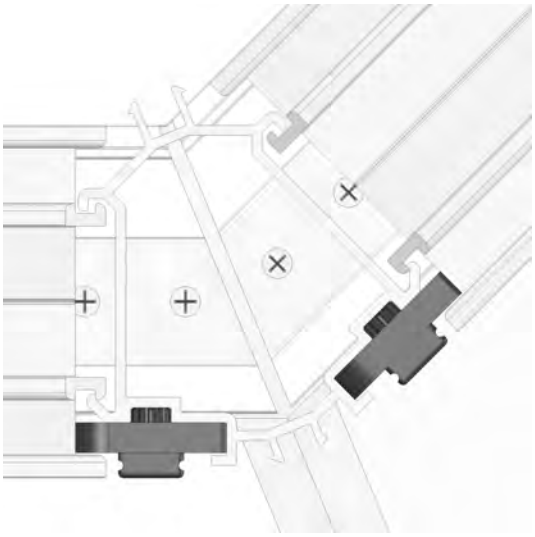
Select a quarter turn button (C105) and the 6mm Allen Key (6AK).

The quarter turn buttons (C105) are positioned longitudinally into the gap between the panels and 135° corner post (A110) at approximately 50mm from the top and bottom faces of the panels.

When the quarter turn button (C105) is in position and resting against the 135° corner post (A110), turn the 6mm Allen key 90° clockwise. The quarter turn button (C105) will 'click' into position.

The 135° corner post (A110) also requires a quarter turn button in the adjacent outer corner. This is positioned in the same way as described previous.

If positioned correctly, the quarter turn buttons (C105) should lock the 135° corner post (A110) and panels as shown below.

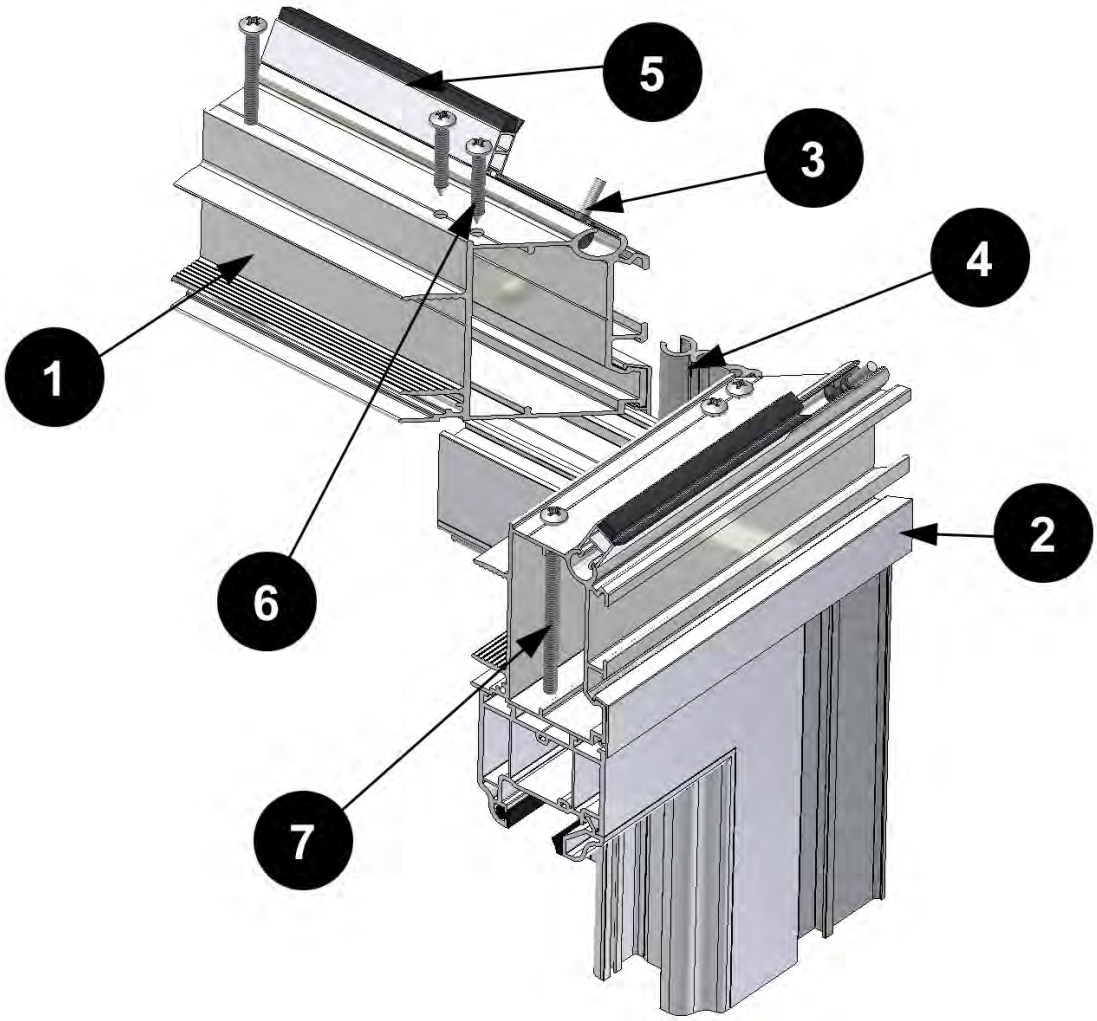


Continue to fit the rest of the quarter turn buttons (C105) into the 135° corner post (A110) as described.

Six quarter turn buttons (C105) per face of the 135° corner post (A110) should be attached on dwarf wall models inside and out, and eight quarter turn buttons (C105) per full height model conservatory, again eight inside and eight on the outside.

5 - EAVES BEAM COMPONENT REFERENCE

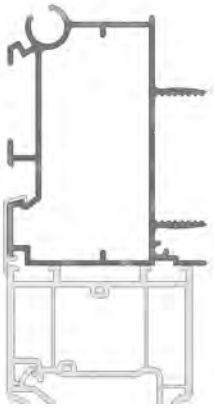
Item No	Item Description	Comments
1	Eaves Beam	A5080
2	Eaves Beam External Trim	P6024
3	Pivot Bolt	C9144
4	Eaves Beam Connector	C9068
5	Eaves Beam Closure	P6056
6	6.35 x 38mm Eaves Connector Screw	C9132
7	6.0 x 120mm Yellow Eaves to Frame Screw	SK007



It is recommended at this point to re-check the internal dimensions (width and projection) and check the measurements across the internal corners (these should be the same).

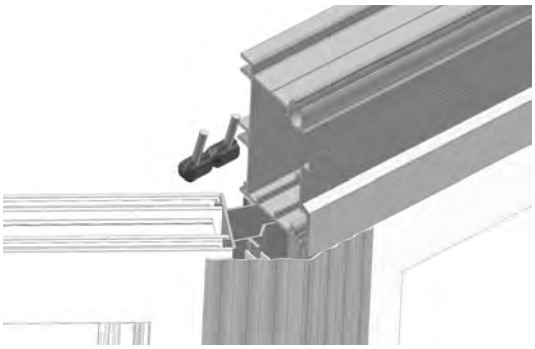
If your conservatory is against a side wall as well as the rear your roof will require a box gutter. If so, it is important that you re-read the Box Gutter Installation section at the back of this installation guide before you continue erecting your conservatory roof.

Attach the eaves beam external trim (P6024) onto the front of the eaves beam (A5080) as shown at the top of next column. Remember to remove the protective film.



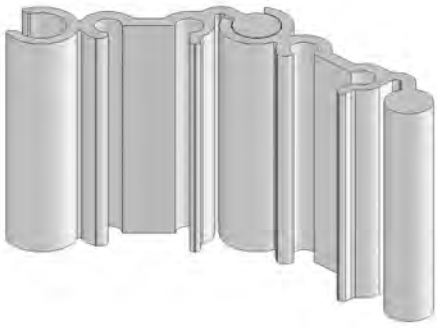
Position the eaves beam (A5080) centrally on top of the panels. When positioned correctly the front face of the eaves beam (A5080) will sit flush with the front face of the panels below and the eaves beam (A5080).

Slide the eaves beam bolt retainers (C9144) complete with M5 x 25mm bolt (C9142) into the eaves beam (A5080). To calculate how many bolt retainers (C9144) are required refer to your roof plan.

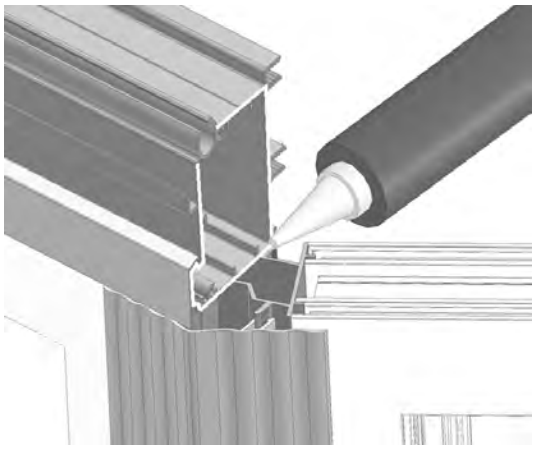


Please note: One double bolt retainer is required per bar however a single bolt retainer (C9144) is required for each starter bar and either side of the eaves beam (A5080) corners for the hip bars. Do not throw any bares away.

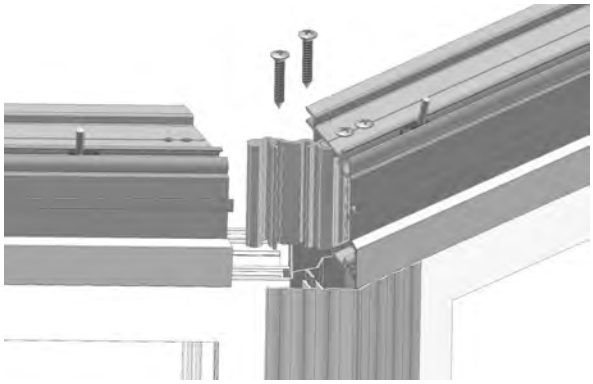
The eaves beam (A5080) pieces will also require joining at the corners. These are joined using two eaves beam joiners (C9068) which slot together as shown below and slid into the channels on the inside of the eaves beam (A5080).



Prior to joining the eaves beam (A5080), apply a bead of silicone to the cut faces of the eaves beam (A5080) as shown below.

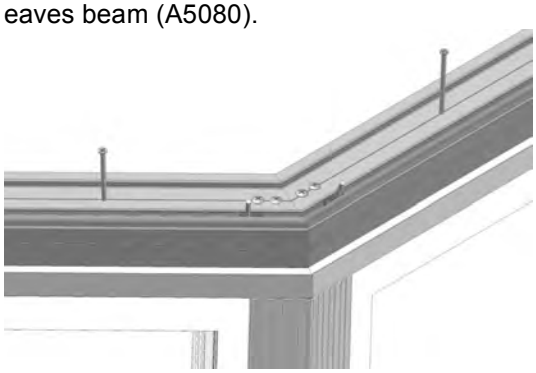


The eaves beam joiners (C9068) are fixed into position by use of the 6.35 x 38mm silver screws through the pre-drilled holes.



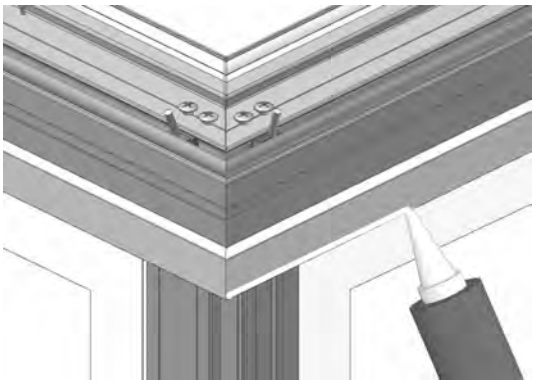
When the eaves beam (A5080) is assembled on top of the panels, drill through the eaves beam (A5080) only with a long reach 5mm drill at positions which are 100mm from the edge of each panel (i.e. two holes per panel position).

Power drill the 4.8 x 120mm yellow screws (SK007) down through the holes in the eaves beam (A5080).



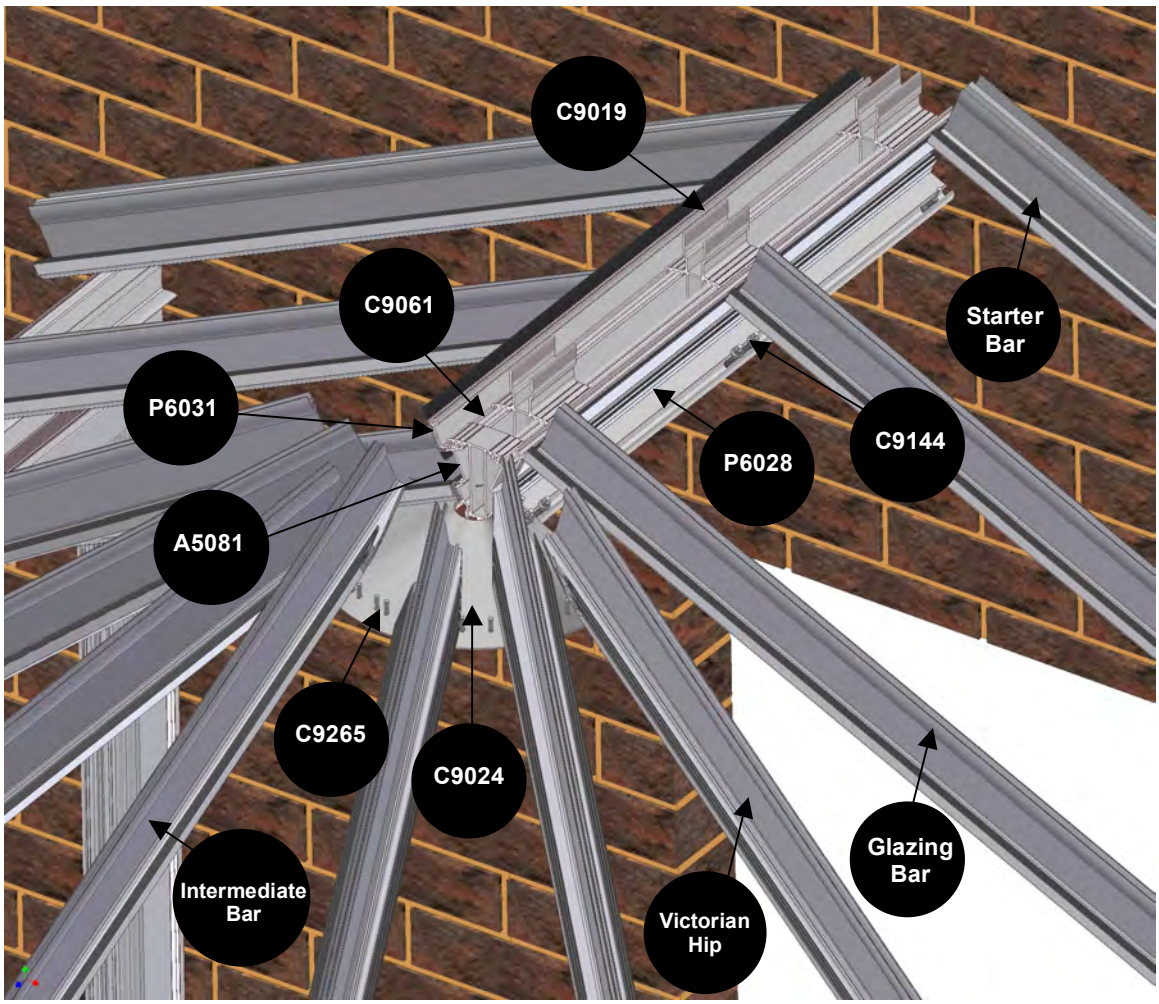
Please note: Do not use the 4.8 x 120mm yellow screws to fix the eaves beam (A5080) to the French door outer frame. Instead use four 70mm fixing screws (70fix) as you used to fix the French door outer frame to the 150mm sill (P106), pre drilling upwards from inside the French door outer frame and up into the eaves beam (A5080).

Silicone seal the gaps between the front of the eaves beam external trim (P6024) and the front of the panels to create a water-tight seal.



6 – RIDGE COMPONENT REFERENCE

Item No	Item Description	Comments
1	Universal Ridge Wing	A5081
2	25mm Standard Ridge Centre	C9019
3	Ridge End Spacer	C9061
4	Top Cloaking Trim	P6031
5	Bottom Cloaking Trim	P6028
6	Pivot bolt Assembly	C9144
7	M5 x 25mm Bolt & Flange Nut	C9265
8	25deg Boss End	C9024
9	Victorian Hip	-
10	Starter Bar	-
11	Glazing Bar	-
12	Intermediate Bar	-



Referring to your roof plan, select the correct number of bolt retainers (C9144) and slide into the channels of the universal ridge wings (A5081).

To identify the glazing bar positions for your conservatory, refer to your roof plan, where the first glazing bar (marked as P1) is always located at the top left of the diagram. All the glazing bars, bars are numbered anti-clockwise around the layout. Please note: all bars must be counted in sequence. These will then correspond to the numbering on the glazing bar assemblies.

It will be easier to assemble the glazing bars if all the M5 flange nuts are removed from the double bolt retainers in the eaves beam and universal ridge wings and kept about your person for use when you require them.

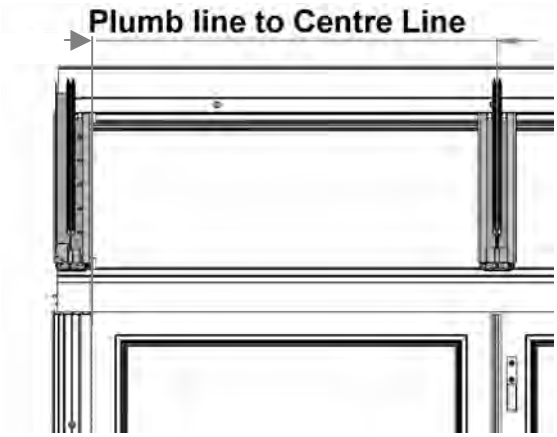
Start the ridge assembly by attaching the victorian hip bars to the boss end (C9024). These are glazing bars that span diagonally from the corners of the eaves beam (A5080) to the boss ends (C9024).

Temporarily support the ridge assembly in the correct position. Slot the holes at the bottom of the victorian hip bar over the M5 bolts located in the bolt retainers that sit either side of the eaves beam corner. Please note that the holes at the upper end of the hip are closer to the end of the bar than the holes at the lower, eaves beam end.
Remember to remove the protective film on the hip bar undercladding prior to fitting.

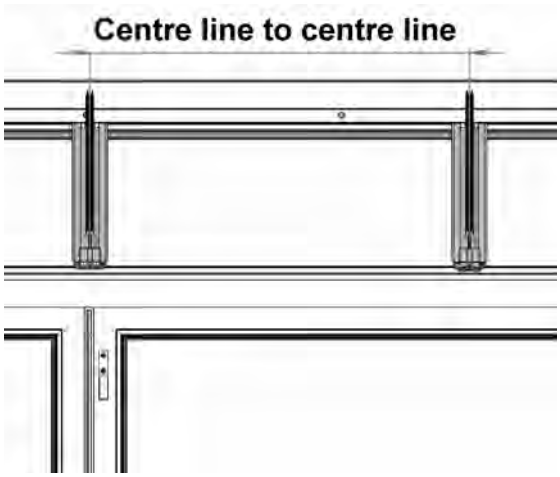
From the underside of the boss end, pass the M5 x 25mm roofing bolts through the pre-drilled holes in the hip and loosely secure with an M5 flange nut.

Repeat this process for the victorian hip on the opposite side. Once the victorian hip and intermediate bars are in position, fit the wallbars using the bolt retainers in the eaves beam and ridge wings.

The first check is the distance from *the plumb line where you positioned the first panel connector – 25mm connector A (PD4)* against the host wall/packing on the far left *to the centre line of the next bar* (RD6) labelled as 'P2'. Refer to your roof plan for this dimension. If the distance is correct tighten the M5 flange nut fully.



The next dimensional checks are the ones between the intermediate rafters. These dimensions shown on your roof plan are taken from *bar centre line to bar centre line*. If all bars are correctly positioned, tighten the M5 flange nuts.



If all checks have been performed it is now possible to permanently fix the starter bars to the host wall.

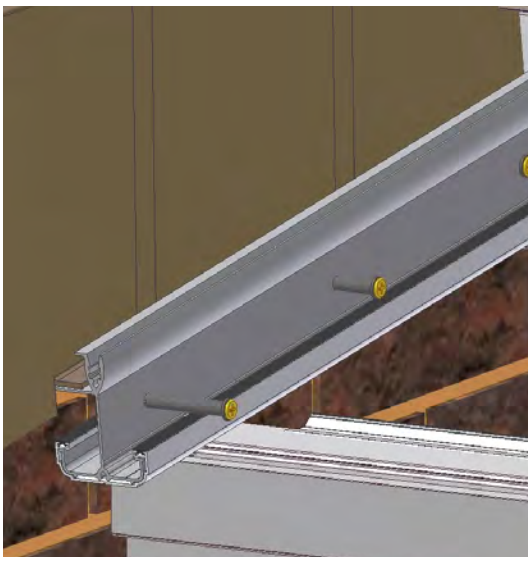
Drill and fix the wallbars to the walls using suitable fixings (not supplied). Fixings should be positioned 150mm from each end and no more than 600mm apart in the location shown.

Take care not to fix into the mortar beds.

Primary Seal to Host Wall

Self-adhesive flashing tape is included in your conservatory kit. This product is suitable for use where the host wall is flat and even, e.g. face brickwork. The tape is provided as a means of temporarily sealing the conservatory from water ingress. Although the flashing tape, if applied in accordance with the manufacturer's instructions, can function for many years, it is not a long term substitute for traditional lead flashing. We would recommend that you employ an experienced builder to carry out lead flashing works during the construction of your conservatory or at some time in the near future.

When all wallbars are fully installed, cut the flashing tape and apply the flashing tape to the host wall. The flashing tape should run down three courses of brick and run into the drainage channel

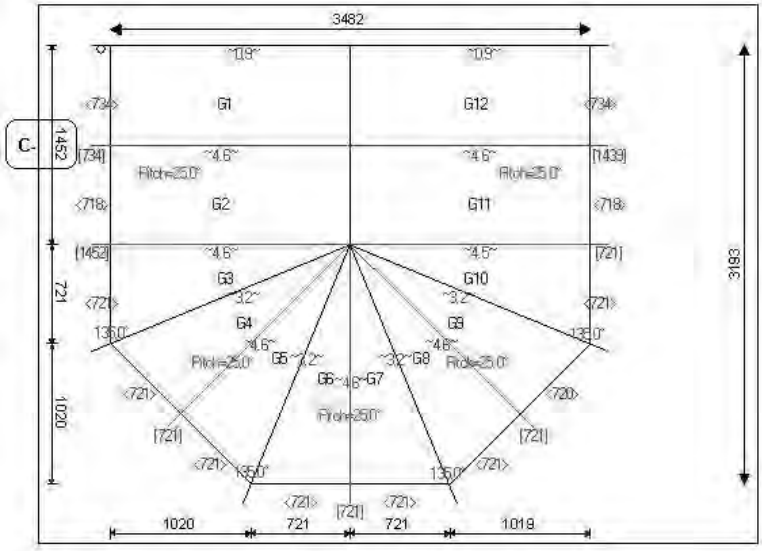


6 - RIDGE CHECKS

The Colour of this Conservatory is

Order No
Reference
Spec Number

A Internal Frame Width :
B Internal Frame Projection :
Frame Height (incl sill) :
C Roof External Ridge Height :
D Roof Internal Ridge Height :
E Roof Height External from Finished Floor level :



Please note that the end dimensions are taken from the external frame to the centre line of the next rafter. The intermediate dimensions are taken from bar centre line to bar centre line. The image above is an example roof plan. The detail specific to your conservatory is shown on your roof plan, **do not follow the dimensions shown in this image.**

It is strongly advised that you perform the following checks:-

1 . Double check the internal dimensions shown '**A**' and '**B**'.

2. Check that the height of your ridge (A5081) is correct. One of three ways is possible:

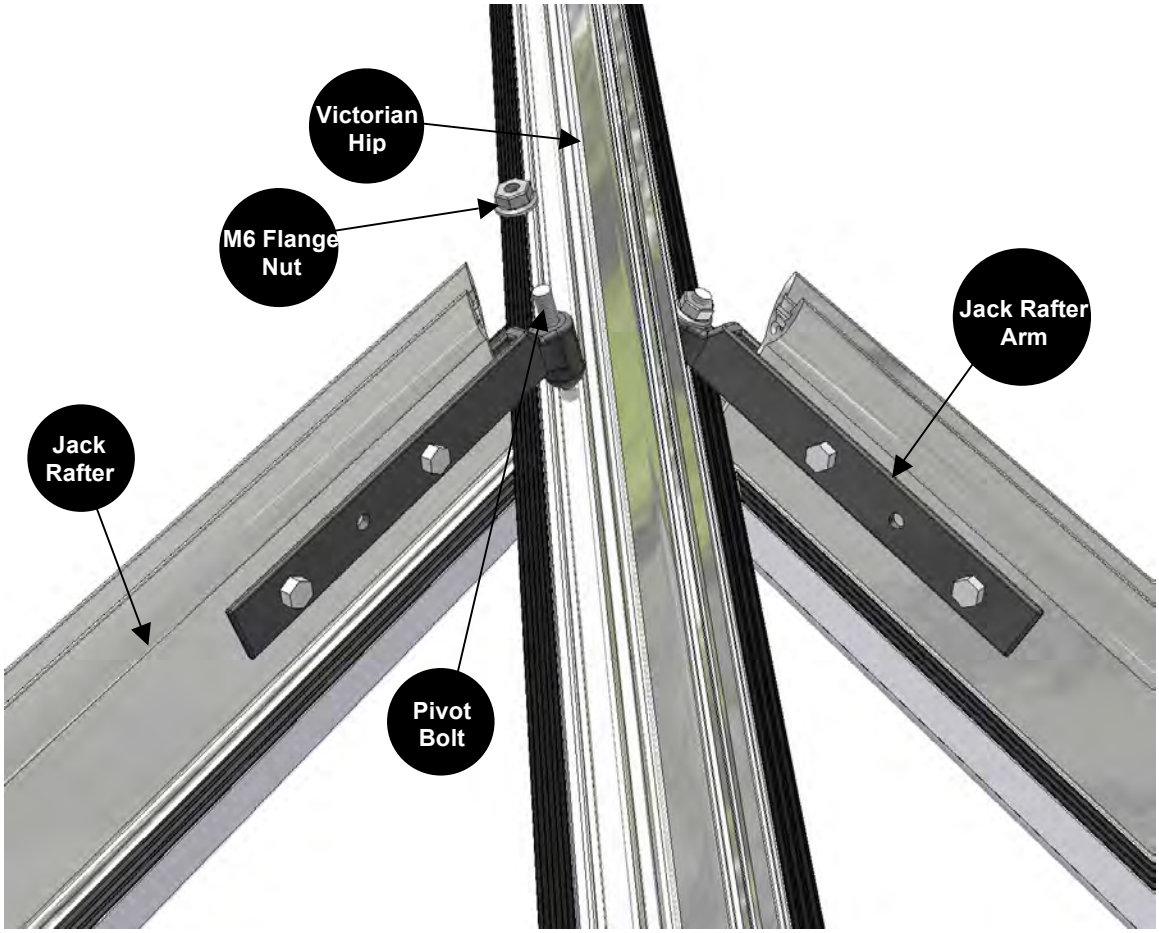
C. - **Roof External Ridge Height**: Height from the top of the panels to the top of the ridge (A5081).

D. - **Roof Internal Ridge Height**: Height from the top of the panels to the underside of the ridge (A5081).

E. - **Height from your Finished Floor Level:** to the top of ridge (A5081).

7 – JACK RAFTERS INSTALLATION

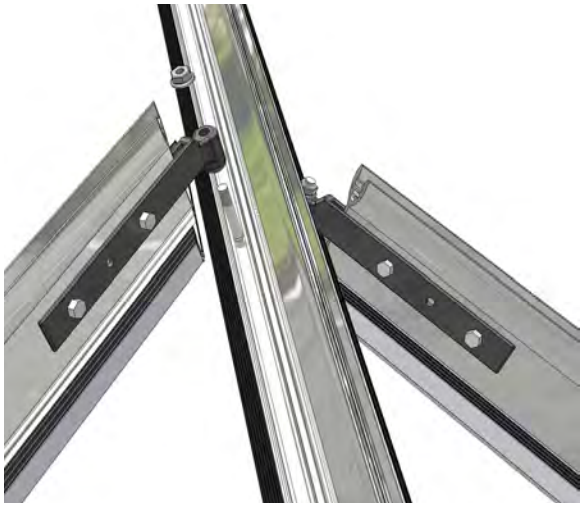
Item No	Item Description	Comments
1	Victorian Hip Bar	Pre-assembled
2	Jack Rafter Assembly	Pre-assembled
3	Jack Rafter Undercladding	Pre-assembled
4	Jack Rafter Arm	Pre-assembled
5	Pivot Bolt	-
6	M6 Flange Nut	-



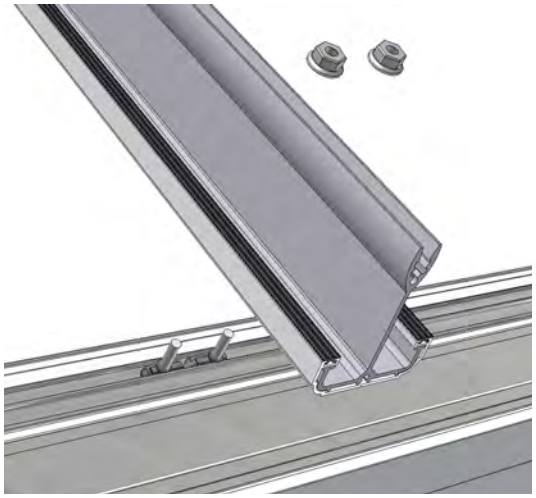
Jack Rafters

The set of glazing bars that connect to the hip, jack rafters can now be fitted to the hips. The jack rafters have tops which are cut at an angle and when in position will run perpendicular from the eaves beam until they meet and attach to the Georgian hips.

Before attaching the jack rafter, slide the jack rafter undercladding down and away from the top end of the jack rafter.



Slide the undercladding back to the top of the jack rafter and tight up against the Georgian hip undercladding, locate the jack rafter onto the bolts in the eaves beam and loosely attach the M5 flange nuts.



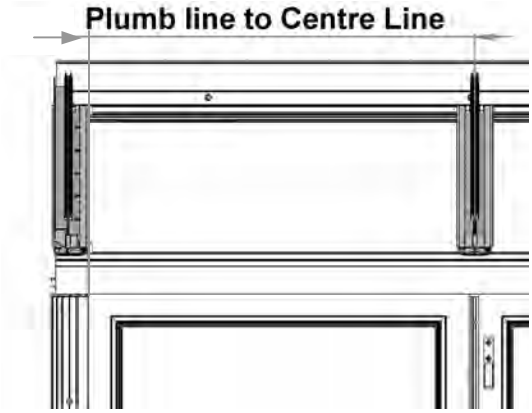
REMEMBER to remove the protective film from the undercladding prior to installation.

If not already fitted, locate a domed bolt (C9165) into the jack rafter bolt slot which runs the entire length of the Georgian hip. Locate the jack rafter arm (C9166) onto the domed bolt and loosely attach the M6 flange nut. Do not tighten.

Prior to tightening **any** M5 locking nuts it is recommended that you perform some glazing bar position checks.

The positions of the intermediate glazing bars are confirmed by performing dimensional checks between the rafter centres.

These dimensions shown on your roof plan are taken from the centre line of the transom glazing bars. If all the glazing bars and jack rafters are correctly positioned, tighten all M5 and M6 flange nu

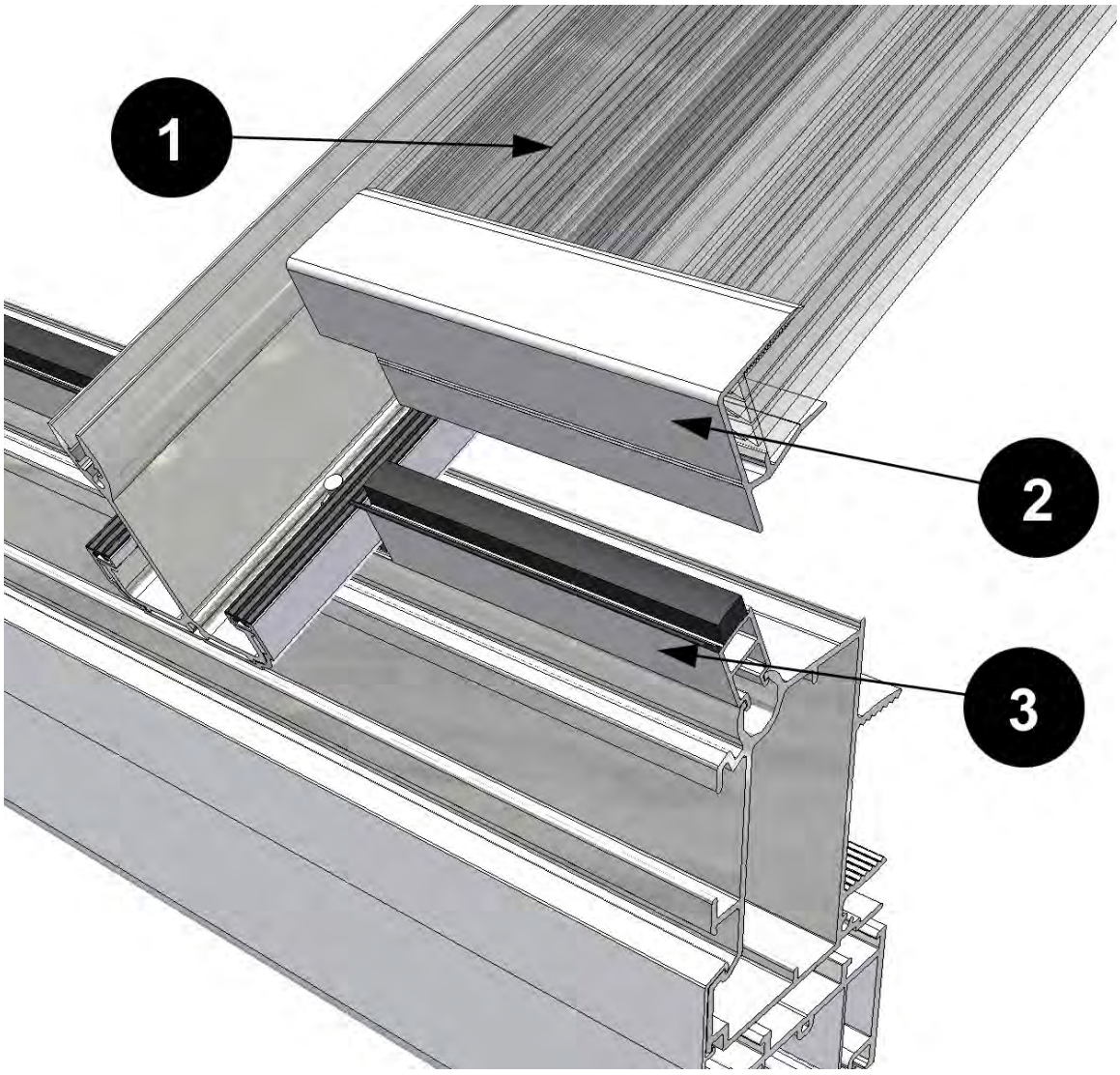


IMPORTANT NOTE
On the inside of the connection, thoroughly seal with silicone the joint between the aluminium jack rafters and the PVC Georgian hip undercladding.

The finished appearance of the jack rafter connection from beneath should be as below.

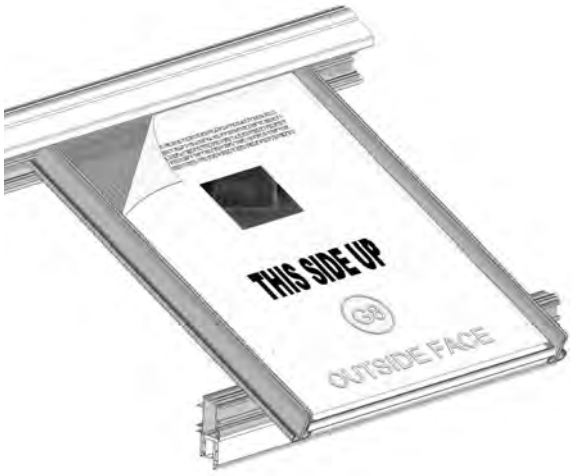
8 – ROOF GLAZING COMPONENT REFERENCE

Item No	Item Description	Comments
1	Roof Glazing Sheet	
2	Glazing end Trim	P6054
3	Eaves Beam Closure	P6056



Please Note: Not all roofs are glazed with polycarbonate roof glazing sheets, some models may be glass.

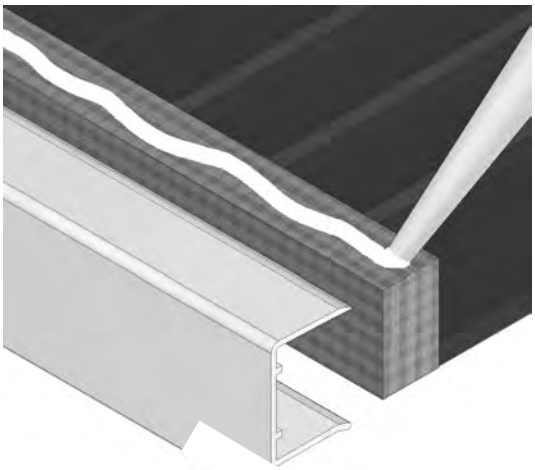
Unpack the roof glazing sheets. If your glazing material is polycarbonate, it is important at this stage to note the *printed* polythene film is on the outside of the conservatory. The print on the outer film gives details on how to store your polycarbonate until it is installed.
Each glazing sheet is labelled with the corresponding number on your roof plan.



If not already installed, fit all the eaves beam closure (P6056) into eaves beam (A5080). This trim will snap fit into the channels of the eaves beam between the glazing bars. Do not remove the glazing tape protective film at this point.

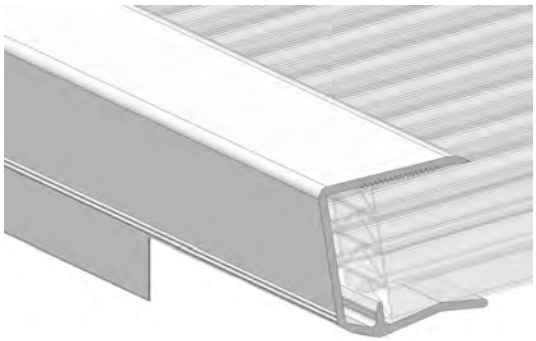
It is recommended to apply a bead of silicone to the gap between the eaves beam closures and glazing bar undercladdings as shown.

The end closure (P6054) may be pre-assembled on polycarbonate roof glazing sheets, however you will need to remove the end closure and apply a line of silicone along the top face of the breather tape, the re-fit the end closure. Clean off all excess silicone.



The end closure (P6054) push fits over the bottom edge of the roof glazing sheet with the flange facing down.

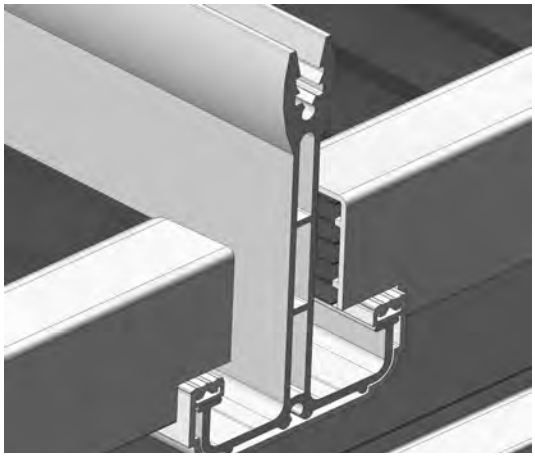
The polycarbonate end closure (P6054) should also be pre-notched at either end to allow the polycarbonate roof glazing sheet to rest fully onto the bar.



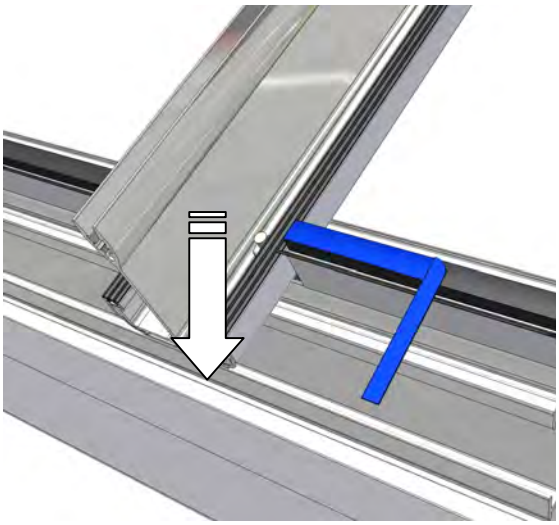
Select the first roof glazing sheet ‘G1’and remove its protective films (polycarbonate only). It is recommended that only a 50 to 100mm perimeter of the protective film is removed at this stage as this will help protect the roof glazing sheet from any unwanted marks. The inner protective film can then be completely removed once all plaster work is complete.

Start with the roof glazing sheets against the wall and to the left with the face which had the printed film facing outwards.

Push the roof glazing sheet up into the wallplate or ridge, the end closure should be flush with the end of the bar. Gently allow the roof glazing sheet to rest on to the glazing support trim (P6056).



Once the roof glazing sheet is in place, pull on the glazing tape protective film on the glazing support trim (P6056) from the inside of the conservatory in a downwards motion to remove.



Recommended Method of Glazing

When you are glazing your conservatory roof it is recommended that you place the roof glazing sheet labelled ‘G1’ into position first, Install “P1” starter bar top cap, then place ‘G2’ roof glazing sheet into position then install ‘P2’ bar top cap. If you choose to install the roof glazing sheets and bar top caps in this way it is imperative that you read both the glazing and capping installation sections prior to glazing your conservatory roof.

When satisfied that the roof glazing sheet is in place, gently pull on the glazing tape protective film on the eaves beam glazing support trim (P6056) in a downwards motion and press firmly down on the roof glazing sheet to ensure that sheet adheres to the eaves closure tape. Continue to fit all others as previously described.

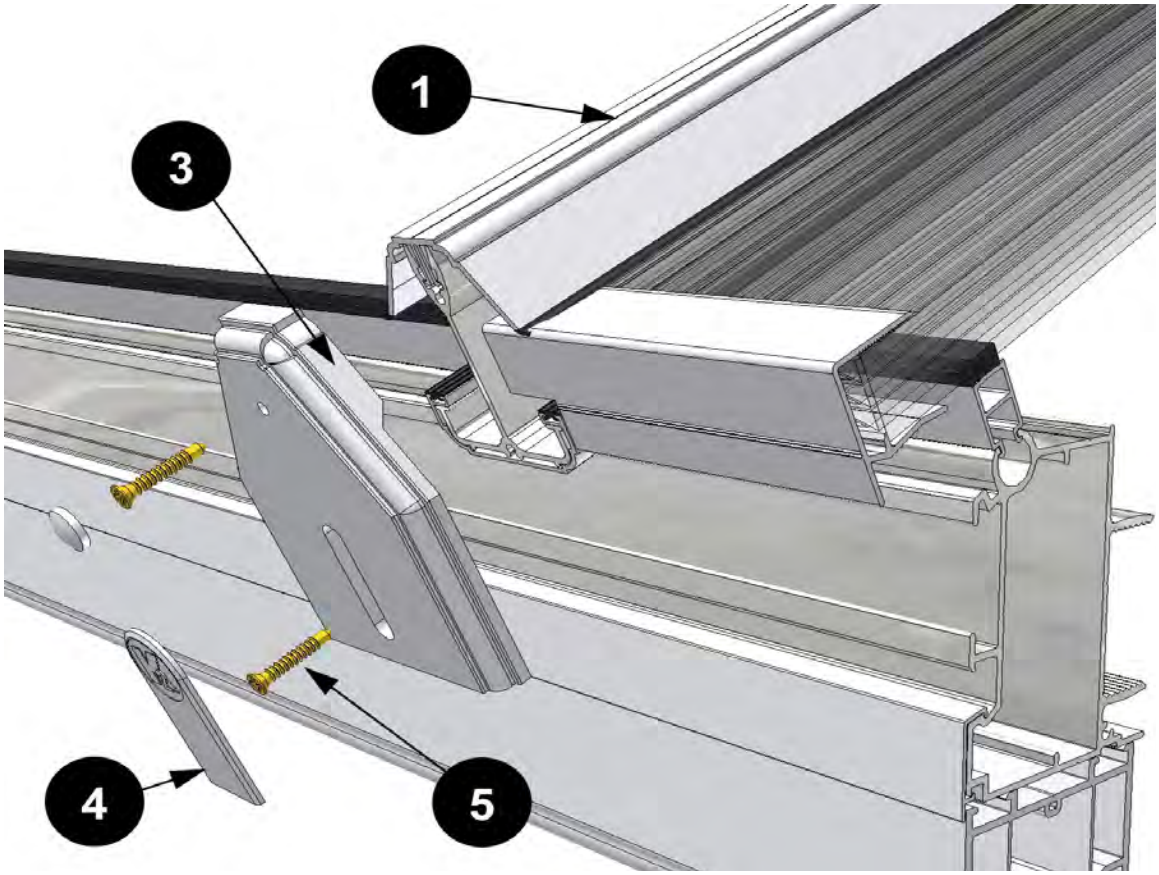
PLEASE NOTE IT IS NOT UNCOMMON FOR CONDENSATION TO APPEAR IN THE FLUTES OF THE POLYCARBONATE ROOF GLAZING SHEETS FROM TIME TO TIME.

THE ‘BREATHER’ TAPE PRE-FITTED TO THE BOTTOM OF THE POLYCARBONATE ROOF GLAZING SHEETS IS DESIGNED TO ALLOW THE MOISTURE TO EVAPOURATE NATURALLY.

DO NOT BREAK THE SEAL ON THE BREATHER TAPE IN ATTEMPT TO INCREASE THE VENTILATION INTO THE FLUTES OF THE POLYCARBONATE ROOF GLAZING SHEETS.

9 – GLAZING BAR CAPPINGS COMPONENT REFERENCE

Item No	Item Description	Comments
1	Glazing Bar Top Cap	
2	Glazing Bar End Cap	C9038
3	Screw Cover Cap	C8019
4	End Cap Screw Cover	
5	3.9 x 25mm Fixing Screw	C8019

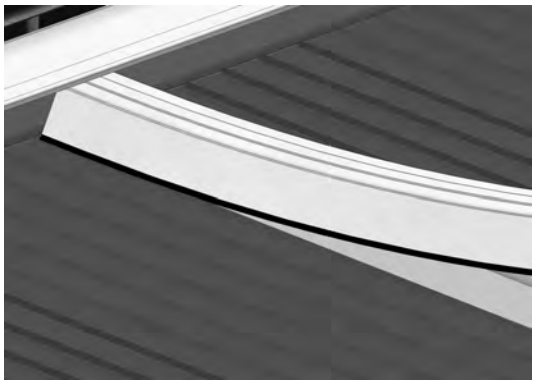


Once all roof glazing sheets are in position and stuck to the glazing support trim (P6056), attach the bar top caps to the bars.

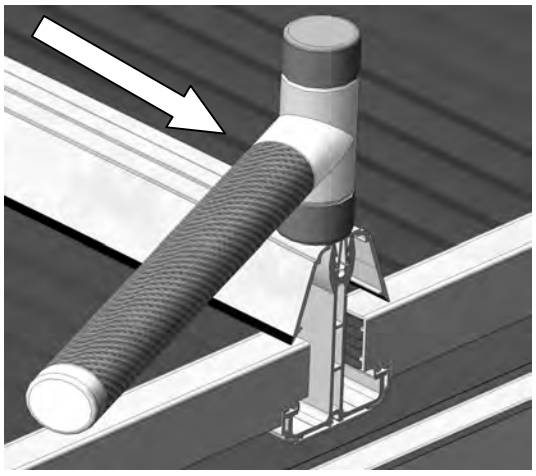
Fitting Starter Bar Caps

Select the appropriate bar top cap by matching its number with the corresponding bar number.

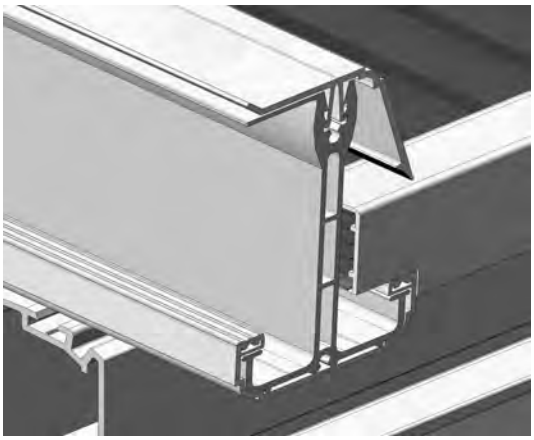
Prior to installing the bar top cap, the bar top cap rubber gasket must be lubricated with a solution of mild soapy water (this will help to slide the bar top cap along the bar if adjustments are necessary).



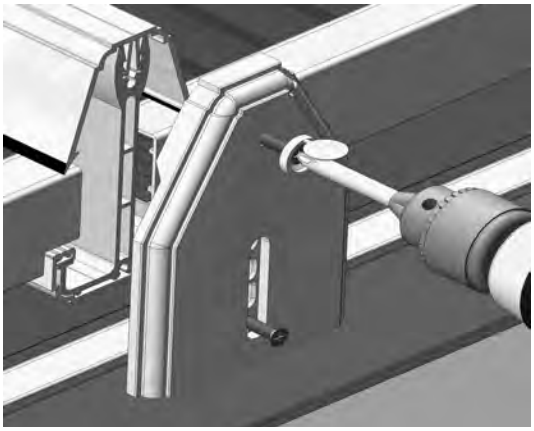
Use a glazing mallet or similar plastic surfaced mallet to knock on the bar top cap starting at the top and working down the bar top cap towards the eaves beam (A5080).



When the bar top cap is attached, make sure that the bottom face of the bar top cap is flush with the bottom face of the bar. Remove the protective film from the bar top cap. Repeat for all top caps.



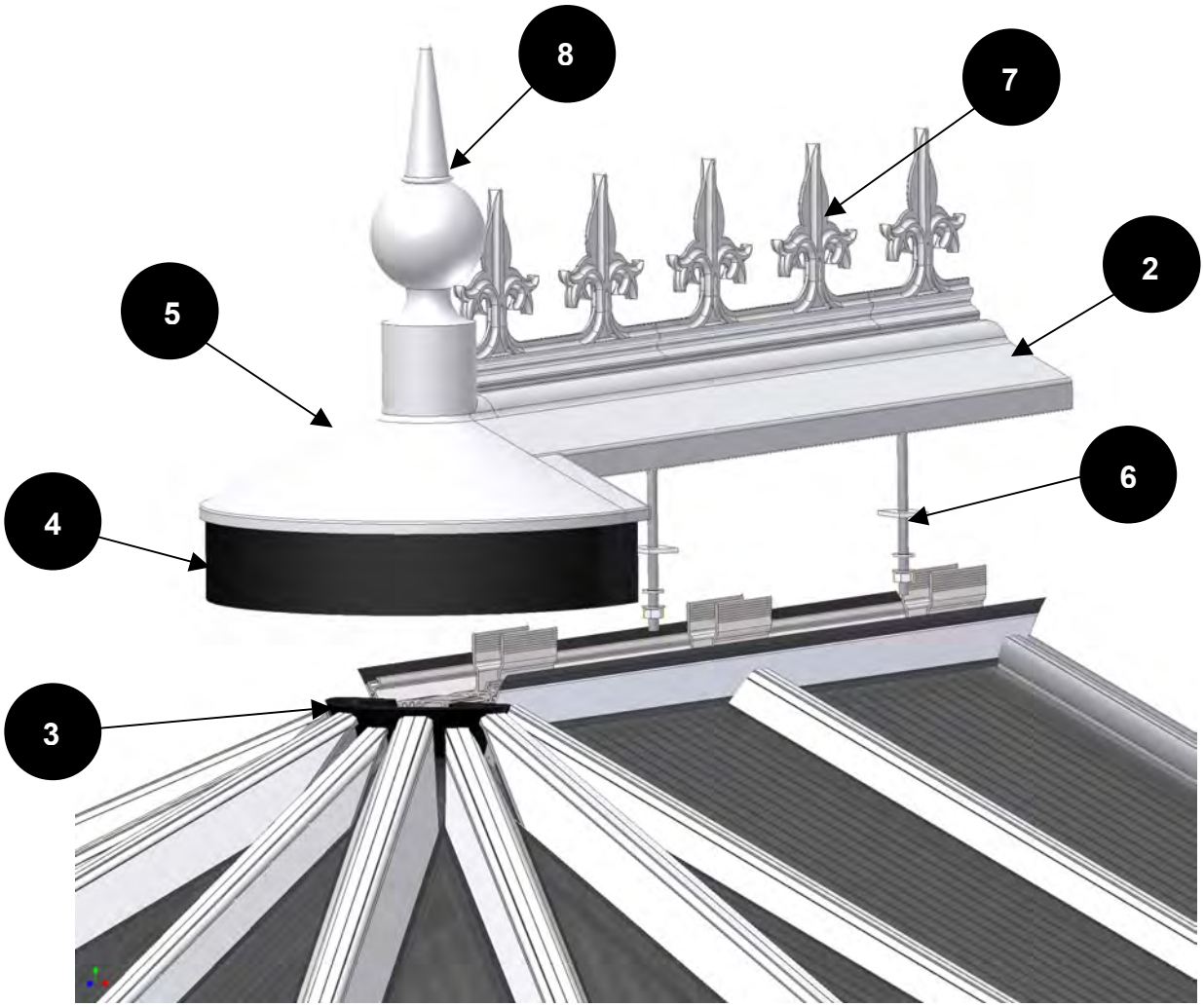
Fix the glazing bar end caps to the end of the bars using two 3.9 x 25mm yellow screws (C8019). Ensure that the top fixing is done first using the cup washer and cover cap, this aligns the end cap bottom holes with the screw port on the glazing bar.



Locate the large screw cover cap over the elongated slot detail.

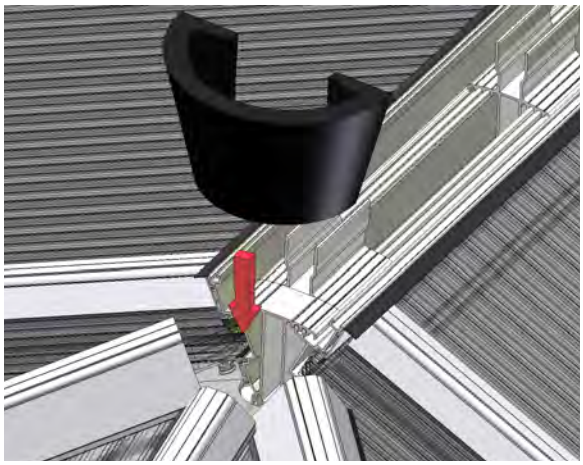
11 – RIDGE CAPS

Item No	Item Description	Comments
1	25° Variable Pitch Ridge	-
2	External Ridge Cover	P6027
3	Universal Foam bung	C7023
4	Boss End Foam Trim	C9350
5	Round External Boss Cover / Deep Skirt	C9027 / C9043
6	Ridge Holding Down Bolts	C8031
7	Ornate Cresting (as shown) / Plain Cresting	C7015 / 7013
8	Finial	C7012

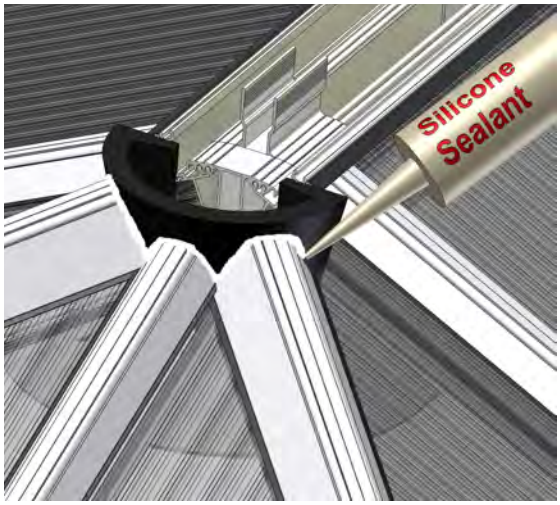


Now that all the edges of the polycarbonate roof sheets are sealed by use of the bar top caps and the bar end caps, the tops of the bars need to be sealed from water ingress and dirt.

After folding into a semi circle ensuring the ends are tucked into the centre, place the foam bung (C7023) into the void on the Victorian boss end so that the outer face rests against the back of the bars.



Using the silicone provided, run a continuous bead around the joint between the foam bung (C7023) and the end of each bar top cap, being careful to avoid gaps in the sealant.

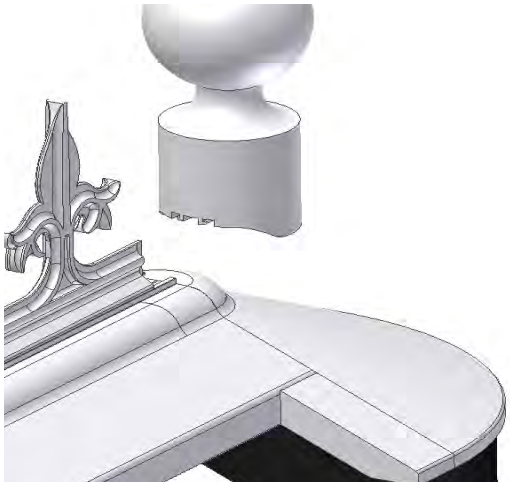


Fitting the Ridge Covers

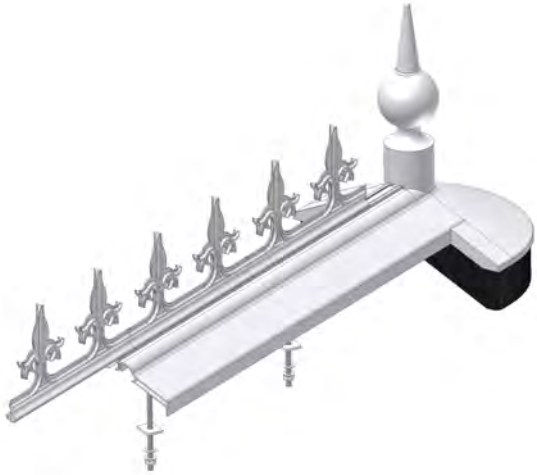
When fitting the ridge covers, you must first attach the boss end foam trim around the perimeter of the underside of the boss end cover as shown, Remove the backing tape and press firmly onto the underside of the boss cover.

The ridge holding down bolts must b e fitted into the groove on the underneath of the external ridge capping at approximately 500mm centres. When fitting the bolts ensure that the nut and washer for each threaded rod is located into the channel, tighten the threaded rod prior to installing.

Slide the finial (C7012) fully onto the ridge cap assembly as far as it will go.

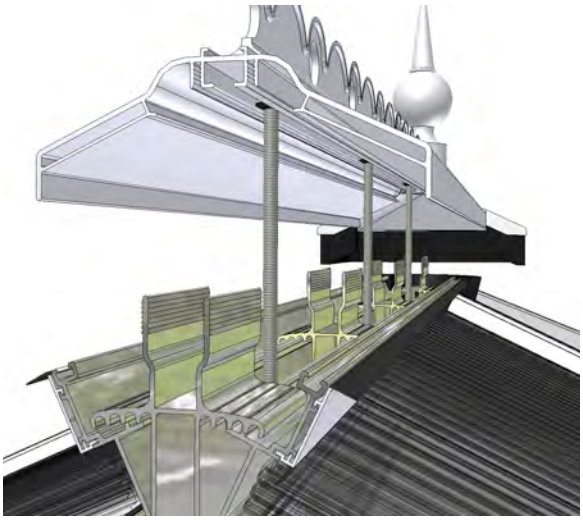


Slide the pieces of cresting (C7013/C7015) into the open ended channel of the ridge cap assembly.



The last piece of cresting may have to be cut to length so that it finishes flush with the end of the ridge top cover.

Lift the ridge capping assembly onto the top of the ridge assembly and push down so that it locates onto the prongs of the ridge centres.

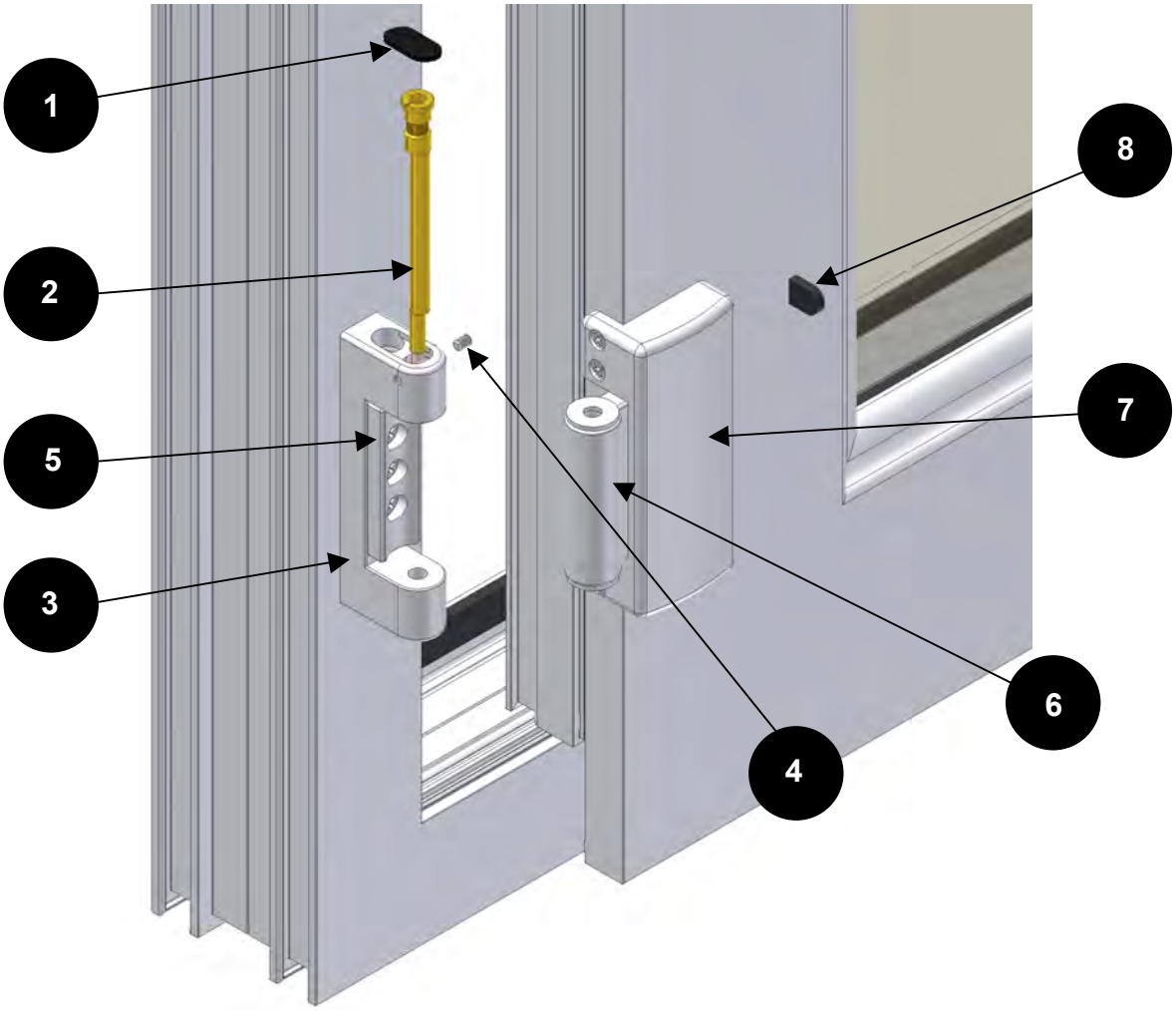


When fitting the external ridge cover assembly, Use of conservatory ladders or boards positioned across the glazing bars will assist spreading any load. **Do not put your weight directly on to the roof glazing sheets.**

Screw the rectangular washer until it touches the ridge wings and finger tighten the nylon nut on the ridge holding down bolts to make the external ridge capping secure.

12 - DOOR COMPONENT REFERENCE

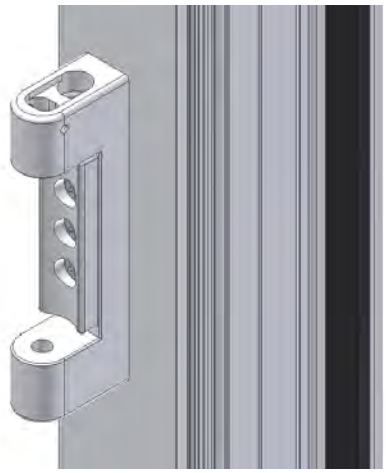
Item No	Item Description	Comments
1	Hinge Pin Cover Cap	
2	Hinge Pin (Mk2)	
3	Outer Frame Hinge (Mk2)	
4	Hinge Pin Grub Screw	
5	Outer Hinge Adjuster	
6	Sash Hinge Adjuster	
7	Sash Hinge Cover	
8	Sash Hinge Adjustment Cover Cap	



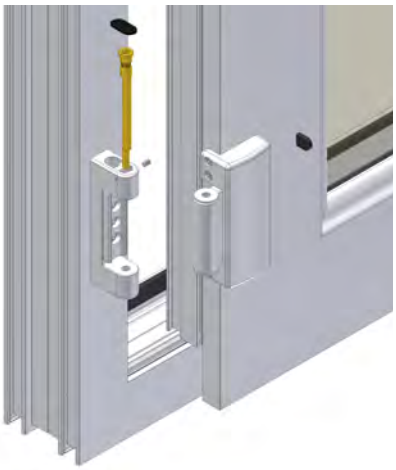
Check that the double door outer frame is square, plumb and not in twist (check that the diagonal measurement from corner to corner is equal in both directions).

Two or three sash hinges will be fitted to the door leafs with all relevant components, except for the sash hinge adjustment cover cap.

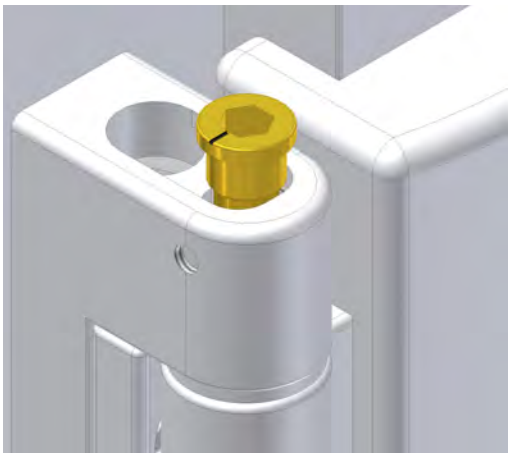
Two or three outer frame hinges and sash hinge adjusters are pre-fitted to the door outer frame. The hinge pin, hinge pin cover cap and hinge pin grub screw are supplied seperately.



To hang the door, lift and slide the door sash assembly to allow the sash hinge adjuster to slide in between the outer frame hinge.



Once in position, pass the hinge pins through both hinge parts. It may be necessary to tap each pin down using a mallet. Do not fit the outer hinge cover and sash hinge cover caps at this time as some adjustment may be required later.



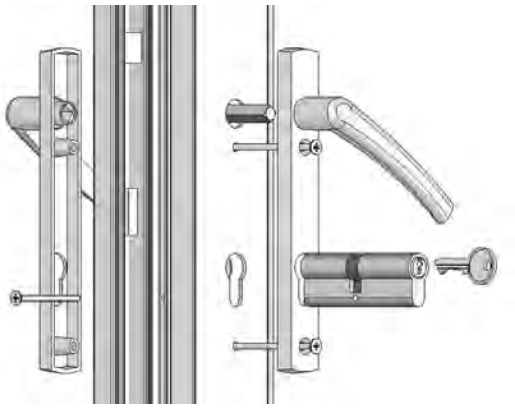
Ensure that the slot mark in the hinge pin points away from the door sash.

To prevent the hinge pins from turning, it is recommended that the hinge pin grub screws are fitted at this point. To do this,

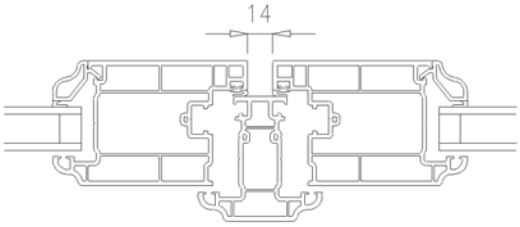
open each sash and fit the grub screws into the inside hole on the outer hinge.

Fit the door handles and cylinder.

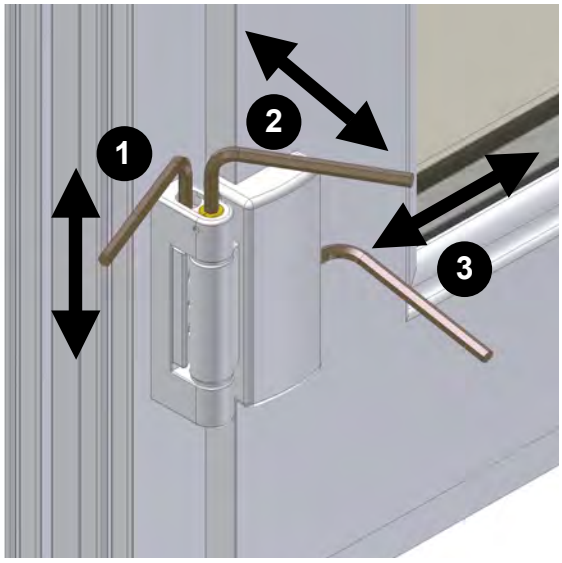
NB: To operate the locking mechanism the handle must be lifted to allow the key to turn the cylinder.



Ensure that the gap between the door sashes is parallel. When set correctly the gap between the doors will be 14mm.



Adjusting the Hinge



Vertical adjustment of each sash can be achieved by inserting the 5mm Allen key into socket 1 in the top of the outer frame hinges and turning it clockwise to lift the door sash. A maximum lift of 4mm can be achieved.

Horizontal (front to back) adjustment can obtained by inserting the 5mm Allen key into socket 2 in the top of the outer frame hinges and turning 90º in either direction to adjust the compression of the door sash. (N.B The hinge pin grub screw will need to be removed to allow this adjustment).

Horizontal (left to right) adjustment of the sash can be achieved by use of socket 3 located on the end face of the sash hinge cover (above). Insert the 5mm Allen key into the socket of the hinge and turn clockwise to move the sash inwards or anti-clockwise to move the sash outwards, Approximately 4mm adjustment can be obtained in either direction.

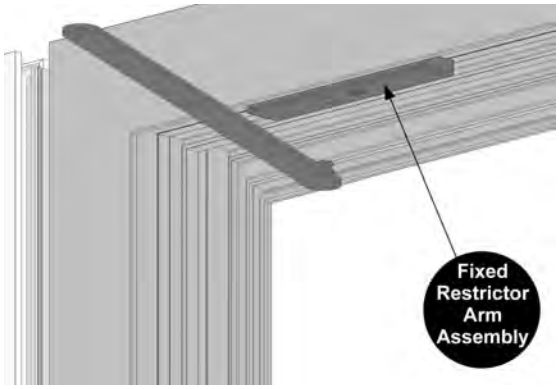
When content that the door sashes are correctly adjusted, fit the outer hinge cover caps.

Shoot Bolt Keeps

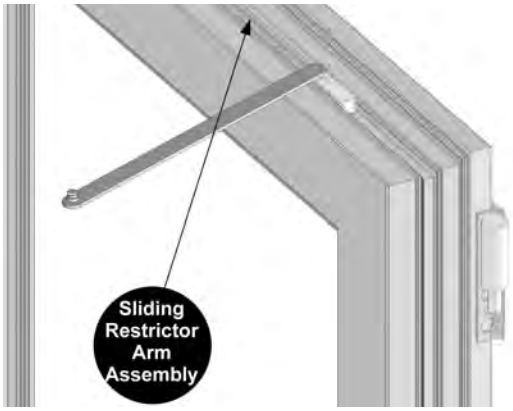
The shoot bolt keeps have an adjustable top plate. Loosen the locking screws on each plate prior to adjustment, ensuring that they are re-tightened afterwards. On the slave door, adjust the top section so that this door is pulled into the frame as tightly as possible. Adjust the master door keep as required to ensure that the door latching and locking is a smooth operation.

Connecting the Restrictor Arm

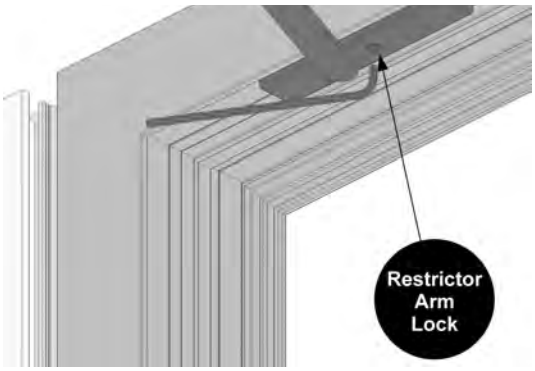
When both double doors sashes are in position the restrictor arm assemblies can be connected. These are found in two parts that are already attached to the top of both door sashes and the top inside corners of the door outer frame.



The restrictor arms are taped into position for transit. The tape should be removed prior to installation.



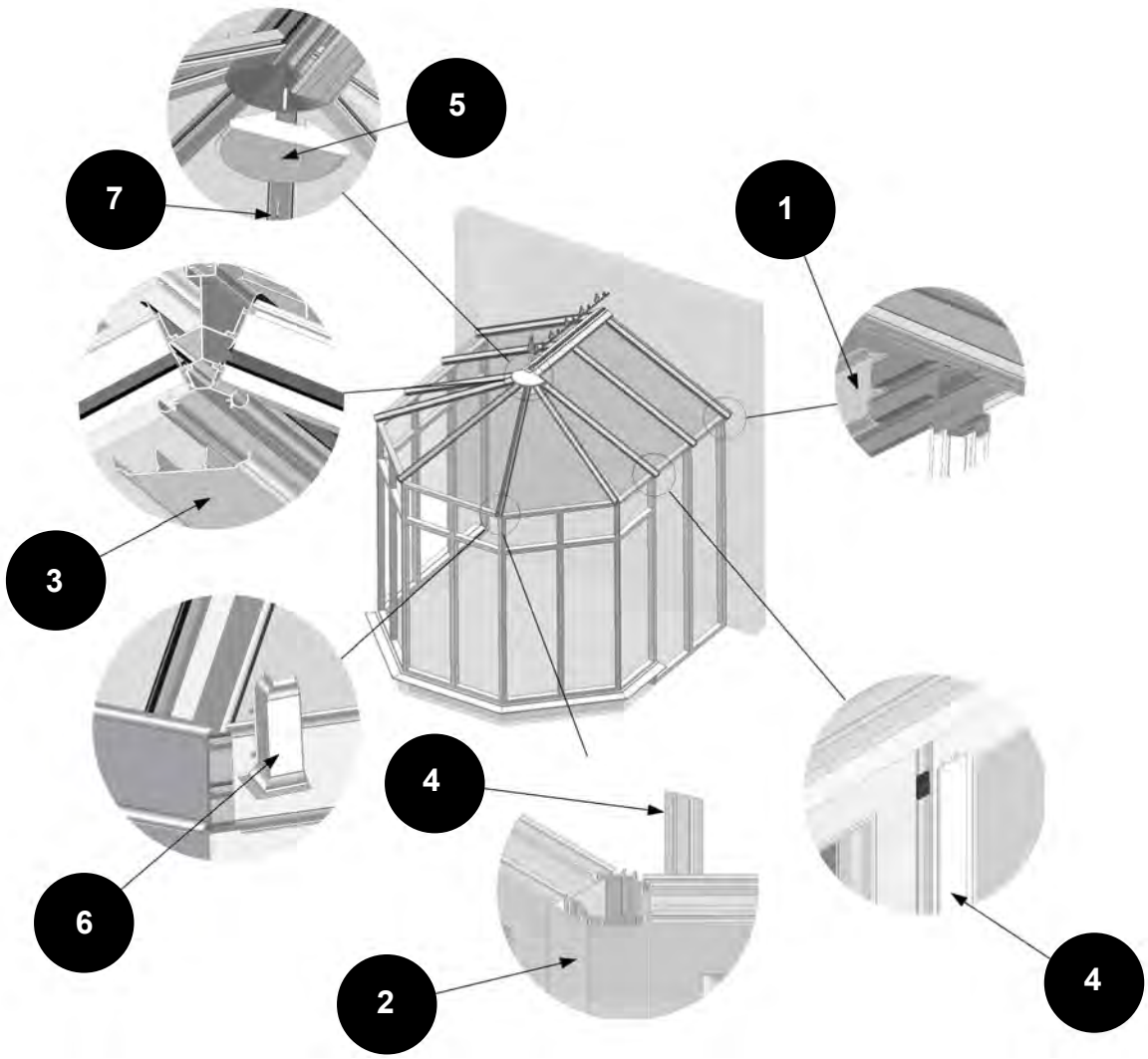
Locate the button on the sliding arm into the receptor of the fixed restrictor assembly. Push firmly upwards until the button snaps into place.



When the restrictor has been located, tighten the restrictor arm lock by using the 2mm Allen key.

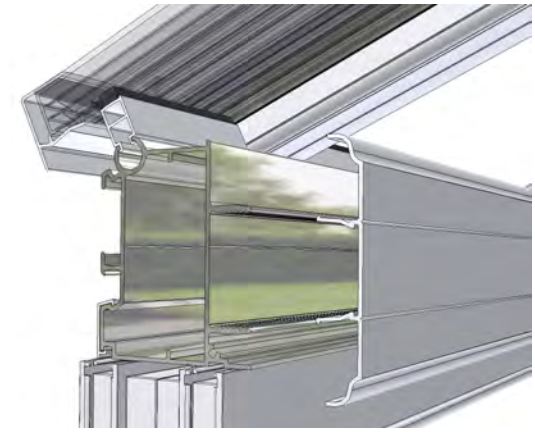
13 – TRIMS AND FINISHING COMPONENT REFERENCE

Item No	Item Description	Comments
1	Eaves Beam Cover	P6042
2	135° Corner Post Cover	P114
3	Ridge Cover Internal	P6042
4	18mm Coupling Cover	P125
5	Victorian Boss End Cover Internal	C9028
6	Eaves Beam 135° Corner Trim	C9111
7	3.9 x 25mm Gold fixing Screw / Cap & Washer	C8019

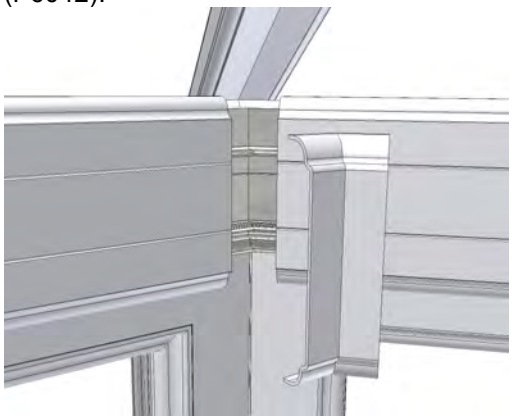


Check that you have sealed the joints in between the glazing support trims and the bar under cladding on each panel and the glazing tape protective film has been removed.

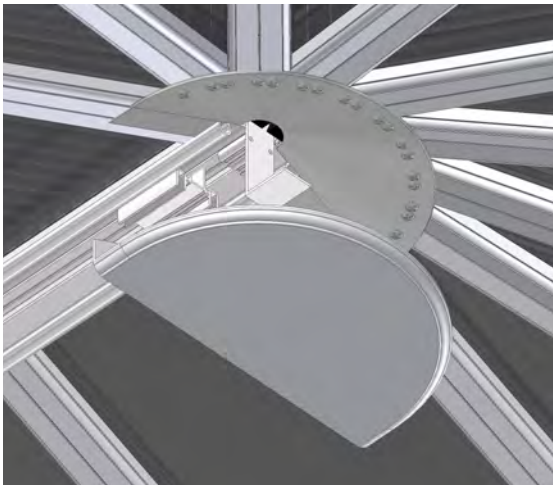
Select the eaves beam cover (P6042), position onto the barbs on the eaves beam (A5080) and press home.



Select the eaves beam 135° cover trim (C9111), and push home into the corner gaps between the eaves beam cover (P6042).



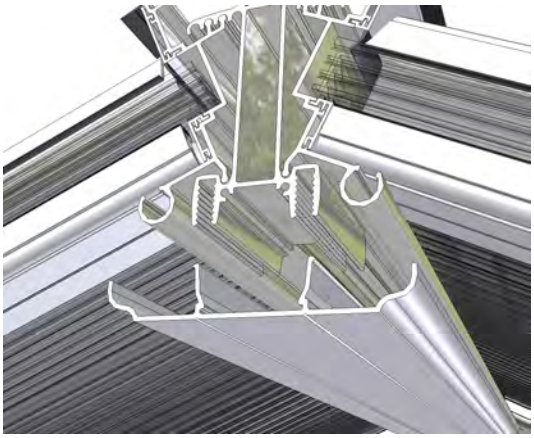
Prior to installing the internal boss cover, it may require trimming to suit the roof pitch.



Offer the boss end internal cover (C9028) up to the boss end. The boss end cover internal (C9028) is positioned so that the up stand fits tight against the boss end and the edge against the hip bars.

Use the 3.9 x 25mm fixing screw and cup washer to fix the internal boss cover to the “L” bracket attached to the ridge assembly. Push fit the cover cap over the screw and cap washer to finish.

Select the ridge cover internal (P6042) and position beneath the serrated prongs of the aluminium ridge spacers. Push the internal ridge cover into position until it touches the bottom of the glazing bars on both sides.

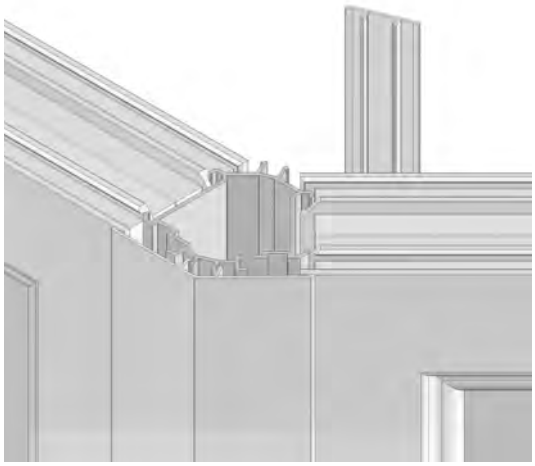


Select the 135° corner post cover (P113) for the 135° corner post (A110).

Position the 135° corner post cover (P113) over the barbs at the bottom of the 135° corner post (A110) and by working upwards press home.

The 18mm coupling covers will require trimming to fit underneath the external eaves beam trim (P6024) and the eaves beam cover (P6042).

Select an 18mm coupling cover (P111) and position onto the barbs on the inside of the 135° corner post (A110) and push firmly to fit.



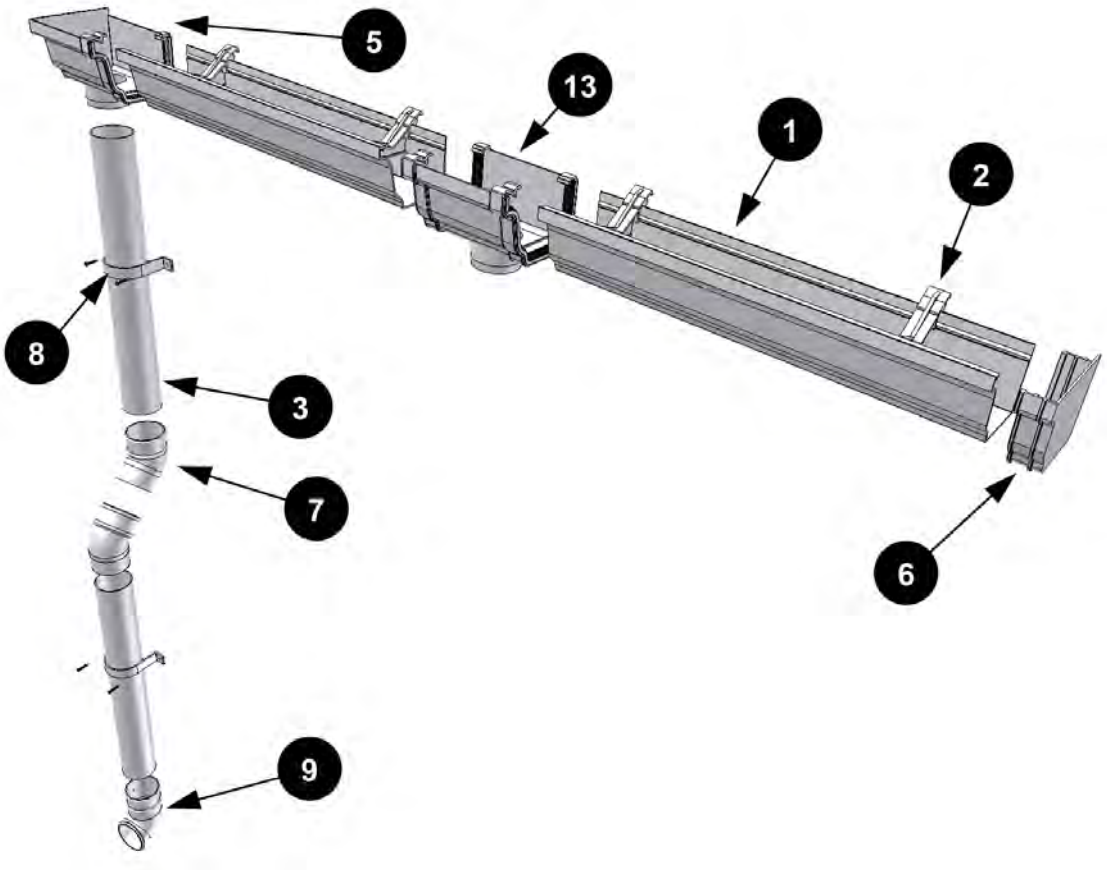
Select the 18mm coupling covers (P111) and position onto the recesses on the sides of each quarter turn button (C105) positioned on the 18mm inline couplings (A104) and press home.

Repeat for each set of 18mm inline couplings including the ones on the inside.

Fit the handles to all opening sashes using the 5 x 20mm handle screw (RS11).

14 - GUTTER COMPONENTS REFERENCE

Item No	Item Description	Part Number
1	Ogee Gutter	P6026
2	Ogee Gutter Support Brackets	C8043
3	Round Downpipe (2.4m)	P6022
4	Ogee Gutter Stop End Outlet (opposite hand to 5)	C9188
5	Ogee Gutter Stop End Outlet (as shown below)	C9187
6	Ogee Gutter Stop End (pair)	C8042
7	135° Downpipe Bend	C9012
8	Downpipe Retention Clip	C8056
9	Downpipe Shoe	C9013
10	Ogee Gutter Inline Union	C8035
11	Ogee 135°External Gutter Corner	C8037
12	Ogee 90°External Gutter Corner	C8040
13	Ogee Running Outlet	C8036
14	Ogee Gutter Clips	C8067

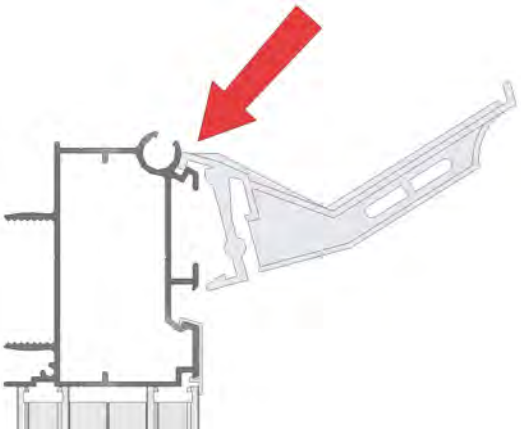


The following illustrations show the round downpipe located to the left hand side of the conservatory. This can however be fitted to either side. All the relevant components are supplied with your conservatory to suit either side.

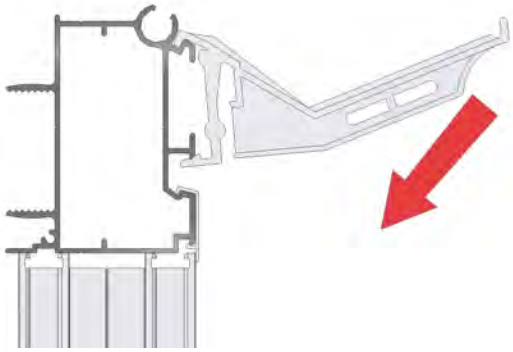
Ogee gutter support brackets (C8043) should be positioned 150mm from each corner and the remainder equally spaced.

Fitting Ogee Gutter Support Brackets

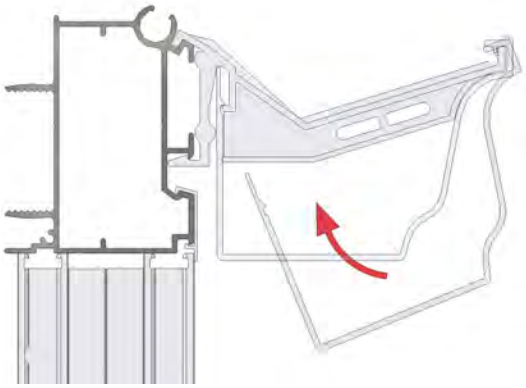
To fit the brackets, place the top of the bracket into the groove on the eaves beam.



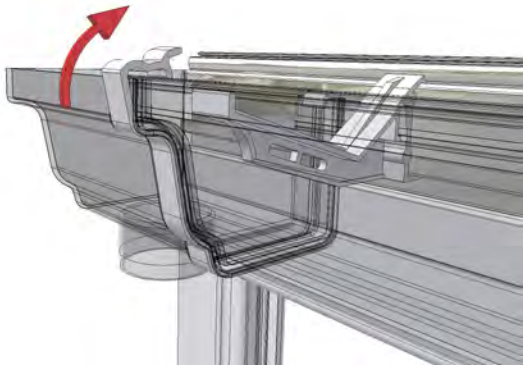
Pull the bracket downwards until it locks into place



Hang the front edge of the gutter onto the bracket and rotate up the back of the bracket as shown. Fit only to the first “click”, do not push all the way up.

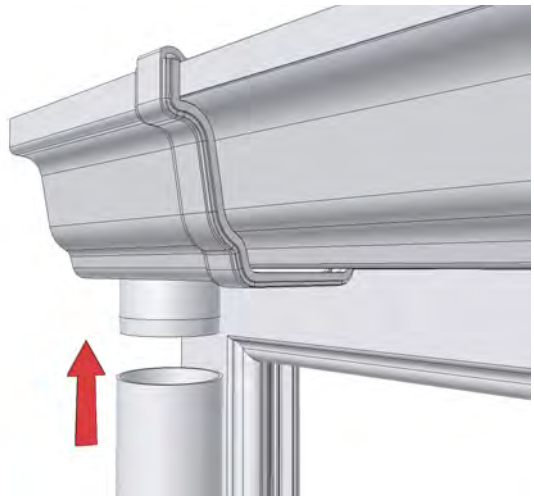


Where there are stop ends or outlets on the gutter you will need gutter joint clips to fix these in place. Offer the gutter joint clips over the gutter, slide up the back of the gutter until the hooks engages over the gutter. Pull up the front of the joints and clip over the gutter.



Once the clips are in place you can push the gutter up into its final position.

With the gutter and clips in place you can now fit the downpipes and brackets.



Push fit the downpipe (P6022) onto the spigot of the stop end outlet.

Connect the downpipe shoe (C9013) to the base of the downpipe. Fix the downpipe in position by use of the downpipe retention clips (C8056). They can be clipped over the downpipe and fixed into position with the screws provided

On dwarf wall models, you will need to cut the round downpipe (P6022) into two lengths and join them together by use of the downpipe bends (C9012). This is to allow the round downpipe to sweep over the 150mm sill (P106) and down the dwarf wall to the ground. The cut in the round downpipe is to produce two lengths that suit the height of the window frames and the dwarf wall.

NOTE: To ensure adequate drainage, it is important that all round downpipes supplied, are fitted.

Your conservatory is made to the highest technical standards using the finest materials. However as with all precision items, where metal parts move on metal, regular lubrication will increase service life and removal of surface dirt will maintain good looks.

Lubrication

We recommend that once every 3-6 months parts should be oiled or greased. Any acid-free light machine oil will provide reasonable protection for metal fittings. Penetrating oil and similar spray-on lubricants are not recommended.

Locking System – Windows

Move the operating handle to open the window. Locate and lubricate all locking points with oil. Lubricate the moving strip showing through the slot.

Friction Hinges

While the window is open, lubricate all moving parts of the hinges with oil.

Doors

Move the operating handle to open the door, locate and lubricate all locking points with oil. Lightly Oil all Hinges.

Cleaning

The need for cleaning your PVC-U conservatory will vary in frequency depending on where you live.
Some areas have a higher level of industrial pollution or natural corrosive air content, eg: salty atmosphere in coastal regions.

We recommend that when the glass needs cleaning, the PVC-U parts are also quickly wiped over with warm soapy water.

Persistent marks can be moved by using a hard circular motion with a wet cloth and neat washing-up liquid.

When decorating, it is wise to wipe away splashes of paint where they have been caught by masking/cover material before they dry. Do not scrape with anything hard, metal or sharp.

Your conservatory in PVC-U will never rot, need painting or discolour BUT it will need cleaning.