

COMPLETE CONSERVATORIES & GARDEN BUILDINGS

Please Note: This guide is updated regularly, to reflect the latest system developments.

It is recommended that you check online at www.k2conservatories.co.uk/downloads (look for the category "Installation Guides") for the latest version as a PDF download, in case there are any changes that affect your build. Changes between versions are detailed on the Contents Page.

This is Version 1.7, produced in September 2015.

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IMPORTANT: If you have chosen Capella Soffit, Gutter or Pilasters as part of your specification, we would advise you read the suitable section listed below first, to ensure you are aware of the needed steps at the appropriate point in the installation process.

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The sections updated since version 1.6 are:

Capella Plaster Soffit; Trims & Finishing - Traditional; Garden Buildings added (notations in existing content & new sections)

INTRODUCTION

K2 INSTALLATION GUIDE

Using this Installation Manual

These universal instructions will guide you through the installation of your conservatory, but with a bespoke manufactured product every installation is different. We cannot guarantee to cover every eventuality that may arise during your build process.

The table on the contents page opposite (along with the White Boxes located at the top right of the section pages) act as general guide to the sections relevant to particular conservatory styles (these boxes are 'greyed-out' when the section does not typically apply to a certain style), but you should read everything relevant to your chosen specification.

Note that some sections may appear duplicated at first glance (i.e. "Trims & Finishing: Edwardian", "Trims & Finishing: Victorian" and so on.) so be sure to check your are reading the appropriate version of that section, as there will be subtle differences.

The K2 systems are developed and fine-tuned constantly, so we recommended that you visit www.k2conservatories.co.uk and download the latest version of this guide, in case any recent changes effect the conservatory supplied to you.

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

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.

Do not leave wrapped goods in direct sunlight.

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.

Component Reference Page / Table

The first page of most installation guide sections contains a diagram and table (where appropriate) 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 check lists (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).

IMPORTANT: Please read the below upon delivery

CHECK FOR DELIVERY DAMAGE

On receipt of delivery please check any outer packaging carefully for damage prior to signing the delivery note.

All conservatory components should be checked thoroughly for delivery damage as soon as possible, including the removal of protective tape on windows, doors and door frames.

CHECK YOU HAVE EVERYTHING NEEDED

It is strongly recommended that all packages are opened upon delivery and their contents and quantities cross referenced against your Customer Check List.

The check list includes component pictures to aid in the identification of parts.

If any components are damaged or missing, please contact the company the conservatory was purchased from and provide;

- Your 6 digit order number e.g. 177047
- The part reference code from this manual e.g. C101
- The part description from this manual e.g. 150mm Sill Caps
- The manual version (see at the top of every page) and page number where the part is described e.g. Version 1.7, Page 9

Damaged or missing components will have a cost implication after the specified after-delivery buffer period for Free Of Charge parts. The applicable F.O.C. buffer period will be noted on your delivery check sheet.

Conservatories and parts are provided on a 'supply only' basis for you (or any installer working on your behalf) to fit.

K2 INSTALLATION GUIDE

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 are 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.

Do not remove external doors of house before checking that the doors on the conservatory are fully functioning.

Occasionally you may receive frames which are bowed in the middle. This is due to the tight packaging that we apply during transit to prohibit movement. This is nothing to be concerned about.

The bow in the frames can be easily removed by gently tapping the frame outwards using a nylon or rubber mallet.

If at any point you feel you require any assistance, please see any additional documentation from your supplier for contact information, or details of a technical support helpline.

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, 5.0mm 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
- Gasket pliers/cutterCleaning materials
- Cleaning equipment
- Paper Towels
- Plastic mallet
- Hacksaw
- · Extension lead
- Work bench
- Screwdrivers
- Superglue

Health, Safety & Environmental Issues

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

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.

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.

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.

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

K2 INSTALLATION GUIDE

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".

Tools

The tools you use are your responsibility.

Check the condition of your tools prior to use, for obvious damage. Get them checked out if you are in doubt. Arrange for your electric 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.

Using Knives and Chisels

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.

Ensure the position of others is away from the cutting direction.

Keep the tooling in a sharp condition so you don't have to exert excessive force to cut / slice.

Always pick up the tool by the handle.

Always ensure the tool is stored safely where a sharp edge cannot cause injury.

Only use the tooling for its intended purpose where possible.

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 ping 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 your 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

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.

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.

INTRODUCTION - VICTORIAN ROOF STYLES

Victorian Roof Styles

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





THIS SECTION CAN BE USED FOR THESE STYLES (IF APPLICABLE TO YOUR SPECIFICATION).

BESPOKE EDWARDIAN TRADITIONAL VICTORIAN GARDEN BUILDING

INTRODUCTION - GARDEN BUILDING STYLES **K2 INSTALLATION GUIDE**

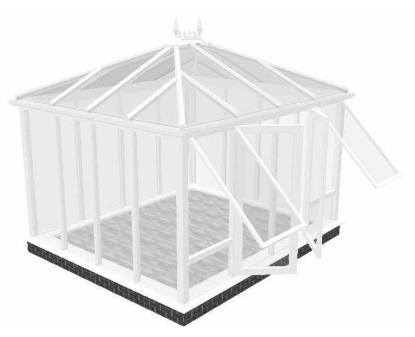
The installation procedure for Garden Buildings differs slightly by shape.

The sections of this guide will lead you through a standard process, but be aware of any variations between Square & Octagonal as highlighted.

Please also be aware that this guide is written primarily for Conservatory installation, so some sections will have parts marked that you will not need to follow for Garden Buildings (for reasons such as them not being connected to any house walls).

The Square Garden Building

The free standing Square Garden Building model range also contains rectangular shaped models. Both styles are joined at the corners by the 90° corner post (A109). The Square Garden Building also uses a total of four Edwardian hip spars, which connect to a 25° Edwardian boss end (C9170) situated on each end of the 25° ridge.



The Octagonal Garden Building

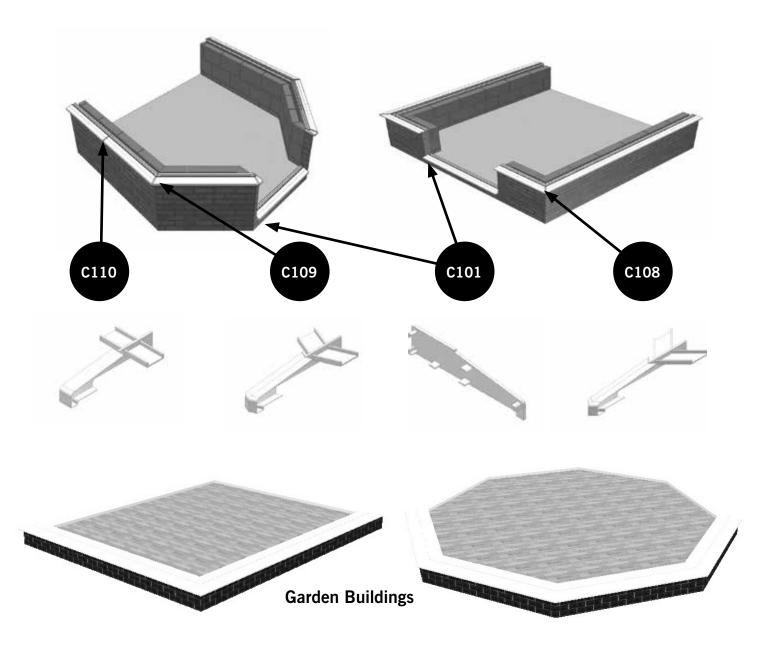
The Octagonal Garden Building has angled corners called 'facets'. The windows around the Garden Building are therefore joined by 135° corner posts (A110). The Octagonal Garden Building uses a total of eight Victorian hip spars, which connect to a central circular 25° full boss (C9026). There are two variations of the Octagonal Garden Building - the smaller model has only one window on each facet unlike the larger model which has two windows per facet as shown below.



BASE CILL

COMPONENTS

Item No.	Item Description
P140	150mm Cill
C101	Cill End Caps
C108	90° Cill Jointer
C109	135° Cill Jointer
C110	Inline Cill Jointer
SC025	3.9 x 16mm Jointer Fixing Screws
SC030	100mm Fixing Bolts



BASE CILL

Prior to installation, referring to your Base Plan provided to check the DIMENSIONAL ACCURACY and LEVEL of the base.

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.

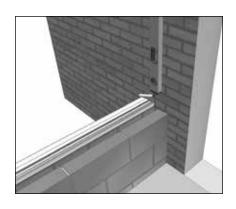
Always refer to the manufacturers' instructions for removing excess sealant.

Occasionally, due to the configuration of a conservatory, the cill may have to be cut down on site from a longer length.

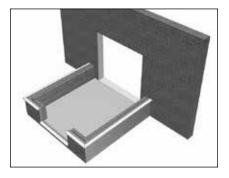
Fitting the Sill

IMPORTANT: Time spent setting the Cill correctly will save time later fitting the conservatory.

FOR GARDEN BUILDINGS: These instructions detail the fitting of a cill to a dwarf wall, but the process is the same for installing on a base (do not follow the door cill part, your cill is continuous).

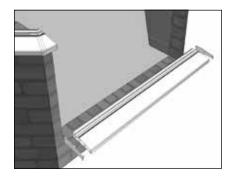


Prior to installation, mark a vertical line parallel to the internal face of the brickwork.

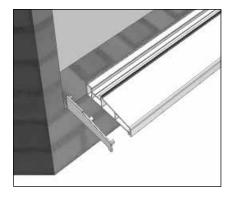


Referring to your base plan provided, lay all the Cill pieces (P140) in the approximate position.

Preparing the Cill for Double Doors in dwarf walls

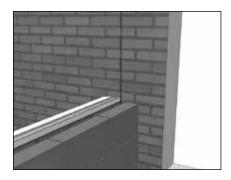


On dwarf walls styles the Door Cill will require cutting to fit the opening. To allow for the Cill End Caps (C101) cut the Cill 6mm shorter than the opening.



Prior to installing attached the Cill End Caps (C101) to the Door Cill with a suitable adhesive.

Fitting the Cill



Position the inside face of the Cill flush with the inside face of the external brickwork.

Cill Connectors



Straight: C110 Inline Cill Jointer



135° Angle: C109 135° Cill Jointer



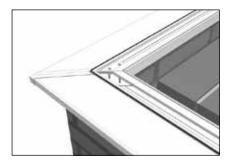
90° Angle: C109 90° Cill Jointer

Working on each joint, select the correct Connector, apply silicone to all contact areas on both sides prior to fitting.

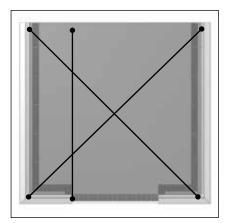
BASE CILL



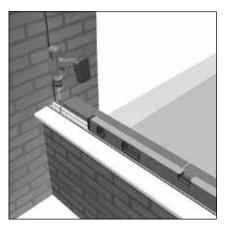
Fix all Cill Connectors using 3.9mm x 16mm (SC025) screws.



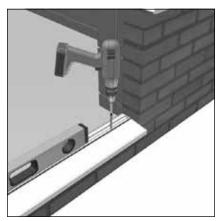
IMPORTANT: Time spent setting the Cill correctly will save time later fitting the conservatory.



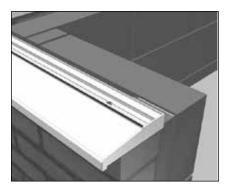
Refer to your Roof Plan ensuring that the widths and projections are correct and the diagonals are equal.



Once level and in the correct position, using the relevant drill bits, drill through all Cills and into the wall at least 100mm deep. The fixing bolts (SC030) should be positioned 100mm from each end and then equally spaced between.



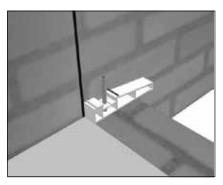
Two fixings (SC030) are used to secure the Cill at the Double Door opening in dwarf wall models.



Once all Cill's have been set into the correct position and securely fixed, attach the Cill End Caps (C101) using a suitable adhesive.

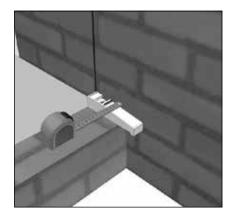
FOR GARDEN BUILDINGS: If your Garden Building uses a pre-fabricated steel base, please use the self drilling screws provided with the steel base fixing kit, referring to the installation guide supplied.

Positioning Starter Cill for Aluminium Low Threshold against host wall.



FOR GARDEN BUILDINGS: The starter cill is not part of your build.

If Double Doors have been supplied with an Aluminium Threshold, a small piece of Cill (P140) is required fitting first, either 30mm or 77mm long. Prior to cutting determine which Wallplate (A119 A125, A130, A131) has been provided.



Once fixed into place secure the Cill End Cap (C101) using a suitable adhesive.

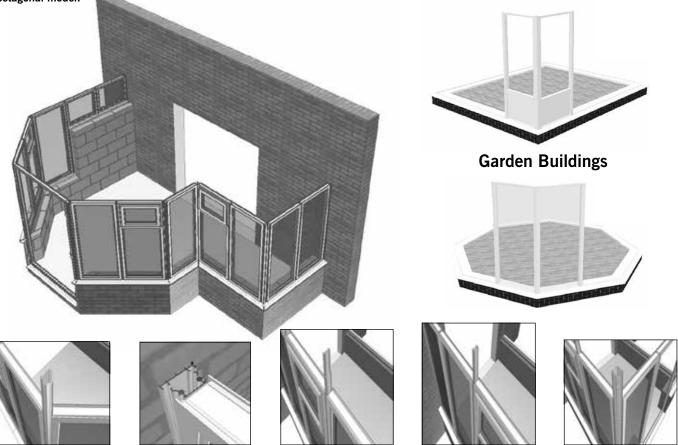
WINDOW PANELS & DOOR FRAME **K2 INSTALLATION GUIDE**

COMPONENTS

Item No.	Item Description
A121	18mm Inline Connector
A122	Adjustable Inline Connector
A123	90° Corner Post
A124	135° Corner Post
A126	70mm Inline Connector
A128	Wallplate Connector
A129	Wallplate Connector Adaptor
A130	Standard Wallplate
A131	77mm Wallplate
C117	Quarter Turn Button
C118	Cill Support Block
SC004	4.3mm x 25mm Screw
SC012	60mm Frame Fixing
SC031	120mm Frame Fixing

NB: Application of Wallplate and Connectors A130, A131 & A126 may differ. Please refer to your Base Plans.

FOR GARDEN BUILDINGS: Wallplates are not required or included. Corner post angles will depend on whether you have a square or octagonal model.

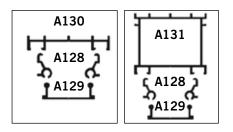


WINDOW PANELS & DOOR FRAME

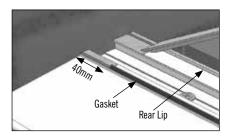
FOR GARDEN BUILDINGS: Skip Wall Connector or Stepped Wall instructions, as your build is free-standing.

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

Setting Position for Wallplates and Connectors



Identify Wall Connectors (A130 or A131, A128 & A129). Mark and drill the position for the Frame Anchors (SC012 or SC031), approximately 50mm from each end, then equally space others. 3 Anchors for dwarf wall models and 5 on full height types. Check prior to drilling that the holes do not land on a mortar joint and adjust accordingly.



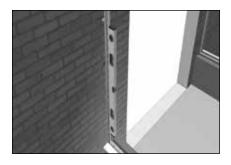
Remove gasket and rear lip of Cill to enable aluminium connectors to sit flush on Cill.



Position the Wallplate onto the Cill and parallel with the vertical line previously marked.



Important: Ensure the Wall Connector is plumb prior to fixing. Packing may be required.

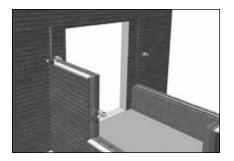


Repeat the process for the Wallplate on the opposite side.

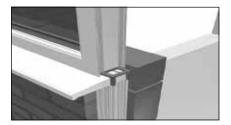
Stepped Walls (Connectors)



Some design of conservatories may require a stepped wall.



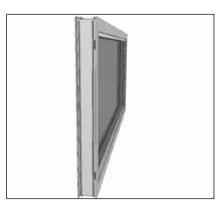
The Wallplates will be supplied in two lengths to suit the windows. Fit these Wallplates in the same way as previously described.



Prior fitting the lower Window to the Connector, fit the Cill End Cap using a suitable adhesive.

Once fitted apply beads of Low Modulus Neutral Cure Silicone across where the windows meets the Cill and on the face of the Cill End Cap (in-line with the inner legs of the window).

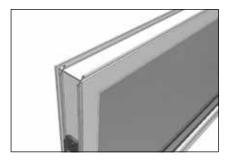
Checking Windows



Always check each window for any damage prior to installing.

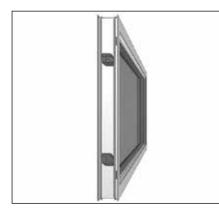
Important: When installing any frame, ensure that the drainage slots in the bottom are always to the outside of the conservatory.

WINDOW PANELS & DOOR FRAME

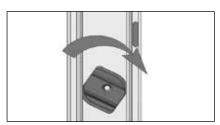


Check that the inner legs on each corner has been machined away. This detail allows for the coupling engagement (shown later).

Cill Support Blocks



Each window, with the exception of doors, will require Cill Support blocks (if not already fitted). A minimum of 2 blocks should be fitted to the bottom edge of each frame.

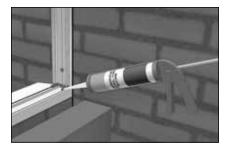


If not already fitted: Position Cill Blocks approximately 100-150mm in from each end. Place the Block between the legs of the Window (clips running front to back of window). Rotate the block clockwise to lock into outer frame legs (clips running parallel to window).



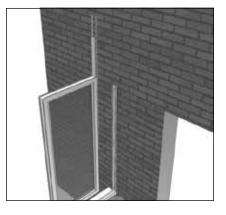
Secure each block using 4.3x25mm Screw (SC004).

Fitting First Window (Conservatories)

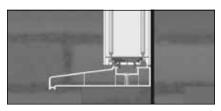


Prior to installing the starter windows, apply Low Modulus Neutral Cure Silicone at the meeting point of the Cill and Wallplate.

Important: Ensure that the area is clean and free from dust or dirt prior to applying Silicone.

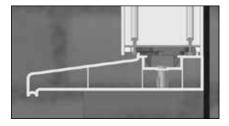


Identify first window from the base plan, ensure all Cill Support Blocks are fitted.



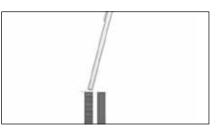
Position the window close to the Wallplate, the legs of the Cill Support Blocks should line up with the channel of the Cill (inside face of window will be parallel with inside of Cill).

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



Push or tap window firmly downwards to clip into place, the base of the window should sit firmly down onto the Cill.

Alternative Window Fitting



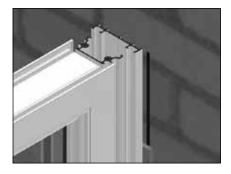
The windows may be fitted by tilting backwards ensuring that the leg of the window is sat on the rear of the Cill.



The rear clip will locate into the channel, then push the window forwards until vertical, the front clip will then engage into the channel.

WINDOW PANELS & DOOR FRAME

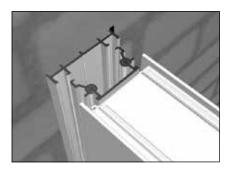
Connect to Wallplate



Select the corresponding A129 Wallplate Adaptor and 2x A128 Wallplate Connectors, slide the Adaptor and Connector downwards so it is held by the windows inner legs until it rests onto the Cill.

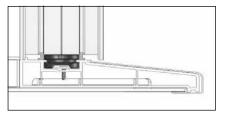


Slide the Window and Connectors along the Cill to engage the legs of the Connectors with the legs of the Wallplate.



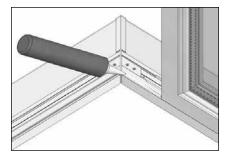
Fitting First Window (Garden Buildings)

Select the first window and position over the milled out sections in the 150mm sill (P106).

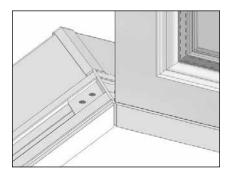


Slide the window towards the corner of the 150mm sill (P106).

Prior to the positioning of the window into its final place, apply a bead of silicone to the top of the 150mm sill (P106) and inline with the rear face of the 150mm sill (P106).



Continue to slide the window towards the corner of the sill so that the front edge is inline with the rear face of the 150mm sill (P106) on the adjacent corner.



Repeat the procedure for the other window that also meets at the same corner.

Silicone seal the internal corner of the 150mm sill (P106) where both windows meet.

You should now insert the appropriate 90° or 135° corner post as detailed later in this section of the guide.

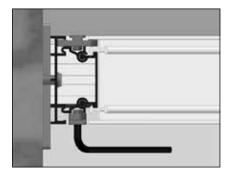
Insert Quarter Turn Buttons

Select the 5mm Allen Key and Quarter Turn Buttons (C117), Six Buttons per face on dwarf wall models and eight per face on full height models.



Position Quarter Turn Buttons (C117) vertically into the gap between the Window and the Wallplate (A130 or A131) approximately 50mm in from the top and bottom of Window, using the 5mm Allen Key provided turn the button clockwise to enable it to lock the Wallplate Connector legs onto the Wallplate.

(The process of fitting Quarter Turn buttons is the same whether joining a window to a Wallplate, Corner Post or Connector.)



Fit the rest of the Quarter Turn Buttons (C117) into the Wallplate (internally & externally) as previously described.

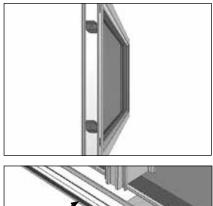


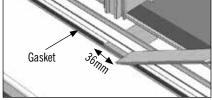
Repeat the process for the opposite side.

WINDOW PANELS & DOOR FRAME

Inline Connectors

Identify the next window from your base plans provided and ensure Cill Support Blocks are fitted (as previously described).



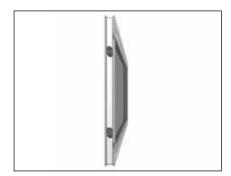


Remove gasket only of the cill, as shown. This will enable aluminium connector to sit flush on Cill.

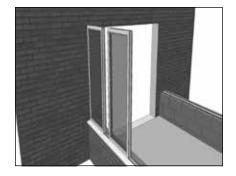
Prior to installing inline windows and Connectors, apply Low Modulus Neutral Cure Silicone across where the windows meets the Cill and beads approximately 40mm long at the front and back where the connector will sit.



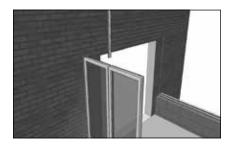
Important: Ensure that the area is clean and free from dust or dirt prior to applying Silicone.



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

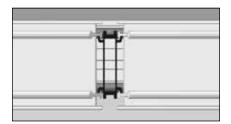


Fit the Window onto the Cill as previously described.



Slide Window along Cill until approximately 18mm from previous Window. Select an Inline Coupler (A121), slide downwards through the gap between the Windows.

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



Ensure that the Windows and Connectors legs inter-lock, push the Connector down until it rests onto the Cill and into the Silicone.



Using Quarter Turn Buttons, lock the Connector as previously described in "Insert Quarter Turn Buttons" - this process is the same whether on wallplates or inline connectors..

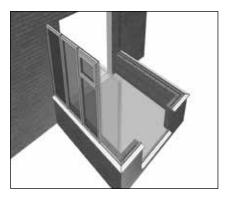
Continue to install all inline windows in the same manner (ensure that each window is fitted in the correct position and the drainage slots to the outside).

Adjustable Inline Connectors



Prior to installing inline windows and Connectors, apply Low Modulus Neutral Cure Silicone across where the windows meets the Cill and apply beads approximately 40mm long at the front and back where the connector will sit.

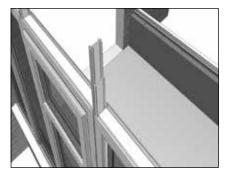
Important: Ensure that the area is clean and free from dust or dirt prior to applying Silicone. Check welds and remove any excess.



Identify the next window from your base plans provided and ensure Cill Support Blocks are fitted (as previously described).

When installing a run of windows, it is recommended to fit an Adjustable Connector after the third window or before a corner.

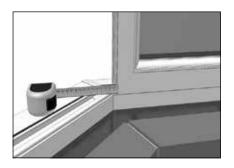
WINDOW PANELS & DOOR FRAME

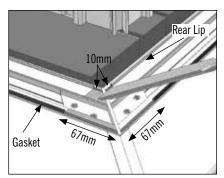


Place window into position, if the corner is 90° , the window should sit flush with the inside of the adjacent Cill.



For 135° corners, the window should sit 12mm back from the internal corner.

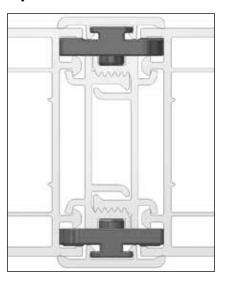




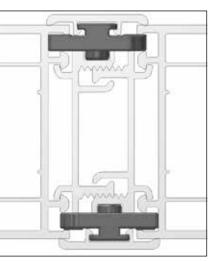
Remove gasket and rear lip of Cill to enable aluminium connector to sit flush on Cill on 135° corner posts remove gasket and rear lip for rear lip trim 13mm for gasket 42mm.

If the gap between the windows is wider than 18mm the adjustable Inline Connector needs to be set first.

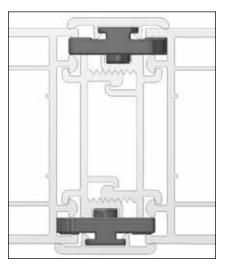
Adjustable Inline Connector 18mm

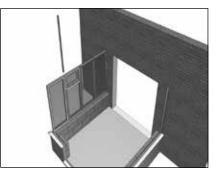


Adjustable Inline Connector 20mm



Adjustable Inline Connector 22mm



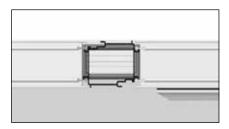


Once adjusted to the correct width, slide the assembled Connector downwards through the gap between the windows until it rests onto the Cill and into the Silicone.

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

Using Quarter Turn Buttons (C117), lock the Connector as previously described.

70mm Inline Connector



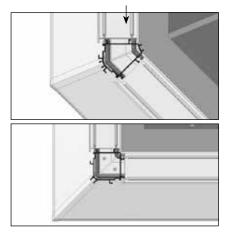
Occasionally a 70mm Inline Connector may have been specified, the position will be shown on the base plans.



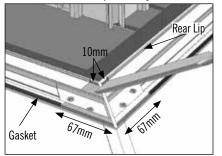
This Connector is to be installed the same way as the 18mm Inline.

WINDOW PANELS & DOOR FRAME

Corner Posts



Identify the next window from you base plans provided and ensure Cill Support Blocks are fitted (as previously described).



Remove gasket and rear lip of Cill to enable aluminium connector to sit flush on Cill on 135° corner posts remove gasket and rear lip for rear lip trim 13mm for gasket 42mm.

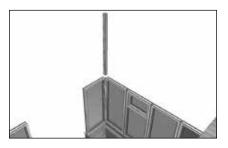


Fit the window into position (as previously described, the frame should meet at the internal corner.



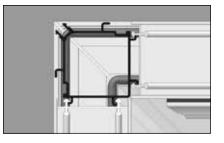
Apply beads of Low Modulus Neutral Cure Silicone onto the Cill, where the Corner Connector will sit.

Important: Ensure that the area is clean and free from dust or dirt prior to applying Silicone.



Select the Corner Post, position and fit the same way as the Inline Connector, ensuring that Corner Post and Windows legs inter-lock.

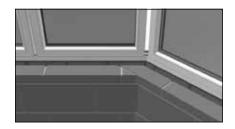
Push the Corner Post downwards until it rests onto the Cill and into the Silicone.



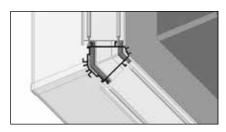
The 135° Corner Post is installed in the same way as the 90° .



Fit the window into position (as previously described, both frames should be set back 12mm from the internal corner.



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



Push the Corner Post downwards until it rests onto the Cill and into the Silicone.

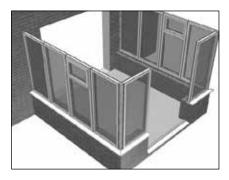


Using Quarter Turn Buttons, lock the Connector as previously described.

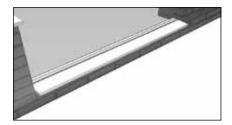
NB Quarter Turn Buttons are only used externally on Corner Posts.

Double Doors and Connectors

Once all the window have been installed, the doors can now be fitted.



If not already positioned, fit the door cill as previously described (see Cill Guide).

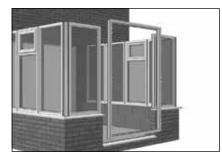


WINDOW PANELS & DOOR FRAME

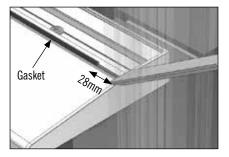
Select the double doors, prior to installing identify the external face (open outward, hinges and drainage to outside – open inward, hinges internal and drainage external).



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



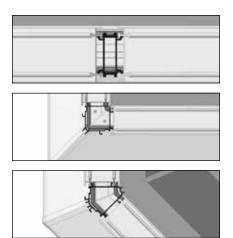
Remove gasket only of the Cill, as shown. This will enable aluminium connector to sit flush on Cill.



Prior to installing the doors and connectors, apply Low Modulus Neutral Cure Silicone across where the windows meet the Cill and apply beads approximately 40mm long at the front and back where the connector will sit.



Position the doors into the opening and onto the Cill. Ensure that the faces of the door outer and windows are flush.



Select the required connector (Inline or corner post), slide downwards through the gap between the Windows.

Ensure that the Windows and Connector legs inter-lock, push the Connector down until it rests onto the Cill and into the Silicone.



Using Quarter Turn Buttons, lock the Connectors as previously described.



Permanently fix through the Cill and Double Doors using (SC031) 120mm Frame Anchors approximately 100-150mm in from the outer frame and one either side of the keep plates (factory fitted).

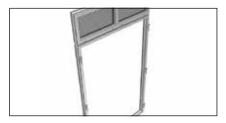
Fix the verticals approximately 50mm front top and bottom of brick work (adjust positions to suit).



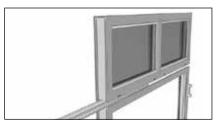
Apply Low Modulus Neutral Cure Silicone to gaps between wall and door outer.

Double Door Combination Frame

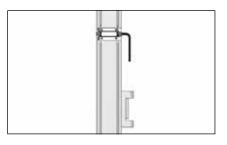
If the conservatory has been design with fixed lights above double doors, this must be assembled prior to installing.



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



Horizontally Couple the Top Light window to the top of the Double Doors by using an 18mm Inline Connector (Connector needs to be 14mm shorter than the door widththis will allow for the vertical connector to pass).



Ensure that the Windows and Connector legs inter-lock.



Using Quarter Turn Buttons, lock the Connectors as previously described.

THIS SECTION CONTAINS INSTRUCTIONS USUALLY ONLY REQUIRED FOR SPECIAL BUILDS OR REMEDIAL WORK (DO NOT DEGLAZE OR REGLAZE UNLESS REQUIRED).

DE-GLAZING & RE-GLAZING WINDOWS

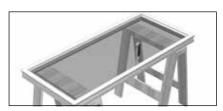
Some conservatory specifications, or remedial work, may require the deglazing and reglazing of your window panels. This section is here to provide instruction only when it is required - do not de-glaze your windows if it is not explicitly required for your build.

Before following the instructions in this section, please ensure your have appropriate Safety Equipment and all the required assistance needed to handle the glass panels safely.

It is important to protect and support the window to avoid damage and breakages.

De-glazing Windows

When de-glazing a window, we suggest using a "DON CARLOS" Knife, 6 in 1 painter's tool or a wide stiff bladed scraper.



Insert the blade of the scraper or knife in the joint between the bead and frame, mid-way on the longest length of bead.

Keeping the blade at 90 degrees (right angle) to the window, push or tap the handle until the blade creates a gap.



When the blade starts to open the bead line push the blade handle towards the frame at approximately 45 degrees.

The bead will start to bow and locally disengage from the frame bead groove. Work the blade along the bead line until the bead is fully disengaged.

Once the bead has been disengaged, it may be possible to hold the bead and pull it away from the window (take care with the bead, as it re-straighten once removed).

Continue to remove the remaining beads carefully in the same manner.

Mark the location of each bead (Left, Right Top & Bottom) for re-fitting.



Carefully lift the glass out of the frame and store safely, protecting the edges from any damage.



Once the glass has been removed, collect any loose packers that may have fallen out. These will be required for re-glazing.

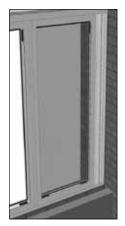
Re-glazing Windows

If you have previously de-glazed your Window, glazing packers and bead locations should have been noted.



If glazing from start, disengage each glazing bead, ensure each bead with the location.

Clip the black glazing packers into the frame (2 packers to base, 1 or 2 packers to each side).



Carefully lift the glass unit and rest on the bottom packers. Push the glass unit into place against the glazing gasket of the window.



Select one the short beads (top or bottom) and place into position with the gasket tight against the glass and the bead foot towards the bead groove of the frame.

Using a nylon tipped or rubber hammer, strike the bead (starting at one end) to force the bead leg into the groove. Work along the length of the bead until fully clip in.



Fit the next short bead in the same way.



When fitting the longer beads, it may be necessary to bend the bead along its length to place into position.

Using the same technique fit all remaining beads.

A light solution of soapy water sprayed onto the bead gasket may help with the fitting.

BI-FOLDING DOORS

K2 INSTALLATION GUIDE

COMPONENTS

Item No.	Item Description
1	Structural Corner Post (70mm x 70mm)
2	Base Plate
3	Support Beam
4	Eaves Pivot Adaptor
5	Bi-fold Doors

NB. It is the responsibility of the installer to ensure that the fixings used are suitable for the substrate.

Bi-Fold Door Installer's Pack

This contains all parts to complete the doors once fitted, glazed and adjusted:

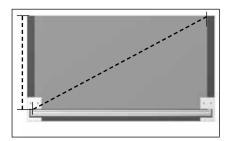
Sash locking clips – These need to be fitted between all the doors facing each other when folded back, leaving them neatly and safely stacked at the end of the frame.

Security Screws, (star/torque heads with anti-drill balls) and none-secure screws (Phillips head). The security screws are for external use, none-secure for internal use. These screws are used for locking off the hinges once they have been adjusted.

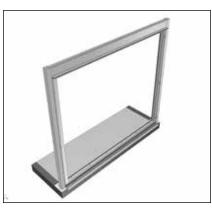


BI-FOLDING DOORS

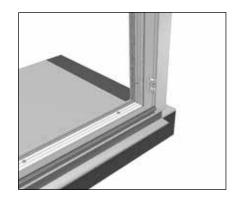
It is recommended that the internal frame positions are marked on the host wall, this will be use as a reference point to measure from when setting out.



Select and assemble the corner posts and support beam, ensure that the support beam fixing bolts are facing the inside of the conservatory.



Place the Bi-Fold outer frame into the opening. Prior to fixing, ensure the bottom running track is to the outside of the conservatory. Pack and plumb until square.

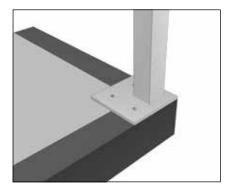


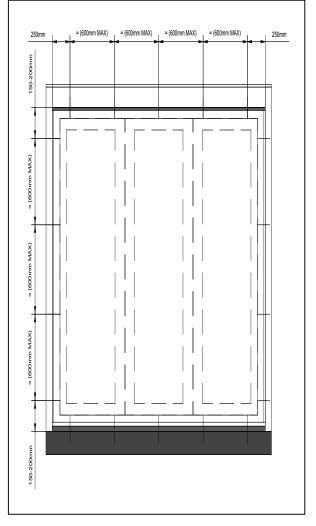
Check the head and cill to ensure there are no bows present.





Set the goal post assembly roughly into place. Using the marks previously, measure, set and fix the goal post into position ensuring that it is square and level.





All four sides of the outerframe MUST be fixed. This frame is not load bearing – No weight to be applied to the head.

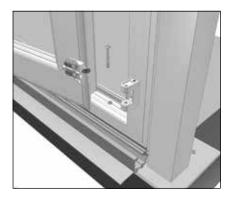
BI-FOLDING DOORS

Pre drill jambs, head and cill sections at the specified centres.

The following "rule of thumb" may be applied to frame widths and heights:

Up to 1200mm: 3 Fixings **MIN** 1201 to 2400mm: 4 Fixings **MIN** Over 2400mm: 5 Fixings **MIN**

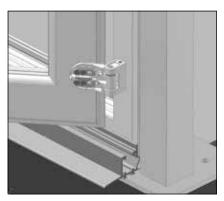
It is the responsibility of the installer to ensure that the fixings used are suitable for the application.



With the outer frame fixed. Select the corresponding sash to mount onto the outer frame hinges.

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.

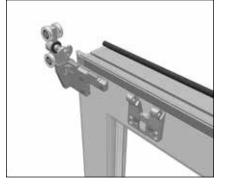
Once in position, fit all the hinge pins. It may be necessary to tap each pin down using a mallet. Do not fit the outer hinge cover and sash hinge cover caps at this time, as some adjustment may be required later.

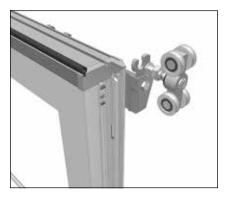


Now select the door sash fitted with hinges on both faces and track brackets to top and bottom.

5a	
28	
28	

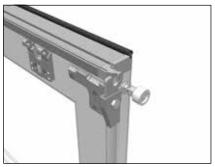
Identify the bottom of the door sash by the drainage slots. Select and fit the bogie wheels to the bracket using a 17mm spanner.



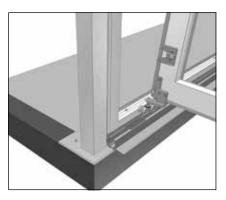


Select and fit the top roller guide to the bracket using an 13mm spanner.





Hold the sash perpendicular to the outer frame with the bogie wheels inline with the bottom aluminium track.



Place the bogie wheels into the routed slot in the aluminium track. The sash will require tilting to allow the top roller be guided into the top track.

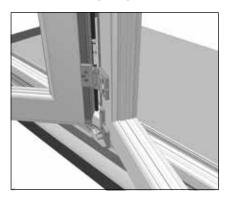


BI-FOLDING DOORS

Pull the sash vertical and slide along to meet the previously installed door sash.



Push the sash hinges together



Once in position, fit all the hinge pins. 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.



Fit the remaining sash as previously described.

Close all sashes prior to glazing.



All double glazed units, must be fitted and packed by "Toe & Heel" method. Pack diagonally each sash from the load bearing point.

Each sash must also be packed at the mid hinge and locking points.

It is recommended that a bead of silicone is applied to the packers to stop any movement over time and causing the sashes to drop.

NOTE: All Bi-fold doors are supplied with glazing bridges fitted in the sashes, which have been correctly positioned for "Toe & Heel" glazing.

There are a number of adjustment points exists on all Bi-Fold Doors.

These adjustments should only be done once all sashes have been fitted and glazed in the correct method as previously described.

Hinge Adjustments – Outer Frame

Vertical adjustment, insert a 4mm Allen Key into socket 1 in the top of the outer frame hinges and turning it clockwise/ anti-clockwise to lift or drop the door sash. A maximum of +4mm, -1mm can be achieved.



Horizontal (left to right) adjustment, insert a 6mm Allen Key into socket 2 located of the end face of the sash hinge. Turning it clockwise/anti-clockwise will move the sash inwards or outwards. A maximum of \pm 5mm can be achieved.

Compression adjustment, open the door sash to gain access to the adjustment screw. Turning it clockwise/anti-clockwise will move the sash forwards or backwards. A maximum of ± 0.75 mm can be achieved.



Check that the door sash is level and plumb prior to fitting all finishing caps and covers.



BI-FOLDING DOORS

Hinge Adjustments – Floating Sashes

Horizontal (left to right) adjustment, insert a 4mm Allen Key into socket located of the end face of the sash hinge. Turning it clockwise/anti-clockwise will move the sash inwards or outwards. A maximum of \pm 5mm can be achieved.

Before adjustment is done the locking screws either side of the adjuster will need to be slackened off. Once adjusted ensure that all screws are tightened and additional ones fitted where necessary.

Compression Adjustments:

Floating Sash



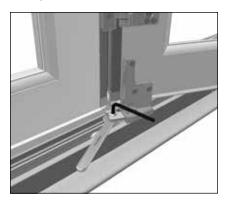
Top Roller Guide Compression

Compression adjustment, loosen the lock nut using a 13mm spanner, firmly push the sash against the frame and tighten locking nut.



Bogie Wheel Compression

Compression adjustment, loosen the lock nut using a 13mm spanner, firmly push the sash against the frame and tighten locking nut.

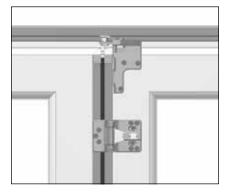


Bogie Wheel Height Adjustment

Vertical adjustment, loosen the lock nut using a 17mm spanner and insert a 5mm Allen Key into the socket in the top of the bogie wheel carrier and turning it clockwise/anti-clockwise to lift or drop the door sash. A maximum of ± 3.5 mm can be achieved.

Security Screws

Most of the screws will be factory fitted, however some screws can only be fitted once the all the doors are installed, glazed and adjusted.

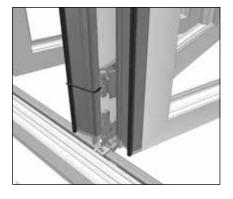


External Hinges

After complete adjustment, tighten all screws and fit all locking screws (Star/ Torx).

Internal Hinges

After complete adjustment, tighten all screws and fit all standard screws – 5mm x 38mm (Phillips).



Hinge Pins

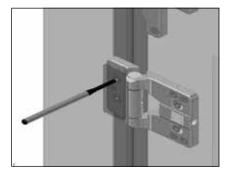
After complete adjustment, open the door sashes to gain access to the inside of the hinges.

All external hinge pin's must be secured using the grub screw's included in the installers pack.

Tamper-Proofing Star/Torx Screws

A number of ball bearings are supplied in the installer's pack.

On completion of installation, these are to be punched into the heads of all of the Star/Torx screws on the external hinges, wheels and top guides.



We recommend the ball bearing's are placed into position and held with tape, then punched into place using a pin punch or similar.

FIRRINGS K2 INSTALLATION GUIDE

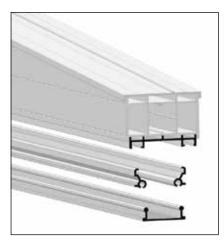
Please see the diagram included in the "Eaves Beam - Traditional" section for identifying parts.

Our system currently requires you to fit Firring Connectors prior to Eaves Beam installation, which differs from some older Demonstration / Installation Videos.

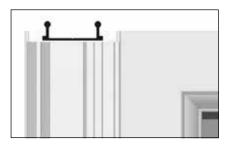
Firring Connection



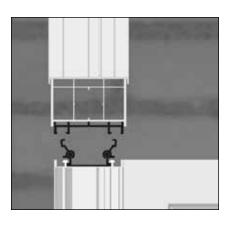
If Firring's have been provided, these will be fitted once all windows and doors have been installed and connected.



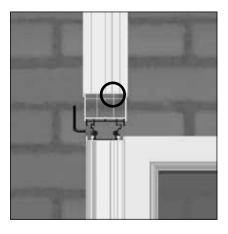
The Firrings come complete with Covers and Standard Wallplates factory fitted.



To fit the Firring, Identify A129 Wallplate Connector Adaptor, slide the Connector along the head of all the windows.



Identify and select 2 x A128 Wallplate Connectors. Slide each Connector along the Adaptor previously fitted, ensuring that the hooks are facing inwards.



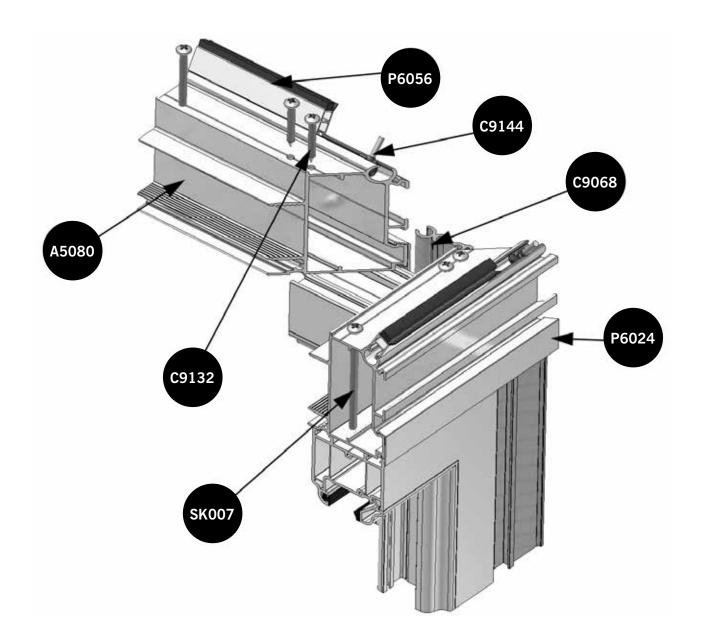
Select the Firring with the bar location pips always located to the inside of the conservatory. Lower the Firring into position. Using Quarter Turn Buttons, lock the Wallplate Connectors as previously described, ensuring that the hooks lock onto the Wallplate.

EAVES BEAM K2 INSTALLATION GUIDE

COMPONENTS

Item No.	Item Description
A5080	Eaves Beam
P6024	Eaves Beam External Trim
C9144	Pivot Bolt
C9068	Eaves Beam Joiner
P6056	Eaves Beam Enclosure
C9132	6.35 x 38mm Eaves Beam Connecting Screw
SK007	6mm x 120mm Yellow Screw

90° CORNER SHOWN.

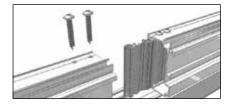


EAVES BEAM

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

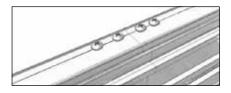
On large models the eaves beam (A5080) may be in two pieces. These are joined using the inline eaves beam joiner (C9068) which joins the two pieces of eaves beam (A5080) together as shown below.

One end of the eaves beam inline joiner (C9068) is already fixed to one of the eaves beams (A5080), the other piece of eaves beam (A5080) is pre-drilled and positioned over the eaves beam inline joiner (C9068).

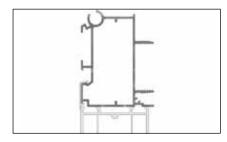


When in position, the eaves beam inline joiner (C9068) is fixed using the 6.35×38 mm silver screws (C9132) through the pre-drilled holes.

Four 6.35 x 38mm silver screws (C9132) are required to join the eaves beam inline joiner (C9068) to the eaves beams (A5080).



Attach the eaves beam external trim (P6024) onto the front of the eaves beam (A5080) as shown remembering to remove the protective film on the outer frame.



Position the eaves beam (A5080) centrally on top of the windows. When positioned

correctly the front face of the eaves beam (A5080) will sit flush with the front face of the windows below.

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



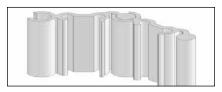
Please note: One double bolt retainer is required per spar however a single bolt retainer is required for each starter spar and either side of the eaves beam corners.

The eaves beam (A5080) will also require joining at the corners. These are joined using two eaves beam joiners (C9068) which slot togeth er as shown below and slid into the eaves beam.

90° Eaves Beam Corners



135° Eaves Beam Corners



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



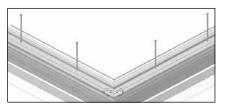
The eaves beam connectors (C9068) are fixed into position by use of the 6.35 x 38mm silver screws (C9132) through the pre-drilled holes.



When all the eaves beams (A5080) are assembled on top of the windows, drill through the eaves beam only with a long reach 6mm drill at positions which are 100mm from the edge of each window (i.e. two holes per window position).

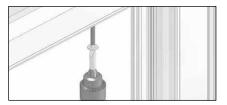
Please note: The first holes from each end of the eaves beam (A5080) should be positioned at 200mm to ensure that the 6.0x120mm yellow screw attaches into the window frame rather than the corner post.

Power drill the 6.0 x 120mm yellow screws down through the holes in the eaves beam (A5080).



Do not use the 6.0 x 120mm yellow screws to fix the eaves beam (A5080) to the double door outer frame.

For the attachment of this frame, use four 70mm fixing screws (SC045) as used to attach the double door outer frame to the 150mm sill (P106), pre-drilling upwards from the inside of the outer frame up into the eaves beam as shown.



Silicone seal the gaps between the front of the eaves beam external trim (P6024) and the front of the windows to create a watertight seal.

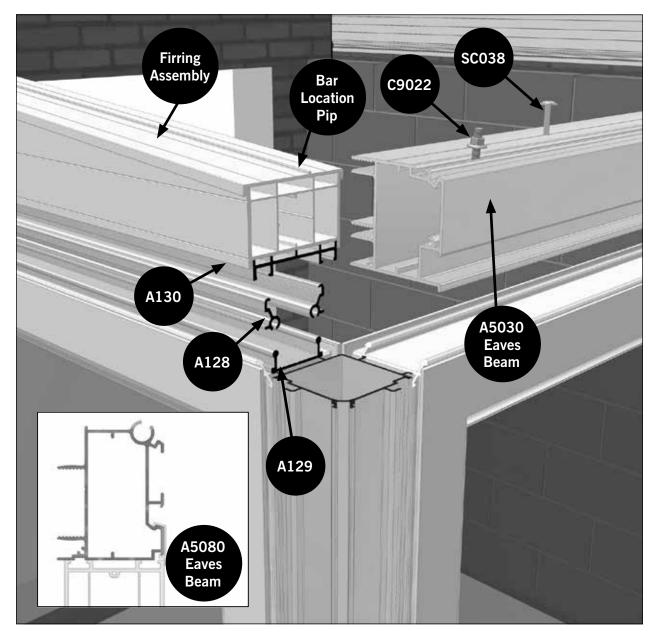


EAVES BEAM - TRADITIONAL

COMPONENTS

Item No.	Item Description
A5030	Eaves Beam
C9022	M5 x 12mm Bolt & Flange Nut
SC038	4.8 x 100mm Fixing Screw
SC045	4.8mmx70mm Fixing Screw
	Firring (with A130 Standard Wallplate – factory fitted)
A128	Wallplate Connector (x2)
A129	Wallplate Connector Adaptor

PLEASE NOTE EAVES BEAM SUPPLIED MAY BE A5030 OR A5080

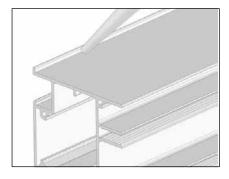


EAVES BEAM - TRADITIONAL

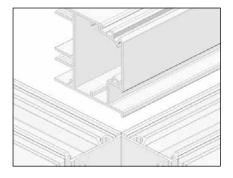
Please note Firring Connectors must be fitted prior to installing the eaves beam so please ensure you have completed the instructions in that section of this guide before continuing.

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).

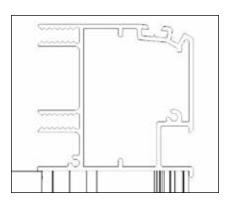
Apply a bead of silicone to the inside front edge of the eaves beam (A5030) or along the top of front edge on the windows.



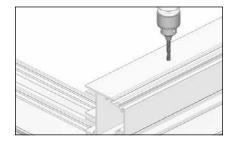
Position the eaves beam (A5030) centrally on top of the windows.



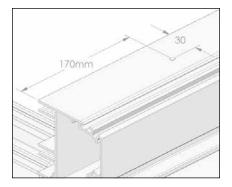
When positioned correctly the inside face of the overhang on the front face of the eaves beam (A5030) will sit against the front face of the panels and the ends of the eaves beam (A5030) will be flush with the outer faces of the side panels.



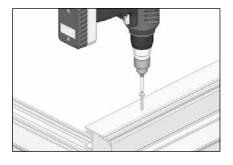
When the eaves beam (A5030) is assembled on top of the panels, drill through the eaves beam (A5030) only using a long reach 5mm drill at positions which are 100mm from the edge of each window (i.e. two holes per window position).



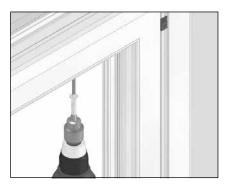
Please note: The first holes in from each end of the eaves beam (A5030) should be positioned at 170mm to ensure that the (SC038) 4.8 x 100mm fixing screw is fastened into window .



Power screw the 4.8 x 100mm fixing screws (SC038) down through the holes in the eaves beam (A5030) and into the head of the window.



Please note: Do not use the 4.8 x 100mm fixing screws to fix the eaves beam (A5030) to the French door outer frame. Instead use four 4.8 x 70mm fixing screws (SC045) 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 (A5030).

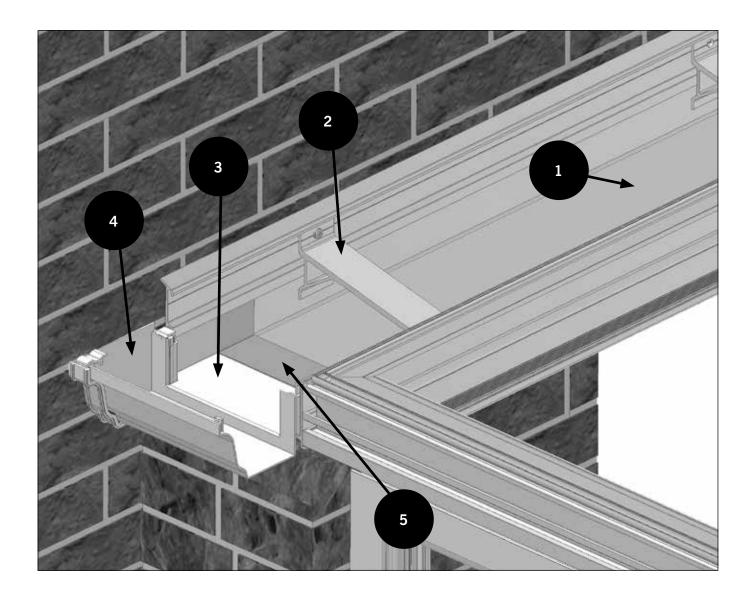


BOX GUTTER - INSTALLATION ONTO HOST WALL

COMPONENTS

Item No.	Item Description
1	Box Gutter
2	Box Gutter Brace
3	Box Gutter Adaptor
4	Gutter Stopend (pair) C8042
5	Box Gutter Adaptor Sealing Tape C8065

NB. It is the responsibility of the installer to ensure that the fixings used are suitable for the substrate.

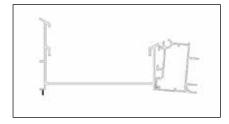


BOX GUTTER - INSTALLATION ONTO HOST WALL

Some roof designs may require a Box Gutter.

Usually the eaves beam and box gutter are factory assembled.

If not, select the correct eaves beam (refer to your roof plan) and box gutter. Hook the bottom of the eaves beam onto the box gutter and rotate anticlockwise to enable to the eaves beam to clip into place.



Once clipped into place fix together using 4mm x 18mm self drilling, pan head screws (C8018) at approx 100mm from each and 450mm centres.



Place assembly into position and install the remaining eaves beam as previously described.

Set the box gutter braces at approximately 600mm centres along the box gutter.

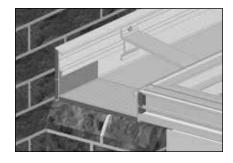


Use an 8mm drill bit, drill through the braces and box gutter into sound masonry.

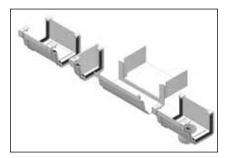


When drilling into the substrate it is recommended that a pry bar is used to lever each brace into the correct position, ensuring that the box gutter is in correctly positioned and level.

Secure the box gutter using suitable fixings.



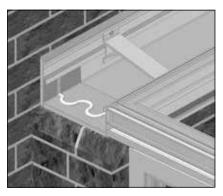
Prior to fitting the box gutter adaptor, silicone seal around the box gutter and eaves beam.



Before fitting the box gutter adaptor, select and fit the required gutter stopend, inline union or union outlet to suit the application.



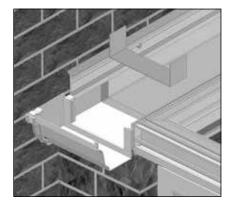
Thoroughly clean the inside of the box gutter area to the depth of the adaptor (approximately 120mm in from the end).



Once cleaned, apply silicone to the sides and base of box gutter and slide the assembled adaptor into place.



Thoroughly clean off all excess silicon.



Select the foiled sealing tape from items supplied, peel off the backing tape and centrally position over the joint.

Press and work the foiled tape into all corners and sides to ensure no air pockets are present.

We recommend that the sealed box gutter assembly is left for a few hours to ensure that the silicone has cured.

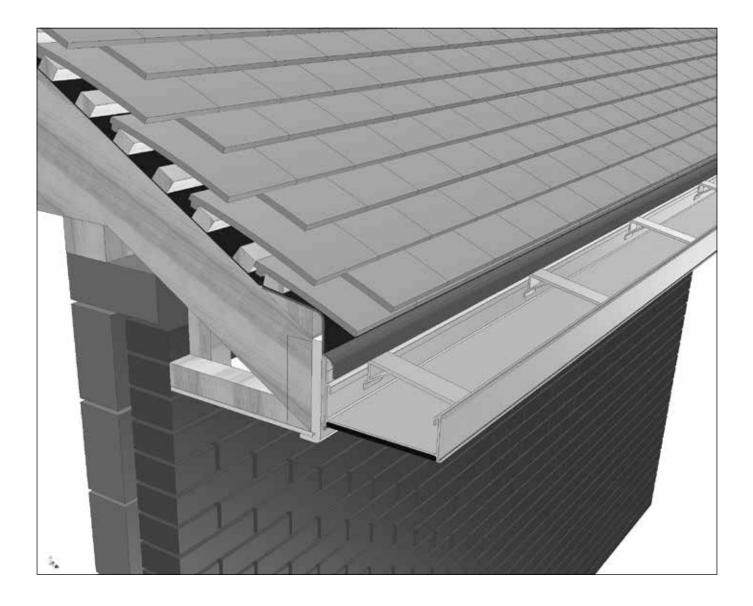
BOX GUTTER - INSTALLATION ONTO FASCIA

COMPONENTS

Item No.	Item Description
-	Box Gutter
-	Box Gutter Brace

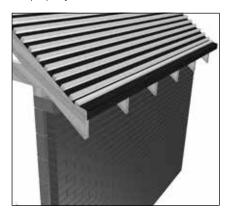
NB. It is the responsibility of the installer to ensure that the fascia and fixings used are suitable for the application.

We recommended that a professional builder is employed to alter any house roof structure prior to installing the box gutter.

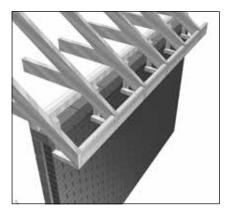


BOX GUTTER - INSTALLATION ONTO FASCIA

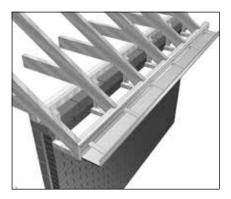
Some roof designs may require a Box Gutter that requires fitting to the fascia of the property.



Typical soffits will not be suitable to install a box gutter against (no fixings should be through the end grain of any rafters)



It may be necessary to frame out and install timber noggins between each rafter to ensure adequate support for the box gutter (We recommended that a professional builder is employed to alter any house roof structure prior to installing the box gutter).



Using suitable drill bits, drill through the braces and box gutter into the timber noggins.



When drilling into the substrate it is recommended that a pry bar is used to lever each brace into the correct position, ensuring that the box gutter is in correctly positioned and level.

Secure the box gutter using suitable fixings.

Once lead flashing and house roof finished, Install box gutter adaptors as previously described.

It is the responsibility of the installer to ensure that the fascia and fixings used are suitable for the application.

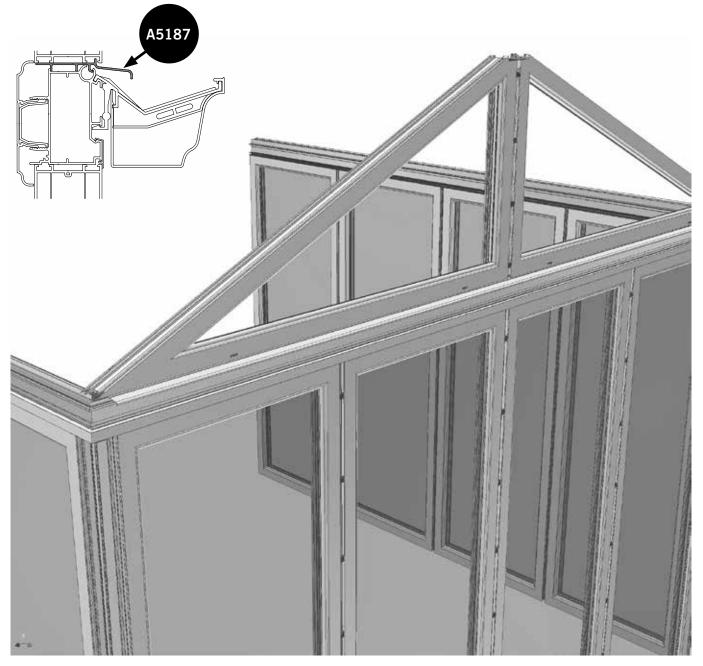
THIS SECTION CAN BE USED FOR THESE STYLES (IF APPLICABLE TO YOUR SPECIFICATION).

BESPOKE EDWARDIAN TRADITIONAL VICTORIAN GARDEN BUILDING

GABLE FRAME K2 INSTALLATION GUIDE

COMPONENTS

Item No.	Item Description
-	Gable Frame
A5080	Eaves Beam
A5187	Eaves Beam Gable Adaptor
A121	18mm Inline Coupler
C117	Quarter Turn Buttons
5AK	5m Allen Key



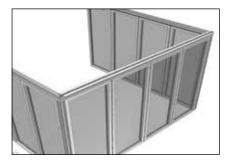
THIS SECTION CAN BE USED FOR THESE STYLES (IF APPLICABLE TO YOUR SPECIFICATION).

BESPOKE EDWARDIAN TRADITIONAL VICTORIAN GARDEN BUILDING

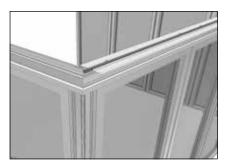
GABLE FRAME K2 INSTALLATION GUIDE

When installing the eaves beams, ensure that the eaves beam with the gable adapter fitted is in the right position.

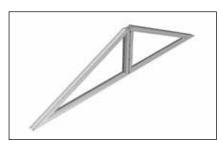
Drill through the eaves/eaves and gable adaptor only using a 5mm long series drill bit at 100mm from the edge of each window.



Power drill 6mm x 120mm (SK007) down through the holes and into the head of the windows (countersinking the holes along the gable adaptor prior to fixing, is recommended)

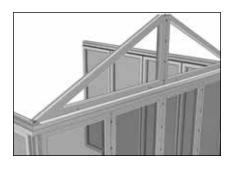


Apply a generous bead of silicone along the length of gable adaptor upstand and eave beam.

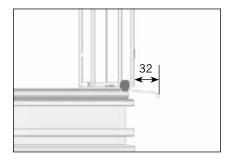


Remove beads and glass if needed, make note of bead and glass unit position for re-fitted later.

Select the gable frame (connect together using the 18mm inline couplers and quarter turn buttons if necessary).



Lift the gable frame assembly and place onto eaves beam and gable adaptor. Ensure that it is centrally located and bedded onto the silicone. So that the outer face of the gable frame is set back by 32mm from the outer edge of the gable adaptor



Prior to fixing, check that the drainage slots are to the outside of the conservatory.

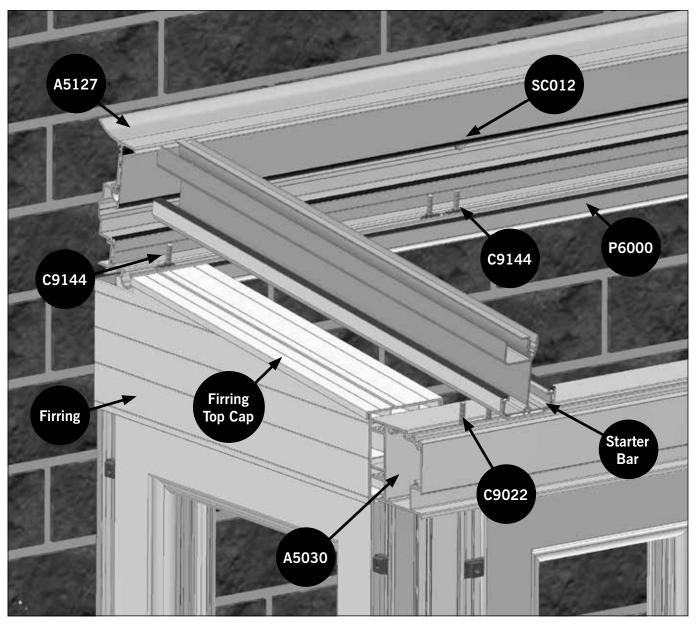
Drill though gable frame, gable adaptor and eaves beam using a 4mm long series drill. Silicone the holes and fix with 4.8mm x 70mm (SC045) at 100mm in from each end (or as close to the internal corner as possible) and at approximately 450mm centres.



WALL PLATE K2 INSTALLATION GUIDE

COMPONENTS

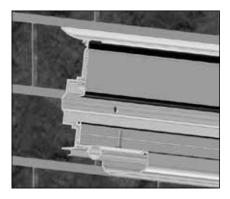
Item No.	Item Description
-	Wallplate & Undercladding (Pre-assembled)
C9022	M5 x 12mm Bolt & Flange Nut
SC012	60mm Fixing Bolts
-	Starter Bar
SC020	4.8mm x 32mm Pan Head Fixing Screw
C9144	Pivet Bolt Assembly & Flange Nuts (Pre-assembled)
A5030	Eaves Beam



WALL PLATE K2 INSTALLATION GUIDE

You will notice that the wallplate cladding trim (P6000), top coaking trim and the bottom cloaking trim are pre-assembled on to the wallplate (A5127).

Prior to positioning the walllate (A5127), measure the distance between the firings (or firring and wall) and cut the wallplate undercladding (P6000) to this size. Slide the wallplate undercladding (P6000) onto the wallplate (A5127).

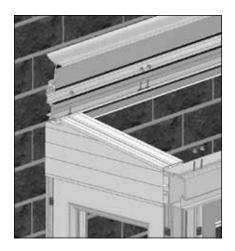


Rest the wallplate (A5127) in the notch of the firrings and position centrally. If positioned correctly the wallplate (A5127) should be approximately 5mm back from the firring top cap at each end.

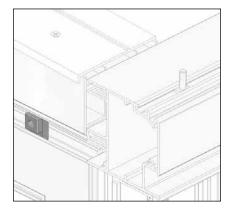


Remove the protective film from the top face of the firring top cap.

Check that the correct number of pivot bolt assemblies (C9144) are inserted into the wall plate (A5127) by referring to your roof plan. These bolts will hold the roof bars to the wallplate (A5127). The starter bar at each end of the roof will only require one M5 x 12mm bolt (C9022) and one pivot bolt (C9144), the intermediate bars will require two.

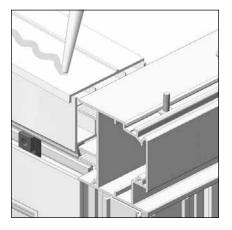


Repeat for the M5 x 12 bolts (C9022) which slide into the eaves beam (A5030).



Select the starter bar and remove the protective film from the under cladding (P6000).

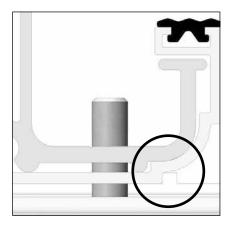
Run a line of silicone along the firring top cap (P6043) where the starter bar will sit. This will help prevent water ingress.



Fit the starter bar onto the bolts situated in the wallplate (A5127) and eaves beam (A5030).



The starter bar will sit against the upstand of the firring top cap. This helps locate the position of the starter bar correctly.

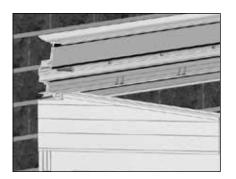


Repeat the process for the starter bar at the opposite end of the roof.



When permanently fixing the wallplate (A5127) to the wall, you must first drill through a central point along the wallplate (A5127) with an 8mm masonry drill, through the wallplate (A5127) and into sound masonry drilling to a minimum depth of 10mm deeper than fixing.

WALL PLATE K2 INSTALLATION GUIDE

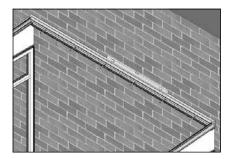


Fix the wallplate (A5127) with a central 60mm fixing bolt (SC012). Do not fully tighten, allow enough slack for rotation.

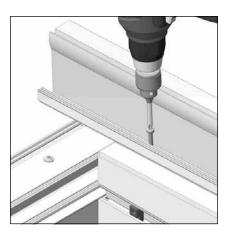


It is recommended at this stage that you check the wallplate (A5127) for level by use of spirit level before permanently tightening the central 60mm fixing bolt (SC012).

Once level, 5° wallplate (A5127) is permanently fixed to the host wall by fitting the remaining 60mm fixing bolts (SC012) at 600mm centres along the wallplate (A5127) ensuring that the first and last 60mm fixing bolts (SC012) are positioned 100mm from the ends of the wallplate (A5127). Permanently tighten the M5 flange nuts on all the bolts.



Secure the starter bars to the firrings with 4.8 x 32mm screws (SC020) positioned at 500mm centres along the starter bar the first one being 100mm from the inside face of the eaves beam (A5030).



Fitting Starter Bar to Side Wall for 'End Out' Models

The starter bar which is adjacent to the side wall needs to be attached not only to the eaves beam (A5030) and the wallplate (A5127) but also to the side wall.

When the starter bar is already permanently fixed to the eaves beam (A5030) and the wallplate (A5127), you need to pre drill into the side of the starter bar with an 8mm masonry drill, through and into sound masonry drilling to a minimum depth of 90mm. The positioning of the drilling should be approx. 150mm from each end and then at 500mm centres (these dimensions may vary to ensure that drilling is into sound masonry and not mortar joints). Fix the starter bar) to the side wall with 80mm fixing bolts (SC030).

Primary Seal to Host Wall (All Models)

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 manufacturers 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 starter bars are fixed in position,

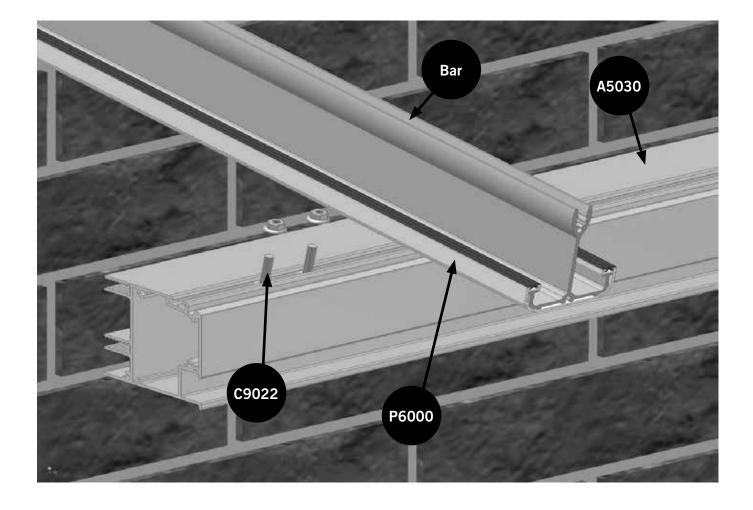
cut out and apply the flashing tape.

The flashing tape should cover three courses of brickwork on the host wall and run over the top face of the 5° wallplate (A5127). On 'End Out' models, the flashing tape should also be cut in and applied over three courses of brickwork on the side wall and over the flat leg section of the starter bar which rests against the side wall.



MAIN BARS - TRADITIONAL

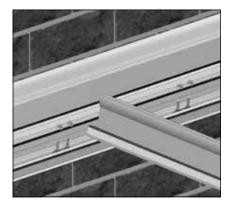
Item No.	Item Description
C9022	M5 x 12mm Bolt & Flange Nut
-	Bar
P6000	Under Cladding (Pre-assembled on Bar)
A5020	Eaves Beam



MAIN BARS - TRADITIONAL

When fitting the main bars it is advised to start at one side of the roof working across to the opposite side. After removing the protective film from the bar under cladding (P6000), Fit the main bars onto the bolts situated in the wallplate (A5127) and eaves beam (A5030).

Loosely thread on the M5 flange nuts.

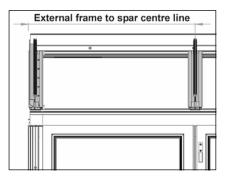


Do not tighten at this stage. When your first bar is temporarily in place it is recommended that you check the distance from the external frame of the side panel to the centre line of the bar. Refer to your roof plan for this dimension. If the distance is correct tighten the M5 flange nut fully.

Continue to fix all remaining bars REMEMBERING to remove all protective film from the bar under cladding (P6000). Check that all bars are perpendicular to eaves beam (A5030) and set at the correct bar centres.

Please note that all other dimensions shown on your roof plan are bar centre line to bar centre line dimensions (except for the last dimension which is the distance from the centre line of your last bar to the internal frame of the opposite side window from which you started).

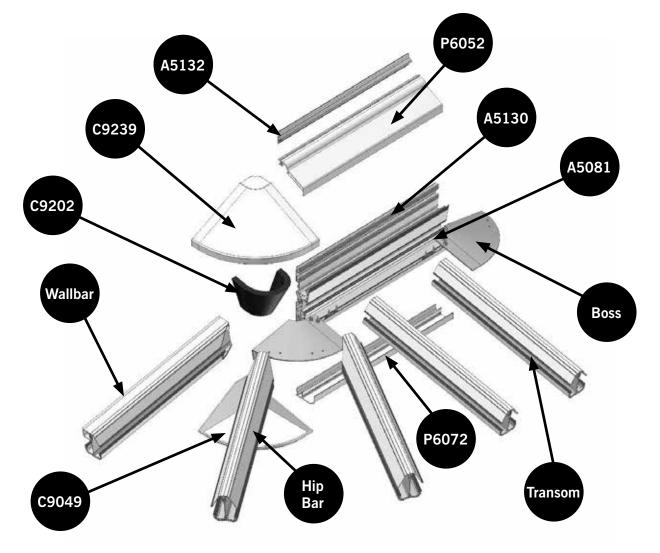
Do not tighten any M5 flange nuts until these checks have been performed.



BESPOKE EDWARDIAN TRADITIONAL VICTORIAN GARDEN BUILDING

HIPPED TRADITIONAL / LEAN-TO ROOF **K2 INSTALLATION GUIDE**

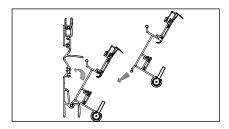
Item No.	Item Description
A5130	Wallplate
A5081	Wallplate Wing Assembly
_	Quarter End Boss
P6052	Wallplate External Cover
P6072 / P6073	Wallplate Internal Cover
C9202	Quarter End Boss Foam Bung
C9239 / C9240	Quarter End Boss External Cover
C9049 / C9241	Quarter End Boss Internal Cover
A5132	Wallplate Flashing Section
_	Hip Bar
-	Transom Glazing Bar
-	Wallbar



HIPPED TRADITIONAL / LEAN-TO ROOF

Once the eaves beam is in position and screwed to the window frames below, the wallplate assembly can be installed.

If not already assembled, locate the wallplate wing assembly into the wallplate (A5130) as shown below.



Use the roof plan to determine the transom glazing bars that extend from the wallplate to the front eaves beam (A5080). Whilst the wallplate assemble is at ground level, attach the outer most transom glazing bars to the wallplate wing using the double bolt retainers and M5 flange nuts.



Lift the entire assembly roughly into position, locate the transom glazing bars onto the double bolt retainers (C9144) in the eaves beam (A5080) and allow the wallplate to rest against the wall in its natural position. Loosely attach the M5 flange nuts to the bolts in the eaves beam.

Install the wallbars. These must be attached using the double bolt retainer in the eaves beam and the M5 x 20mm roofing bolts at the position of the quarter boss end. The fixing should pass through the pre-drilled hole in the end boss and into the wallbar. It may be necessary to manoeuvre the wallplate assembly to align the holes. Loosely attach M5 flange nuts on all fixings. If it is not possible to align the holes, stop and check the window frame dimensions and that the correct bars have been used. Do not drill your own fixing holes in the boss end.

Confirm that the wallplate is at the correct height by checking the dimension from the top of the window frames to the highest point on the wallplate assembly. This dimension is shown on the roof confirmation found in the box of roof components.

TOTAL ROOF PRICE	642	5.50		
PROFILE FRAME THICKNESS ROOF FRAMING COLOUR GLAZING THICKNESS GLAZING COLOUR INT CONSERVATORY DEPN TOP OF RIDGE (2588mm III) TOP OF RIDGE (2588mm III)	W 74 0 3 3	Omm Hite Imm Dysarb pal polt 14mm HOmm NG 21	*	FRAMES
A1 A2 B1 E	12	C1	D1	Et

Once satisfied that the wallplate is at the correct height and that it is level, mark its height and end positions on the wall. Also mark suitable fixing positions along the wallplate that will avoid mortar courses. Fixings should be approximately 150mm from each end of the wallplate and no more than 600mm apart.

Dismantle the roof back to eaves beam level.

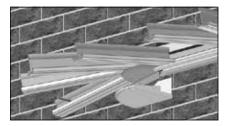
Whilst at ground level, drill the wallplate (A5130) at the position of the marks in the location shown on page 3. The size of the hole will be dependant on the type of fixing being used. These fixings must be suitable for the building substrate and are therefore not supplied.

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Once drilled, position the wallplate to align with the marks on the wall and, using the pre-drilled holes as a template, drill the wall to suit the fixings. Fix the wallplate.

Re-assemble the roof as before, ensuring that the glazing bars are in the correct positions in accordance with the roof plan supplied. Fit and tighten all M5 flange nuts.

Prior to permanently fixing the wallbars, locate the internal quarter boss cover behind the return on the quarter end boss. Depending upon the pitch of the roof and the handing of the boss end, the upstand on the boss cover will require an amount of trimming. If there is a large variation in pitch between the front and side of the conservatory roof, it may also be necessary to trim the skirt of the internal boss cover to suit.



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



Glaze the roof using the method described in the main guide, ensuring that the correct top cap is used on each glazing bar and hip.

Fold the quarter boss end foam bung (C9202) into a partial cone and insert into the void at the position of the quarter boss. Ensure that the bung makes contact with the glazing and the end of each top cap.

Using a continuous bead of silicone, seal the joint between the top caps, glazing and foam bung.



Slide the quarter boss end covers (onto the wallplate cover (P6052) by 30mm and attach to the wallplate by locating onto the aluminium barbs and applying downward pressure.

THIS SECTION CAN BE USED FOR THESE STYLES (IF APPLICABLE TO YOUR SPECIFICATION).

BESPOKE EDWARDIAN TRADITIONAL VICTORIAN GARDEN BUILDING

HIPPED TRADITIONAL / LEAN-TO ROOF



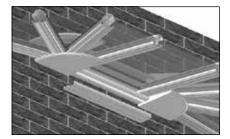
If the quarter boss end cover fouls on the hip top caps, it will be necessary to trim the skirt on the cover to suit. Once fitted, silicone seal the joint between the boss cover and the wallplate external cover.

Locate the aluminium flashing trim into the gap between the wallplate external cover and the wall and tap into position.

Using continuous beads of silicone, Seal the flashing section to the wall and to the wallplate external cover.



Measure the distance along the wallplate between the internal boss covers and cut the wallplate internal cover to suit. Locate the legs on the wallplate internal cover between the aluminium barbs on the wallplate and push into position.

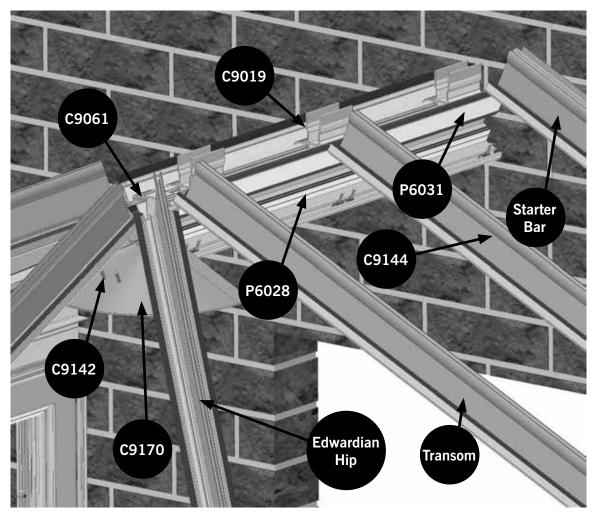


RIDGE

K2 INSTALLATION GUIDE

COMPONENTS (Bespoke / Edwardian Ridge)

A5081Universal Ridge WingC901925mm Standard Ridge CentreC9061Ridge End SpacerP6031Top Cloaking TrimP6028Bottom Cloaking TrimC9144Pivot Bolt Assembly-M5 Flange NutC917025° Mini Boss EndC9142M5 x 25mm Bolt-Edwardian/Georgian Hip Bar-Transom Glazing Bar-Starter Bar	Item No.	Item Description
C9061 Ridge End Spacer P6031 Top Cloaking Trim P6028 Bottom Cloaking Trim C9144 Pivot Bolt Assembly - M5 Flange Nut C9170 25° Mini Boss End C9142 M5 x 25mm Bolt - Edwardian/Georgian Hip Bar - Transom Glazing Bar	A5081	Universal Ridge Wing
P6031 Top Cloaking Trim P6028 Bottom Cloaking Trim C9144 Pivot Bolt Assembly - M5 Flange Nut C9170 25° Mini Boss End C9142 M5 x 25mm Bolt - Edwardian/Georgian Hip Bar - Transom Glazing Bar	C9019	25mm Standard Ridge Centre
P6028 Bottom Cloaking Trim C9144 Pivot Bolt Assembly - M5 Flange Nut C9170 25° Mini Boss End C9142 M5 x 25mm Bolt - Edwardian/Georgian Hip Bar - Transom Glazing Bar	C9061	Ridge End Spacer
C9144 Pivot Bolt Assembly - M5 Flange Nut C9170 25° Mini Boss End C9142 M5 x 25mm Bolt - Edwardian/Georgian Hip Bar - Transom Glazing Bar	P6031	Top Cloaking Trim
- M5 Flange Nut C9170 25°Mini Boss End C9142 M5 x 25mm Bolt - Edwardian/Georgian Hip Bar - Transom Glazing Bar	P6028	Bottom Cloaking Trim
C9170 25° Mini Boss End C9142 M5 x 25mm Bolt - Edwardian/Georgian Hip Bar - Transom Glazing Bar	C9144	Pivot Bolt Assembly
C9142 M5 x 25mm Bolt - Edwardian/Georgian Hip Bar - Transom Glazing Bar	-	M5 Flange Nut
- Edwardian/Georgian Hip Bar - Transom Glazing Bar	C9170	25°Mini Boss End
- Transom Glazing Bar	C9142	M5 x 25mm Bolt
	-	Edwardian/Georgian Hip Bar
- Starter Bar	-	Transom Glazing Bar
	-	Starter Bar

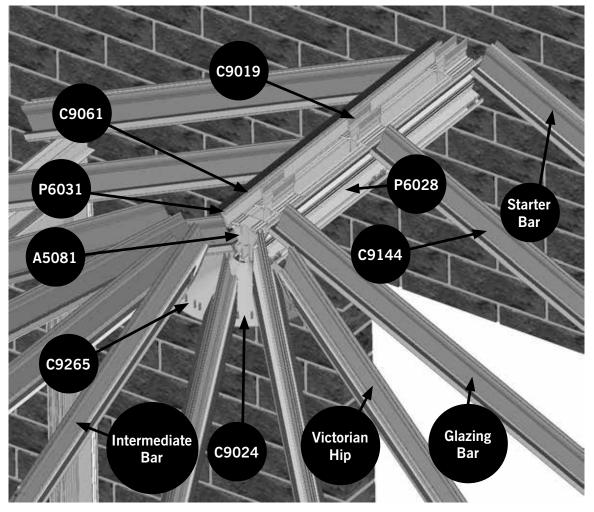


RIDGE

K2 INSTALLATION GUIDE

COMPONENTS (Victorian Ridge)

Item No.	Item Description
A5081	Universal Ridge Wing
C9019	25mm Standard Ridge Centre
C9061	Ridge End Spacer
P6031	Top Cloaking Trim
P6028	Bottom Cloaking Trim
C9144	Pivot Bolt Assembly
C9265	M5 x 25mm Bolt & Flange Nut
C9024	25°Boss End
-	Victorian Hip Bar
-	Glazing Bar
-	Starter Bar
-	Intermediate Bar



RIDGE K2 INSTALLATION GUIDE

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

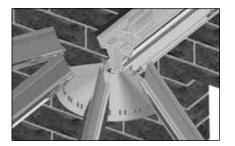
To identify the glazing bar positions for your conservatory, refer to your roof plan, where the first glazing bar (marked as P1) is always located at the top left of the diagram. All the glazing bars, bars are numbered anti-clockwise around the layout. Please note: all bars must be counted in sequence.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

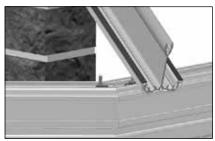
It will be easier to assemble the glazing bars if all the M5 flange nuts are removed from the double bolt retainers in the eaves beam and universal ridge wings and kept about your person for use when you require them.

Start the ridge assembly by attaching the 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 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.





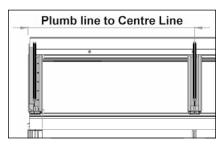
From the underside of the boss end, pass the M5 x 25mm roofing bolts through the pre-drilled holes in the hip and loosely secure with an M5 flange nut.



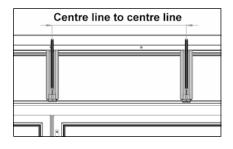
Repeat this process for the hip on the opposite side. Once the hip and intermediate bars are in position, fit the wallbars using the bolt retainers in the eaves beam and ridge wings.



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.



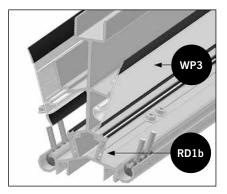
If all checks have been performed it is now possible to permanently fix the starter bars to the host wall.

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.

Setting Ridge Height on Gable Fronted Models

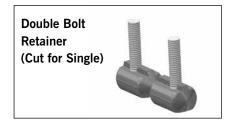
Referring to your roof plan, select the correct number of bolt retainers (C9144) complete with M5 x 25mm bolts (RA3) and slide into the channels of the ridge (RD1). It will be easier to assemble the bars(RD5/6) if all the pre-assembled M5 locking nuts (RA7) are removed from the double bolt retainers (C9144) in the eaves beam (A5080) and the ridge (RD1), and kept about your person for use as and when you require them.



NOTE: A single bolt retainer (C9144) is required for the starter bars(RD5) all others will be a double bolt retainer (C9144) as shown below. Simply cut the double bolt retainer (C9144) in half to create a single.

Do not throw any spares away.

RIDGE K2 INSTALLATION GUIDE

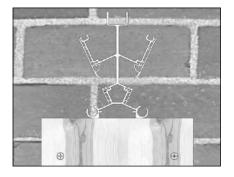


To identify the spar (RD5/6) numbers for your conservatory, when referring to your roof plan the first spar (RD5) (marked as P1) is always located at the top left of the diagram. The bars(RD5/6) can then be counted anti-clockwise around the layout.

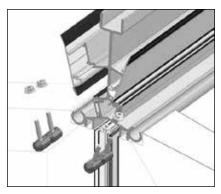
Please note: all bars(RD5/6) must be counted in sequence. These will then correspond to the numbering on the physical spar (RD5/6) assemblies.

Referring to your roof plan, mark the host wall with the dimension from the top of the windows to the internal ridge. Fix a wood block to the wall at least 50mm deep to the host wall with the top face set at the internal ridge height. This is to support the ridge assembly (R1) whilst you erect the rest of the roof.

Do not remove until the aluminium frame of the roof is assembled.

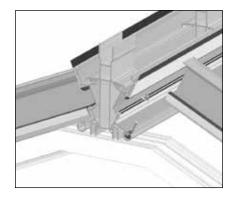


Hoist the ridge assembly (R1) into the air and rest the rear face of the ridge (RD1) on top of the wooden block and the front face of the ridge (RD1) into the recess at the top of the gable frames (GF1) so that the front of the ridge (RD1) is inline with the front of the gable frames (GF1).



Temporarily supporting the ridge (RD1) in the correct position, attach the first starter spar (RD5) over the single bolt retainer (C9144) in the eaves beam (A5080). The

end which has the holes drilled furthest up the spar (RD5/6) is the end which is positioned over the eaves beam (A5080).



Now position the hole at the bottom of the starter spar (RD5) over the single bolt retainer (C9144) in the eaves beam (A5080).



Repeat for the starter spar (RD5) at the opposite side of the ridge (RD1).

Once completed, additional roof checks to ensure the build is plumb and level should be carried out. These checks are shown at the end of this section.

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

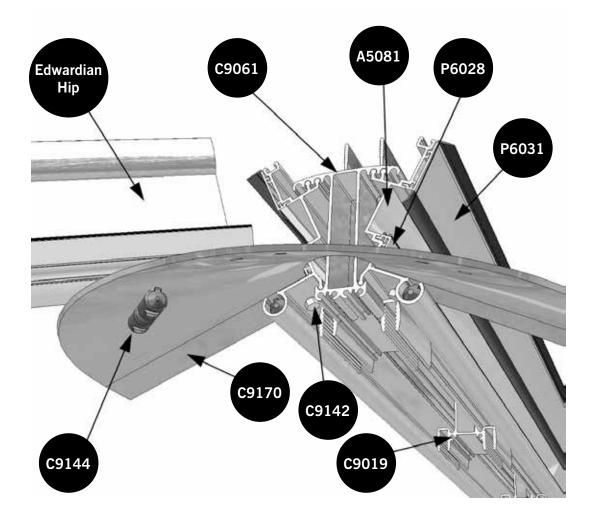


BESPOKE EDWARDIAN TRADITIONAL VICTORIAN GARDEN BUILDING

RIDGE - SQUARE GARDEN BUILDING K2 INSTALLATION GUIDE

COMPONENTS (Square)

Item No.	Item Description
A5081	Universal Ridge Wing
C9019	25mm Standard Ridge Centre
C9061	Ridge End Spacer
P6031	Top Cloaking Trim
P6028	Bottom Cloaking Trim
C9144	Pivot Bolt Assembly
-	M5 Flange Nut
C9170	25°Mini Boss End
C9142	M5 x 25mm Bolt
-	Edwardian/Georgian Hip Bar
-	Transom Glazing Bar



BESPOKE EDWARDIAN TRADITIONAL VICTORIAN GARDEN BUILDING

RIDGE - SQUARE GARDEN BUILDING

Referring to your roof plan, select the correct number of bolt retainers (C9144) complete with M5 x 25mm bolts (C9142) 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. The glazing bars can then be counted anti-clockwise around the layout. Please note: all glazing 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 the universal ridge wings, and kept about your person for use as and when you require them.



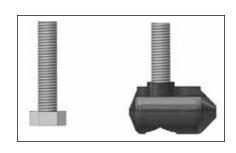
Select the mini boss end (C9170) for attachment to the universal ridge wings (A5081).

It is easier if both the mini boss ends (C9170) are assembled to the ridge before you lift the ridge assembly into position for installation.

The mini boss ends are connected to the universal ridge wings by use of a single bolt retainer and a separate single bolt attached to each universal ridge wing.

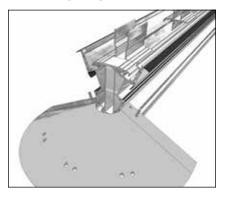
Connecting Boss Ends

Select a single bolt retainer and a separate bolt without the retainer as shown.

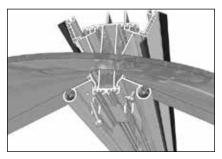


Slide a single bolt retainer into both of the universal ridge wings.

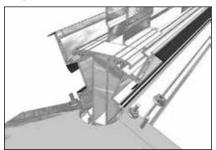
Locate the mini boss end (C9170) over the single bolt retainer located in both of the universal ridge wings.



Once the boss end (C9170) is in position, locate the separate bolt through the predrilled hole in the underside of the universal ridge wing ensuring that the bolt passes through the hole in the boss end.

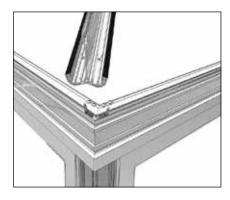


Permanently fix in place by use of a M5 flange nut.

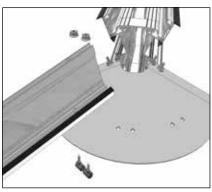


Start the ridge assembly by attaching the Georgian hip bars to the boss end (C9170). These are the glazing bars which run diagonally from the corners of the eaves beam (A5080) to the mini boss ends (C9170).

Temporarily support the ridge assembly in the correct position. Slot the holes at the bottom of the Georgian hip bar over the M5 x 25mm bolts located in the single bolt retainers that sit either side of the eaves beam corner.



Now locate a double bolt retainer from underneath the boss end and through the holes.



Slot the top of the Georgian hip bar over the double bolt retainer and loosely attach the M5 flange nut, but do not fully tighten at this stage. Repeat for the Georgian hips on the opposite ridge wing.

Once the rear Georgian hip bars are in position, fit the front ones.

Once completed, with the four Georgian hip bars in position, the ridge is self supported and additional roof checks to ensure the build is plumb and level should be carried out.

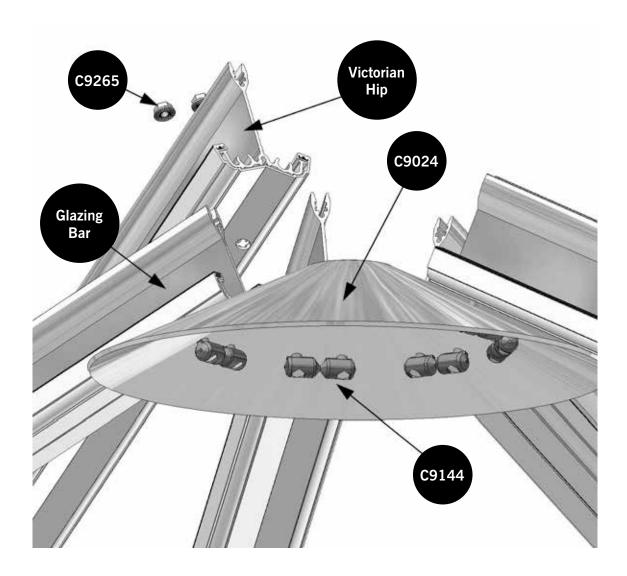
THIS SECTION CAN BE USED FOR THESE STYLES (IF APPLICABLE TO YOUR SPECIFICATION).

BESPOKE EDWARDIAN TRADITIONAL VICTORIAN GARDEN BUILDING

RIDGE - OCTAGONAL GARDEN BUILDING K2 INSTALLATION GUIDE

COMPONENTS (Octagonal)

Item No.	Item Description
C9144	Pivot Bolt Assembly
C9265	M5 x 25mm Bolt & Flange Nut
C9024	25°Boss End
-	Victorian Hip Bar
-	Glazing Bar



BESPOKE EDWARDIAN TRADITIONAL VICTORIAN GARDEN BUILDING

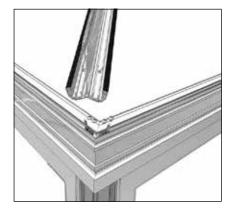
RIDGE - OCTAGONAL GARDEN BUILDING K2 INSTALLATION GUIDE

It will be easier to assemble the transom and Victorian hip bars if all the M5 flange nuts are removed from the double bolt retainers (C9144) in the eaves beam (A5080) and kept about your person for use as and when you require them.

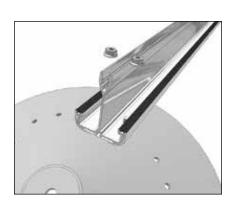
Double Bolt Retainer



Temporarily supporting the gazebo boss (C9026) in the correct position. Slot the holes at the bottom of the Victorian hip bar over the M5 x 25mm bolts located in the single bolt retainers which sit either side of the eaves beam corner.



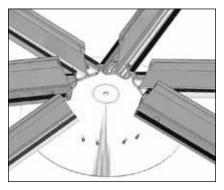
From the underside of the gazebo boss (C9026) pass a double bolt retainer (C9144) through the corresponding holes in the boss and the Victorian hip bar. (Please note that M5 x 20mm roofing bolts (C8017) may have been provided as an alternative fixing).



Repeat this procedure until all the Victorian hip bars are attached to the eaves beam (A5080) and the gazebo boss (C9026).



Secure all bolts at the eaves and gazebo boss using the M5 flange nuts.



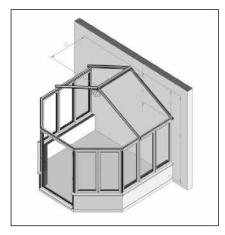
RIDGE CHECKS

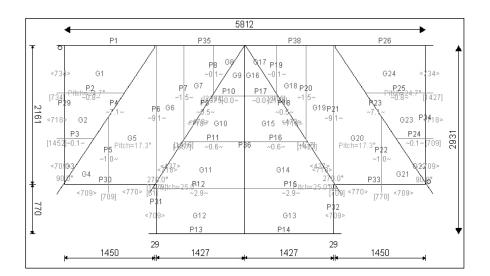
Please note that the end dimensions are taken from the external frame to the centre line of the next rafter. The intermediate dimensions are taken from bar centre line to bar centre line.

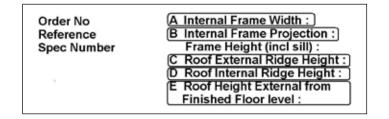
The image above is an example roof plan. The detail specific to your conservatory is shown on your roof plan, **Do not follow the dimensions shown in this image.**

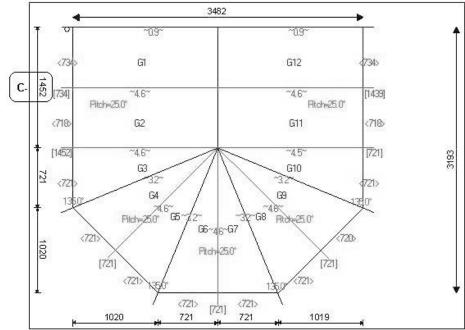
It is strongly advised that you perform the following checks:-

- 1. Double check the internal dimensions shown 'A' and 'B'.
- 2. Check that the height of your ridge (RD1) is correct. One of three ways is possible:
- C. Roof External Ridge Height: Height from the top of the windows to the top of the ridge (RD1).
- D. Roof Internal Ridge Height: Height from the top of the windows to the underside of the ridge (RD1).
- E. Height from your Finished Floor Level: to the top of ridge (RD1).







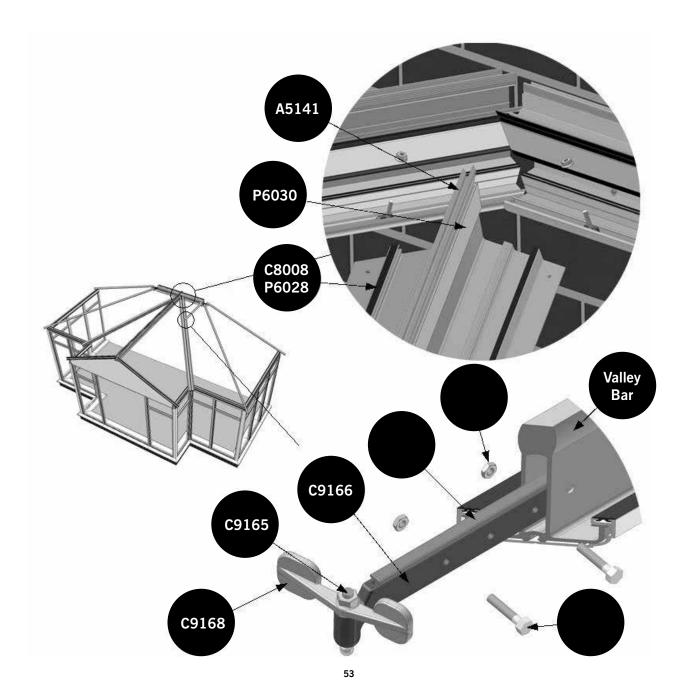


THIS SECTION CAN BE USED FOR THESE STYLES (IF APPLICABLE TO YOUR SPECIFICATION).

BESPOKE EDWARDIAN TRADITIONAL VICTORIAN GARDEN BUILDING



Item No.	Item Description
A5141	Valley Centre (P6030 Cloaking Trims - fitted) (Pre-assembled)
A5037	Valley Wing (Pre-assembled)
C8008	Glazing Support Tape (Pre-assembled)
P6028	Valley Cloaking Trim (Pre-assembled)
-	Valley Bar
C9165	Pivot Bolt, Rubber "O" Ring & Flange Nut
C9166	Jack Rafter Arm (Pre-assembled)



K2 INSTALLATION GUIDE

Fitting Valley Assembly

When the ridge and wall plate assemblies are installed and permanently fixed to the host wall, ridge checks are performed, the pre-assembled valley assembly can be fitted.

The valley is in three sections – a valley centre and two valley wings.

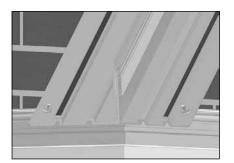
Ensure that the glazing support tape (C8008) is attached to the valley wings.

Locate the pre-drilled holes in the top of the valley wings over the pivot bolts located in the single pivot bolts (C9144) in the wall plate and ridge.

Ensure that the valley centre is pushed as far up the ridge as possible.

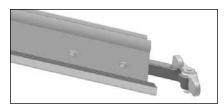


Next, locate the pre-drilled holes at the bottom of the valley wings over the pivot bolts located in the single pivot bolts (C9144) in the eaves beams (A5080) on the internal corner.



Fitting Valley Bars

The valley bars are the bars which run from the wall plate and into the valley. These valley bars are cut at an angle along the bottom face. Jack rafter arm assembly's are fitted to the valley end of the bars, valley paddles (C9168) should be fitted to the jack rafter arm (if not already fitted). This assembly is pre-fitted and prevents the glazing sheets from sliding into the valley.



Hook your first valley bar over the pivot bolts (C9144) located in the wall plate.



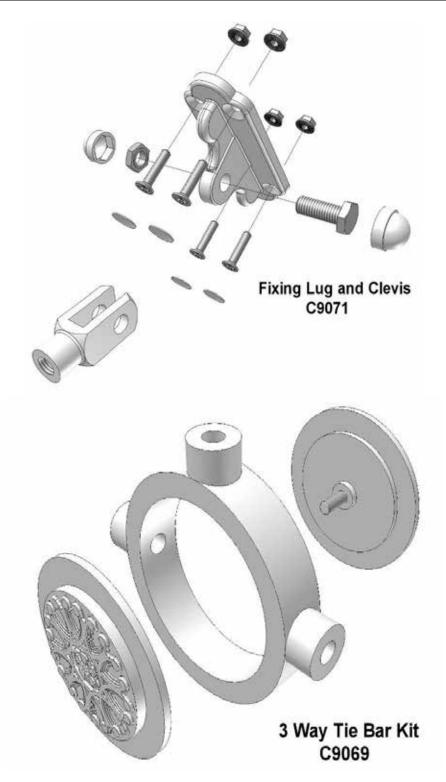
Locate the holes at the bottom of the valley bar over the pre-drilled holes in the valley wing, but do not tighten at this stage.

From the underside, fit the M5 x 20mm bolts (C8017) through the pre-drilled holes in the valley wing and valley bar. Loosely thread on the flange nuts, but do not tighten at this stage. Repeat for every set of valley bars.

When all the valley bars are connect to the wall plate proceed to the valley bars off the ridge, attaching them to the ridge and to the valley wings as previously described. When all valley bars are in position check the bar spacing's between them by referring to your roof plan. When satisfied, tighten all flange nuts. The valley wing flange nuts can be tightened up

TIE BARS

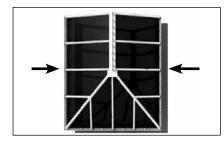
Item No.	Item Description
C8005	Tie Bar Rods with Nuts (3mm)
C9069	3 Way Tie Bar Centre Boss Kit
C9071	Fixing Lug and Clevis Kit



TIE BARS

FOR GARDEN BUILDINGS: Only follow this section if you have a Square Garden Building, and only if your design is shown as requiring tie bars.

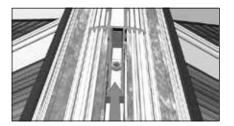
In most cases the tie bar kit is attached to the set of glazing bars that sit at the end of the ridge as shown below.



The lugs will be attached to the bottom of the relevant glazing bars where the tie bar is to be positioned. Three lengths of threaded tie bar rod and three lengths of conduit to cover the rod are supplied with each 3 way tie bar.

Two lengths run horizontal to the lug attached to the glazing bar and into the centre 3-way tie bar boss. The final threaded bar and conduit is fixed vertically into the ridge from the tie bar centre boss.

Firstly attach the vertical tie bar rod through the ridge. Slide a M10 fixing nut into the ridge centre over the pre-drilled hole.



With the locking nut in place screw the vertical tie bar rod into place, through the ridge centre and into the locking nut.



At this stage it is a good time to fit the ridge under cladding with the tie bar rod fitted in place. The ridge under cladding

needs to be inserted and passed up the tie bar rod until it reaches the ridge centres and can be push fit onto the serrated prongs.



Thread the vertical tie bar conduit over the treaded bar and insert into the hole in the internal ridge cover. Leave the tie bar rod hanging down vertically from the ridge.

As the lug is already attached to the glazing bar, screw the horizontal threaded tie bar rod into the clevis.

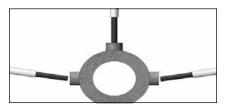


Once the rod has been attached to the clevis, the clevis can be fixed to the lug by means of the M10 nut and bolt. Attach both tie bar rods on the left and right sides of the conservatory in this way.



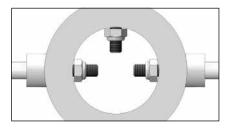
With the vertical tie bar rod and the two horizontal tie bar rods in place, raise them all together towards the centre and thread the ends of the tie bar rods through the holes in the 3 way tie bar centre boss.

Raise the tie bar centre boss until the three rods protrude into the boss.



When the tie bar centre boss assembly is in place, thread on the M10 tie bar centre

boss locking nuts. Check the horizontal tie bar rods for level before tightening the M10 tie bar centre boss locking nuts fully.



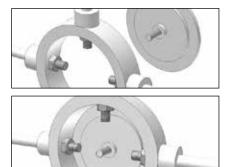
When all tie bar poles are in position and connected to all pole connectors, glazing bar lugs and ridge connection, you can now tighten the M10 tie bar centre boss locking nuts fully ensuring that the horizontal tie bar poles are tight fitting.

Now that all components are permanently fixed, push fit the bolt cover caps over the M10 x 30mm Nyloc nut and bolt.

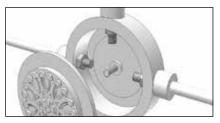


Select one of the tie bar boss covers and screw the centre thread into position.

Position the remaining centre boss cover over the centre thread and rotate into position.

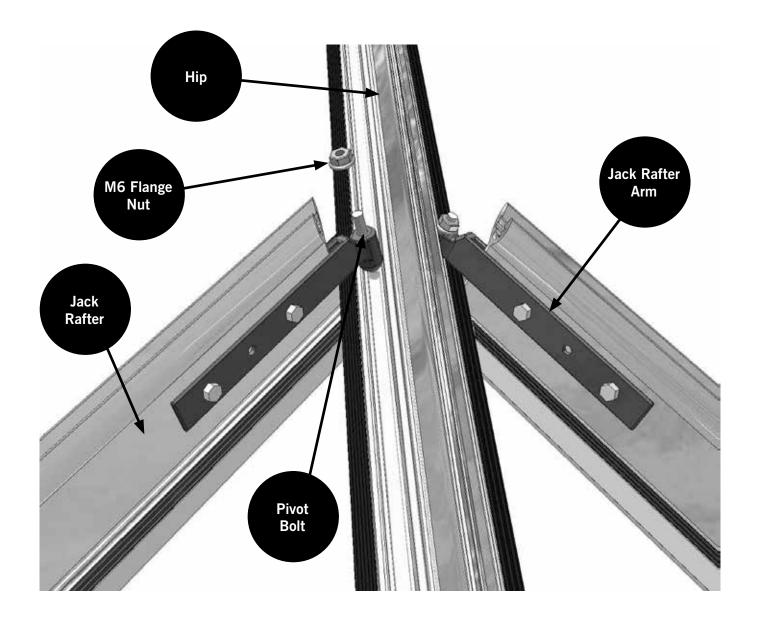


Position the tie bar cover on to the centre boss.



JACK RAFTER K2 INSTALLATION GUIDE

Item No.	Item Description
-	Hip Bar (Pre-assembled)
-	Jack Rafter Assembly (Pre-assembled)
-	Jack Rafter Undercladding (Pre-assembled)
-	Jack Rafter Arm (Pre-assembled)
-	Pivot Bolt
-	M6 Flange Nut



JACK RAFTER K2 INSTALLATION GUIDE

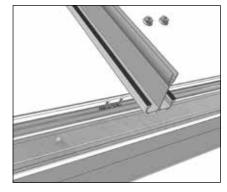
FOR GARDEN BUILDINGS: Only follow this section if you have a Square Garden Building.

Jack rafters can now be fitted to the hips.

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

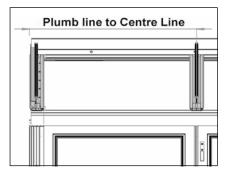


Slide the undercladding back to the top of the jack rafter and tight up against the Georgian hip undercladding, locate the jack rafter onto the bolts in the eaves beam and loosely attach the M5 flange nuts.

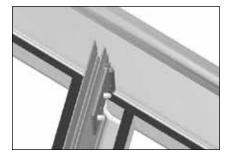


Prior to tightening any M5 locking nuts it is recommended that a check of the glazing bar centres is carried out.

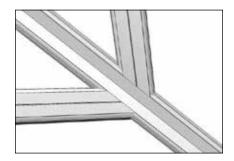
These dimensions are shown on your roof plan are taken from the centre line of the transom glazing bars. When all the bars are correctly positioned, tighten all M5 and M6 flange.



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



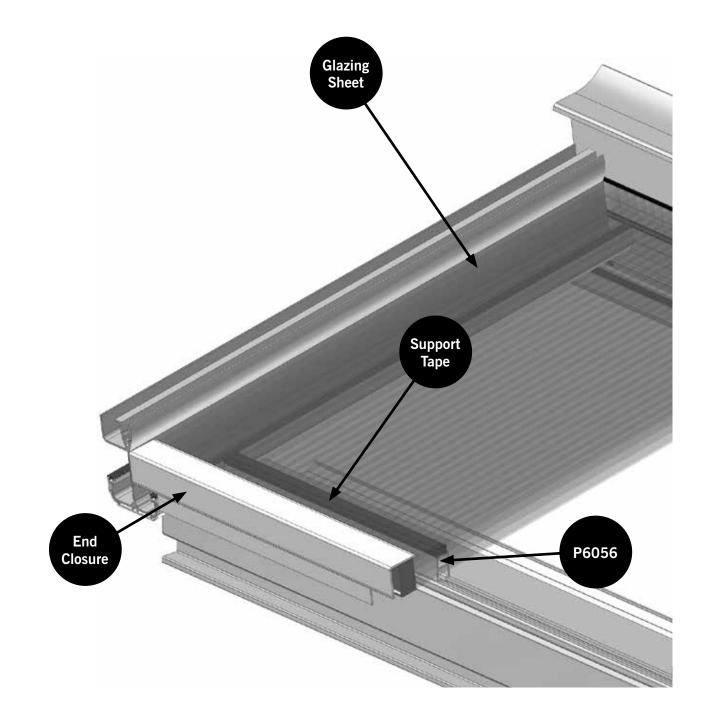
The finished appearance of the jack rafter connection from beneath should be as below.



REMEMBER to remove the protective film from the under cladding prior to installation

ROOF GLAZING

Item No.	Item Description
-	End Closure (P6054/P6076) (Pre-assembled)
P6056	Glazing Support Trim
-	Glaing Support Tape (Pre-assembled)
-	Starter Bar (Pre-assembled)
A5030	Eaves Beam



ROOF GLAZING

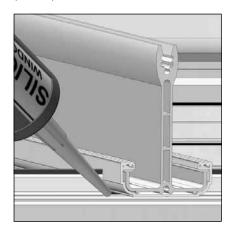
Unpack the roof glazing sheets. If your glazing material is polycarbonate, it is important at this stage to note that the surface which is protected by the printed polythene film is the surface which is on the outside of the conservatory.

The print on the outer film gives details on how to correctly store your polycarbonate until it is installed. Each roof glazing sheet is labelled with the corresponding number on your roof plan.

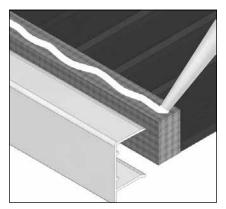
Ensure all the glazing support trims (P6056) are into the eaves beam (A5030). This trim snap fits into the channels of the eaves beam (A5030) between the bars. Do not remove the glazing tape protective film off the tape at this point.



Once the glazing support trim (P6056) is in place, apply a bead of silicone to the gap between the glazing support trim (P6056) and the side of each bar.



The end closure (P6054/P6076) may be pre-assembled on polycarbonate roof glazing sheets, however you will need to remove and apply a line of silicone along the top face of the breather tape where it will come into contact with the end closure (P6054/P6076) once application complete.



The end closure (P6054/P6076) push fits over the bottom edge of the roof glazing sheet with the flange facing down.

The polycarbonate end closure (P6054/ P6076) should also be pre-notched at either end to allow the polycarbonate roof glazing sheet to rest fully onto the bar.

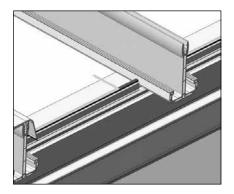
Select the first roof glazing sheet and remove its protective outer film (polycarbonate only). It is recommended that only a 100mm perimeter of the inner protective film is removed at this stage of conservatory installation as this will help protect the roof glazing sheet from any unwanted marks. The 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.

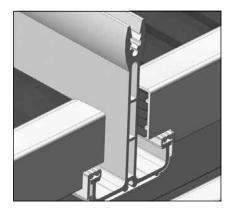


Prior to fitting the roof glazing sheets it is recommended to peel back around 50mm to 100mm of the glazing tape protective film (P6056).This will allow for any adjustments that may be required to the position of the roof glazing sheet without permanently sticking the entire roof glazing sheet to the glazing support trim (P6056).

Ensure that the glazing tape protective film (P6054/P6076) is accessible.



Push the roof glazing sheet up into the wallplate channel (A5127), ensure that the glazing sheet and end closure is flush with the end of the bars. Gently allow the roof glazing sheet to rest on to the glazing support trim (P6054/P6076).

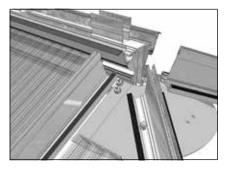


Once the roof glazing sheet is in place, pull on the glazing tape protective film on the glazing support trim (P6056) from the in a downwards motion to remove. Push the glazing sheet firmly down onto the glazing support trim tape.

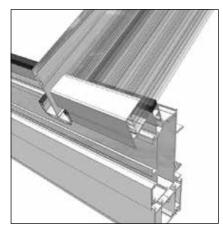


ROOF GLAZING

Square Garden Building Models

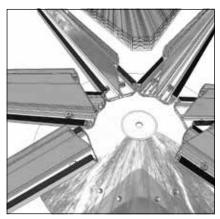


Push the roof glazing sheet up into the universal ridge wings then slowly allow it to slide back down away from the ridge until it rests flush with the bottom of the transom glazing bars.



Allow the roof glazing sheet to gently rest on to the eaves beam closure (P6056).

Octagonal Garden Building Models



Position the triangular roof glazing sheets between the roof glazing bars allowing an even gap between the edge of the roof glazing sheets and the roof bars.

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. Then by use of a step ladder through the empty "G2" roof glazing sheet position you will have good access to put on the bar top cap labelled "P1" first. Then place "G2" roof glazing sheet into position whilst getting good access to put on "P2" bar top cap by use of your stepladder in the empty "G3" roof glazing sheet position. 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 installation and the bar cappings 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 while pressing firmly down on the roof glazing sheet to make sure that it remains in position afterwards.

Continue to fit all others as previously described.

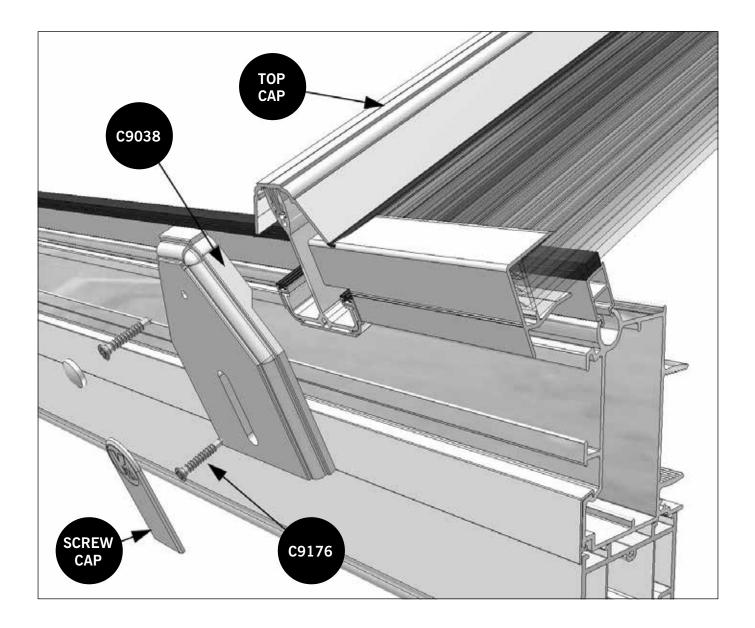
PLEASE NOTE IT IS NOT UNCOMMON FOR CONDENSATION TO APPEAR IN THE FLUTES OF THE POLYCARBONATE ROOF GLAZING SHEETS FROM TIME TO TIME.

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. THIS WILL INVALIDATE ALL WARRANTIES.

GLAZING BAR CAPPINGS ^{K2 INSTALLATION GUIDE}

Item Description
Glazing Bar Top Cap
Glazing Bar End Cap
Screw Cover Cap
3.9 x 19mm Yellow Screw
Wallbar End Cap



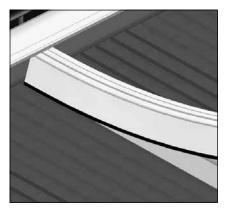
GLAZING BAR CAPPINGS

Once all roof glazing sheets are in position and stuck to the eaves beam closure, it is time to attach the top caps to the glazing bars. This is for two reasons; firstly to permanently keep the roof glazing sheets in place and secondly to create a watertight seal.

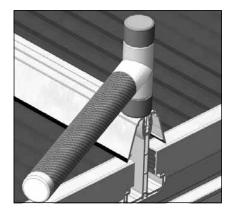
Fitting Glazing Bar Caps

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

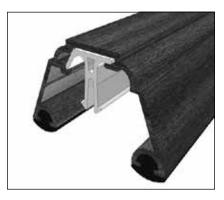
Prior to installing the glazing bar top caps the top cap rubber gasket must be lubricated with a solution of mild soapy water (this will allow the top cap to spread more easily during installation).



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



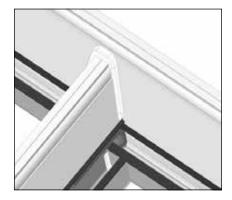
If your conservatory has a woodgrain finish, the Georgian hip top caps will comprise of a foiled aluminium outer case with a PVC inner connector. These top caps are positioned over the hip glazing bars and are attached in the same manner as the other transom bar top caps.



When the glazing bar top cap is attached, ensure that the bottom face of the top cap is aligned with the bottom face of the glazing bar. Remove the protective film from the glazing bar top cap.

When assembling the glazing bar top caps onto the glazing bars, support can be gained by use of conservatory ladders or by spreading your leaning weight on boards positioned across the bars. Do not put your weight directly on to the roof glazing sheets.

Once all top caps are fitted, it will be necessary to seal the joint between the hip and jack rafter top caps with a continuous bead of silicone.

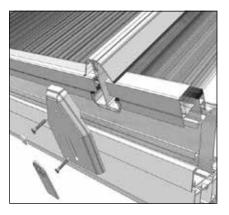


Fitting Glazing Bar End Cap

When the glazing bar top caps are attached you need to close the end of the glazing bar by use of the glazing bar end cap (C9038).

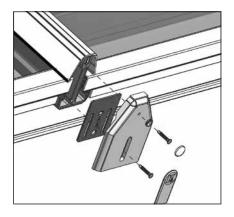
The glazing bar end cap is attached to the glazing bar by two 3.9 x 19mm yellow screws (C9176).

Sit the lip of the end cap over the top cap and locate the top screw through one of the plastic washers supplied and into the port in the glazing bar. Use the hole in the end cap that aligns with the bottom screw port to locate the second screw Ensure that the screw cover caps supplied are used to hide the screws once in position.



Glass Plates

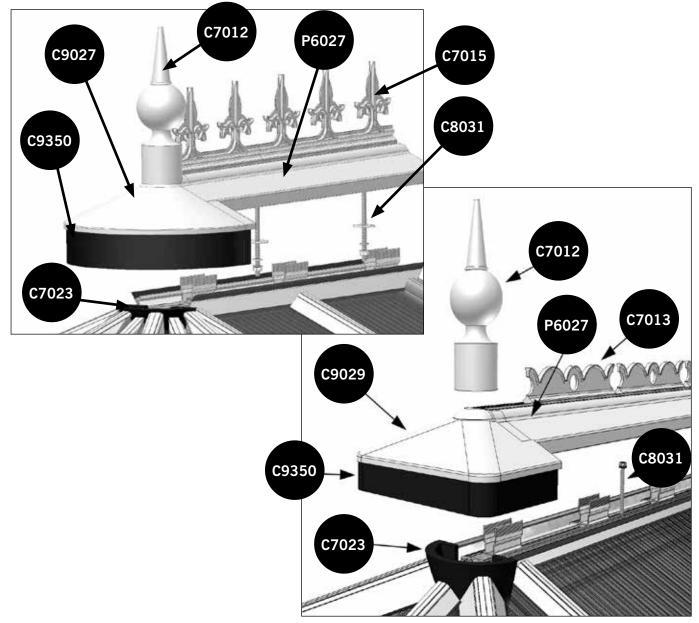
If you have chosen to have Glass Panels in your roof (as opposed to Polycarbonate), you will have been supplied with an additional item "Glass Plate KDC9039" that is placed between the end of the rafter and the inside face of the end cap, as shown below.



RIDGE CAPPING

K2 INSTALLATION GUIDE

Item No.	Item Description
	25° Variable Pitch Ridge
P6027	External Ridge Cover
C7023	Universal Foam Bung
C9350	Boss End Foam Trim
C9027	Round External Boss Cover
C9029	Square External Boss Cover
C8031	Ridge Holding Down Bolts
C7013 / C7015	Plain / Ornate Cresting
C7012	FINIAL

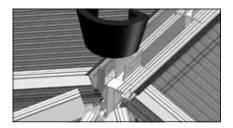


RIDGE CAPPING

FOR GARDEN BUILDINGS: Follow this section for Square models only.

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/Edwardian boss end so that the outer face rests against the back of the bars.



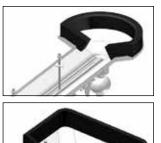
Using the silicone provided, run a continuous bead around the joint between the foam bung (C7023) and the end of each bar top cap, being careful to avoid gaps in the sealant.



If required for your design, repeat for the boss end on the opposite end of the ridge assembly.

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.





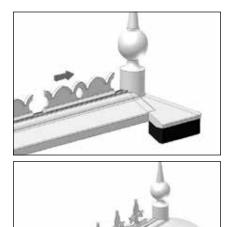
The ridge holding down bolts must be fitted into the groove on the underneath of the external ridge capping at approximately 500mm centres.

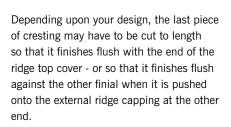
When fitting the bolts ensure that the nut and washer for each threaded rod is located into the channel, tighten the threaded rod prior to installing.



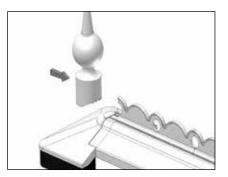
Slide the finial (C7012) fully onto the ridge cap assembly as far as it will go.

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



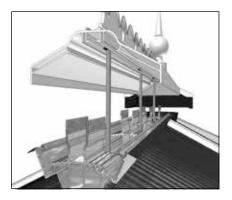


To do this, temporarily position the cresting onto the external ridge cover and mark where the finials final position will be. Remove the cresting, trim and reinsert into position.

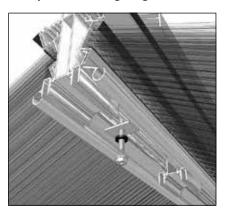


Slide the second finial onto the square external boss cover (when required).

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, support can be gained by 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.



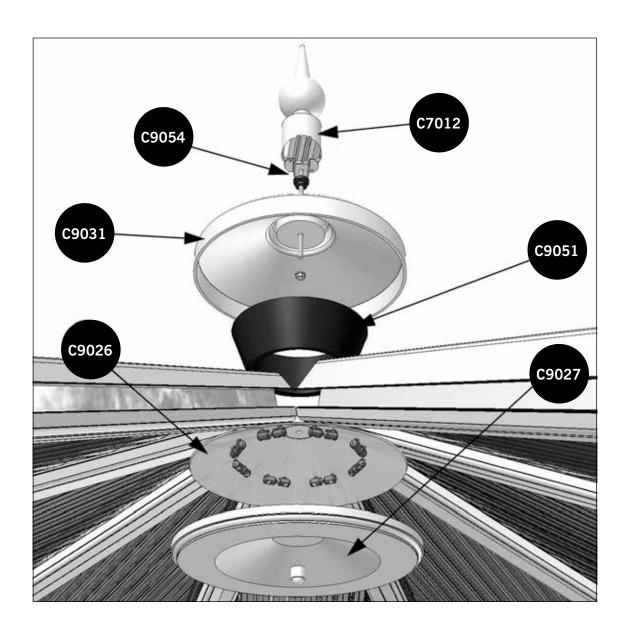
Screw the rectangular washer until it touches the ridge wings and finger tighten the nylon nut on the ridge holding down bolts to make the external ridge capping secure.

THIS SECTION CAN BE USED FOR THESE STYLES (IF APPLICABLE TO YOUR SPECIFICATION).

BESPOKE EDWARDIAN TRADITIONAL VICTORIAN GARDEN BUILDING

RIDGE CAPPING - OCTAGONAL GARDEN BUILDING K2 INSTALLATION GUIDE

Item No.	Item Description
C9026	25° Gazebo Boss
C9031	Gazebo External Boss Cover
C9032	Gazebo Internal Boss Cover
C9051	Gazebo Foam Bung
C9054	Gazebo Fixing Kit
C7012	Finial



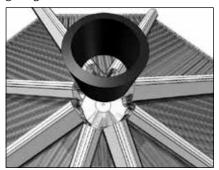
BESPOKE EDWARDIAN TRADITIONAL VICTORIAN GARDEN BUILDING

RIDGE CAPPING - OCTAGONAL GARDEN BUILDING

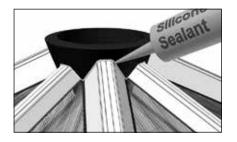
Now all the glazing bars are in position, the conservatory needs to be made watertight and sealed to prevent water ingress.

Creating a watertight seal

Bend the gazebo foam bung (C9051) into a cone and place into the void between the ends of the glazing bars. Ensure that the bung touches the end faces of all the glazing bars.

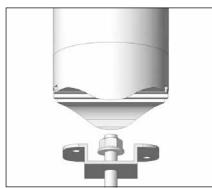


Once in position, seal the glazing and the hip and glazing bar top caps to the gazebo foam bung with a continuous bead of silicone.

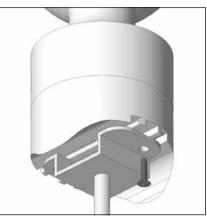


Fitting the Garden Building Covers

Slot the first flange nut into the gap between the finial fixing bracket and the finial (C7012) and screw fully into the nylon rod.



If you had to remove the bracket to insert the flange nut, re-attach the finial fixing bracket to the underside of the finial with the 4.0 x 25mm screws.



Drill a 10mm diameter hole through the centre of the Gazebo Boss (C9031) and insert the rubber grommet from the gazebo fixing kit (C9054) into the hole.



Apply a generous bead of silicone to the inside perimeter of the gazebo boss before pushing the finial into position.

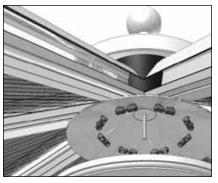


Locate the nylon rod through the hole in the top of the gazebo external boss cover (C9031) and secure in position with the

nylon flange nut fitted to the underside of the cover.



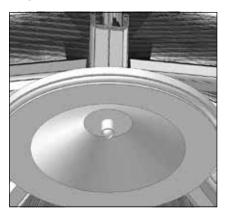
Insert the threaded bar through the hole in the aluminium gazebo boss.



Locate the gazebo internal boss cover (C9032) over the nylon rod and secure in position by fully tightening the remaining flange nut.

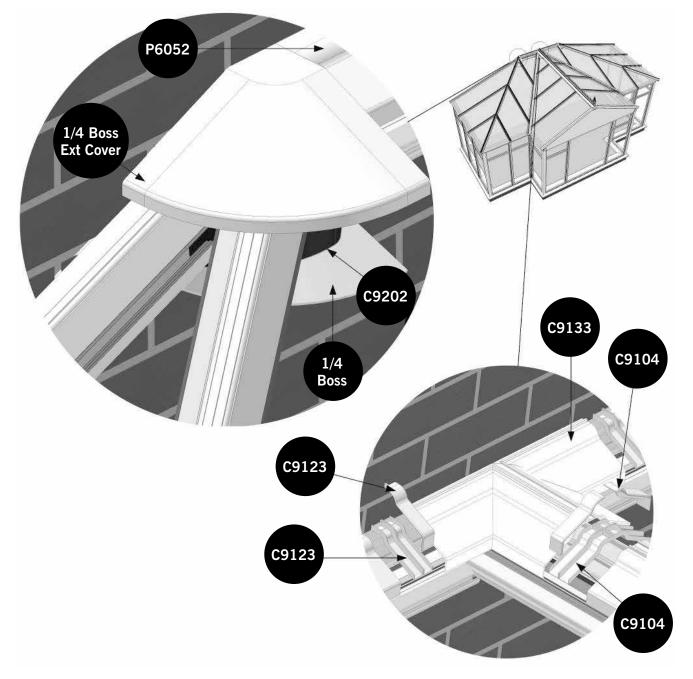
Trim the end of the nylon rod to ensure that it finishes flush with the bottom face of the flange nut.

Push fit the domed cover cap over the flange nut to finish.



QUARTER BOSS COVERS

Item No.	Item Description
P6052	Half Ridge Wall Plate Top Cover
P6027	Ridge Top Cover
	Quarter Boss Ext Cover
C9123	Wallplate Top Cap Inline Jointer (Top & Bottom)
C9133	"T" Ridge / Wallplate Top Cap Jointer (Welded)
C9104	Ridge Top Cap Inline Jointer (Top & Bottom)
C9022	Foam Bung



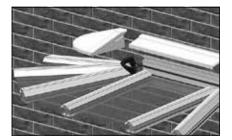
OUARTER BOSS COVERS

Fold the quarter boss end foam bung (C9202) into a partial cone and insert into the void at the position of the quarter boss. Ensure that the bung makes contact with the glazing and the end of each top cap.

Using a continuous bead of silicone, seal the joint between the top caps, glazing and foam bung.



Slide the quarter boss end covers (onto the wallplate cover (P6052) by 30mm and attach to the wallplate by locating onto the aluminium barbs and applying downward pressure.



If the quarter boss external cover fouls the hip top caps, it will be necessary to trim the skirt on the cover to suit.

Once fitted, silicone seal the joint between the boss cover and the wallplate external cover.

Locate the aluminium flashing trim into the gap between the wallplate external cover and the wall and tap into position.

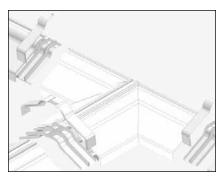
Using continuous beads of silicone, Seal the flashing section to the wall and to the wallplate external cover.



Measure the distance along the wallplate between the internal boss covers and cut the wallplate internal cover to suit.

Ridge Cover Connectors

On a style such as the "P" or "T" Shape, the external ridge cover (P6027) and wallplate covers (P6052) will require joining. The joints are connected using inline jointers (C9104 & C9123). **The C9104 jointer may require cutting in half to suit.**



THIS SECTION CAN BE USED FOR THESE STYLES (IF APPLICABLE TO YOUR SPECIFICATION).

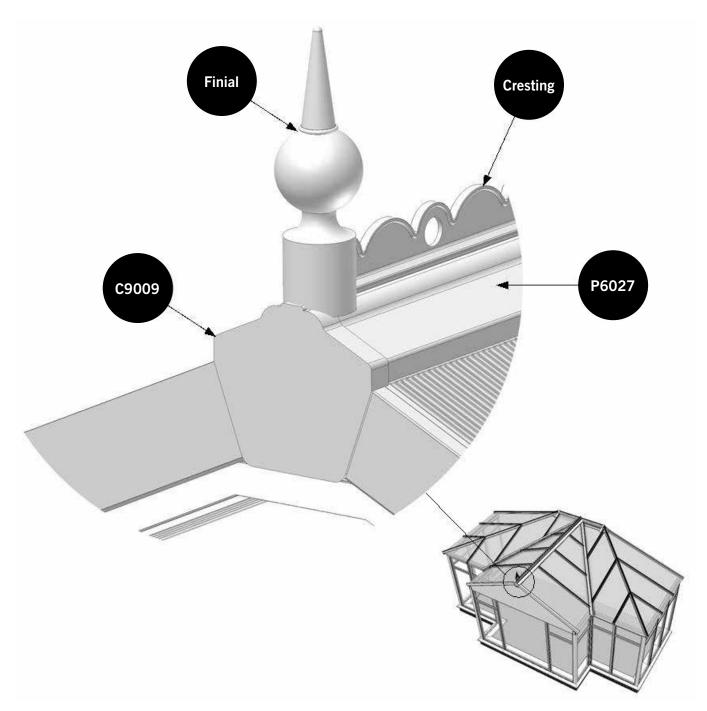
BESPOKE EDWARDIAN TRADITIONAL VICTORIAN GARDEN BUILDING

GABLE RIDGE CAPS

COMPONENTS

Item No.	Item Description
C9009	Gable End Cap
P6027	External Ridge Cover
	Finial (style may vary)
	Cresting (style may vary)

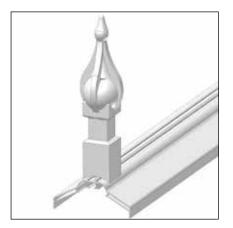
PLEASE NOTE: FINIAL AND CRESTING MAY DIFFER IN STYLE FROM THE IMAGERY SHOWN.



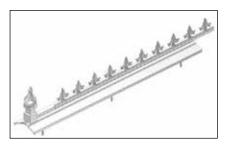
GABLE RIDGE CAPS

Prior to installing the external ridge cover (P6027) will require some assembly.

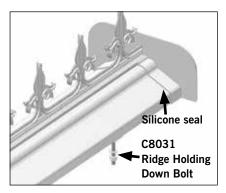
The base of the finial (C7014) will require trimming to allow it to be slide along the ridge cap. Once trimmed the finial must be fitted 25mm back from the end of the ridge cover, this will allow for the fitting of the gable end cap (C9009) later.



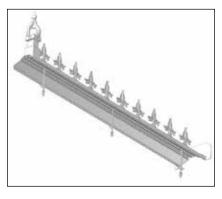
Next slide the cresting's into the channel on the ridge cover, the last cresting may require trimming to length.



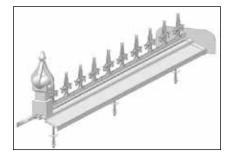
Once all the crestings are in place, the ridge flashing trim (C9010) needs to be fitted, apply silicone to the end of the ridge cover prior to fitting the flashing trim. A bead of silicone can also be applied to the joint between the flashing trim and ridge cap.



The ridge holding down bolts (C8031) must be 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.



The ridge cap assembly can now be lifted into place on the roof, the ridge cap needs to be located centrally onto the top prongs of the ridge centres.

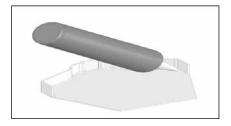


Once in place press firmly down on the ridge cover assembly so that the ridge cover locks onto the barbs of the ridge centre prongs. Support when fitting can be gained by use of conservatory ladders or by spreading your leaning weight on boards positioned across the bars. Do not put your weight directly onto the roof glazing sheets.

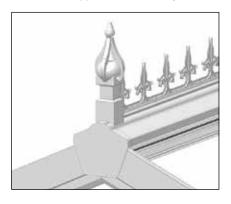


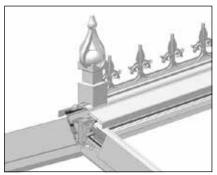
Prior to fitting the fascia cover, ensure that the fascia tape has been adhered to the starter bar bottom cap.

Once the fascia covers has been fitted, install the ridge gable end cap.



Position the gable end cap (C9009) on to the end of the ridge cover so that the return of the gable end cap sits over the ridge cover. It is recommended that a bead of silicone is applied to the mating faces.





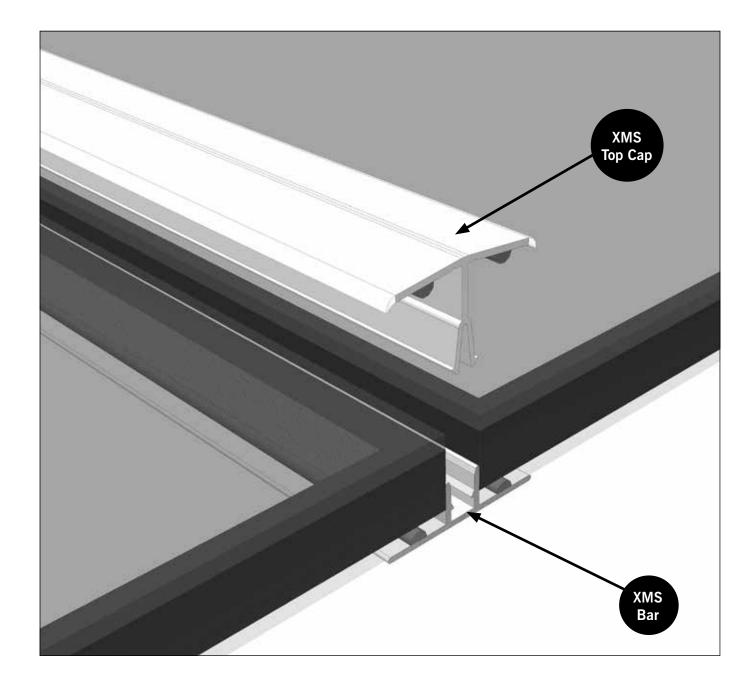
MUNTIN BARS K2 INSTALLATION GUIDE

COMPONENTS

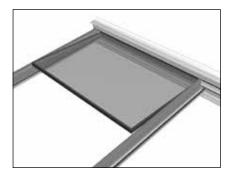
XMS

Item Description
Muntin Bar Assembly

PLEASE NOTE THAT MUNTIN BAR IS ONLY USED WHERE GLASS ROOF GLAZING SHEETS ARE TOO LARGE TO SUPPLY IN ONE PIECE.



MUNTIN BARS K2 INSTALLATION GUIDE



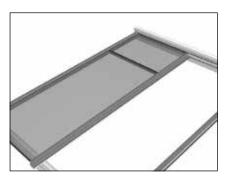
Select the upper glazing panel and push it into Wallplate or Ridge. A light solution of soapy water sprayed onto the roof gaskets will ease the glazing process.



Select the correct aluminium section of the Muntin Bar (same width as glazing panel). Place onto the glazing bars and run continuous beads of Low Modulus Neutral Cure Silicone along both sides.

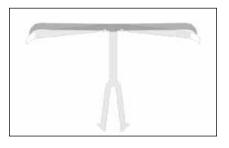
NB. Ensure that the silicone sealant is compatible with the glazing material used.

Lift the glazing panel at its lower edge and position the Muntin bar to abut it. Press the glazing panel firmly downwards along the Muntin Bar and remove any excess sealant.



Position the lower glazing panel onto the Muntin bar and again press firmly downwards along the width of the Muntin

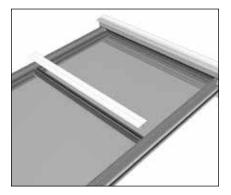
Bar. Remove any excess silicone.



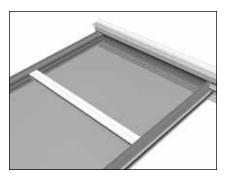
Without applying an excessive amount of force, gently bend back the wings of the Muntin Bar Top Cap until they are horizontal.



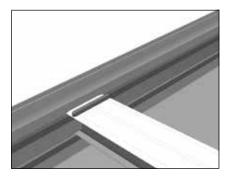
Apply continuous beads of a compatible sealant along both sides of the cap prior to installation.



Locate the Muntin Bar Top Cap in the slot in the aluminium section.



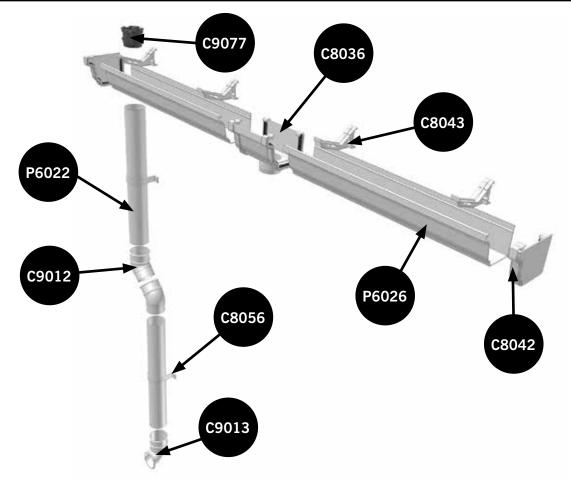
Press one end of the Top Cap firmly downwards until it engages with the aluminium connector. Work along the Top Cap ensuring that it is fully engaged. Remove any excess silicone.



It is recommended that short bead of Silicone is applied over the Muntin Bar Top Cap at the position the Glazing Bar Top Cap will cross it.

GUTTERS K2 INSTALLATION GUIDE

Item No.	Item Description
P6022	Downpipe
P6026	Gutter
C8035	Gutter Inline Union
C8036	Gutter Inline Outlet Union
C8037	135° Gutter Corner
C8039	150° Gutter Corner
C8040	90° Gutter Corner (External)
C8041	270° Gutter Corner (Internal)
C8042	Gutter Stop Ends (Pair)
C8043	Gutter Support Bracket
C8056	Downpipe Retention clip
C9011	90° Downpipe Bend
C9012	135° Downpipe Bend
C9013	Downpipe Shoe
C9077	Multi Positional Outlet



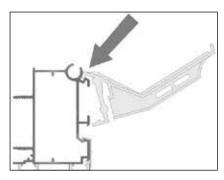
GUTTERS K2 INSTALLATION GUIDE

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.

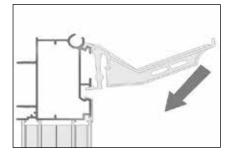
Ogee gutter support brackets (C8043) should be positioned 150mm from each corner and the remainder equally spaced.

Fitting Ogee Gutter Support Brackets

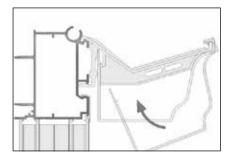
To fit the brackets, place the top of the bracket into the groove on the eaves beam.



Pull the bracket downwards until it locks into place

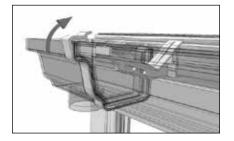


Hang the front edge of the gutter onto the bracket and rotate up the back of the bracket as shown. Fit only to the first "click", do not push all the way up.



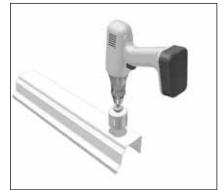
Where there are stop ends or outlets on the gutter you will need gutter joint clips to fix these in place. Offer the gutter joint

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.

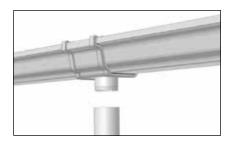
With the gutter and clips in place you can now fit the downpipes and brackets.



Prior to fitting the gutter, establish the position required for the (C9077) Multi Positional Outlet. Cut a hole through the selected gutter using a Ø60 Hole saw.



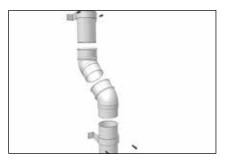
Fit the (C9077) Multi Positional Outlet into the hole and push until it bottoms out on the gutter.



Push fit the (P6022) Downpipe onto the Gutter Outlet Union or Multi Positional 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.

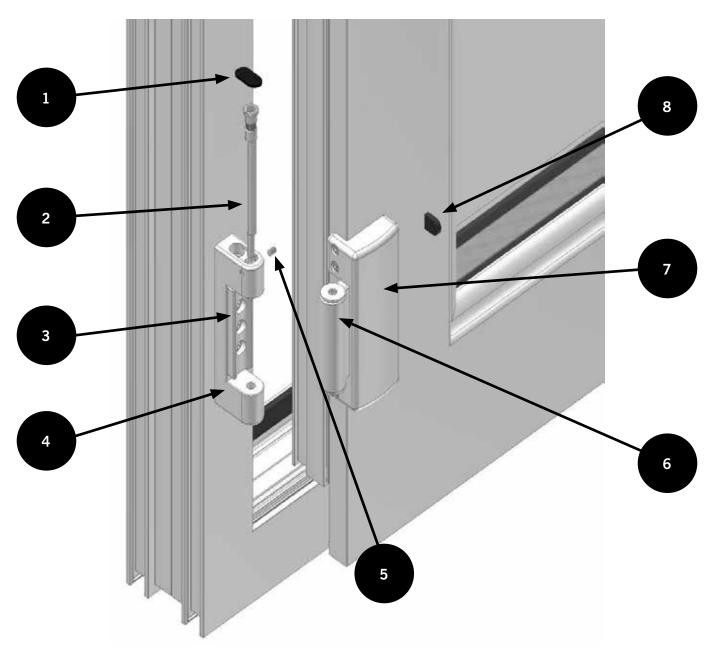


On dwarf wall models, you will need to cut the round downpipe (P6022) into two lengths and join them together by use of the downpipe bends (C9012). This is to allow the round downpipe to sweep over the 150mm sill (P106) and down the dwarf wall to the ground. The cut in the round downpipe is to produce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

DOOR FITTINGS K2 INSTALLATION GUIDE

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



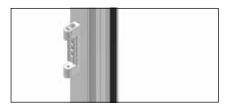
DOOR FITTINGS

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).

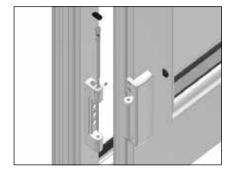
Two or three sash hinges will be fitted to the door leafs with all relevant components, except for the sash hinge adjustment cover cap.



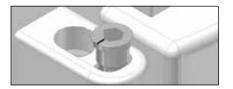
Two or three outer frame hinges and sash hinge adjusters are pre-fitted to the door outer frame. The hinge pin, hinge pin cover cap and hinge pin grub screw are supplied seperately.



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.



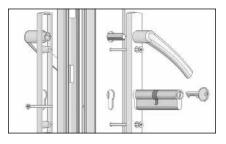
Ensure that the slot mark in the hinge pin points away from the door sash.



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.



Checking Door Overlap

Once the door sashes have been fitted, check that they are correctly positioned.



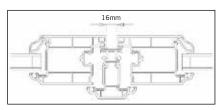
This is achieved by checking the sash overlap onto the frame. To do this, close the doors and mark the outer frame around the perimeter of the sashes with a pencil, including the meeting style fitted to the slave door.



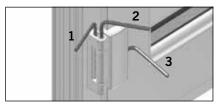
Open the door and measure the distance from the mark to the inner edge of the outer frame or meeting style. The distance should measure 8mm on all sides.

Adjust the hinges to reposition the sashes within the outer frame if necessary.

Ensure that the gap between the door sashes is parallel. When set correctly the gap between the doors will be 16mm.



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 90° 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).

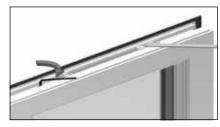


DOOR FITTINGS

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.

Toe & Heeling Device



Raising and lowering of the locking sides of the doors can be achieved by use of the 'Toe and Heeling' device. The device is located on the top of each door sash. Adjustment is made using a 2.5mm Allen Key. Turning the Allen key clockwise will lift the sash edge.

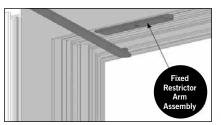
Shoot Bolt Keeps

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.

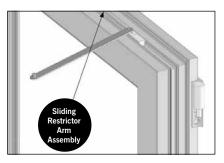


Connecting the Restrictor Arm

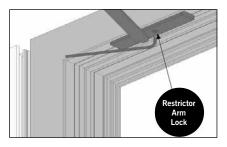
When both double doors sashes are in position the restrictor arm assemblies can be connected. These are found in two parts that are already attached to the top of both door sashes and the top inside corners of the door outer frame.



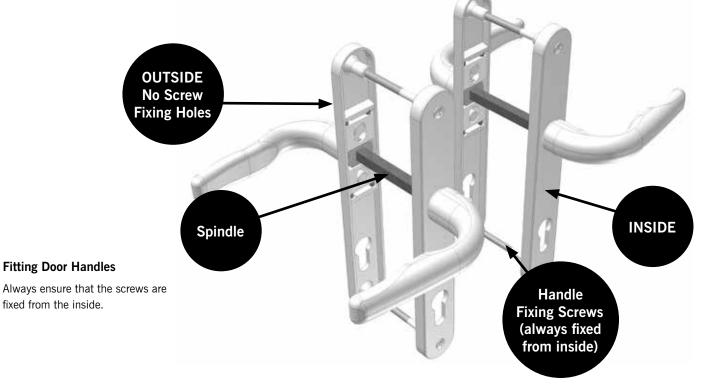
The restrictor arms are taped into position for transit. The tape should be removed prior to installation.



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.

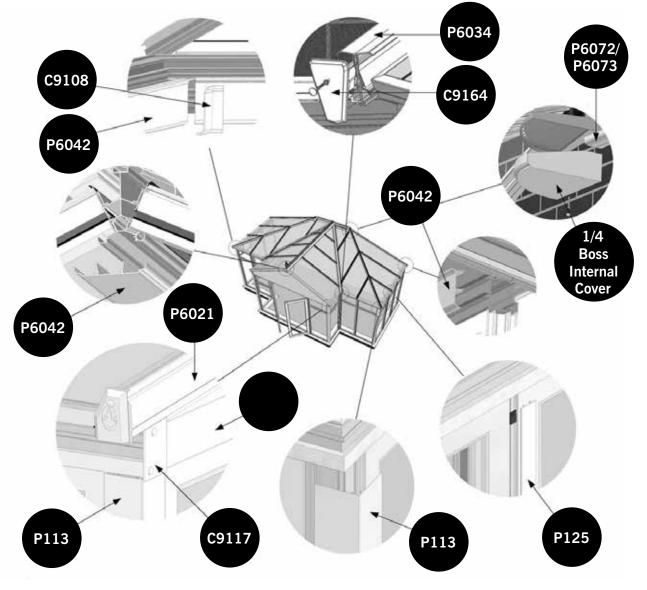


BESPOKE EDWARDIAN TRADITIONAL VICTORIAN GARDEN BUILDING

TRIMS & FINISHING - BESPOKE

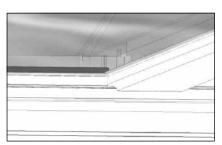
K2 INSTALLATION GUIDE

Item No.	Item Description
P6042	Eaves Beam Cover
P113	90° Corner Post Cover
P6042	Ridge Cover Internal
P125	18mm Coupling Cover
C9108	Eaves Beam 90° Cover Trim
P6034	Valley Top Cover
C9164	Valley End Cap
	Quarter Boss Internal Cover
P6072	Wallplate Internal Cover
C9117	Eaves Beam End Cap

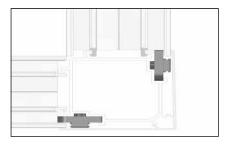


TRIMS & FINISHING - BESPOKE

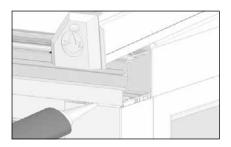
Check that you have sealed the joints in between the eaves beam closures (P6056) and the glazing bar under cladding on each panel and the glazing tape protective film has been removed.



Select the 90° corner post cover (P113) for the 90° corner post (A109), and position onto the barbs on the outer corner as shown below.



When in position silicone seal the gap between the eaves beam external trim (A5080) and the 90° corner post cover (P113).

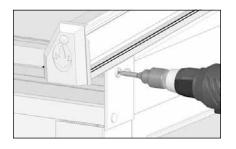


Select the eaves beam end cap (C9117) and position over the open end of the eaves beam (A5080).

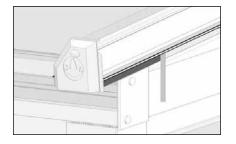


The eaves beam end cap (C9117) is fixed

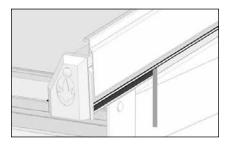
in place by use of 3.9mm x 25mm yellow screws (C8019), covered by screw cover caps (C7004).



Peel back around 100mm of the fascia tape protective film (C8008), but do not cut and remove.



Locate the hook at the top of the fascia trim (P6021) over the up-right long leg on the starter bar top cap ensuring that the inside face of the fascia trim (P6021) does not make contact with the tape at this stage.

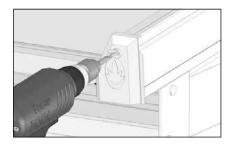


Ensure that the front end of the fascia trim (P6021) is in line with the front face of the starter bar, when satisfied that it is correctly positioned, press firmly on the fascia trim to create a strong bond with the fascia tape.

Slowly pull down on the glazing tape protective film which you peeled back earlier while you press firmly on the fascia trim until all the glazing tape protective film is removed along the full length of the tape.

When the fascia trim is attached, fix the bar end cap (C9036) to the starter bar

using the 3.9 x 19mm yellow screws (C8019), the top screw must be used with a cup washer and finished of with a push-on cover



Select the 18mm coupling covers (P125) and position onto the recesses on the sides of each quarter turn button (C105) positioned on the inline couplings (A104) and press home.



Repeat for each set of 18mm inline couplings (A104) including the ones on the inside.



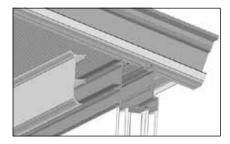
Select the eaves beam cover (P6042), position onto the barbs on the eaves beam (A5080) and press home.



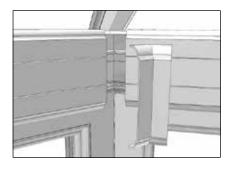
If your roof style has a box gutter, do not locate the eaves beam cover fully into

TRIMS & FINISHING - BESPOKE

position along the box gutter length.

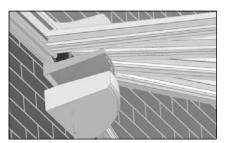


Select the eaves beam cover trim (C9108), and push home into the corner gaps between the eaves beam cover (P6042).



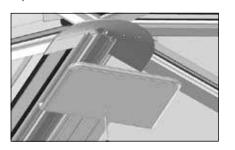
Boss End Covers

Position the quarter boss internal cover and fix with a self tapping screw and cover cap.

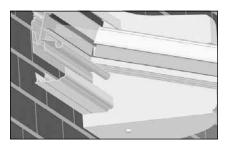


Offer up the boss end cover internal to the boss end. The boss end cover internal is fitted so the up-stand fits tight against the underside of the bars.

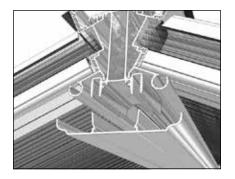
Ensure that the boss end is completely covered and fix in place the boss end cover using a fixing screw, washer and cover cap.



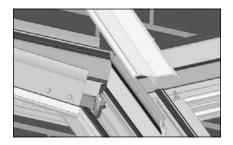
Select the wall plate cover internal and push fit on to the barbs on the under side of the wallplate and press home.



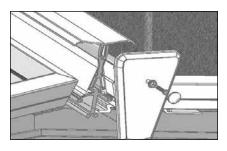
Select the ridge cover internal (P6042) and position over the 'feet' of the ridge centres, Push fit to hold secure.



Locate the valley cover (P6034) push home. Ensure that it is pushed as far up the valley as possible.

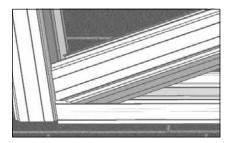


Fit the valley end cap (C9164) on the end of the valley as you would a bar end cap as previously described in 'Bar Caps Installation'.



Finally, push fit the internal valley cover (P6042) on to the underside of the valley

wing scribing them to make them fit into the ridge internal trim and the wall plate under cladding.

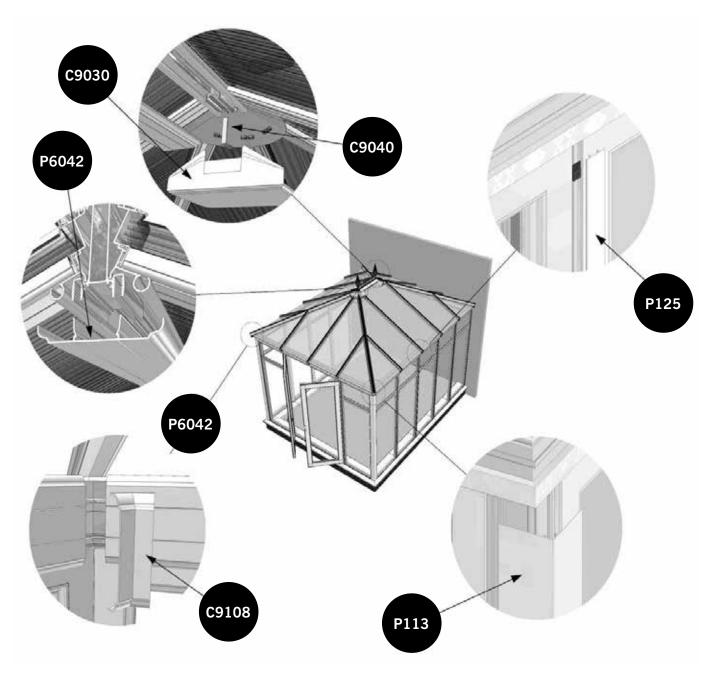


THIS SECTION CAN BE USED FOR THESE STYLES (IF APPLICABLE TO YOUR SPECIFICATION).

BESPOKE EDWARDIAN TRADITIONAL VICTORIAN GARDEN BUILDING

TRIMS & FINISHING - EDWARDIAN & SQUARE GARDEN BUILDING **K2 INSTALLATION GUIDE**

P6042Eaves Beam CoverP11390° Corner Post Cover	
P6042 Ridge Cover Internal	
P125 18mm Coupling Cover	
C9030 Square Internal Boss Cover	
C9108 Eaves Beam 90° Cover Trim	
C9040 End Boss Bracket	



THIS SECTION CAN BE USED FOR THESE STYLES (IF APPLICABLE TO YOUR SPECIFICATION).

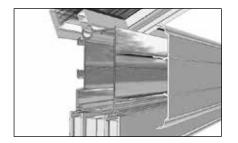
BESPOKE EDWARDIAN TRADITIONAL VICTORIAN GARDEN BUILDING

TRIMS & FINISHING - EDWARDIAN & SQUARE GARDEN BUILDING

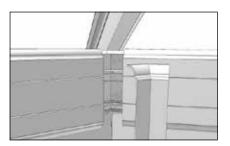
Check that you have sealed the joints in between the eaves beam closure (P6056) and the glazing bar undercladding on each window and that the glazing tape protective film has been removed.



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



Select the eaves beam 90° joint cover (C9111) and push home into the corner gaps between the eaves beam cover.

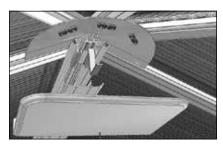


Prior to installing the square internal boss cover, it may need to be trimmed to the correct pitch of the roof

Offer the square internal boss cover (C9030) up to the Edwardian boss end. The square internal boss end cover is positioned so it's upstand fits tight against the rear face of the end boss (C9170).

Use the M4 x 25mm self tapping screw to fix the square internal boss cover to the 'L' shaped bracket attached to the end of the aluminium ridge section.

The square internal cap should be a tight fit under the georgian glazing bar hips on each corner. Push fit the plastic screw cover cap in place.

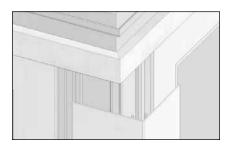


Select the ridge internal cover (P6042) and position beneath the serrated prongs of the aluminium ridge spacers. Push the internal ridge capping into position until it touches the bottom of the glazing bars on each side of the conservatory roof.



Select the 90° corner post cover (P114) for the 90° corner post (A109).

Position the 90° corner post cover (P114) over the barbs at the bottom of the 90° corner post (A109) and by working upwards press home.



Select the 18mm coupling covers (P125) and position onto the recesses on the sides of each quarter turn button (C105) positioned on the 18mm inline couplings (A104) and press home.



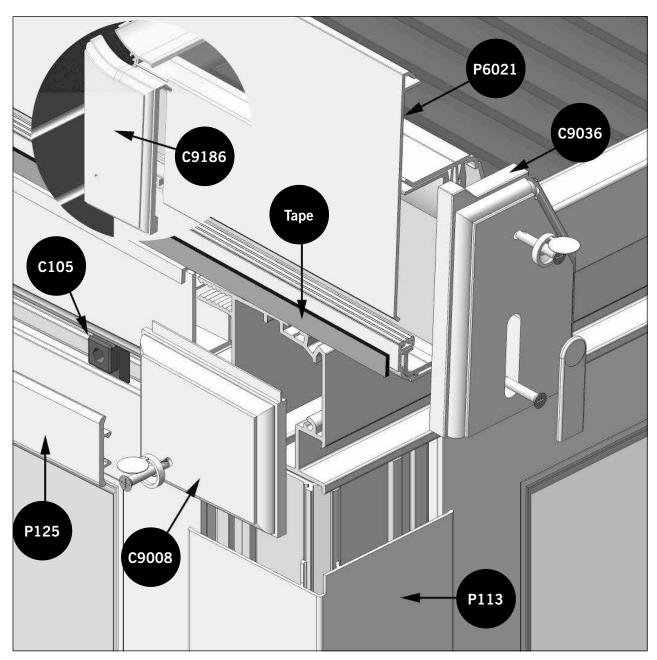
Repeat for each set of 18mm inline couplings including the ones on the inside.



Fit the handles to all opening sashes using the 5 x 45mm handle screw (SC035).

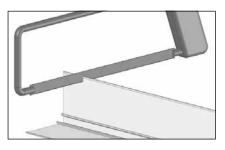
TRIMS & FINISHING - TRADITIONAL K2 INSTALLATION GUIDE

Item No.	Item Description
C9036	Starter Bar End Cap
P113	90° Corner Post Cover
P125	18mm Coupling Cover
P6021	Fascia Trim
C9036	Wallplate End Cap
	2mm Glazing Tape
C9008	Eaves Beam End Cap

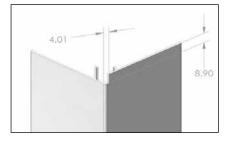


TRIMS & FINISHING - TRADITIONAL

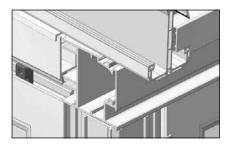
Select the 90° corner post cover (P113) and cut out a slot in the top as shown below by use of a fine tooth saw.



The slot should be 4mm deep and 8mm in length as shown below.



Push the 90° corner post cover (P113) onto the leg detail of the 90° corner post (P113) and slide upwards until the front meets the eaves beam (A5030).



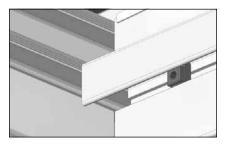
Select the 18mm coupling covers (P125)

And position over the 2 part connectors (A112) between the side panels and the firring.

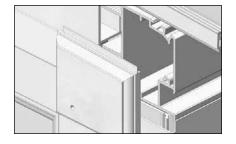
Push fit so that the leg detail on the 18mm coupling covers (P125) inter lock with the detail on the quarter turn buttons (C105).



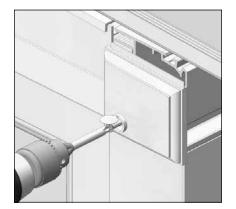
Repeat for the 18mm coupling covers (P125) which connect to the 2 part connectors (A112) on the inside of the conservatory.



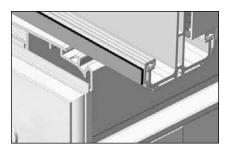
Select the eaves beam end cap (C9008) and position over the open end of the eaves beam (A5030).



Fix in place by use of the 4 x 25mm screws (C8019) ensuring that the screw cover caps (C7004) are used.

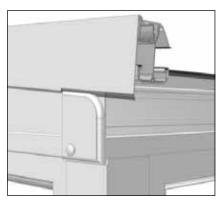


Apply the 2mm glazing tape to the outside edge of the starter bar bottom cap.



Fascia End Trim

If your roof has been supplied with Standard Eaves Beam (A5080), Standard Glazing Bars and the Fascia Trim (P6021), then it may be necessary to trim the Fascia to allow it to sit around the Eaves Beam End Cap prior to installation.



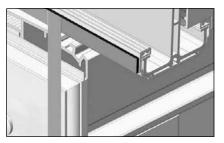


Roof Pitch° AB

5	7133	
10	7132	
15	7109	
20	. 7 96	
25	788	
30	. 7 83	

Peel back around 100mm of the tape protective film on the tape.

Do not cut and remove.

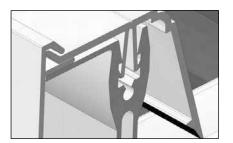


TRIMS & FINISHING - TRADITIONAL

Locate the hook at the top of the facia trim (P6021) over the up-right long leg on the starter bar top cap ensuring that the inside face of the facia trim (P6021) does not make contact with the adhesive tape at this stage.

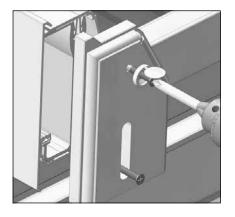


Ensure that the front end of the facia trim (P6021) is in line with the front face of the starter bar and when satisfied that the facia trim (P6021) is correctly positioned, remove the protective tape and press firmly on the facia trim to create a bond with the adhesive tape.

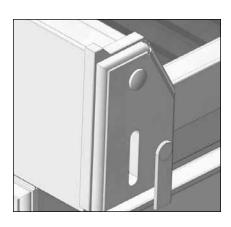


The facia trim (P6021) should be flush with the end of the starter bar.

When the facia trim (P6021) is attached, fix the starter bar end cap (C9036) to the end of the starter bar by using the 4 x 25mm fixing screws (C8019).



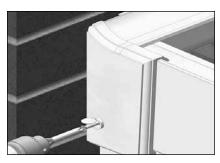
Locate the screw cover cap for the bar end cap (C9038) over the elongated screw port.



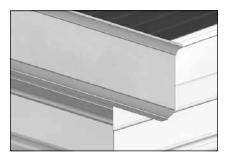
Locate the wallplate end cap (C9186) over the end face of the wallplate (A5127).



Fix in position with the 4 x 25mm fixing (C8019) screws provided. Ensure that the end cap (C9186) has hooked over the fascia trim prior to fixing securely.



Select the eaves beam cover (P6032), position onto the barbs on the eaves beam (A5030) and press home.



Select the 18mm coupling covers (P125) and position onto the recesses on the sides of each quarter turn button (C105) positioned on the 18mm inline couplings (A104) and press home. A gentle tap with a rubber faced mallet may be required.



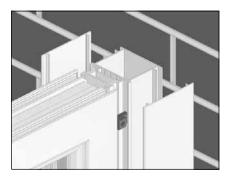
Repeat for each set of 18mm inline couplings (A104) including the ones on the inside.



Fit the handles to all opening sashes using the 5×35 mm handle screws.

Fitting 'Wall End Out' 76mm Covers

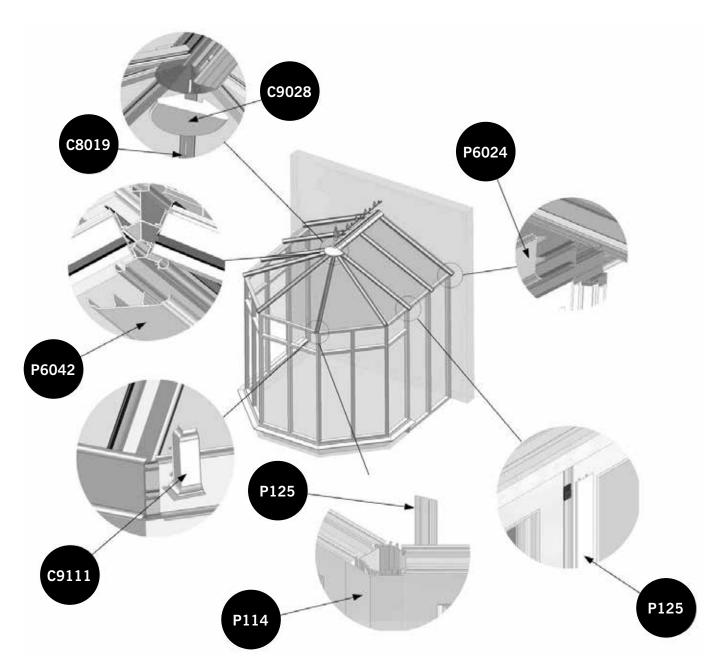
If your conservatory is a 'wall end out' style you will need to fit the 76mm covers (P112) to the 76mm connectors (A106/ A112). These covers are attached by push fitting against the barbs on the 76mm connectors as shown in the image below. A gentle tap with a rubber faced mallet may be required.



Trimming of the internal covers (P125) may be required.

TRIMS & FINISHING - VICTORIAN K2 INSTALLATION GUIDE

Item No.	Item Description
P6042	Eaves Beam Cover
P114	135° Corner Post Cover
P6042	Ridge Cover Internal
P125	18mm Coupling Cover
C9028	Victorian Boss End Cover Internal
C9111	Eaves Beam 135° Cover Trim
C8019	3.9 x 25mm Gold Fixing Screw / Cap & Washer

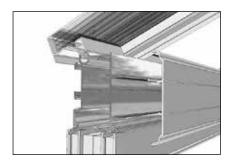


TRIMS & FINISHING - VICTORIAN

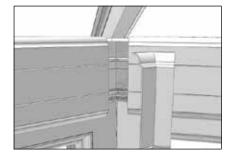
Check that you have sealed the joints in between the glazing support trims and the bar under cladding on each panel and the glazing tape protective film has been removed.



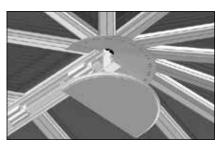
Select the eaves beam cover (P6042), position onto the barbs on the eaves beam (A5080) and press home.



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.

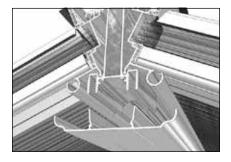


Offer the boss end internal cover (C9028) up to the boss end. The boss end cover internal (C9028) is positioned so that the up stand fits tight against the boss end and the edge against the hip bars.

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.

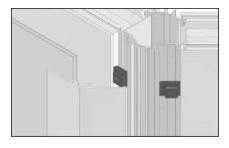
Push fit the cover cap over the screw and cap washer to finish.

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).

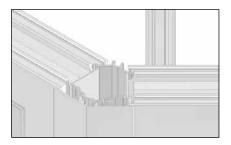
Position the 135° corner post cover (P113) over the barbs at the bottom of the 135° corner post (A110) and by working upwards press home.



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.



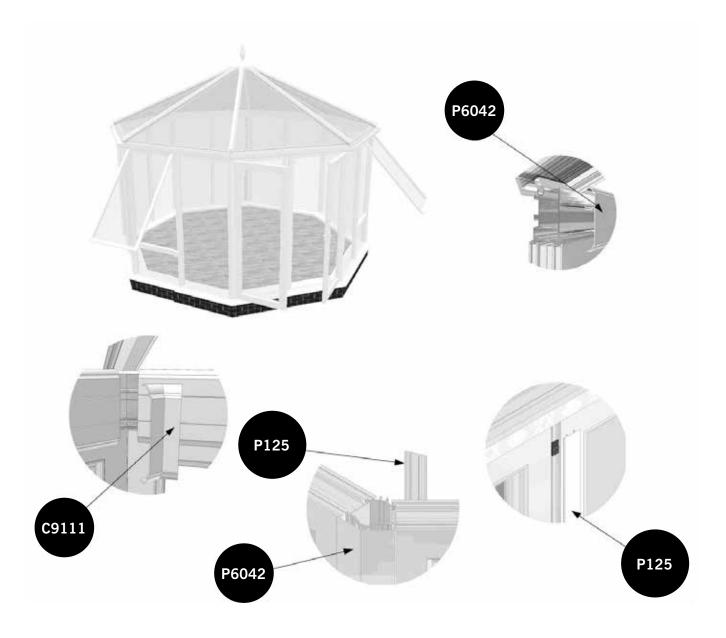
Fit the handles to all opening sashes using the 5 x 20mm handle screw (RS11).

THIS SECTION CAN BE USED FOR THESE STYLES (IF APPLICABLE TO YOUR SPECIFICATION).

BESPOKE EDWARDIAN TRADITIONAL VICTORIAN GARDEN BUILDING

TRIMS & FINISHING - OCTAGONAL GARDEN BUILDING **K2 INSTALLATION GUIDE**

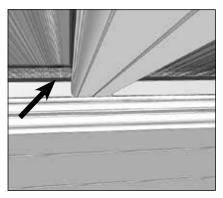
Item No.	Item Description
P6042	Eaves Beam Cover
P114	135° Corner Post Cover
P125	18mm Coupling Cover
C9111	Eaves Beam 135° Cover Trim



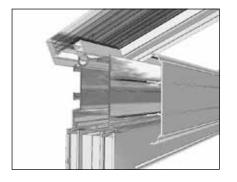
BESPOKE EDWARDIAN TRADITIONAL VICTORIAN GARDEN BUILDING

TRIMS & FINISHING - OCTAGONAL GARDEN BUILDING

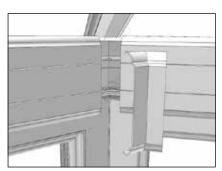
Check that you have sealed the joints inbetween the eaves beam closure (P6056) and the glazing bar under cladding on each window, and that the glazing tape protective film has been removed.



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



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



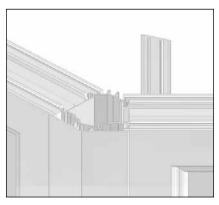
Select the 135° corner post cover (P113) for the 135° corner post (A110).

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



The 18mm coupling covers (P125) will require trimming to fit underneath the external eaves beam trim (P6024) and the eaves beam covers (P6042).

Select an 18mm coupling cover (P125) and position onto the barbs on the inside of the 135° corner post (A110) and push firmly to fit.



Select the 18mm coupling covers (P125) 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 45mm handle screw (SC035).

LUBRICATION & CLEANING

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

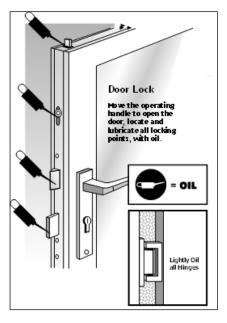
We recommend that once every 3-6 months parts should be oiled or greased. Any acid-free light machine oil will provide reasonable protection for metal fittings. Penetrating oil and similar spray-on lubricants are not recommended.

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.

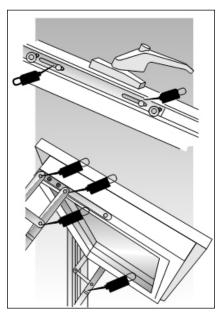
Some areas have a higher level of industrial pollution or natural corrosive air content, eg: salty atmosphere in coastal regions.

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.

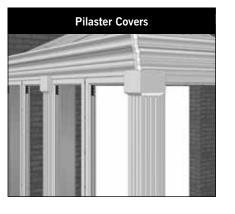
Your conservatory in PVC-U will never rot, need painting or discolour BUT it will need cleaning.



CAPELLA SYSTEM: INTRODUCTION

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

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

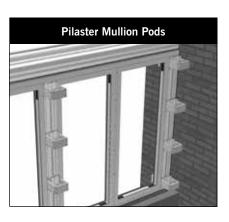


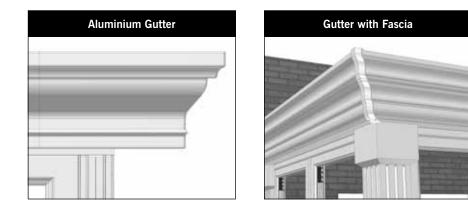


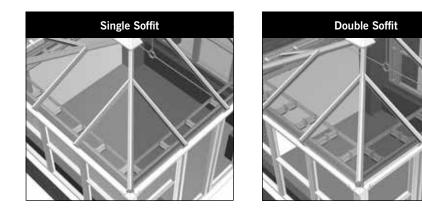


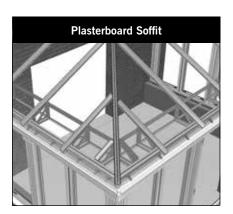
XMP1-015 Mullion Pod (x4 per Mullion)

K2-XDPR1 Pilaster Mullion (x2) K2-XDPR2 Mullion Connector (x2)









CAPELLA SYSTEM: PILASTERS, MULLIONS & MULLION PODS

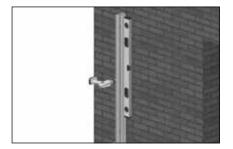
Setting position for Pilaster Mullion (wall)



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



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



Position the pilaster mullion onto the cill. Ensure that it is parallel with the vertical line previously marked when fitting the cill. Mark & drill and attached the pilaster to the house wall. Important: Ensure the Pilaster Mullion is plumb prior to fixing, packing may be required.

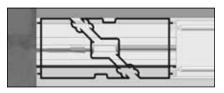
Identify the first window and the opposing Pilaster Mullion for installation.



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

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

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



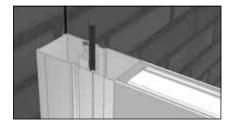
Important: Check the orientation of the Pilaster Mullion prior to fixing.



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

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

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



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

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

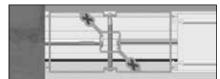
A light solution of soapy water can be used to assist with sliding Connectors.



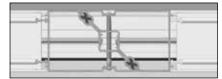
Finally, screw fix 4.8mm x 50mm (SH52) the pilaster mullions together through the holes previously drilled in the fixing channels on both faces.

CAPELLA SYSTEM: PILASTERS, MULLIONS & MULLION PODS

Starter Pilaster Mullion



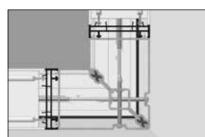
Inline Pilaster Mullion



Inline Pilaster Mullion (Double Doors)

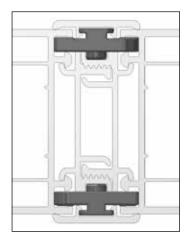


90° Corner Pilaster



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

Adjustable Inline Connector

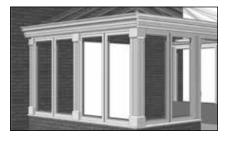


Continue to fit all pilasters in the same method as described previously. Other Inline coupling methods may have been designed within the conservatory (refer to Installation Guide on fitting Adjustable Inline Connectors).

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

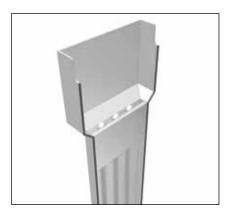
Once all fascia gutter sections and corner covers have been installed, proceed to fit the pilaster mullion covers.

Installing Pilaster Mullion Covers

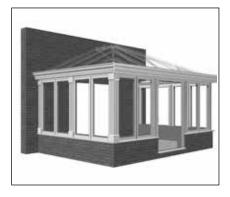




On the inside face of the pilaster mullions, mark and drill (6 \emptyset) to match the centre of each timber insert, ensure the pilot holes line up with the die lines.

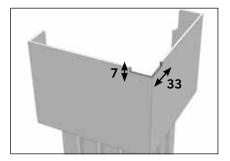


Prior to installing the Pilaster Mullion Cover (K2-XDP1 Inline), apply a bead of silicone down each internal reveal. Once fitted, remove and clean any excess sealant.



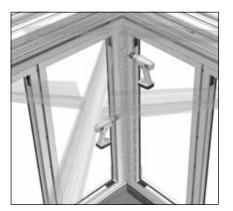


Centrally locate the Pilaster Cover (K2-XDPR1) with the Mullion and fix from the inside using 2x M5 x 90mm Woodscrew screws (XM590WS) per timber insert.



CAPELLA SYSTEM: PILASTERS, MULLIONS & MULLION PODS **K2 INSTALLATION GUIDE**

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



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

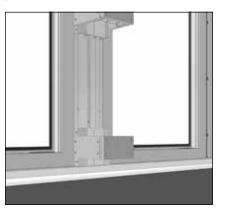
Prior to installing mullion pods (XMP1-015), it is recommended that an Eaves Soffit is installed first.

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

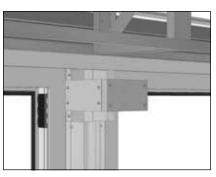
Installing Mullion Pods



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



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



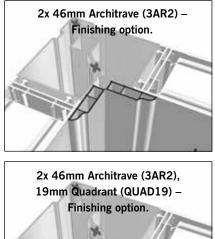
Position the last pod with the aluminium part flush with the top of the windows (this will allow clearance when fitting plasterboards (not supplied).

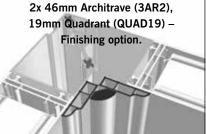
Secure each pod to the pilaster mullions using 4x 4.2mm x 19mm Screws (XM420P).



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

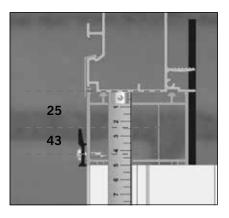
Finishing off Internal 90° Pilasters



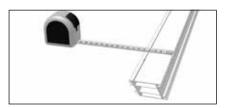


CAPELLA SYSTEM: ALUMINIUM FASCIA ON PVC-U GUTTER **K2 INSTALLATION GUIDE**

Eaves, 50mm Extension & Facia Clip



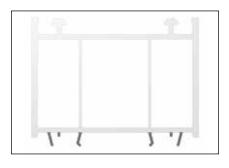
Identify the 50mm Extension's (5EX73), on the external face, measure 43mm down (25mm to top of Fascia Clip) and mark full length (fixing location for the Aluminium Fascia Clip (XGUTFC).



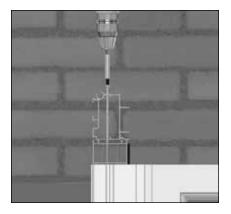
Identify the Aluminium Fascia Clips. Prior to installation mark and drill (4Ø) at approximately 50mm from each end and 600mm centres.



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



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



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

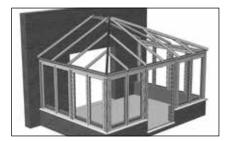
Important: Refer to the Eaves Beam section of this guide for further information on jointing and sealing of the Eaves Beams.



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

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

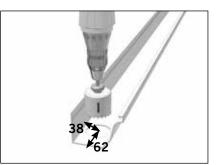
Proceed and install the conservatory roof, refering to the appropriate sections of this guide.





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

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

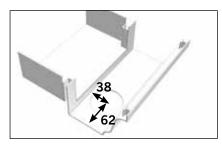


CAPELLA SYSTEM: ALUMINIUM FASCIA ON PVC-U GUTTER

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

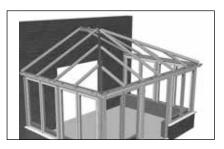


Fit the (C9077) multi positional outlet into the hole and push until it bottoms out on the gutter.

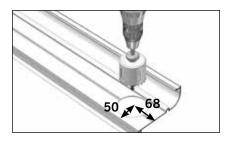


If the conservatory has been designed with a box gutter then prior to fitting, establish the position required for the (C9077) multi positional outlet in the box gutter adaptor (C9441). Mark 38mm in and 62mm along the base, cut a hole through the selected gutter using a 60Ø Hole saw.

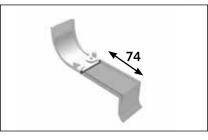
Refer to your "Complete Conservatory Installation Guide" for fitting the PVC Gutter.



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

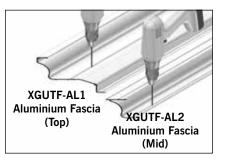


Identify the (XGUTF-AL3) bottom Aluminium Fascia, mark 50mm in and 68mm along the base, cut a hole through the selected gutter using a 75Ø hole saw.



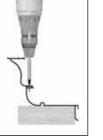
When installing next to any downpipe/ outlets it is necessary to cut down any (X180E) by 74mm prior to fitting.

Assembling Top, Mid and Lower Aluminium Fascia



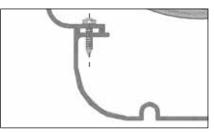
Prior to installation, select the Aluminium Fascia sections for each facet of the conservatory. These sections require drilling with 4Ø pilot hole at 100mm from each end and at approximately 500mm centres.

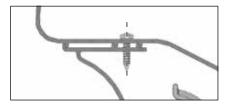
Note: Aluminium Fascia – (XGUTF-AL1) length will have been reduced by 6mm to accommodate the end plate and fixings.





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





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

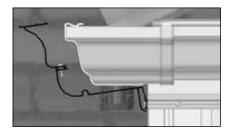


Select and screw fix the end plate (XGUTF-PLT) to the corresponding Aluminium Fascia –top (XGUTF-AL1) using 4.8mm x 19mm Stainless Steel Screws (XM4819SSP). Once fixed apply a bead of silicone to the inside.

CAPELLA SYSTEM: ALUMINIUM FASCIA ON PVC-U GUTTER

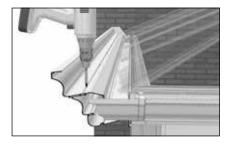


Prior to fitting the Fascia Gutter - bottom (XGUTF-AL3), apply a bead of silicone along the top of the entire Aluminium Fascia Clip (XGUTFC) on each side.

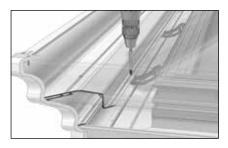


Position the assembled Aluminium Fascia (Mid and Bottom) below the PVC-u gutter and hook over the Aluminium Fascia Clip (XGUTFC).

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

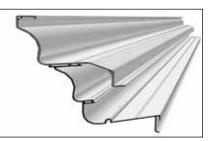


Next, install the fascia gutter top section to the relevant side, through the pilot holes previously drilled.

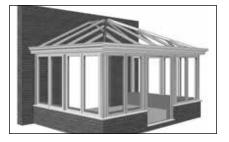


Working along each side, screw the fascia gutter top section (XGUTF-AL1) to each of the fascia gutter brackets (C9569) using 2x 4.8mm x 19mm stainless steel screws (XM4819SSP). The screws should be

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



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



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



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



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



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



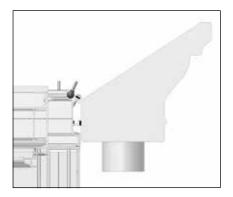
Mitred joints will be finished off with angled covers, 90° external fascia corner cover (X90E) or 135° external fascia corner cover (X135E). Fit and fix as previously described.

CAPELLA SYSTEM: K2 ALUMINIUM GUTTER

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



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



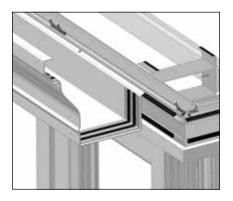
Place the guttering into position so that is sits tightly against the pivot channel of the Eaves Beam. Check the gutter for being level and square to the Eaves Beam.



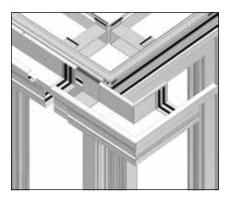
Once the guttering is in position, secure it using the Gutter Fixing Screws (C9479) 50mm from each end and at approximately 450mm centres.

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

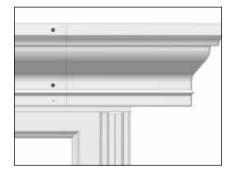
tape approximately 15mm into the gutter and the second leaving a 10mm gap between the two.



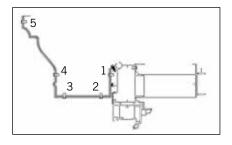
Once the tapes are pressed firmly into position, apply a liberal amount of silicone between the Butyl Tapes so it sits proud (no excess silicone is to be removed at this point).



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



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



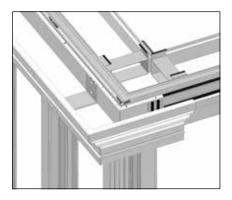
When riveting the back face of the gutter, ensure that it is riveted from inside.

It is important the rivets are installed in the order mindicated (from 1 through to 5).

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



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

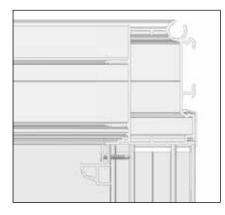


Working around the orangery, fix each joint using the same method. Clean off any excess silicone once permanently fixed together.

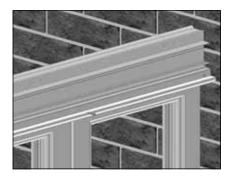
Finish the installation by applying touch up paint (C9484) to each rivet head.

CAPELLA SYSTEM: STANDARD INTERNAL SOFFIT

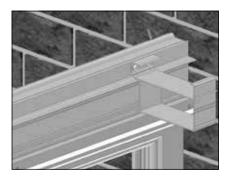
Fix the "Capella" soffit trim (P6095) tight to the underside of the eaves beam and screw fix (C9489) to the inside face of the window (50mm from the ends and at approximately 450mm centres), ensuring that 1mm packers are placed between the trim and windows. It is recommended that the soffit trim should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



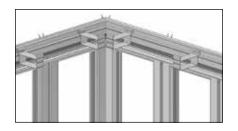
Fit the "Capella" soffit trims around the internal perimeter of the orangery (ensuring that the mitres are tightly together in the corners).



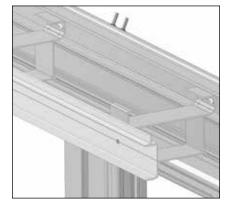
If not already fitted, fix the "Capella" soffit bracket (C9463) to the pre-drilled holes in the upper face of the Eaves Beam using the pop rivets supplied (C9480).



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



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



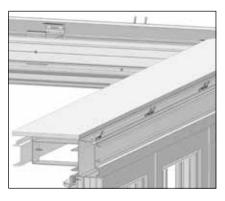
Continue to fix the adaptors around the internal perimeter, ensuring that the mitres are tightly together in the corners.



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



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

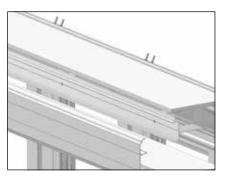


Fit the upper soffit claddings around the internal perimeter of the orangery, ensuring that the mitres are tightly together in the corners.



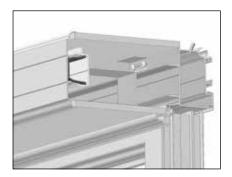
Clip the Eaves Beam packers (C9118) into position in the Eaves Beam Cover Adaptor (A5148) at approx 600mm centres.

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

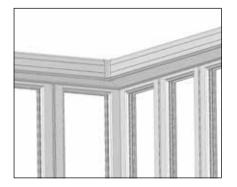


Check along the length of the Internal Eaves Beam Cover (P6042) to ensure that it has correctly located into the adaptor (A5148), if any adjustments are required, gently squeeze the top and bottom of the Eaves Beam Cover (P6042) and place in position before releasing.

CAPELLA SYSTEM: STANDARD INTERNAL SOFFIT

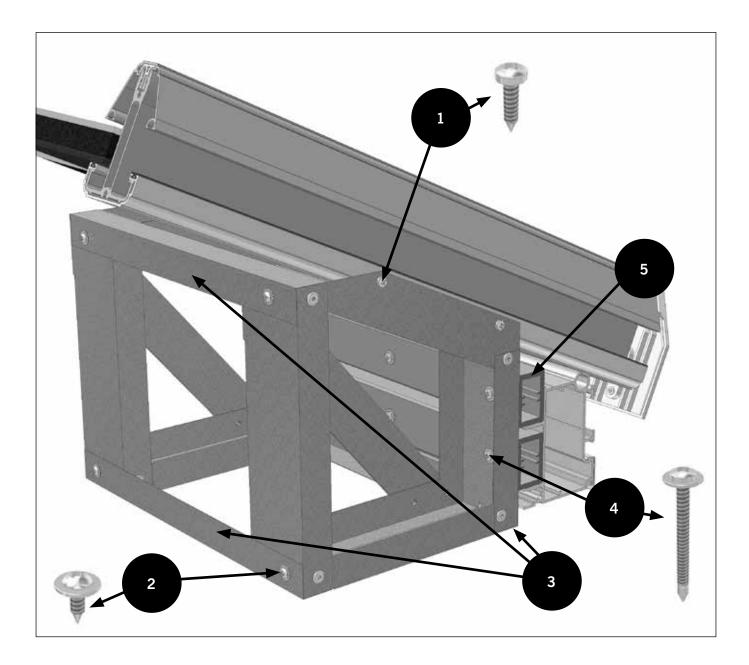


When fitting the Eaves Beam Cover (P6042) ensure that a gap is present in the corners to allow fitting of the Internal Eaves Cover Joint Trim (C9108). Push fit the joint trims into place.



CAPELLA SYSTEM: PLASTERBOARD INTERNAL SOFFIT **K2 INSTALLATION GUIDE**

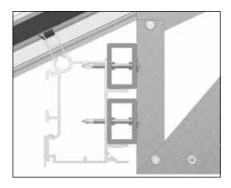
Item No.	Item Description
1	C8018 Frame Fixing Screw
2	C9545 Angle & Strap Fixing Screw
3	25mm x 25mm Fixing Angle
4	C9509 Frame Fixing Screw
5	C9565 Soffit Packer



CAPELLA SYSTEM: PLASTERBOARD INTERNAL SOFFIT



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



Soffit Packer fixing position

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



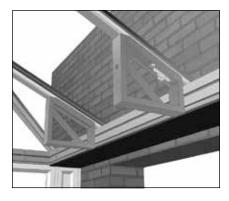
(If not already fitted) Select and position Soffit Packer (C9565) onto the upper Eaves Beam leg, screw fix (C9509) approximately 200mm in from each end. Continue to fit packers around the internal perimeter.



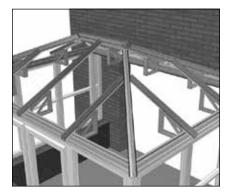
Once all Soffit Packers have been fitted, continue and fit soffit frames.



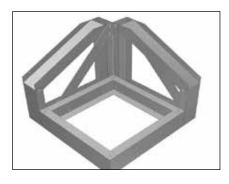
Push Soffit Frame tight against glazing bar and Soffit Packer, ensuring that the frame wraps around the bar. Screw fix (C8018) through frame up-stand into the side of the bar (on both sides. Fix through the face of the Soffit Frame, Soffit Packer and into the Eaves Beam.



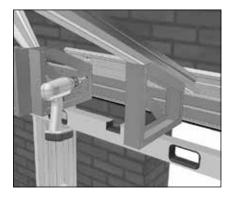
Soffit Frames fitted at Tie Bar positions have been prepared to allow for the bracket and rod to pass through.



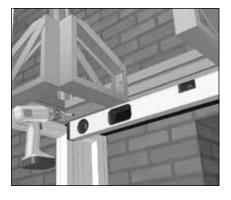
Work around the conservatory fitting all Soffit Frames to all Transom and Jack Rafters only.



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



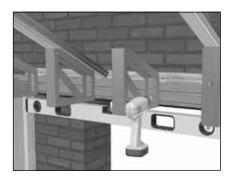
Push Soffit Corner Frame tight into the corner and against the Soffit Packers, ensuring the frame is level. Screw fix (C9509) through the face of the Corner Soffit Frame, Soffit Packer and into the Eaves Beam.



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

Continue to install all corner frames.

CAPELLA SYSTEM: PLASTERBOARD INTERNAL SOFFIT



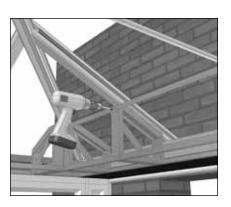
If supplied, install the intermediate Soffit Frames, position centrally to each glazing aperture (if down lights are to be installed, offset the Soffit bracket to suit), these are screw fixed to the Eaves Beam Packers only.



25mm x 25mm Angle requires fixing to the internal perimeter edge of each Soffit Frame using screw fixing (C9545) (this may require cutting to size, using Tin Snips).



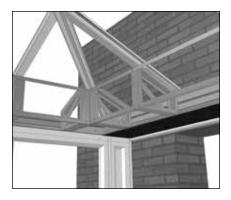
25mm x 25mm Angle requires fixing to the external perimeter edge of each Soffit Frame using screw fixing (C9545) (this may require cutting to size using Tin Snips).



25mm x 25mm Angle requires fixing to the internal upper perimeter edge of each Soffit Frame using screw fixing (C9545) (this may require cutting to size using Tin Snips).



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



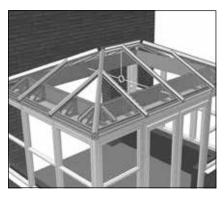
Once all frames are fitted proceed with the installation of the Tie Bars, Capella Gutter (before glazing) and glazing of the roof.



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



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



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