VICTORIAN OAKHAM

ALTON
Cedar Greenhouses

Dwarf Wall Instruction Manual

Includes Models: 10x6, 10x8, 10x10 & 10x12

Made in the United Kingdom

Please read all instructions before proceeding

10' Wide Victorian Cedar Greenhouse Assembly Instructions

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Introduction

Thank you for purchasing your new Alton greenhouse. We recommend you familiarise yourself with the instructions and read all safety information before you commence assembly. This instruction manual is also available online at www.greenhousepeople.co.uk in the technical help section should you need to reprint it. Should you require any additional advice you can always call us on 01782 385409.

Safety Warning

- Glass, aluminium and timber can potentially cause injury. Please ensure you wear protective goggles, gloves, headgear and suitable footwear when assembling and glazing the building.
- Please remember that glass is fragile and should be handled with extreme care. Always clear up and dispose of any breakages immediately.
- Do not assemble the greenhouse in high winds.
- For safety reasons and ease of assembly, we recommend that this greenhouse is assembled by a minimum of two people.
- Please clear all lying snow from the greenhouse roof as it can cause the roof to buckle or collapse.

Site Preparation

- When selecting a site for your greenhouse, it is vital that you choose as flat and level an area as possible.
- A concrete or slabbed base will provide the most solid foundation for your greenhouse. A slabbed base would be our preferred choice as this helps with drainage.
- Avoid placing your greenhouse under trees or in other vulnerable locations.
- To minimise the risk of wind damage, try to select as sheltered a site as possible, e.g. beside a hedgerow or garden fence.

Additional Considerations

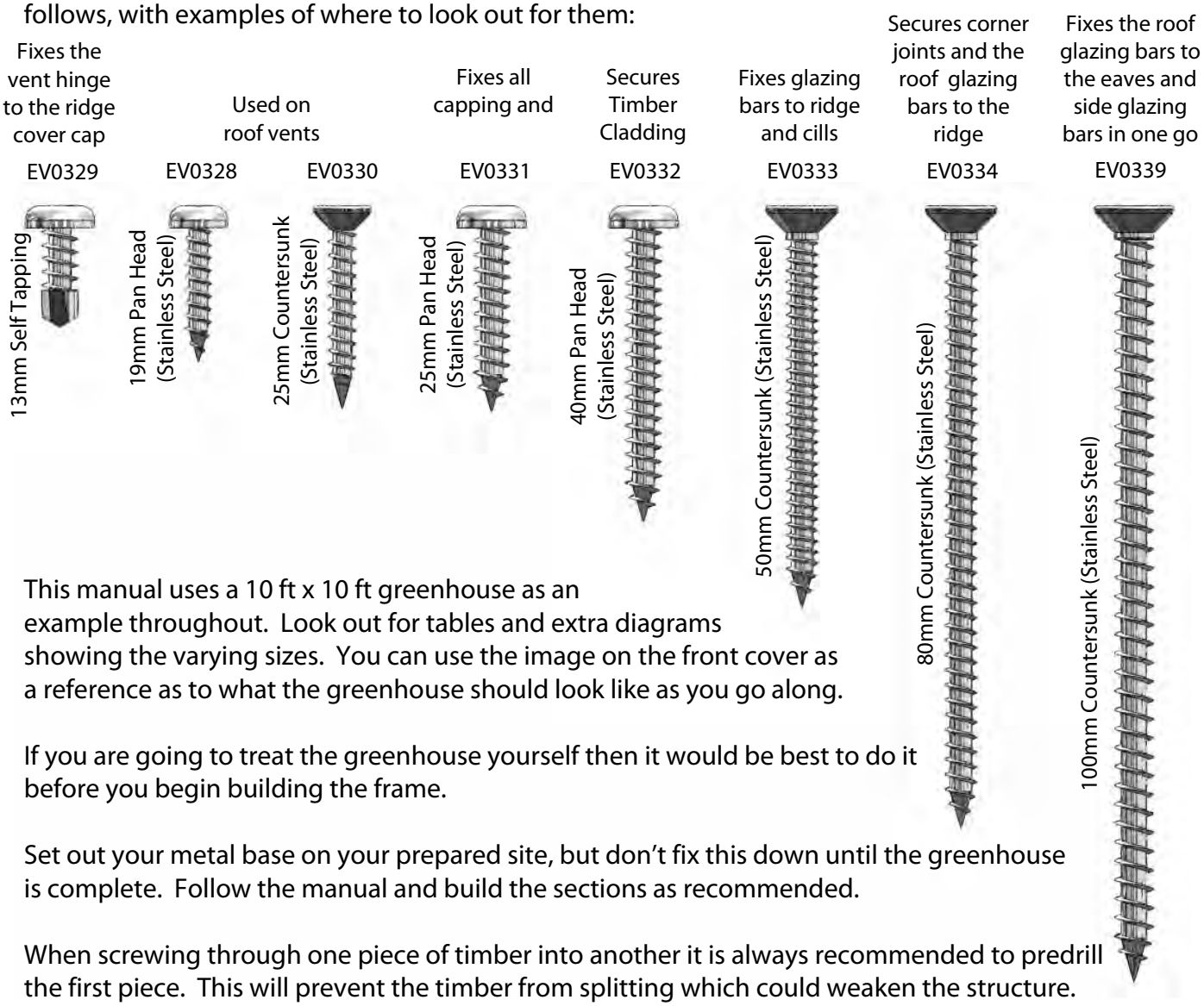
- Please bear in mind that assembling your greenhouse can be time consuming. You may need to spread the construction over two or more days. We recommend that you avoid leaving the building partially glazed. If you ever have to leave your greenhouse half assembled and not anchored down, weigh it down with slabs or bags of sand to stop the wind moving it.
- You will find it helpful to prepare a large, clean and clear area in which to work in. A garage floor or flat lawn area is ideal.
- If you have arranged for someone to install your greenhouse for you, please check that all components are included. Most parts are numbered and can be identified by a stamp or removable label. Alternatively, the components can be identified by lengths detailed in the packing list.
- Remember this is a natural timber product, the wood may soak up some water and some staining may occur. Your Evolution greenhouse is factory dipped in a clear spirit based preservative. We recommend that you re-apply some clear treatment annually particularly on the most exposed areas. If you want to avoid this and give your greenhouse a more permanent finish you could apply an oil based product (refer to manufacturers recommendations for recoating).

Overview

To build your new greenhouse you will need the following tools:

Spirit Level	Pencil
PZ2 Screwdriver Bit	Cordless Screwdriver (2 would be ideal, 1 to drill and 1 to screw)
4mm Drill Bit	7mm Masonry Bit
Hammer Drill	Hammer
Wooden/Rubber Mallet	Tall step ladders x 2

There are 8 different types of screws used in the construction of the greenhouse. These are as follows, with examples of where to look out for them:



This manual uses a 10 ft x 10 ft greenhouse as an example throughout. Look out for tables and extra diagrams showing the varying sizes. You can use the image on the front cover as a reference as to what the greenhouse should look like as you go along.

If you are going to treat the greenhouse yourself then it would be best to do it before you begin building the frame.

Set out your metal base on your prepared site, but don't fix this down until the greenhouse is complete. Follow the manual and build the sections as recommended.

When screwing through one piece of timber into another it is always recommended to predrill the first piece. This will prevent the timber from splitting which could weaken the structure.

You can build the sides and gables flat on the ground and then with help or using a prop position the first one ready for installation. You then work your way around the greenhouse connecting each section. Once you have completed the gables and sides you can install the ridge and the roof.

Overview

Glazing the structure is very simple but be very careful of the edges of the glass as the pane will break into tiny peaces if you catch an edge on a hard surface such as concrete. You should also wear suitable gloves and goggles when handling the glass (this also helps to keep it clean). It is good practice to pre-load the cedar bar capping with screws and position this around the greenhouse ready for you when you arrive with the glass.

During glazing you will also need to fit the louvre vents so make sure you have these built and ready to slot in. These fit between 2 pieces of glass and are held in place by the capping system.

Then fit the roof vents. This is done from the inside, gain access through the opening on a set of steps.

All you have left to do now is fit the gutter and downpipes, think about where you might site a water butt when doing this.

Option of gluing joints. This is **not** required for strength but you may do it if you wish. However bare in mind if you ever intend to move or adapt the greenhouse in the future this would make it very difficult. The best glue for this would be Poly Urethane Wood Adhesive. Take care when applying this, you only need a very small amount as the glue expands to fill the joint. If you use too much it may seep out of the joint and could be unsightly! Try a test piece before you start.

Read through the rest of this manual before starting, you are less likely to miss something doing this and you will have a better understanding of how it all works.

Base Preparation

Refer to your individual base plan supplied with your order confirmation for dwarf wall dimensions.

It is necessary to leave sufficient working room around your greenhouse when you're putting it up and also to allow for the possible need to replace a piece of glass in the future. If possible try and leave a minimum space of 2ft/610mm around the greenhouse.

Note that the door opens inwards so you should not have any higher ground or obstacles inside the front end of the greenhouse.

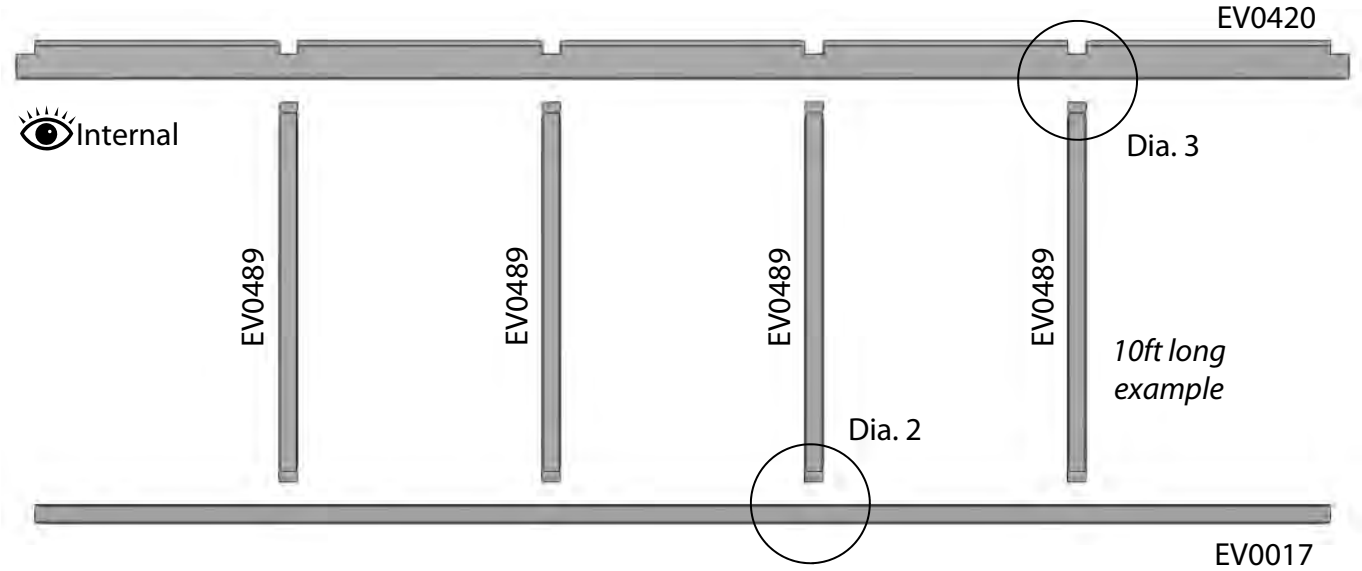
Locate the greenhouse where there is maximum amount of sunlight and avoid if possible any shade from trees, fences or other buildings. Over-hanging branches can be a particular nuisance and should be avoided.

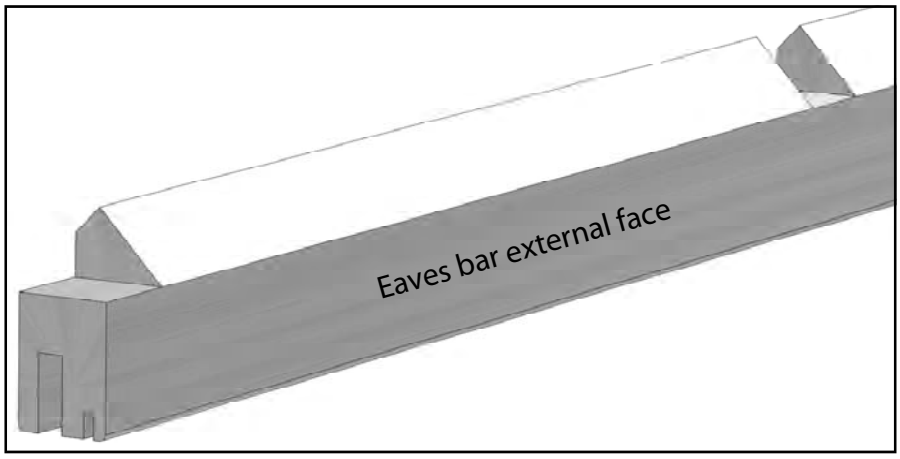
Choose a site where the greenhouse is relatively easy to get to and convenient to bring water to and possibly a supply of electricity.

Finally, and most importantly, choose a site where your Alton Greenhouse will look right so that it will complement your garden.

Side Assembly

To start building your greenhouse begin by laying out the components for your sides flat on the ground like the diagram below. Use the tables below to identify your building length and the components with the part numbers and sizes. First of all drill pilot holes through the bottom of each mortise on the cill section (diagram 2, page 9). Then slot each glazing bar into the mortise holes. These are designed as a tight fit so you may need help with this or maybe use a solid object to push against. Once firmly in position fix with the 50mm screw. Now slot the eaves rail into position (e.g. EV0420). There is no need to fix this yet as it is done at a later stage.





6ft long			
Part Name	Part Number	Size (mm)	Qty
Cill	EV0015	1846	2
Eaves Bar	EV0418	1934	2
Glazing Bar	EV0489	1588	4

8ft long			
Part Name	Part Number	Size (mm)	Qty
Cill	EV0016	2476	2
Eaves Bar	EV0419	2564	2
Glazing Bar	EV0489	1588	6

10ft long example			
Part Name	Part Number	Size (mm)	Qty
Cill	EV0017	3106	2
Eaves Bar	EV0420	3194	2
Glazing Bar	EV0489	1588	8

12ft long			
Part Name	Part Number	Size (mm)	Qty
Cill	EV0018	3736	2
Eaves Bar	EV0421	3824	2
Glazing Bar	EV0489	1588	10

Side Assembly

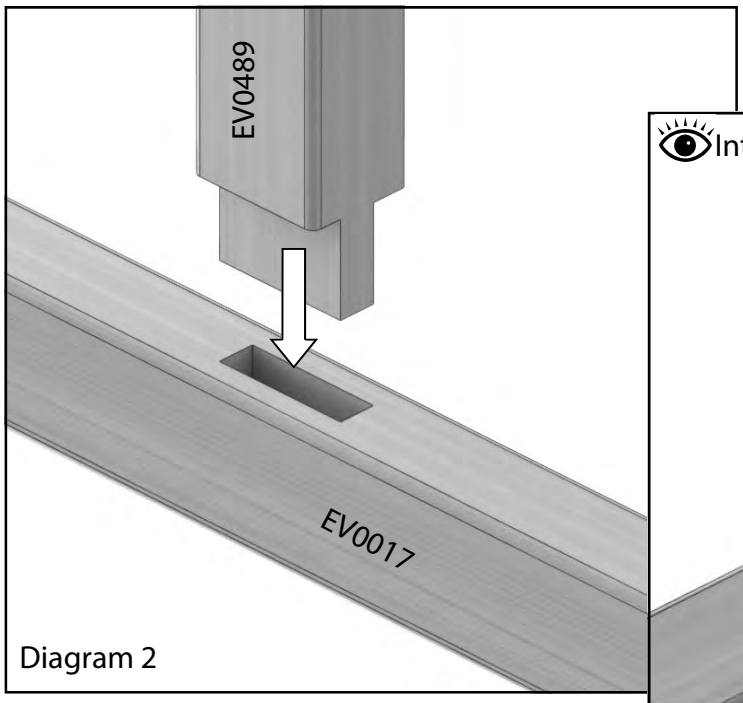
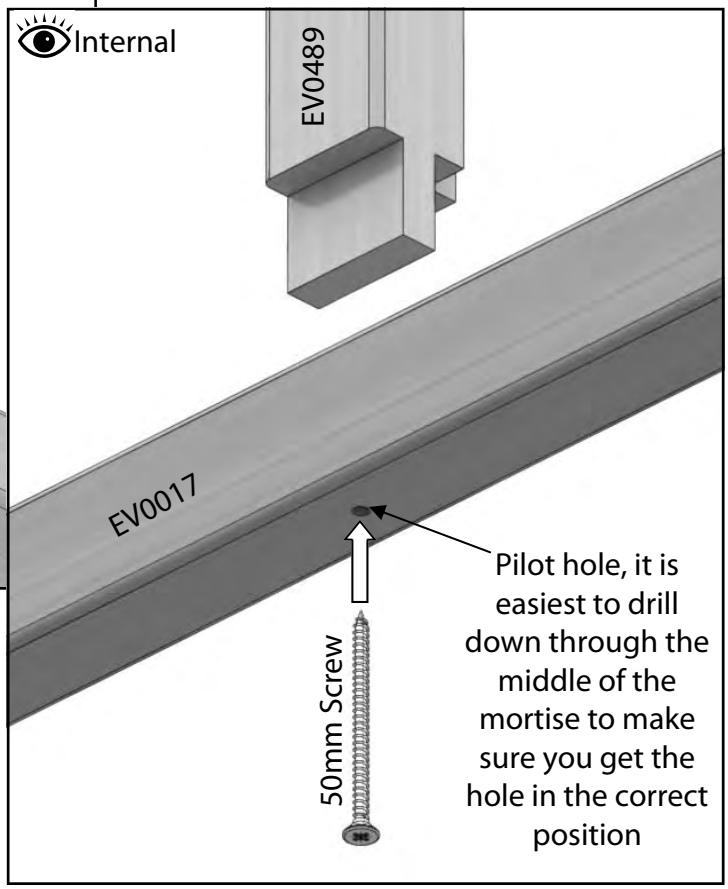


Diagram 2



Make sure the side bars are pushed all the way in, you may find they need a light tap with a wooden mallet or something similar.

(If you are going to glue your joints this is the first point you would do this.)

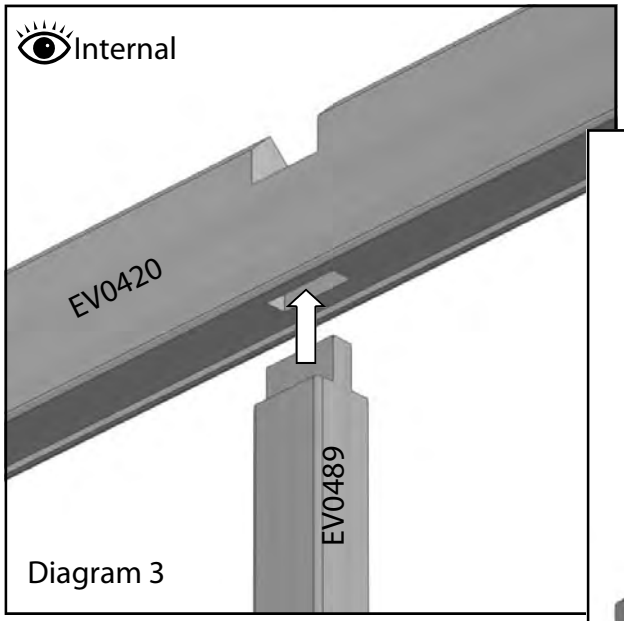


Diagram 3

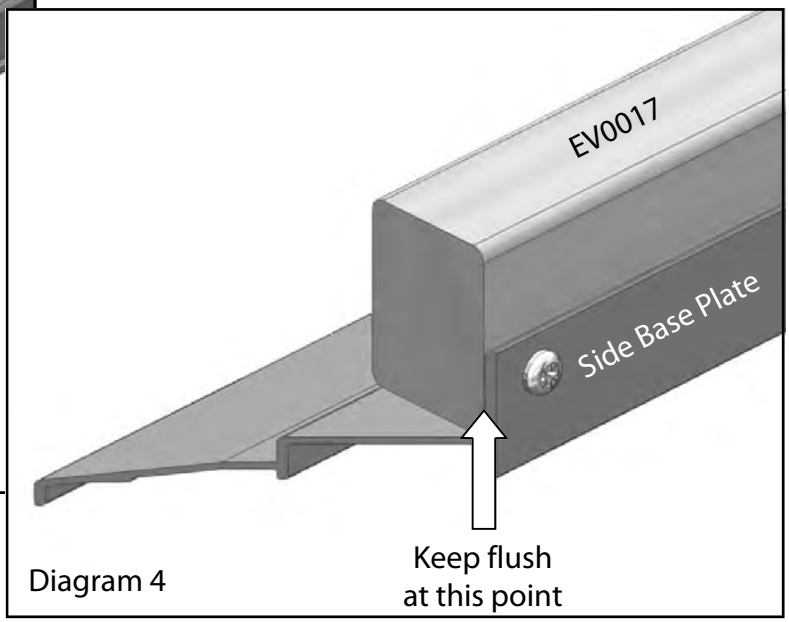
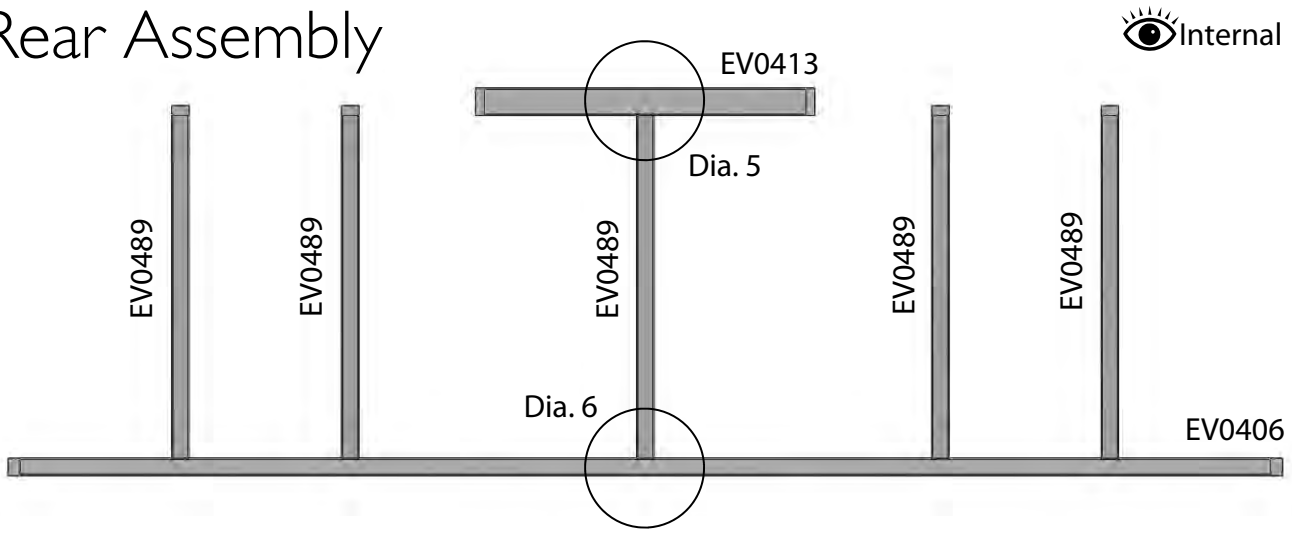


Diagram 4

The side base plates should be fitted flush to the ends of the side cills as shown in diagram 4. Fix with 25mm screws.

Rear Assembly



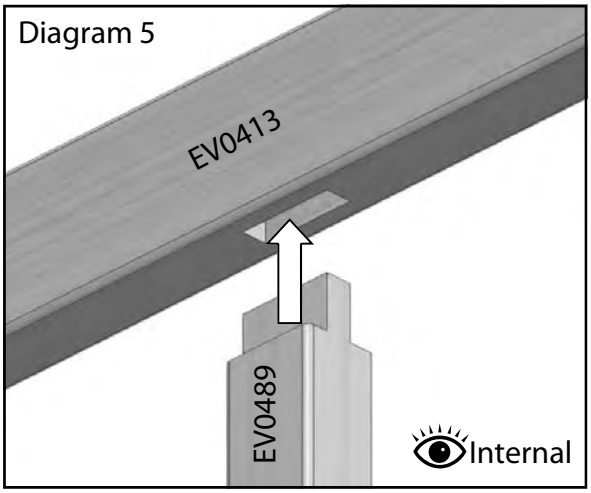
As with the side cills you will need to drill pilot holes in the bottom of the mortise holes (diagram 6).

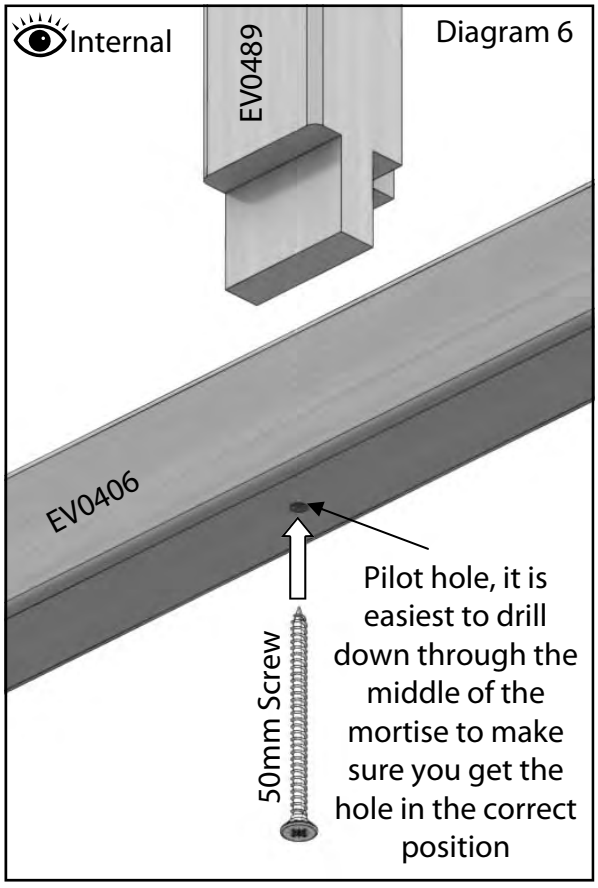
Assemble the gable glazing bars (EV0489) with the rear cill flat on the ground as you did with the side sections. These locate in the two outer mortise holes and the middle mortise hole.

Now slot the middle rear purling (EV0413) onto the central glazing bar, this will be fixed shortly.

10ft wide Rear			
Part Name	Part Number	Size (mm)	Qty
Rear Cill	EV0406	3196	1
Roof Corner R	EV0484	2298	1
Roof Corner L	EV0485	2298	1
Side Corner R	EV0490	934	1
Side Corner L	EV0491	934	1
Gable Purling R	EV0410	1168	1
Gable Purling L	EV0416	1168	1
Rear Mid Purling	EV0413	851	1
Purling Brace	EV0412	3182	1
Standard Bar	EV0489	908	5
Above Purling R	EV0465	519	1
Above Purling L	EV0466	519	1
Above Purling R	EV0467	943	1
Above Purling L	EV0468	943	1
Gable Bar R	EV0496	2180	1
Gable Bar L	EV0497	2180	1
Mid Gable Bar	EV0462	1589	1

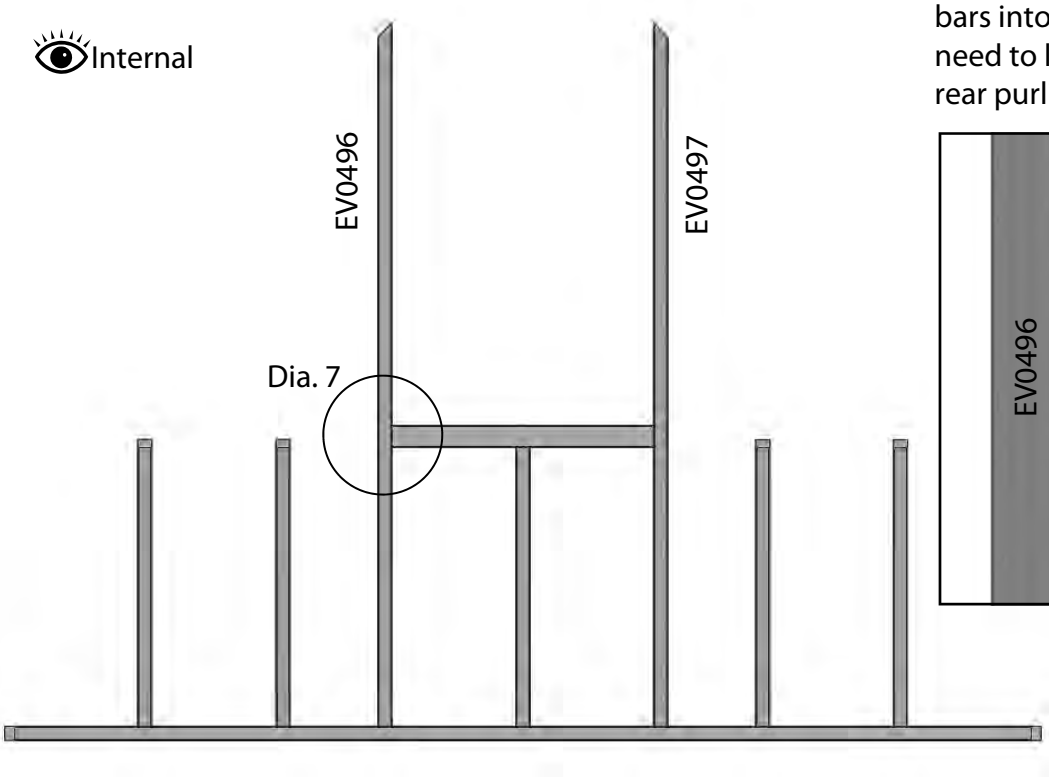
Diagram 5



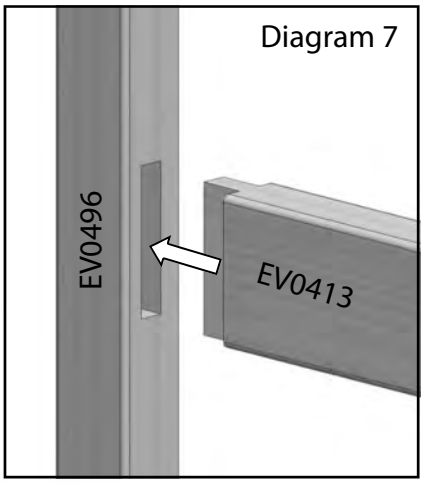


Rear Assembly

Internal



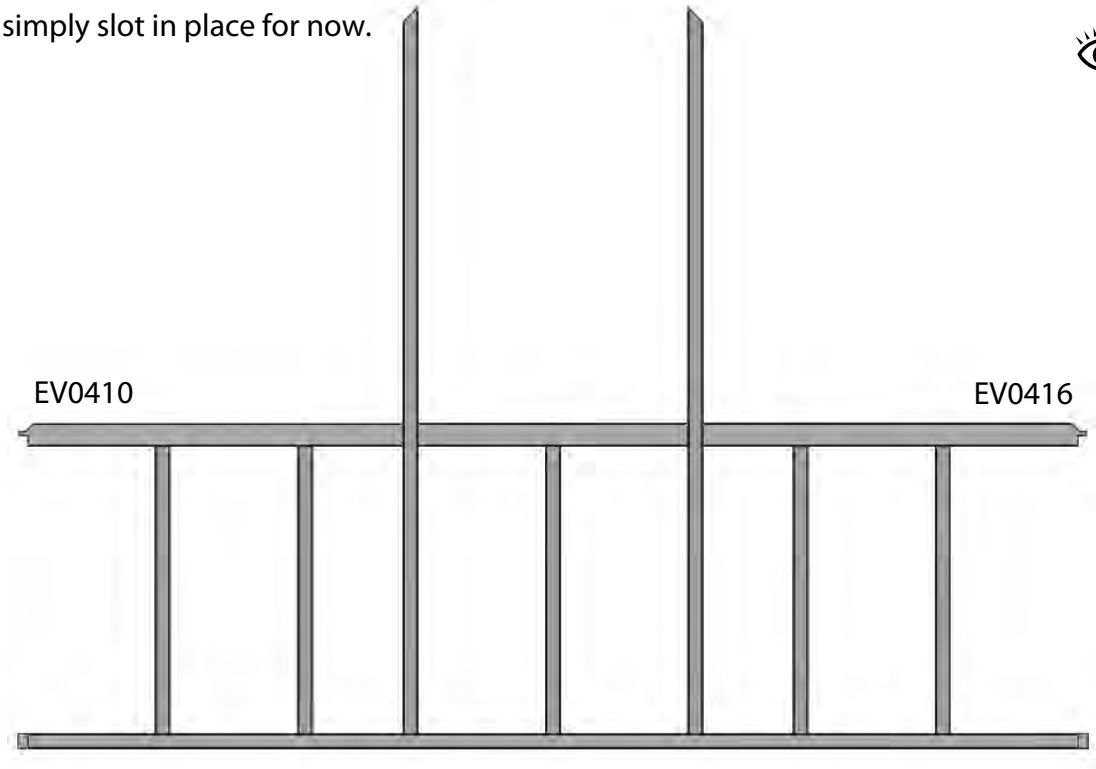
Now slot the 2 longer gable bars into the cill. These also need to locate with the middle rear purling (diagram 7) .



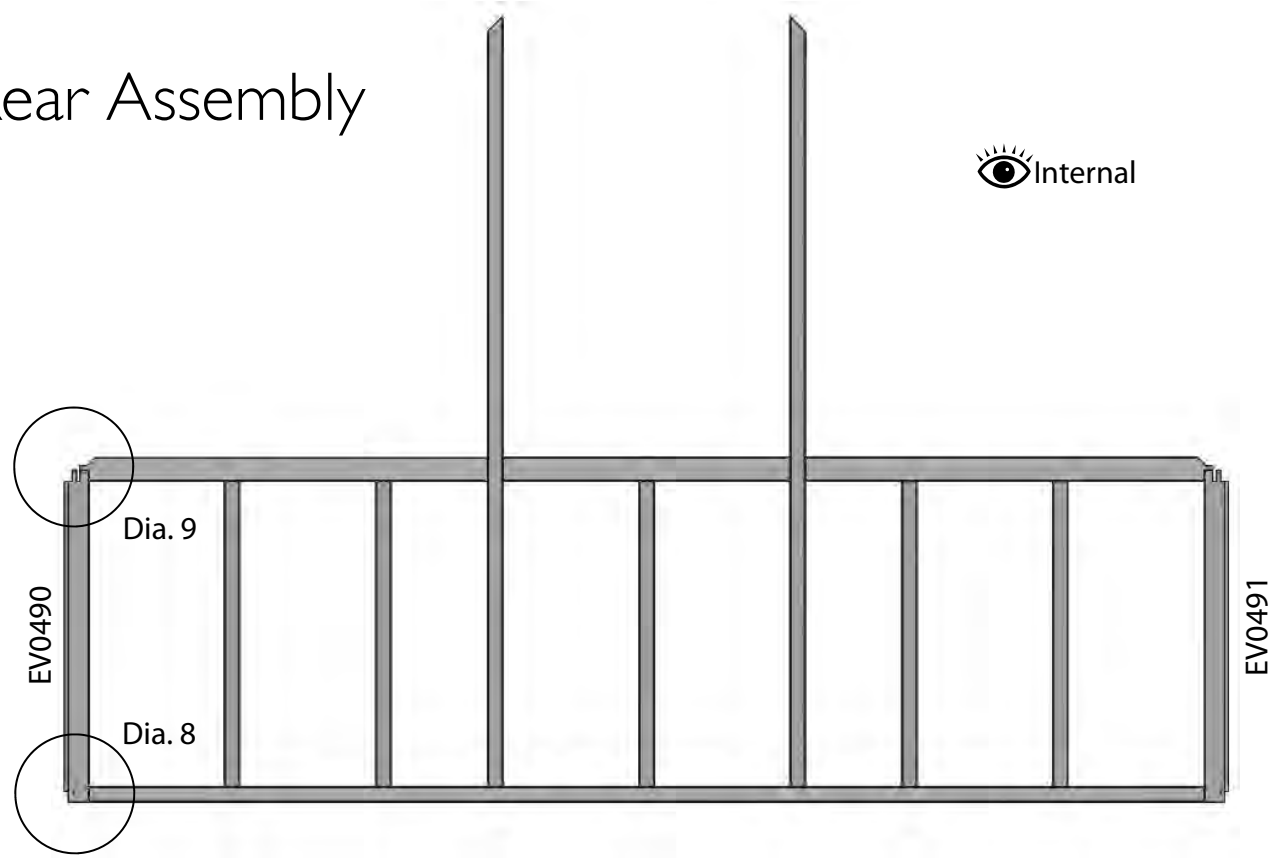
Next fit both left and right purlings to the standard glazing bars (EV0489). These are handed parts and it is important to fit them the correct way round. The purlings will have rounded edges on one side and square cut edges on the other, the rounded edges should be on the inside of the building fitting flush with the other components. The square cut edges should be outward facing and will be set in slightly from the rebate that takes the glass.

These simply slot in place for now.

Internal



Rear Assembly



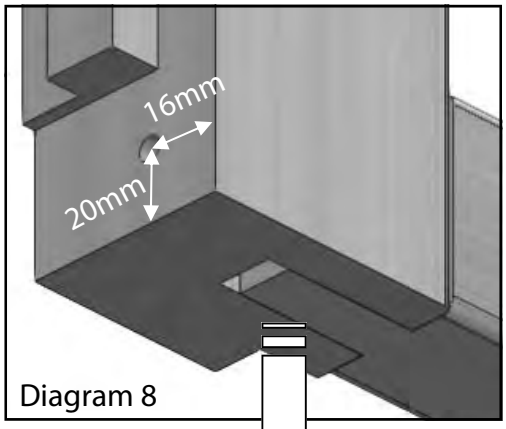
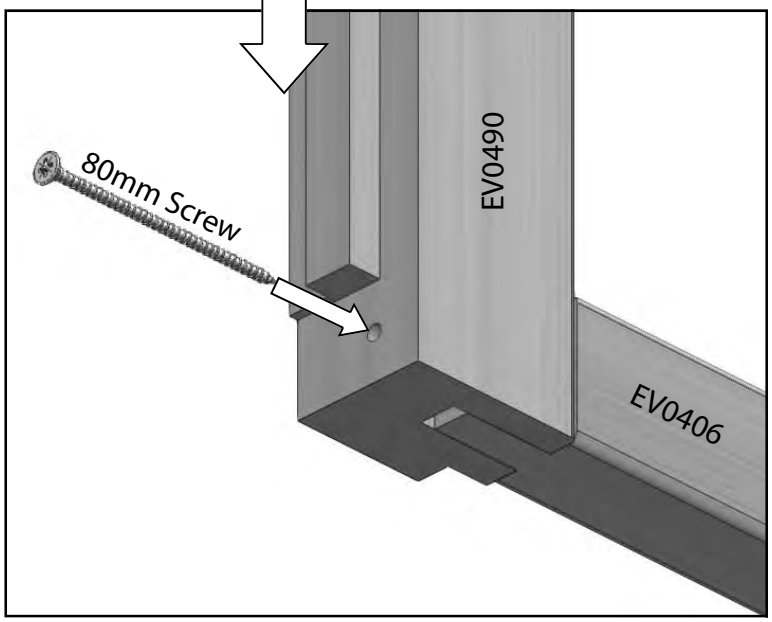


Diagram 8

You will need to drill a pilot hole in the bottom of each side corner bar as shown in diagram 8. This should come through half way up the mortise slot. Now slot the side corner bar into place, fix the bottom of the bar with an 80mm screw.

With the top of the bar lined up with the end of the purling (keeping the inside edges flush) drill a pilot hole close to the inside face of the tenon on the purling (diagram 9), then fix with a 25mm countersunk screw. This is only a transit screw so just make sure the joint is nice and tight, a larger fixing will be added later.



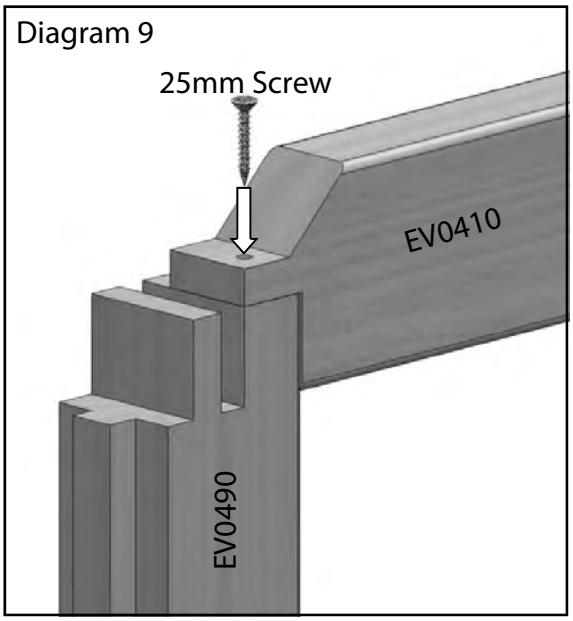
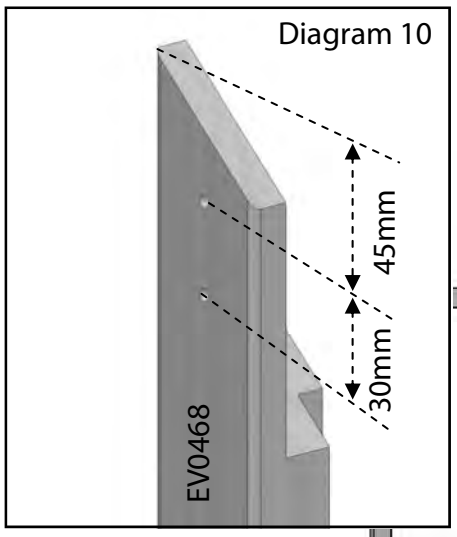


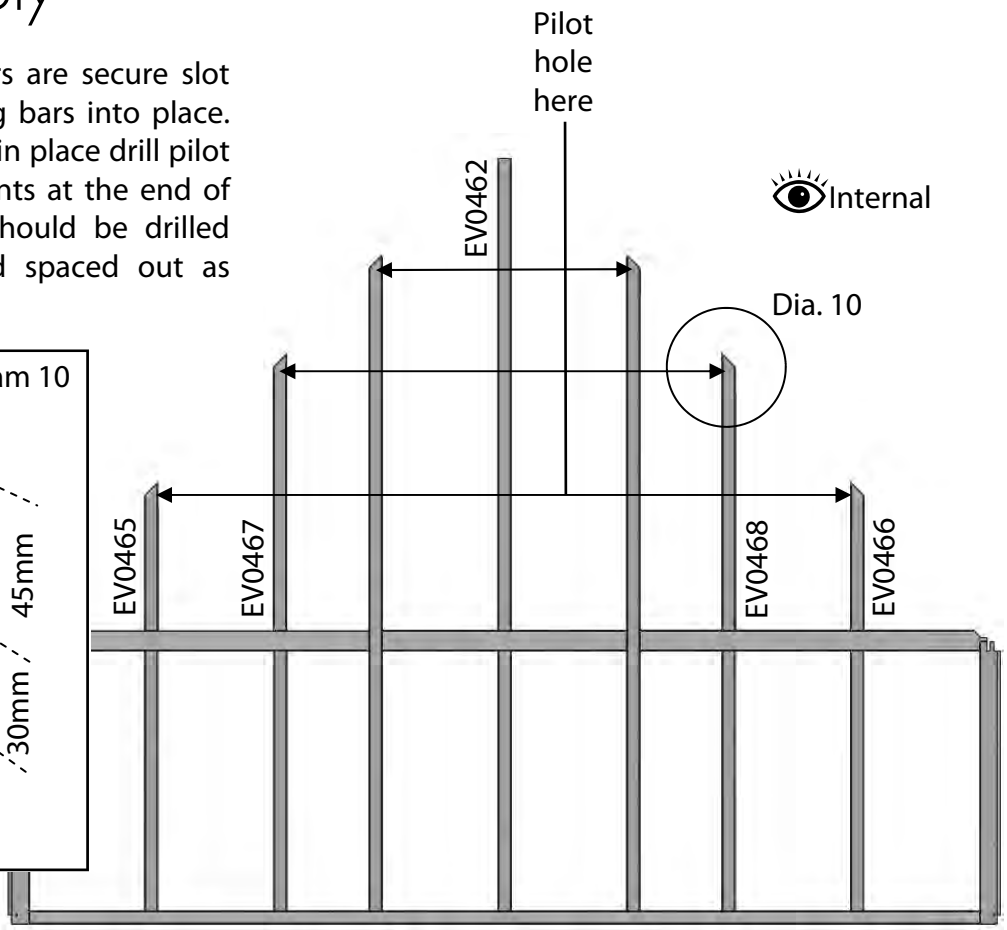
Diagram 9

3

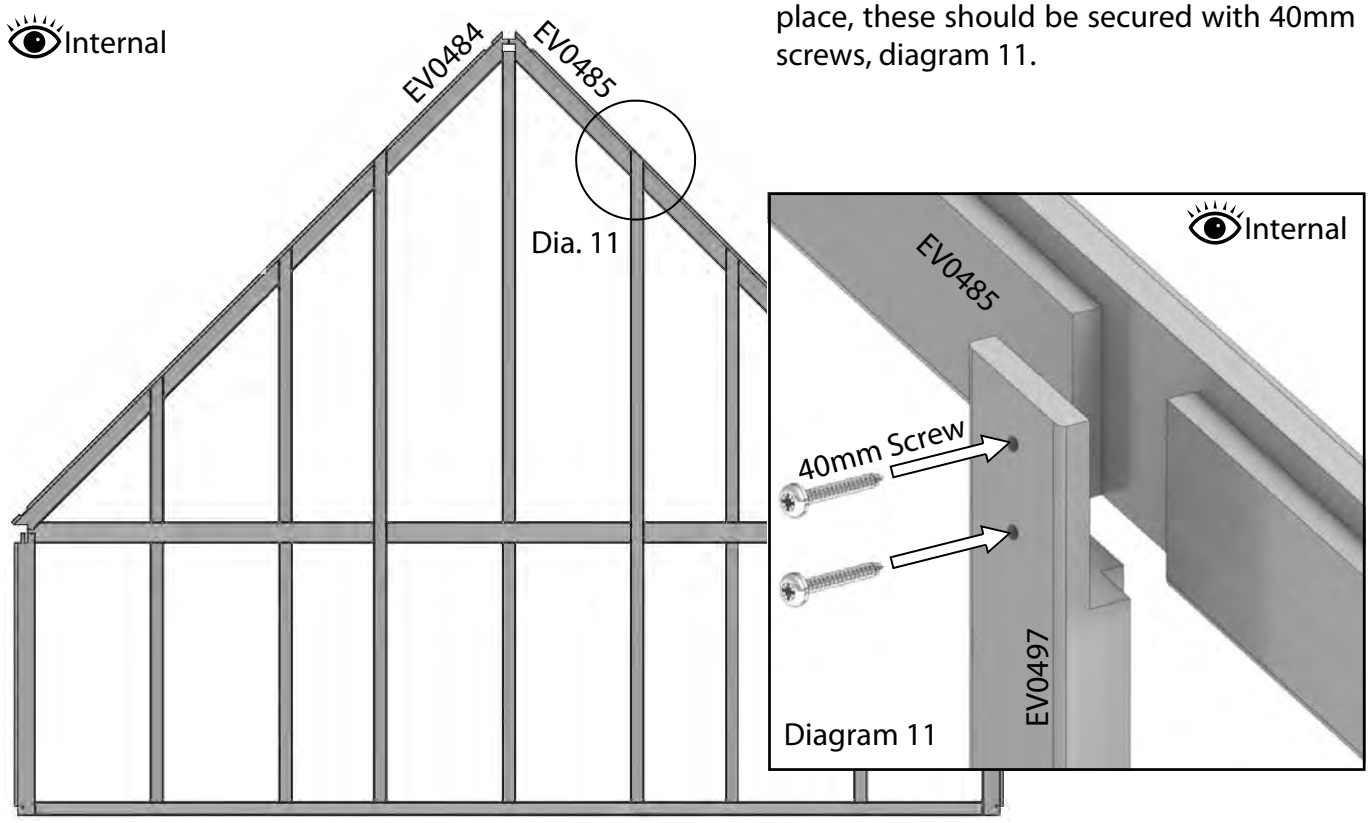
Rear Assembly

Once the side corner bars are secure slot the above purling glazing bars into place. With all of the gable bars in place drill pilot holes through the lap joints at the end of each bar. The holes should be drilled centrally to the bar and spaced out as shown in diagram 10.

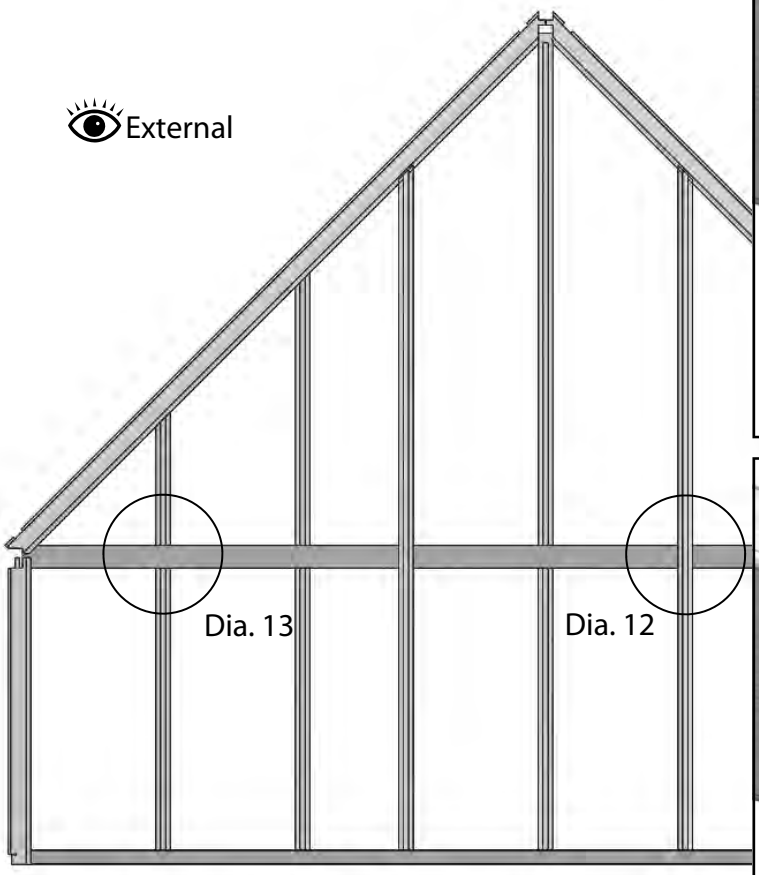


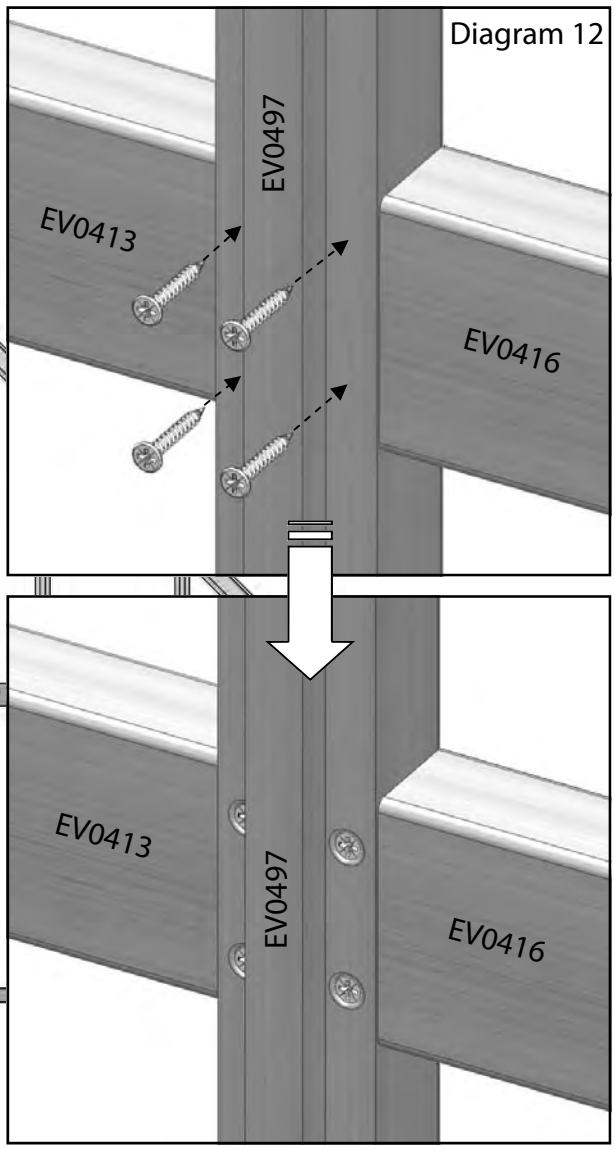


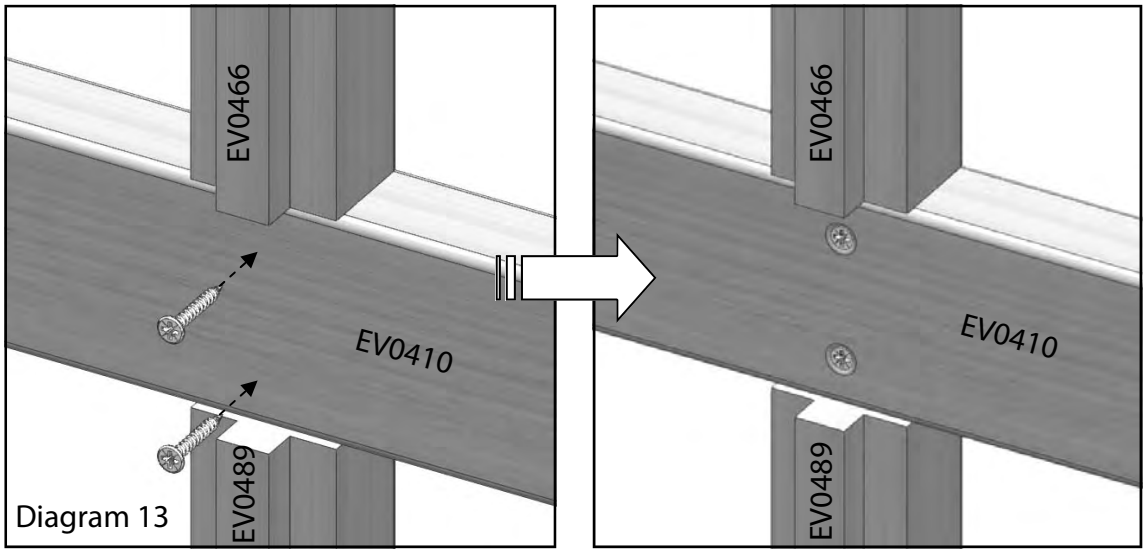
Now slot the two roof corner bars into place, these should be secured with 40mm screws, diagram 11.



Rear Assembly





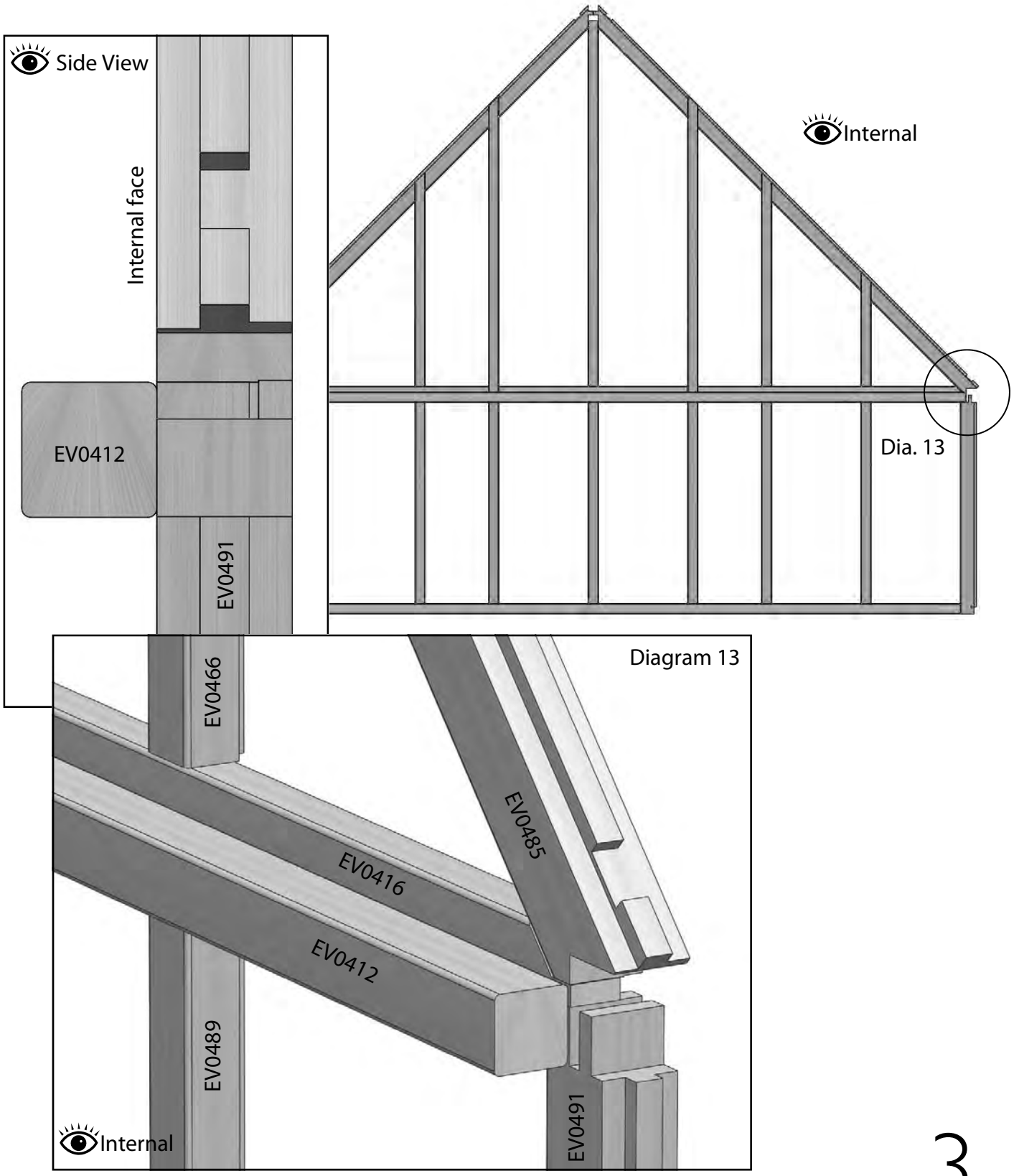


3

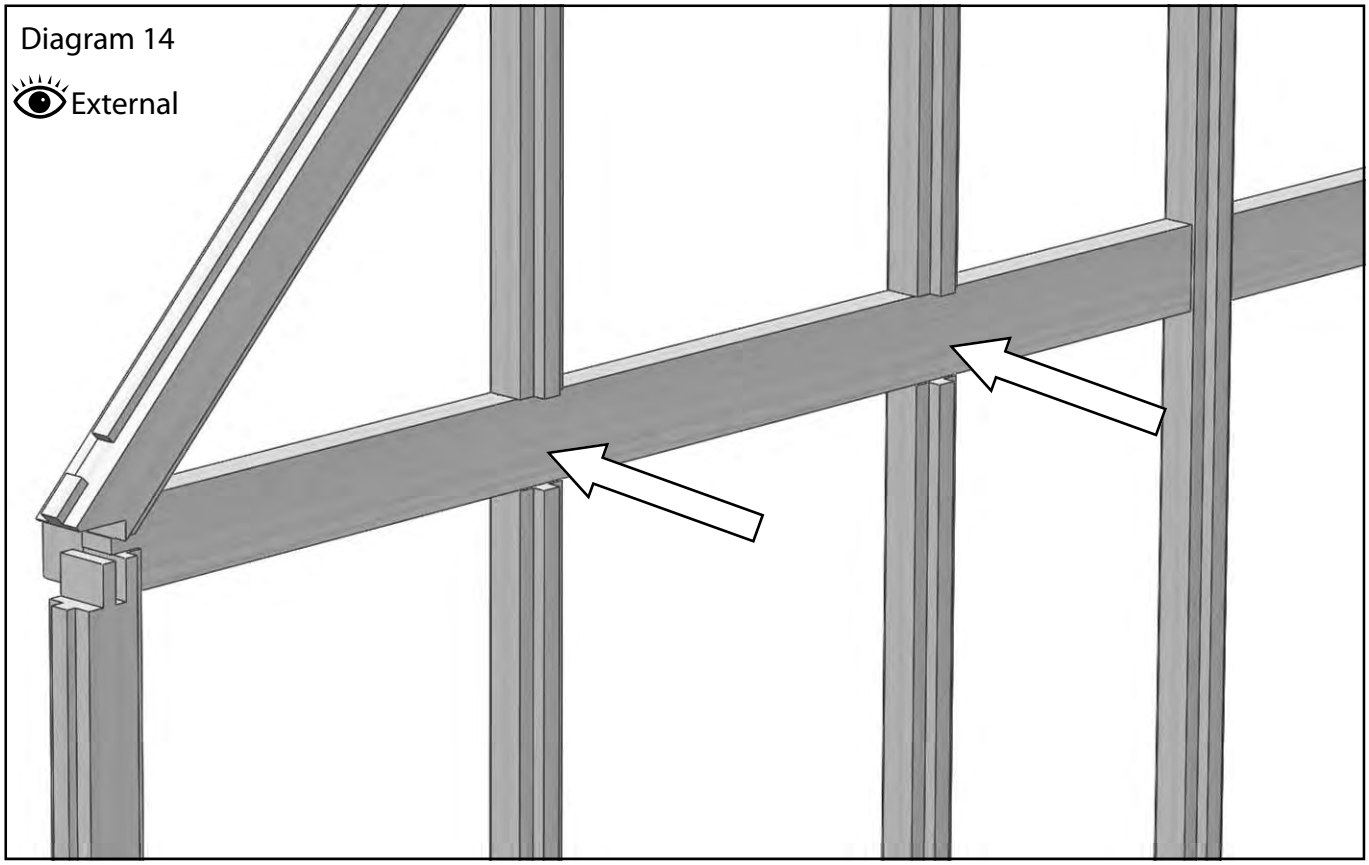
With all the components now in place flip the gable end over so you now have the outside edge facing you. Be careful doing this as some of the parts are not completely supported, it is a good idea to have a helper at this point. Now using 25mm countersunk screws fix the purlings to the glazing bars as shown in diagram 12 and 13. Make sure the head of the screws are below the level of the timber so that they don't have any contact with the glass.

Rear Assembly

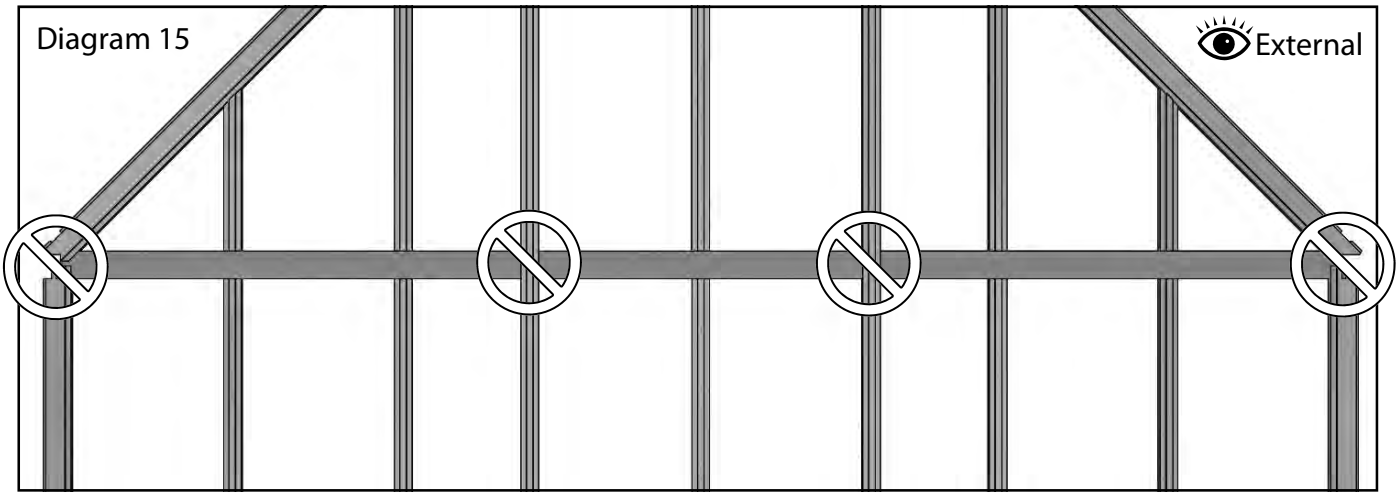
With the outside face of the gable still facing you slide the rear purling brace (EV0412) under the frame (use cardboard or something similar to protect this part when doing this so the internal face is not damaged).
Position the rear purling brace so the underside of the brace is flush with the underside of the purlings. The ends should stop just short of the corner joint as shown in diagram 13.



Rear Assembly



You can now fix the brace through the purlings with 50mm screws at the points shown above in diagram 14, mark the purling and pre-drill before fixing. It's not a good idea to try and screw through the complete sections of glazing bar (unless a countersink is used) as they are likely to split (these are shown below in diagram 15). The rear gable is now complete and you can move onto the next section.



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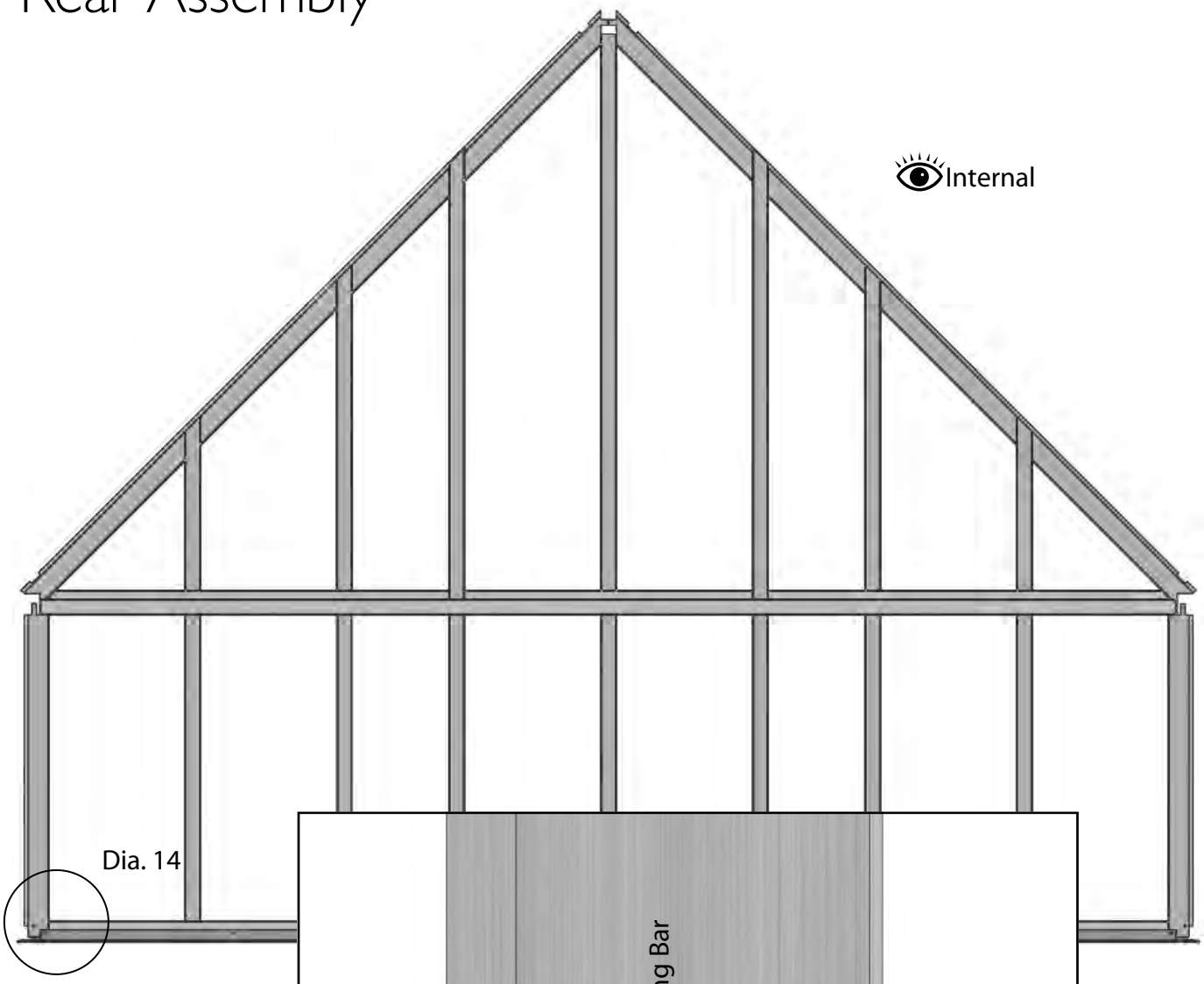
Rear Assembly



You will need to measure from the outside edge of the corner bar to get the correct position for the rear base plate. This should be set in 34mm from each end, diagram 14. Use 25mm screws to fix this in place.

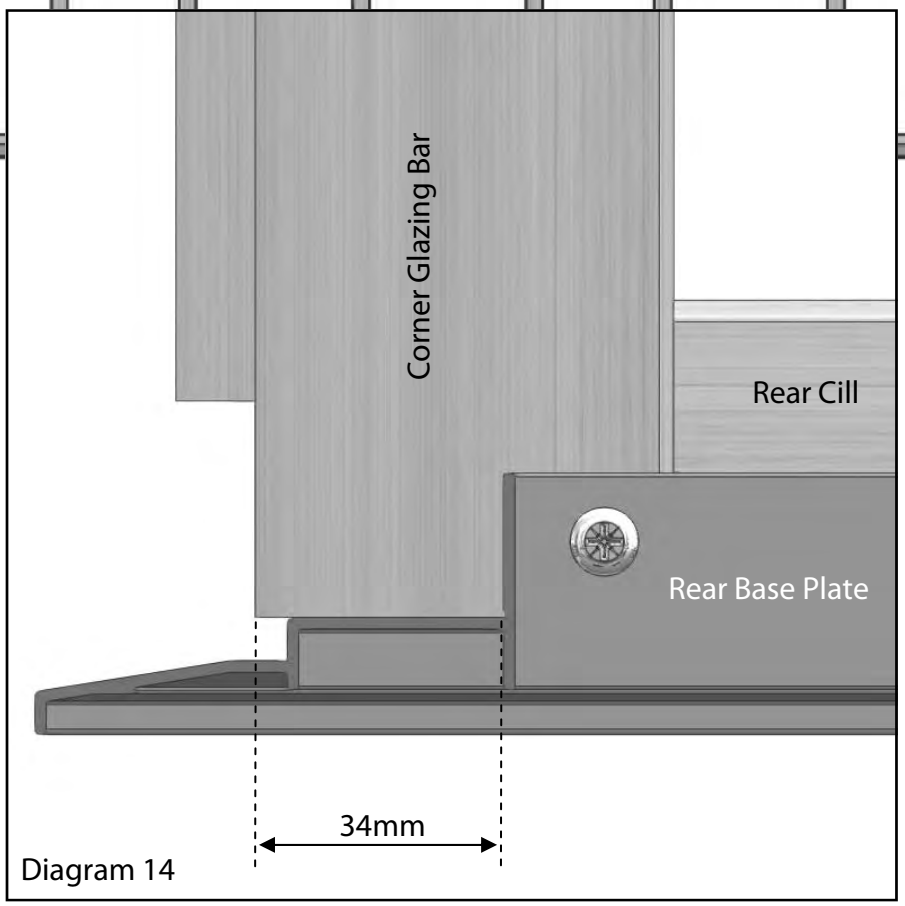
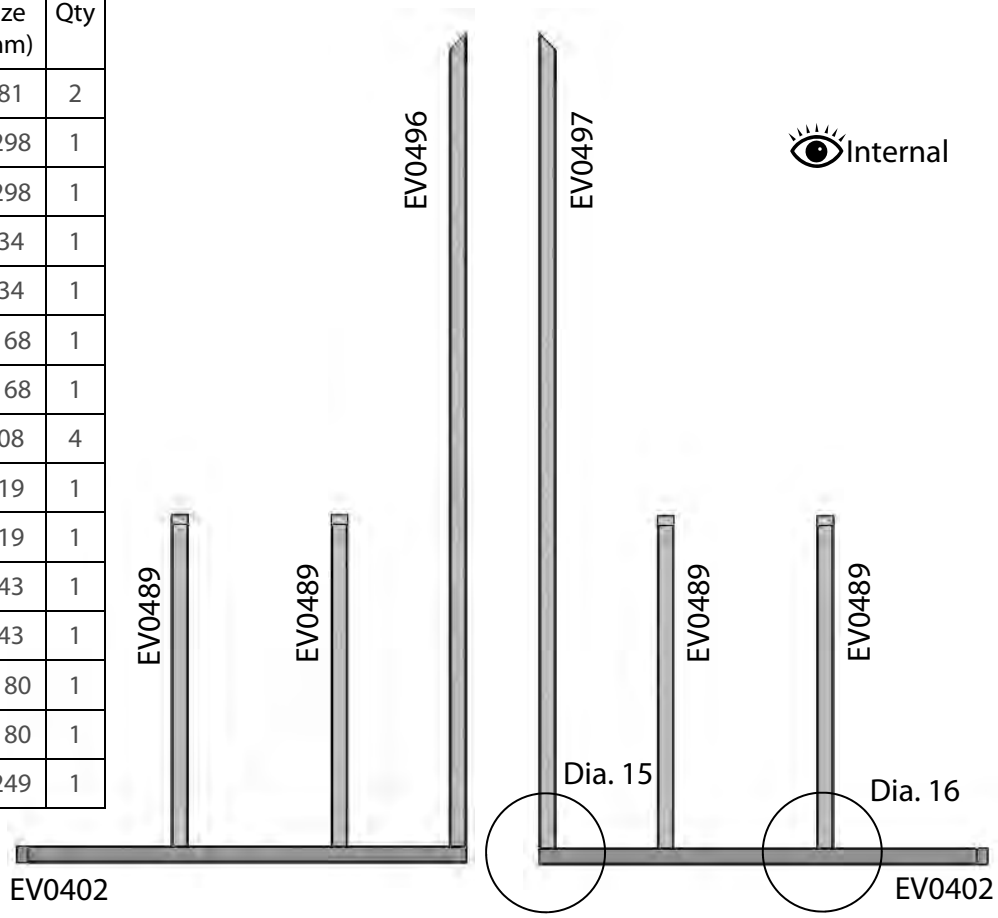


Diagram 14

3

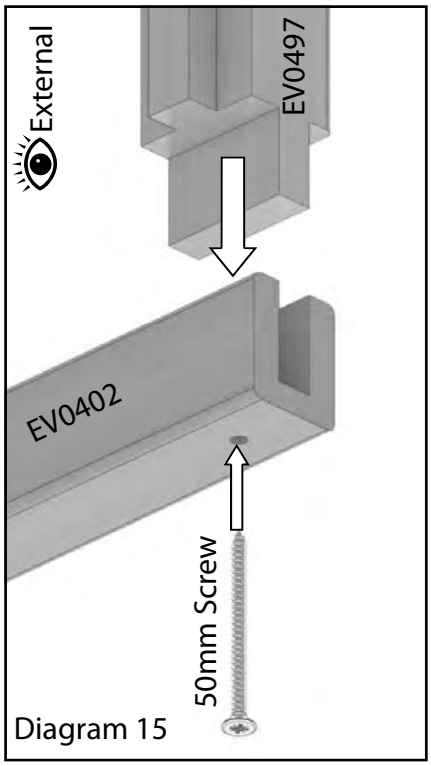
Front Assembly

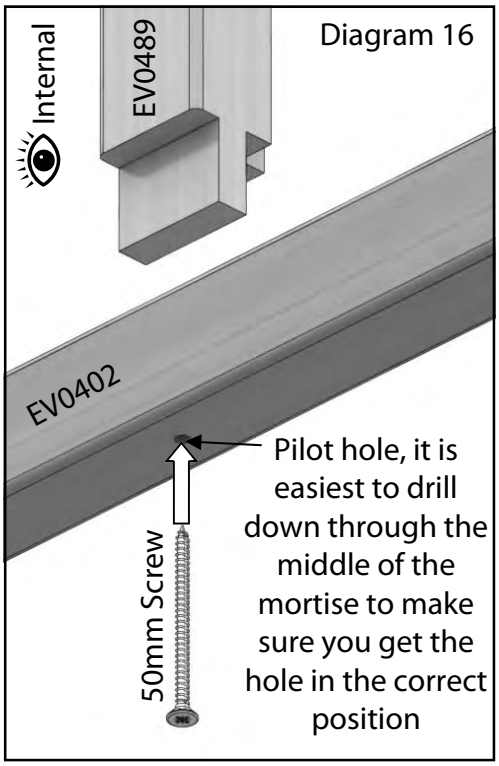
10ft wide Front			
Part Name	Part Number	Size (mm)	Qty
Front Cill	EV0401	881	2
Roof Corner R	EV0484	2298	1
Roof Corner L	EV0485	2298	1
Side Corner R	EV0490	934	1
Side Corner L	EV0491	934	1
Gable Purling R	EV0410	1168	1
Gable Purling L	EV0416	1168	1
Standard Bar	EV0489	908	4
Above Purling R	EV0465	519	1
Above Purling L	EV0466	519	1
Above Purling R	EV0467	943	1
Above Purling L	EV0468	943	1
Gable Bar R	EV0496	2180	1
Gable Bar L	EV0497	2180	1
Above door	EV0473	1249	1



The front gable is made slightly differently to the rear as it is in two halves. It is a good idea to build these side by side to make sure you are fitting the parts in the correct orientation.

As before start by fixing the gable bars to the cills shown in diagrams 15 and 16.





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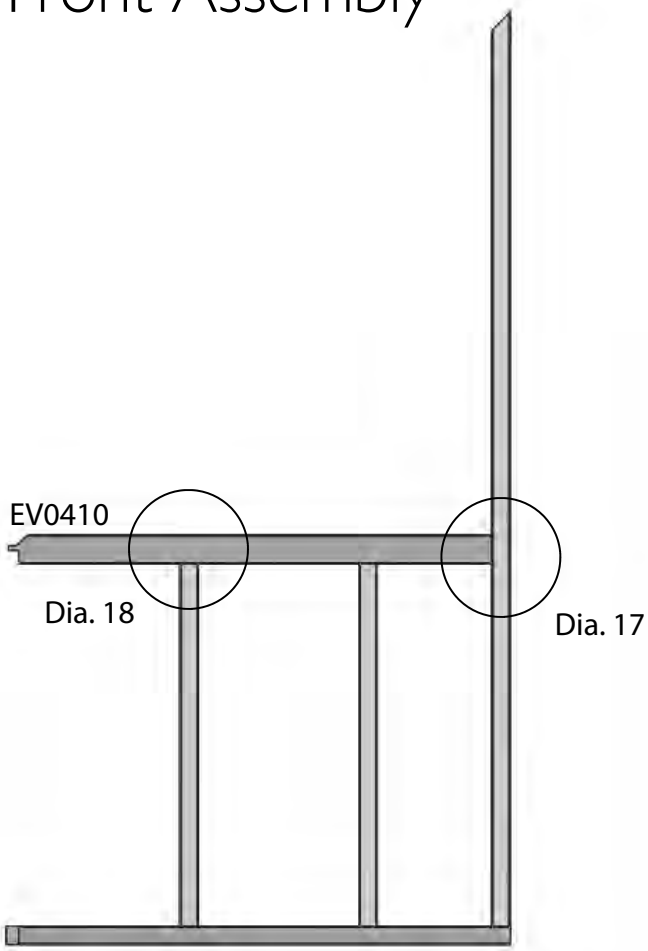
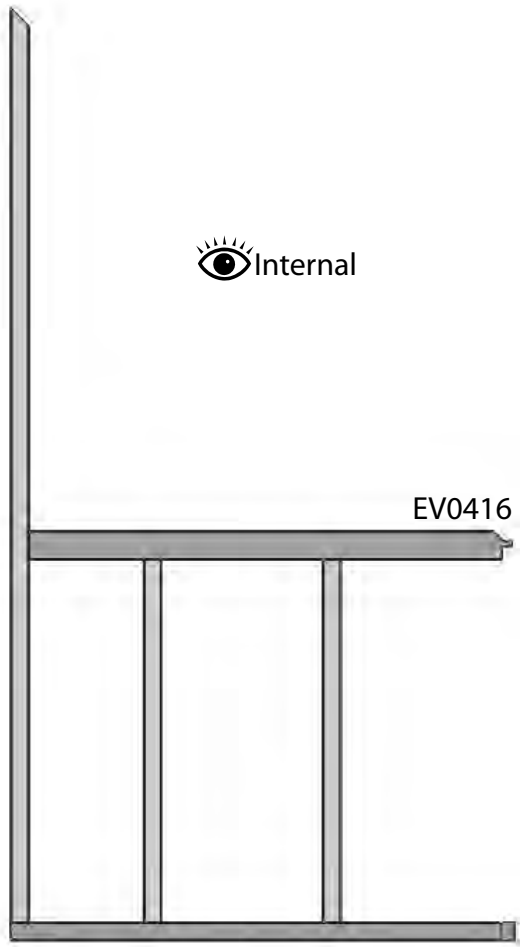
Front Assembly





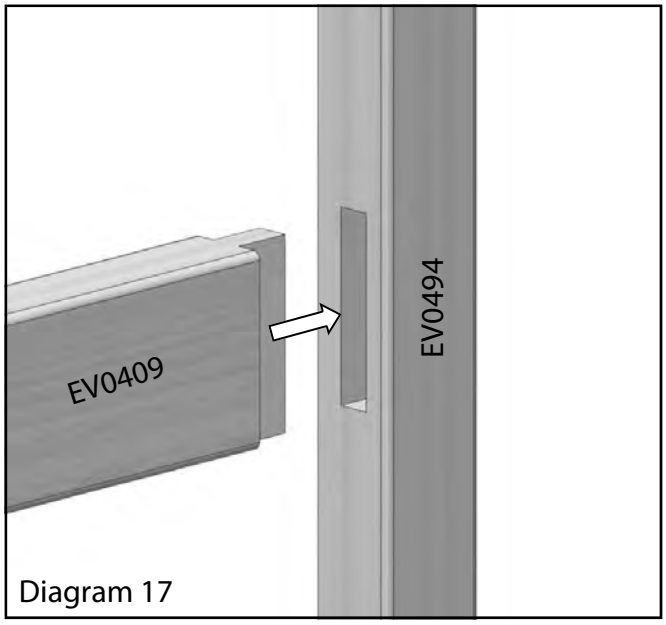


Diagram 17

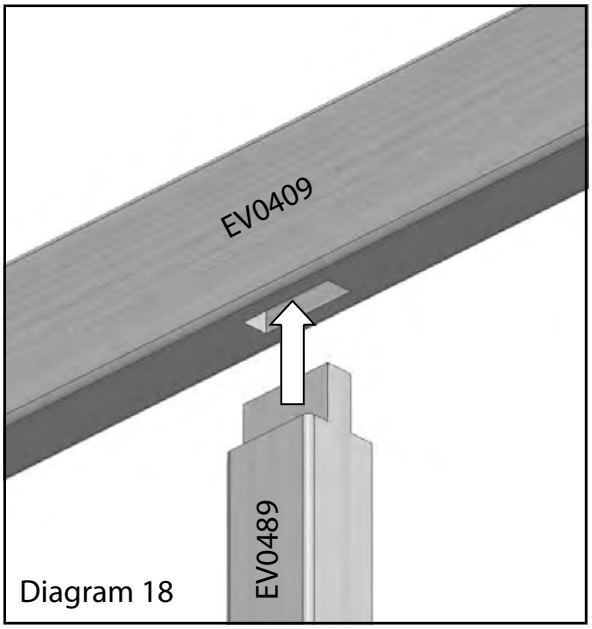
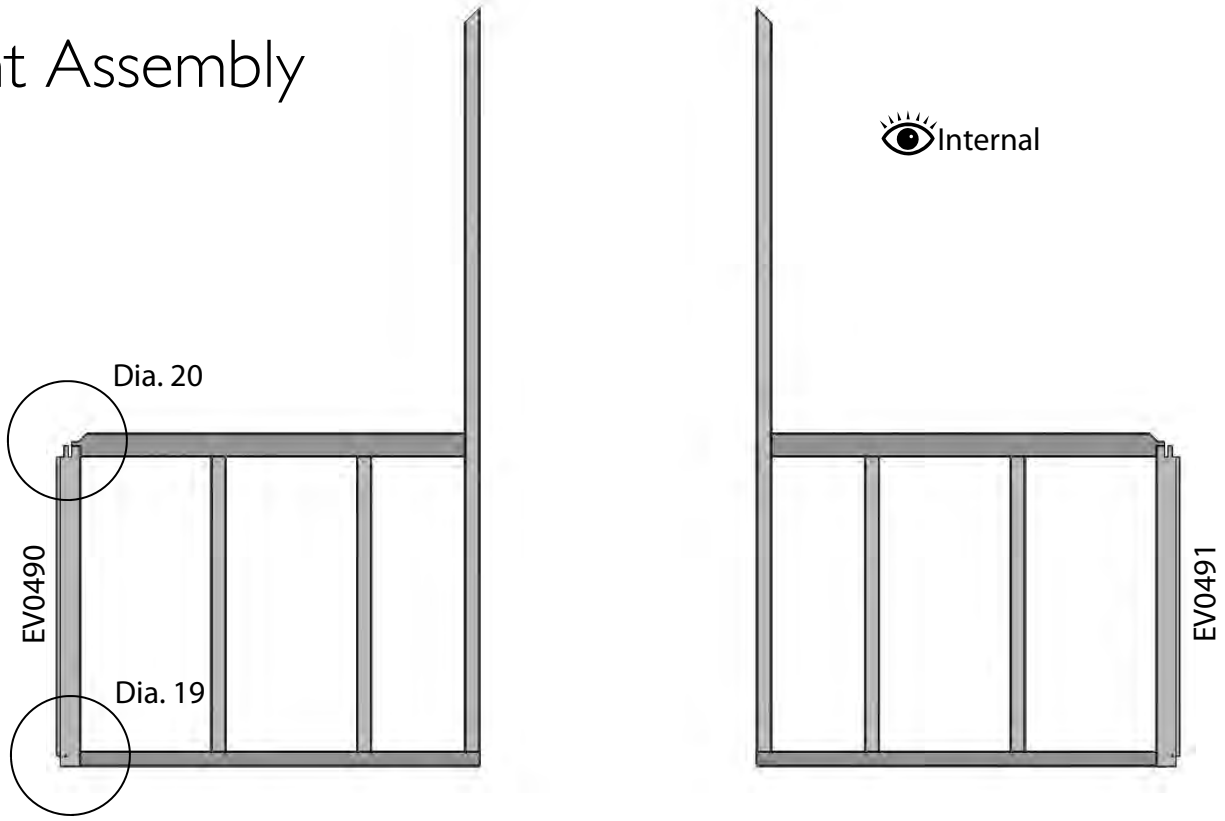


Diagram 18

Now slot the purling bars into place, again as with the rear assembly these will be fixed later.

Front Assembly



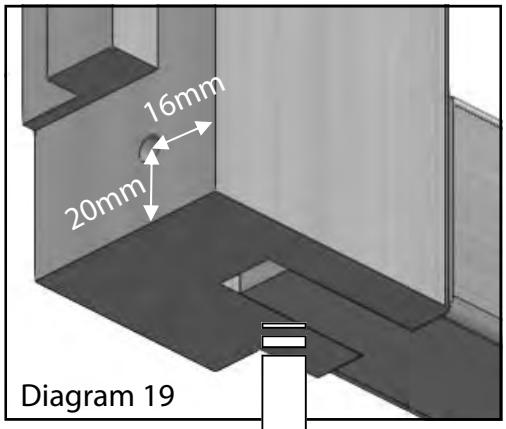


Diagram 19

Drill the pilot holes again as diagram 19 shows. Fix the cill to the corner bar with an 80mm screw.

As before (keeping the inside edges flush) drill a pilot hole close to the inside face of the purlings tenon (diagram 20), then fix with a 25mm countersunk screw. This is only a transit screw so just make sure the joint is nice and tight, a larger fixing will be added later.

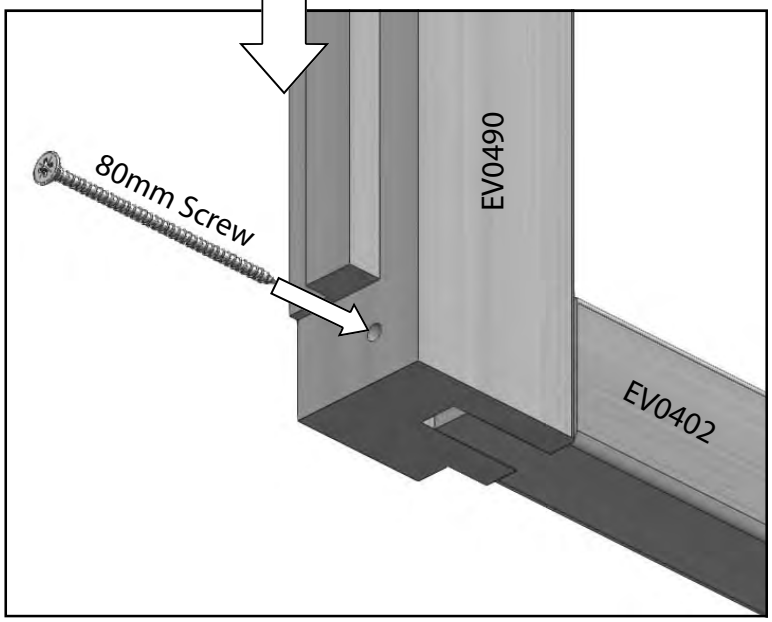
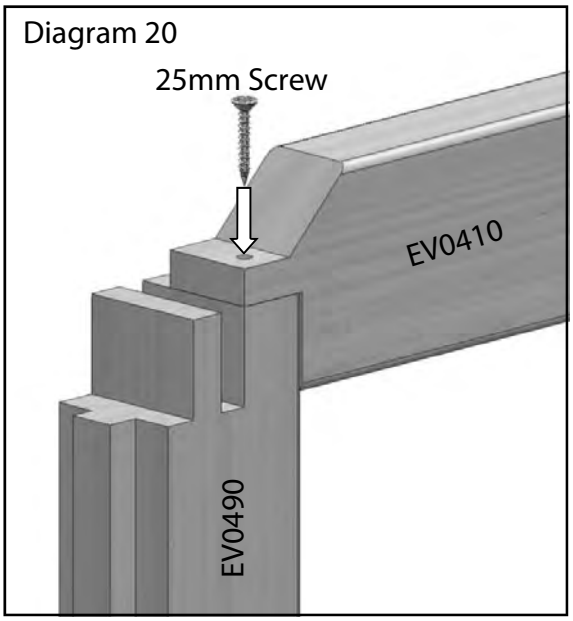
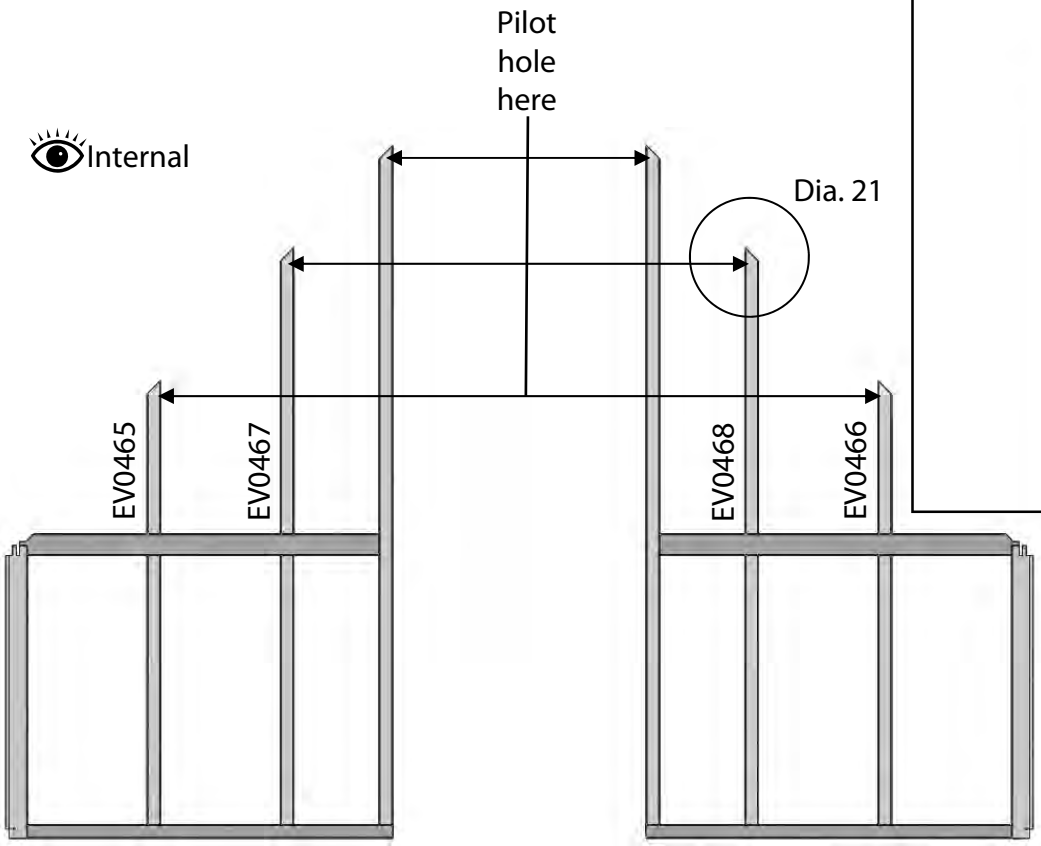


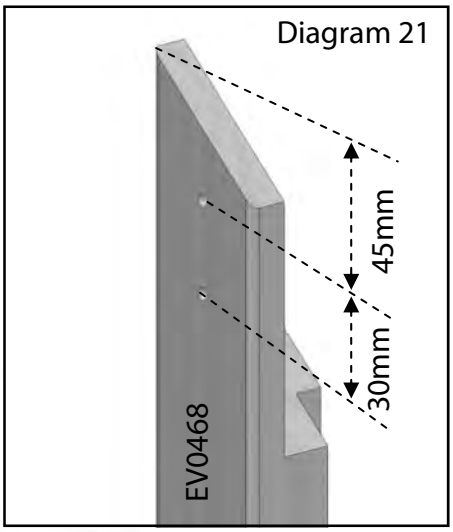
Diagram 20



4

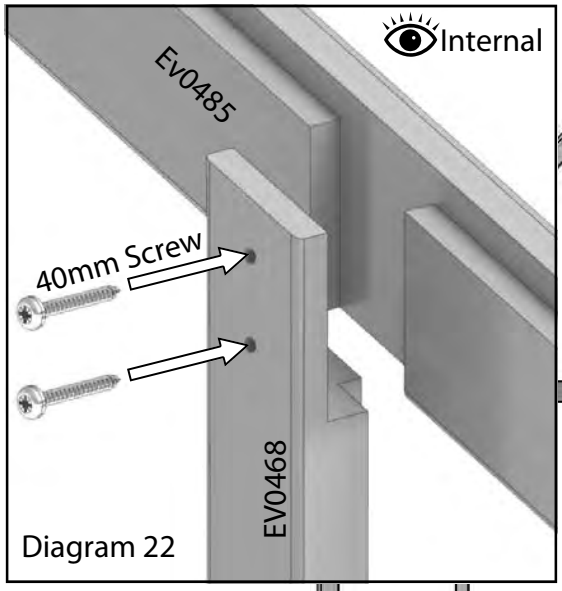
Front Assembly

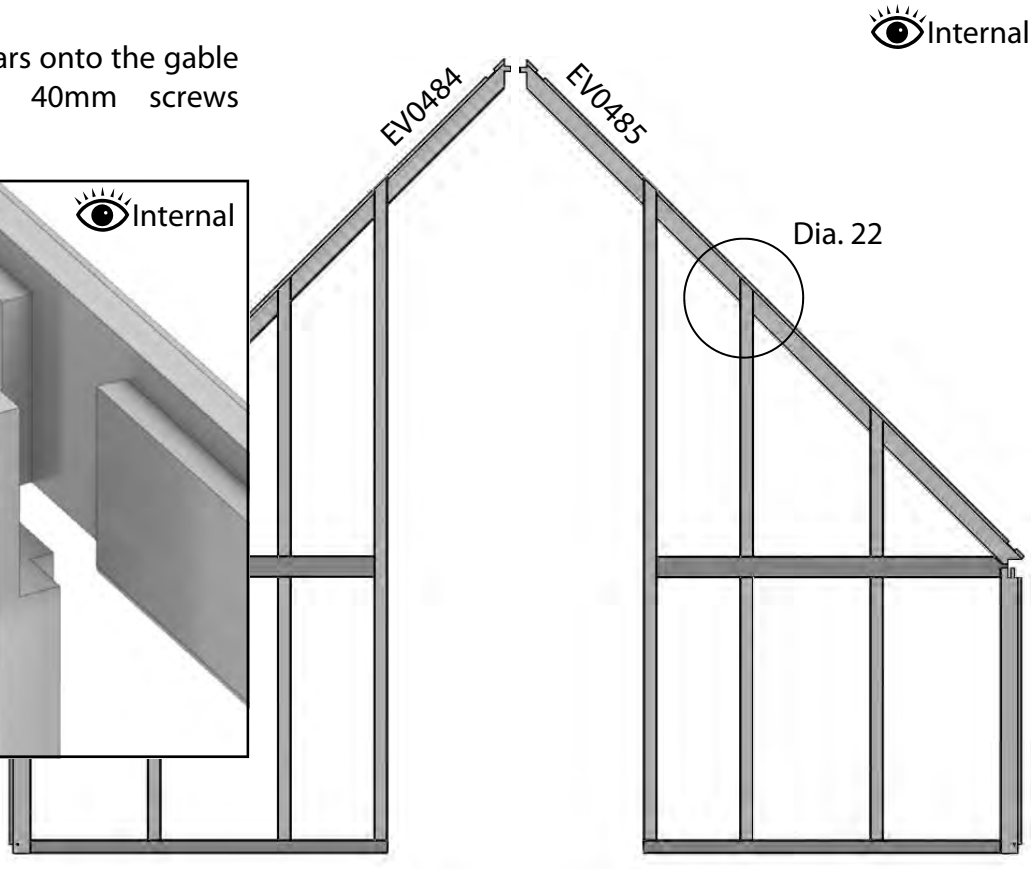




Slot the above purling glazing bars into place ready to take the roof corner bars. You should now drill the pilot holes shown in diagram 21.

Slot the roof corner bars onto the gable bars and fix with 40mm screws (diagram 22).

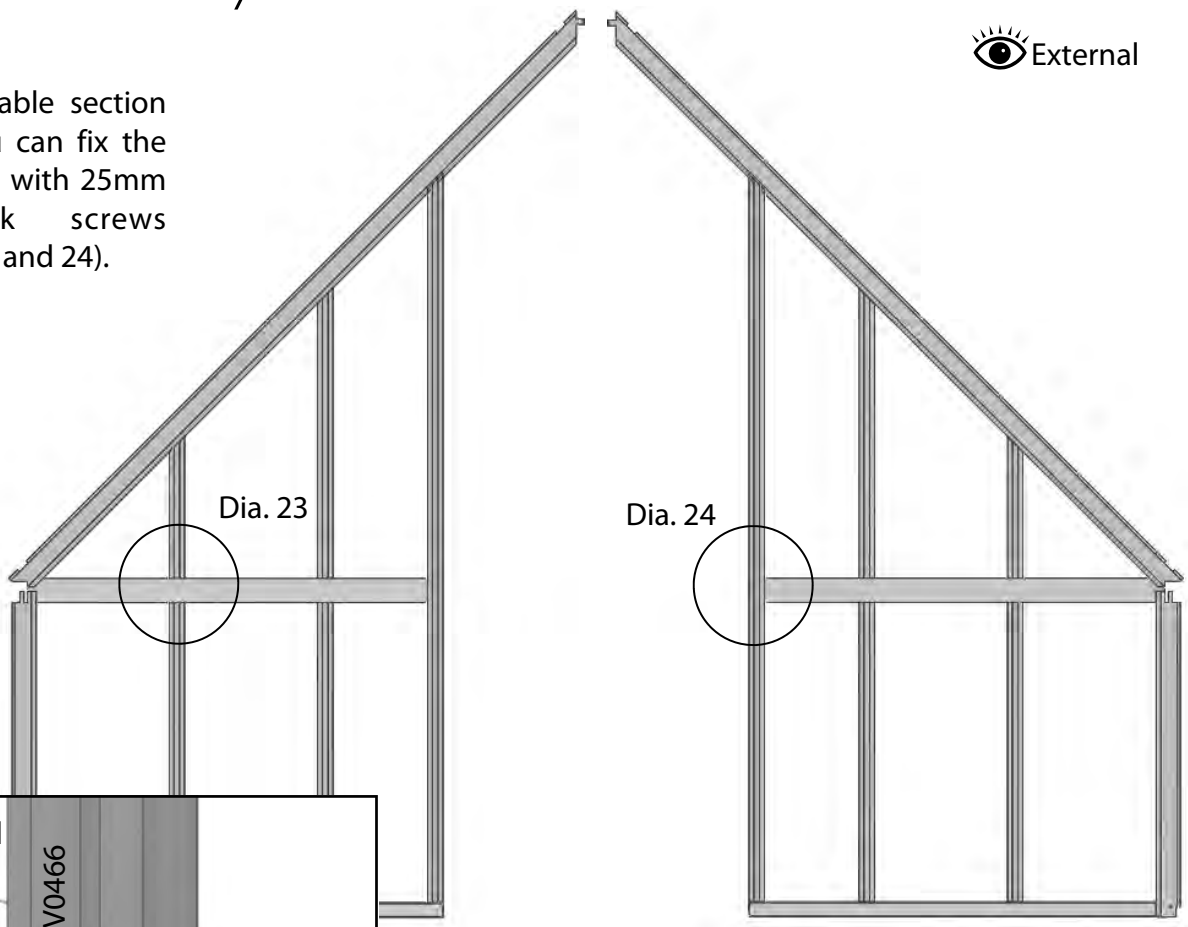




4

Front Assembly

Flip each gable section over so you can fix the purling bars with 25mm countersunk screws (diagram 23 and 24).



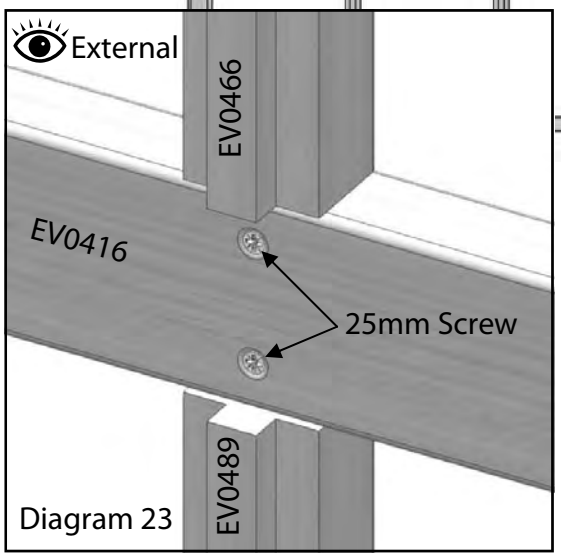


Diagram 23

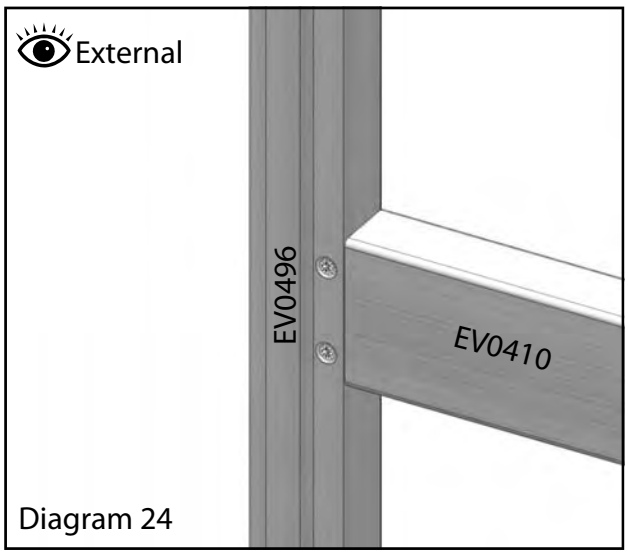
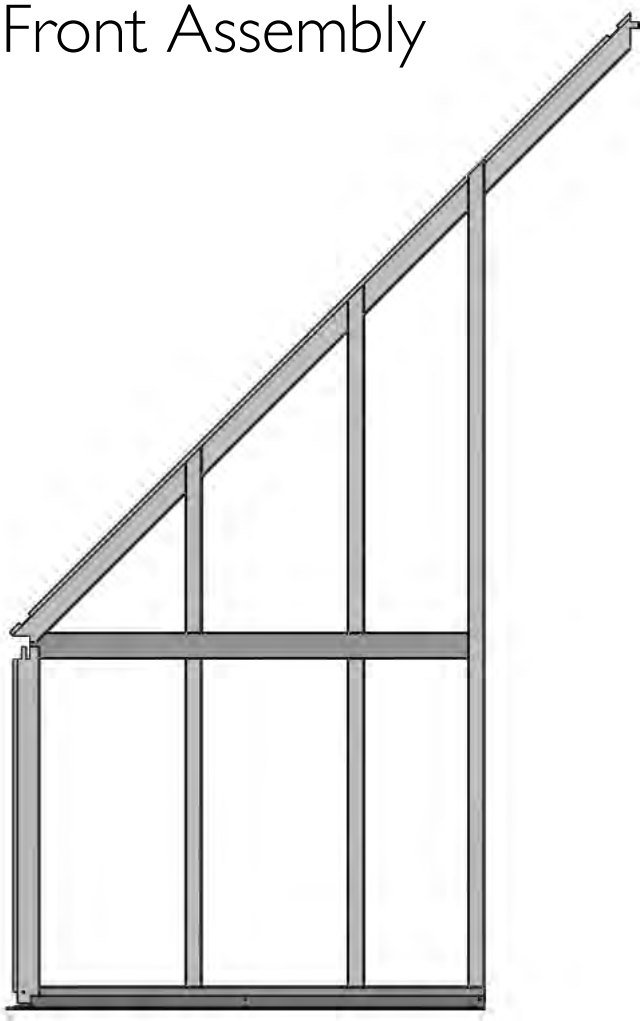


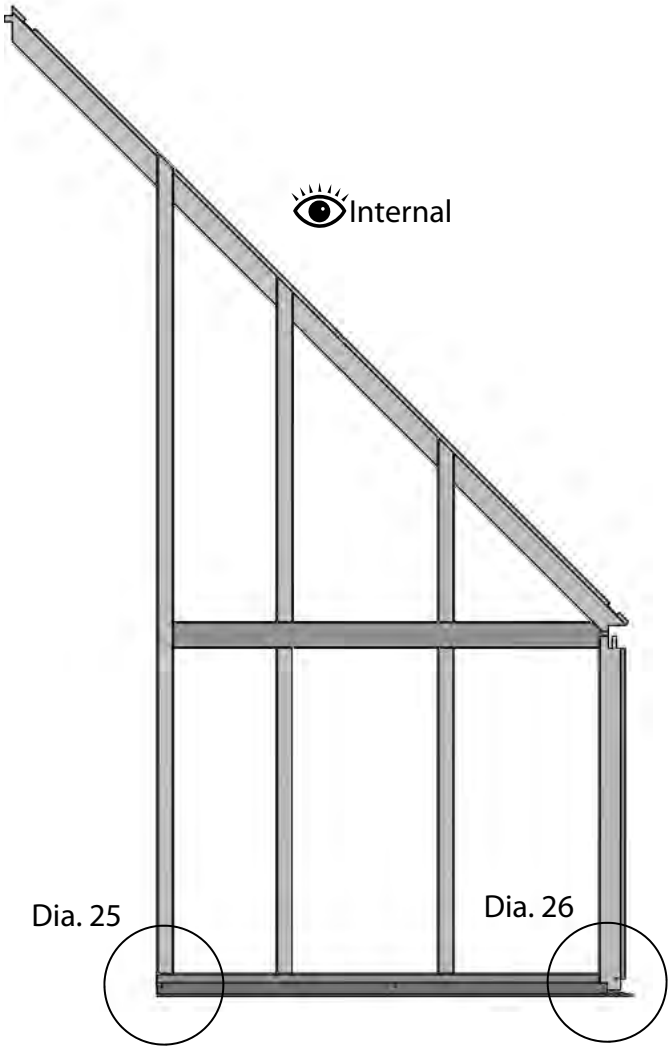
Diagram 24

NB. If you have an extension refer to the separate manual at the end of this section (4) and follow the frame construction as the order of construction is slightly different to a standard building.

4

Front Assembly





Once you have assembled your gable ends you can fit the aluminium base plates. Do this while the gables are flat on the ground. The front gables are easy to set up as the base plate is fitted flush with the end of the cill which meets the door (diagram 25).
The other end should have a mitre cut and will stop short of the corner (diagram 26).
Fix the base plates with 25mm screws.

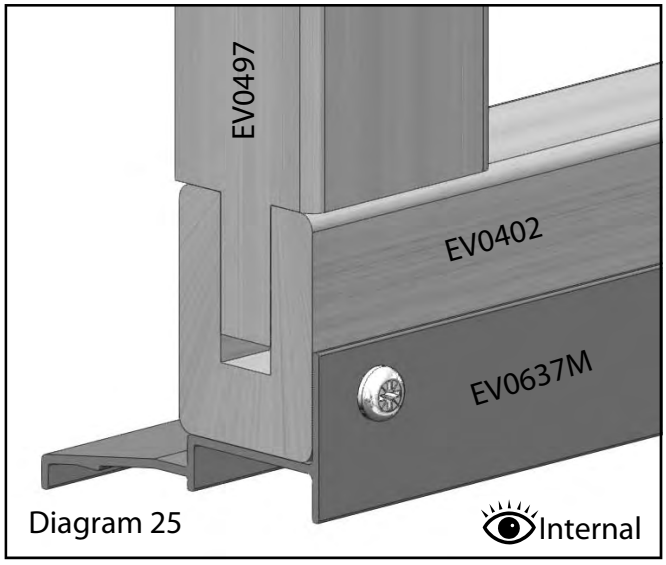


Diagram 25

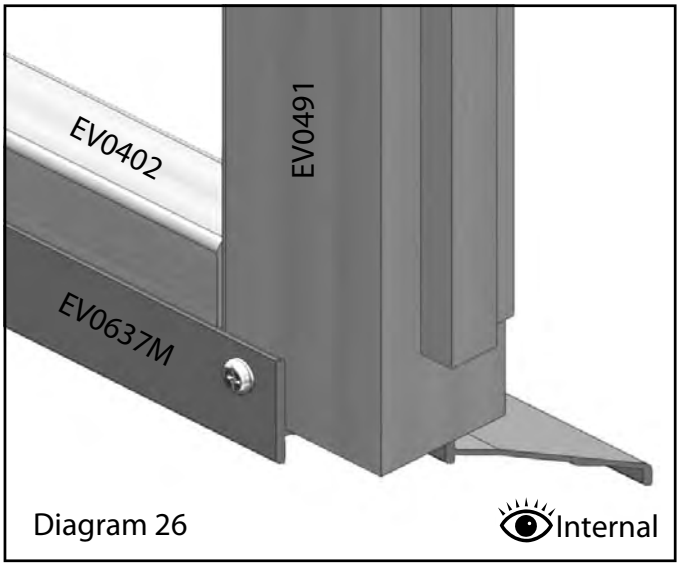


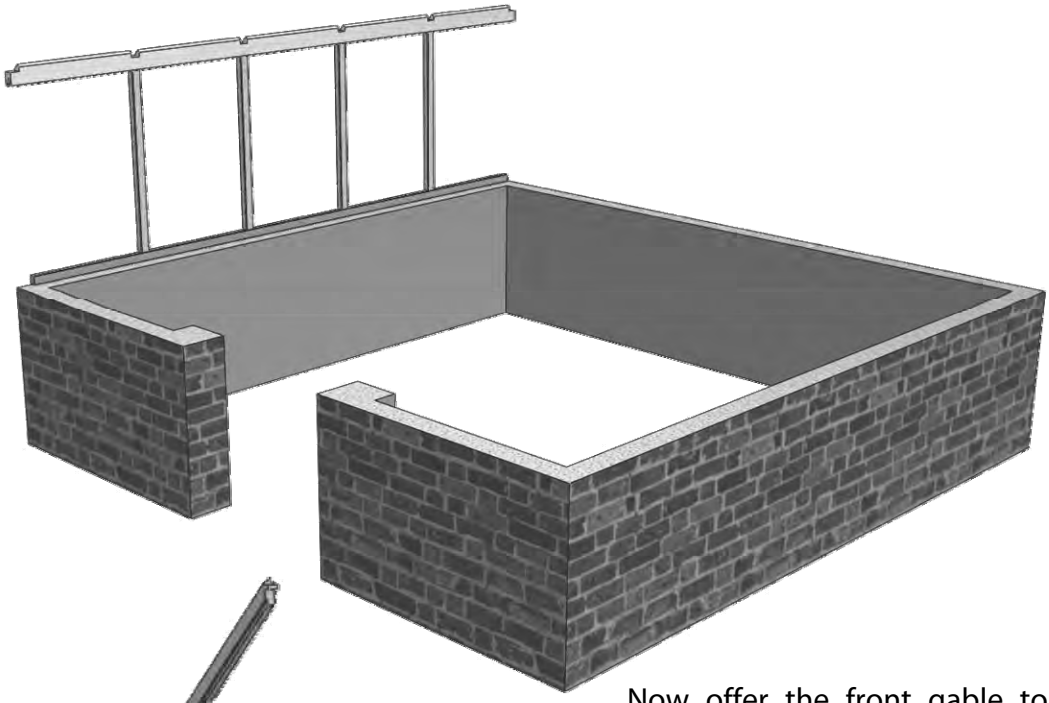
Diagram 26

4

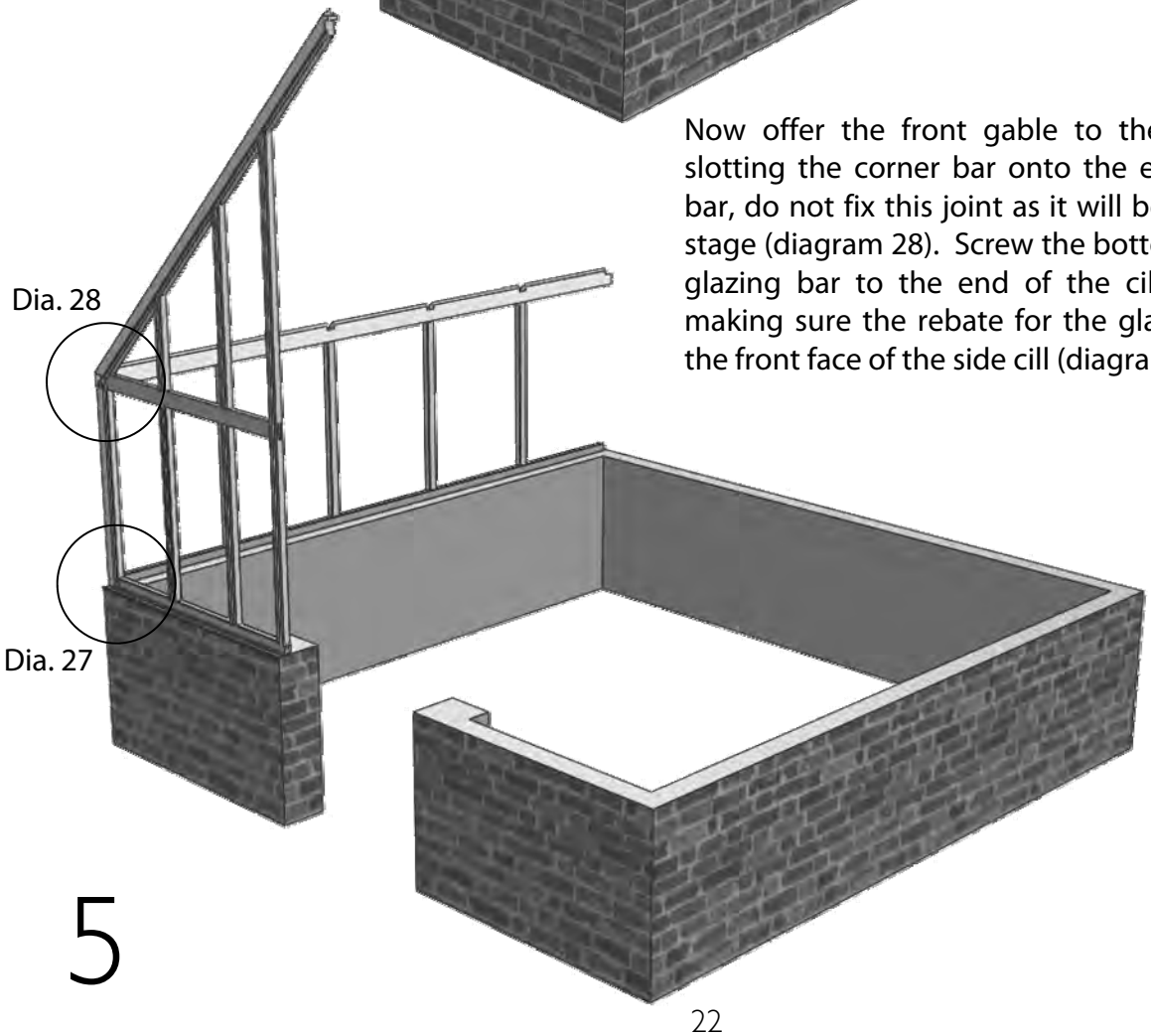
Frame Assembly

Before you position your side section onto the dwarf wall you should drill the pilot holes in the bottom of the side corner bars shown in diagram 27. The position of these holes should be about 19mm from the side face and 30mm measured from the bottom end of the bar.

You can now position the side section on the aluminium base, you will need a helper to hold this in place or simply strap it to a set of steps.



Now offer the front gable to the side assembly slotting the corner bar onto the end of the eaves bar, do not fix this joint as it will be done at a later stage (diagram 28). Screw the bottom of the corner glazing bar to the end of the cill (80mm screw) making sure the rebate for the glass lines up with the front face of the side cill (diagram 27).



5

Frame Assembly

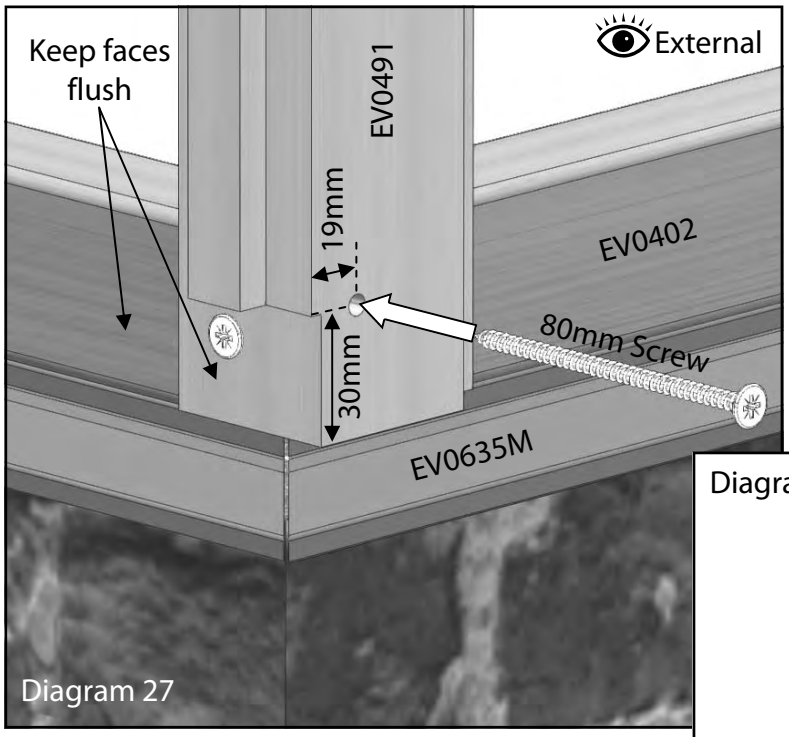


Diagram 27

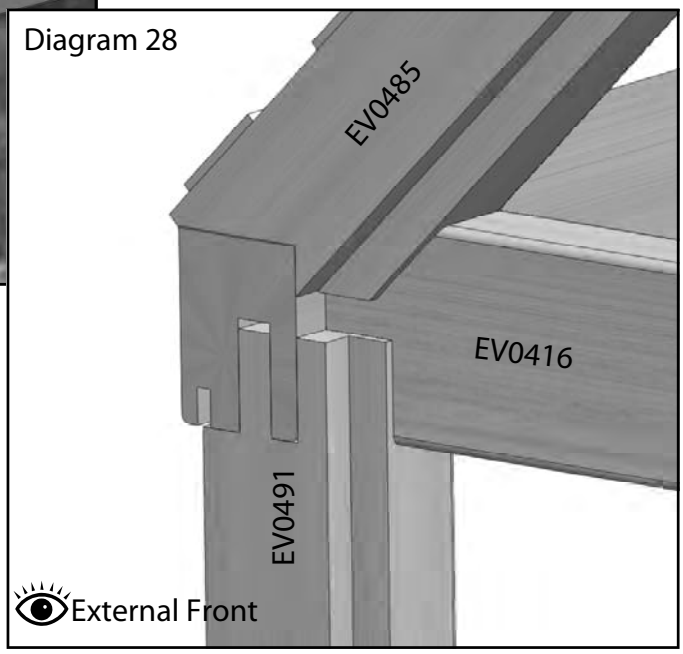


Diagram 28

Make sure the side corner bar is located correctly and the front face is flush with the end of the eaves bar, mark out the pilot hole positions shown in diagram 29 and 30. Diagram 32 and 33 on the next page show the direction the holes should be drilled in.

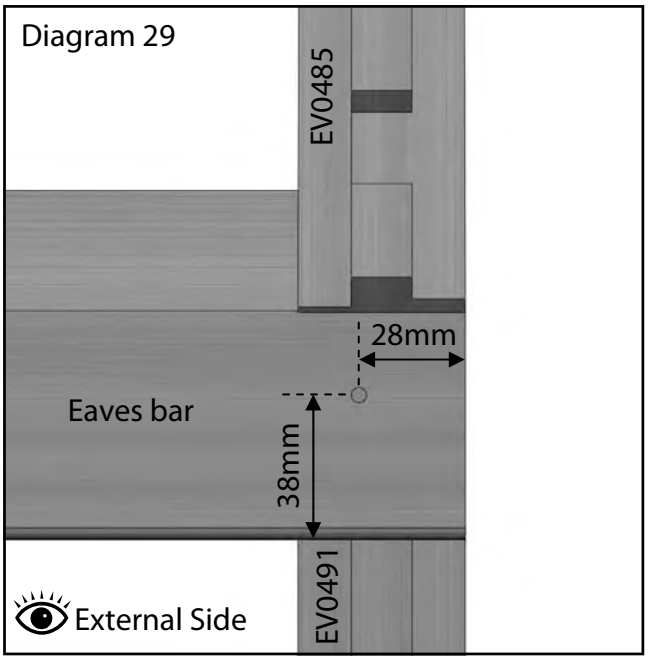


Diagram 29

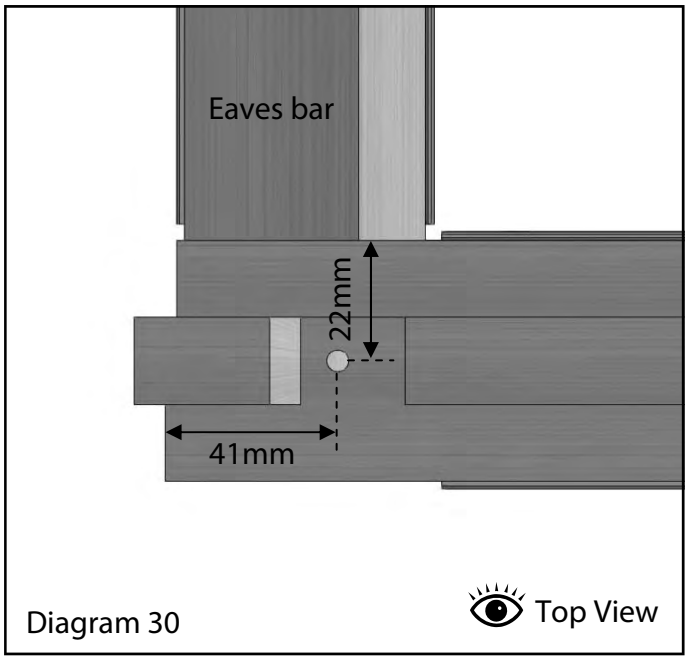
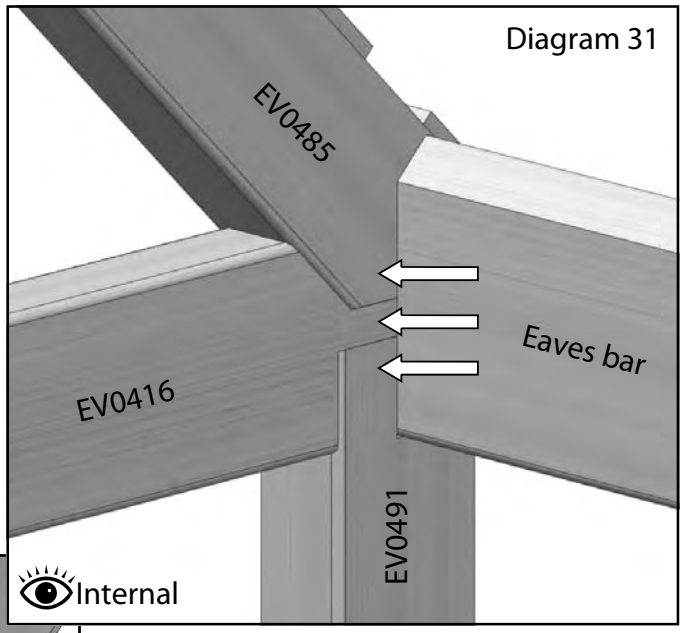
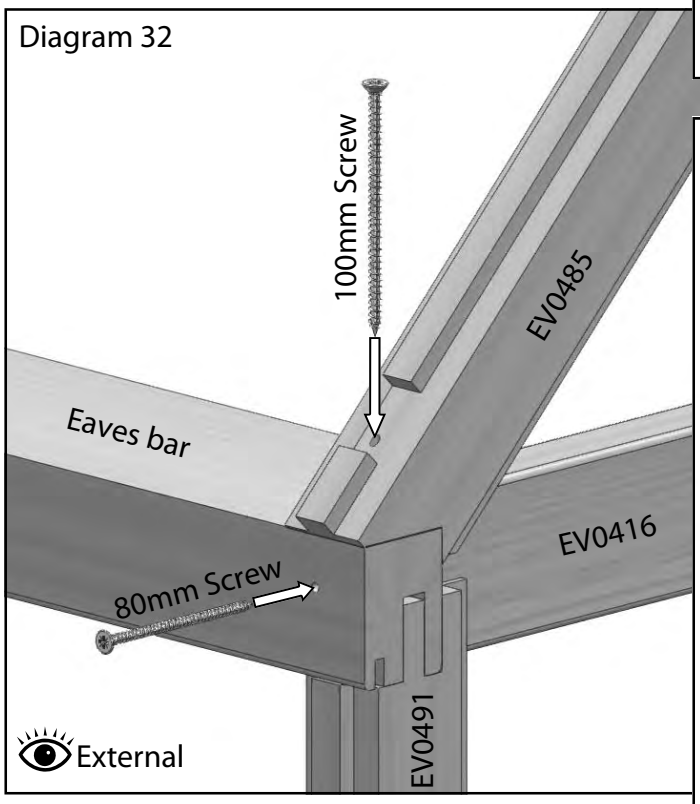


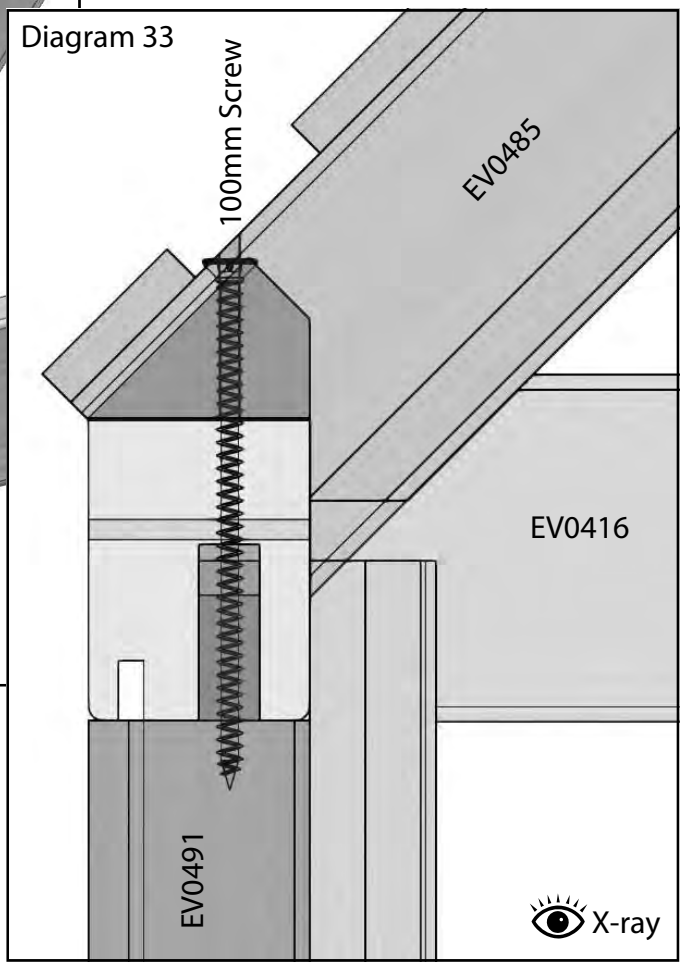
Diagram 30

Frame Assembly

Before fixing this corner make sure the inside faces are all flush (diagram 31). When you are happy that the purling is located correctly (it is normal that the purling is set back slightly from the glass rebate on the front of the building) start by inserting the 80mm screw through the side of the eaves bar into the tenon on the end of the purling.
Next insert the 100mm screw vertically down through the roof corner bar into the eaves bar and finally securing the side corner bar (diagram 33).



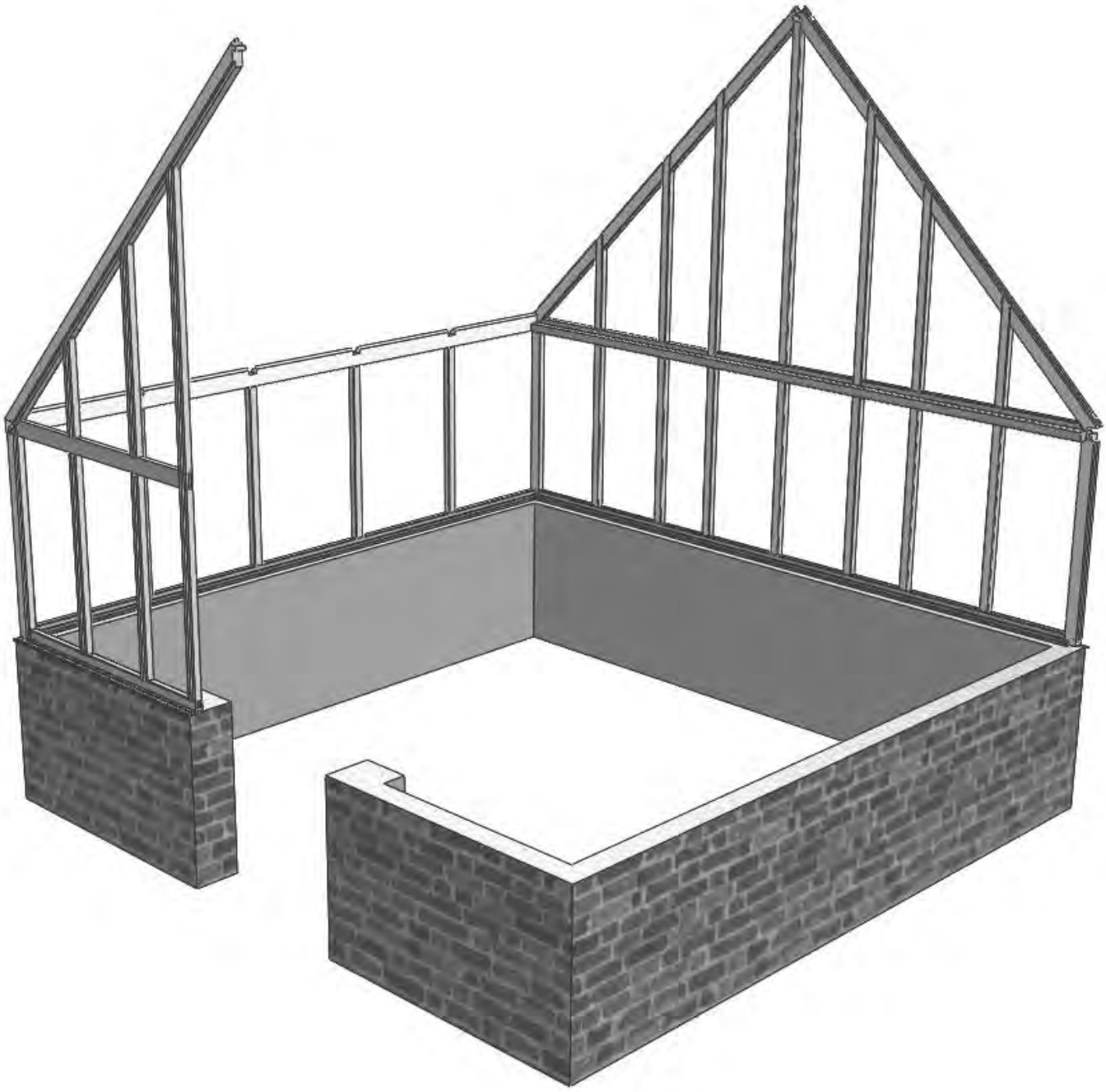




5

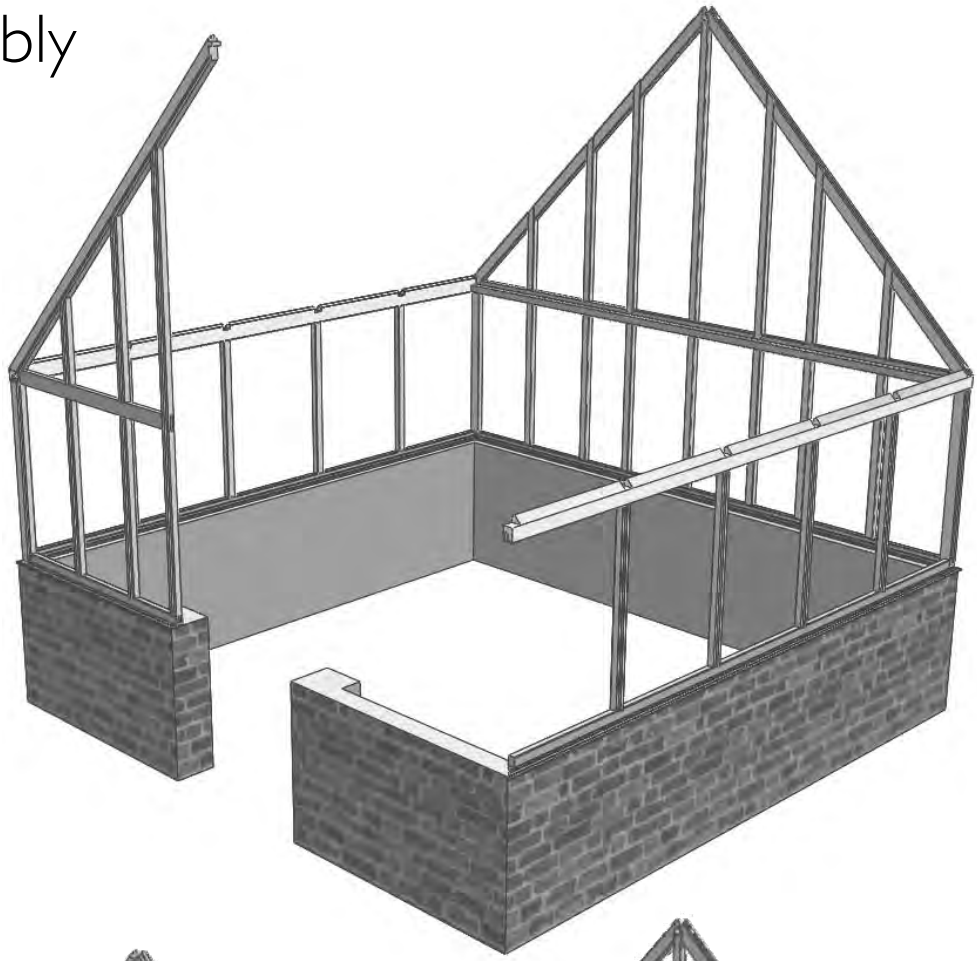
Frame Assembly

With help or using props for extra support, position the rear gable on to the dwarf wall and repeat the steps from page 23 to 24. Keep this supported at all times.

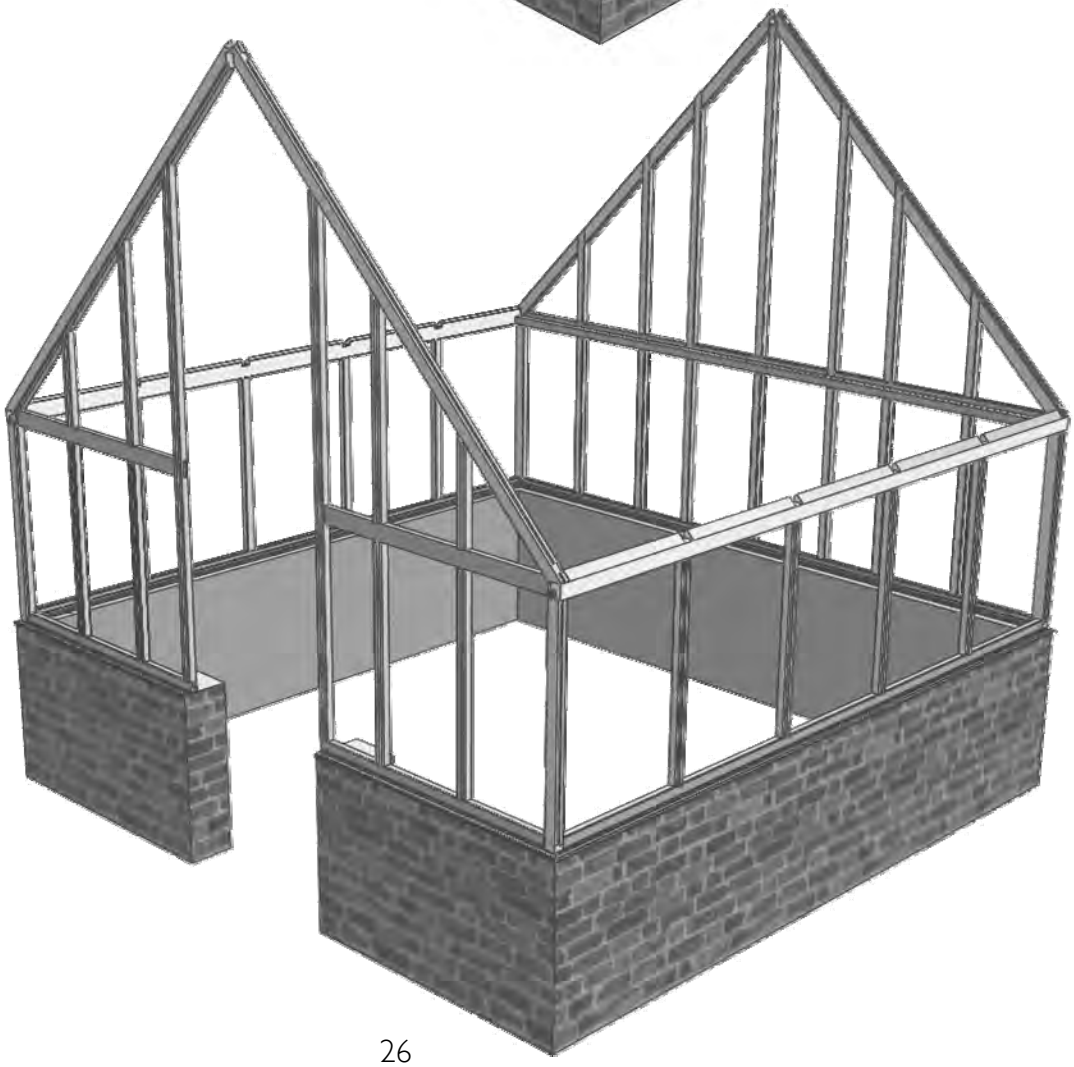


Frame Assembly

Connect the next side as you did before.



Finally attach the last gable section.

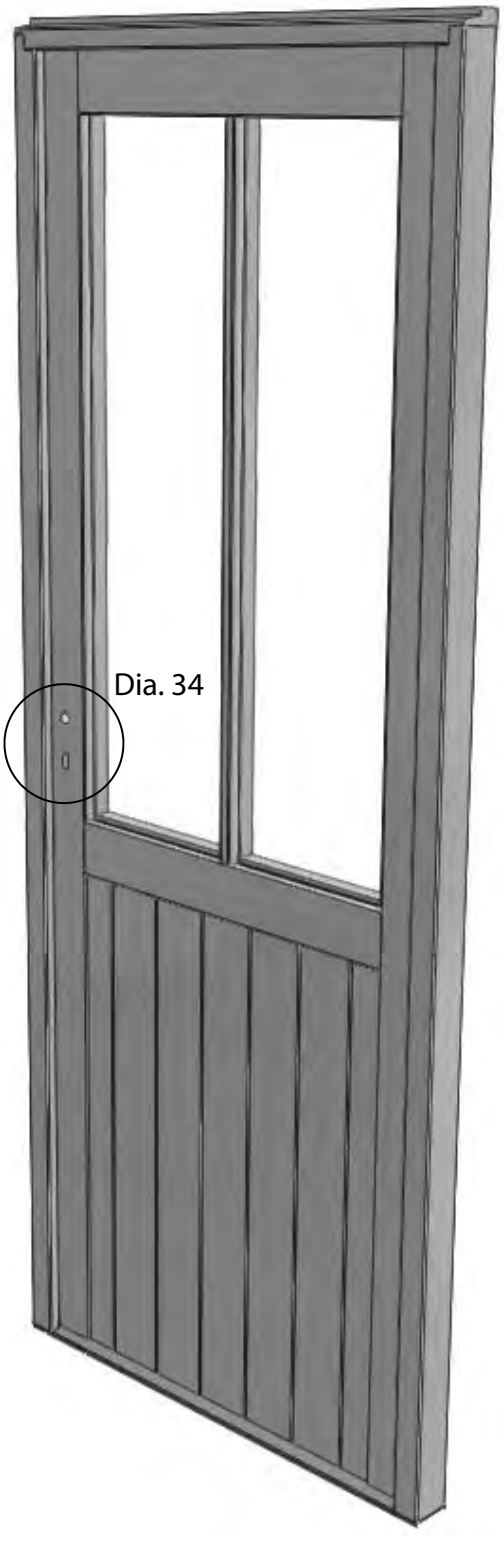


5

Door Installation

Your door will arrive already installed in the frame with the lock and lock plate attached. All you need to do is attach the door handle to install this to the building.

Start by sliding the spindle through the top hole in the door (diagram 34), then locate one of the door handles on this and fix with the screws provided. Repeat this on the other side of the door (diagram 35).



External Views

Diagram 34

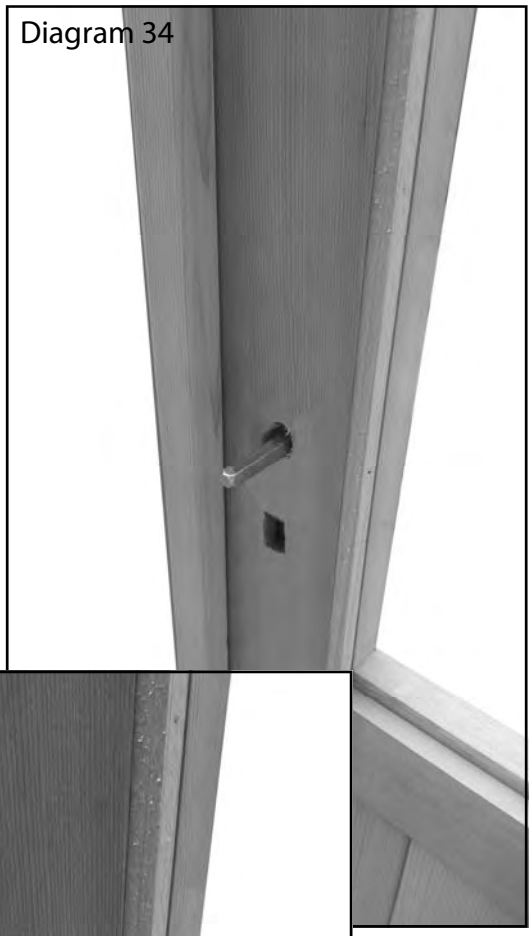
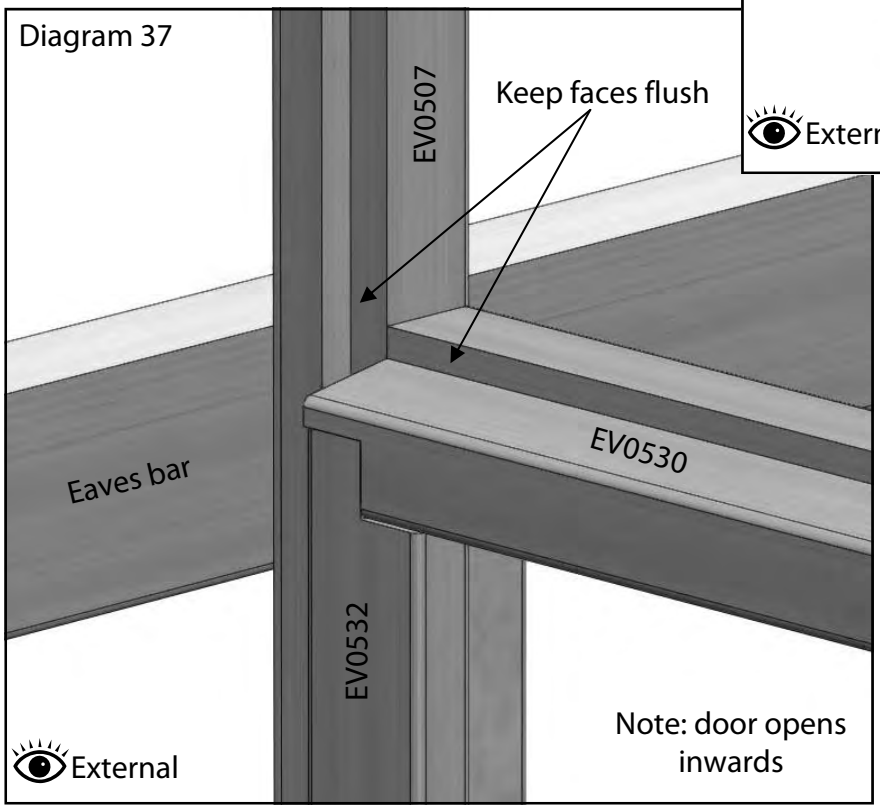


Diagram 35

Door Installation

Take the door to the greenhouse frame assembly and slide it into place. Unlock and open the door so that it is 90 degrees to the frame as shown in the illustration on the opposite page.
You will need to pack the outside edge of the open door, ideally with a wedge so you have some adjustment or simply with some scrap cardboard from the packaging. This will help you get the frame in the correct position for fixing.
To start with you only need to put 4 fixings in the frame, 1 on either side at the top and the same at the bottom. The 50mm screws should go through the same face that the strike plate is mounted on and where the hinges are mounted on the other side. The back of the frame should line up with the inside face of the gable glazing bar, this should then also mean that the glass rebate on the frame header will line up with the rebate on the gable glazing bars.
When you are happy with the position of the frame fix it with the 50mm screws as shown on the opposite page. This is only an initial fix and adjustments can be made later.



Door Parts		
Part Name	Part Number	Qty
Door Lock	EV0606	1
4" Hinges	EV0607	3
Door Handle Set	EV0608	1
Single Door	EV0710	1

6

Door Installation

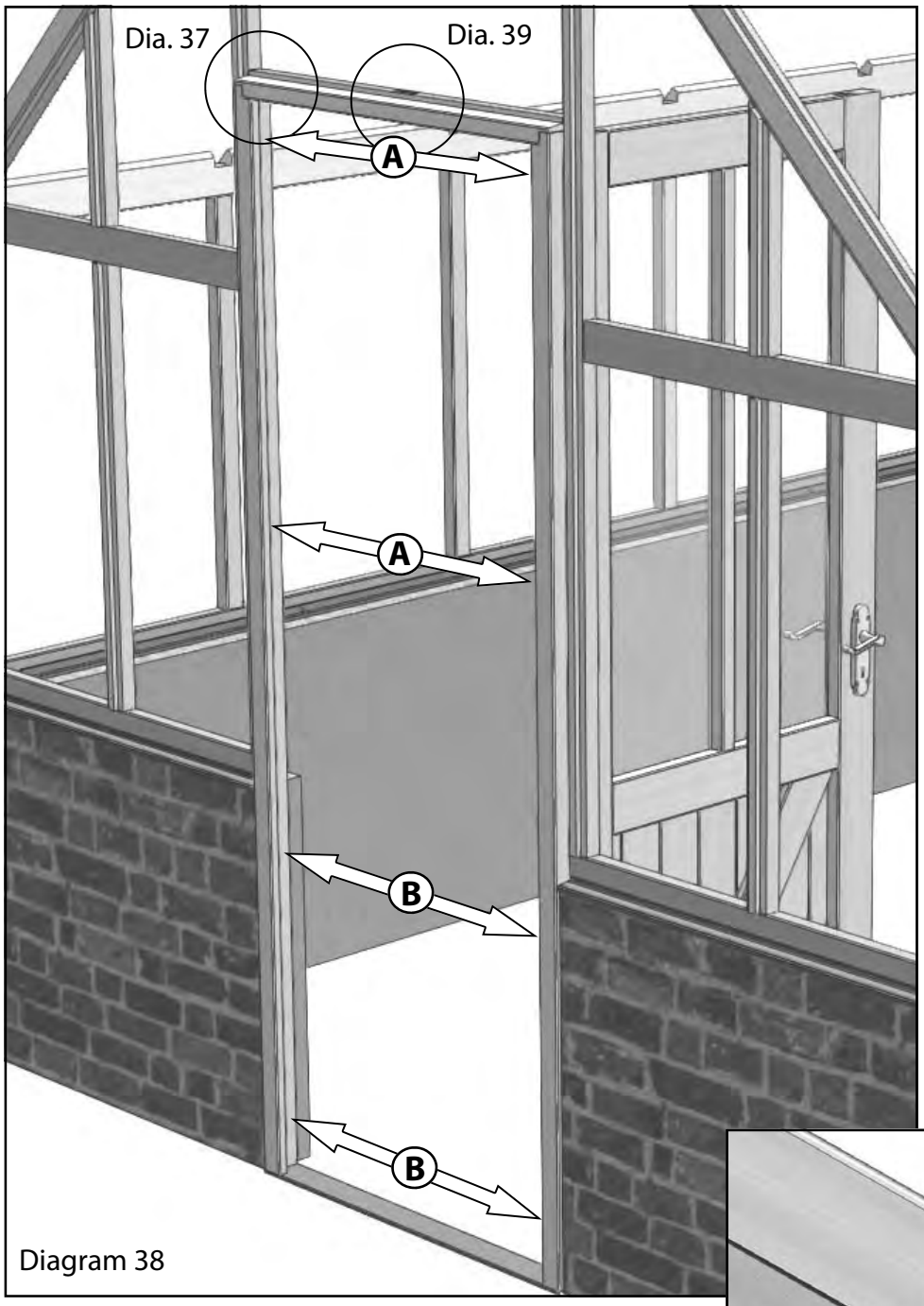


Diagram 38

You should use four 50mm screws at the points shown as 'A' below. You don't want to fix to the brickwork until you are absolutely happy with the position and trueness of the greenhouse frame.

Only when the greenhouse has been glazed and you are ready to fix the building to the brickwork should you fix the door frame at the points shown as 'B' below. Make sure the door frame posts are vertical and are the same width apart all the way down (pack the frame out if necessary). Also its better to avoid drilling into the top course of bricks as this could dislodge them.

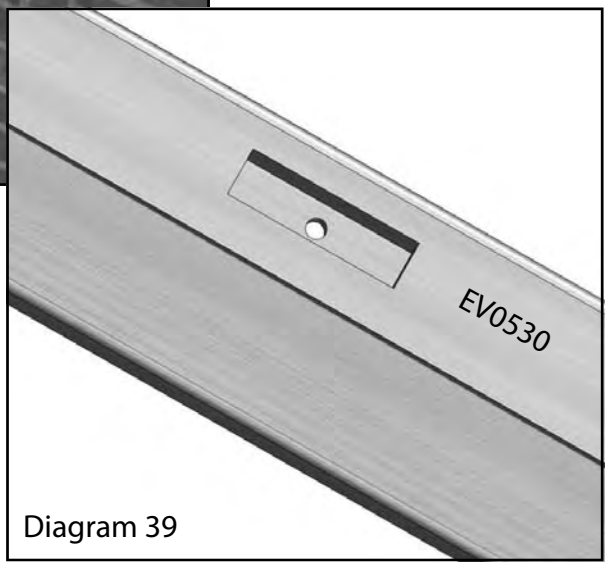
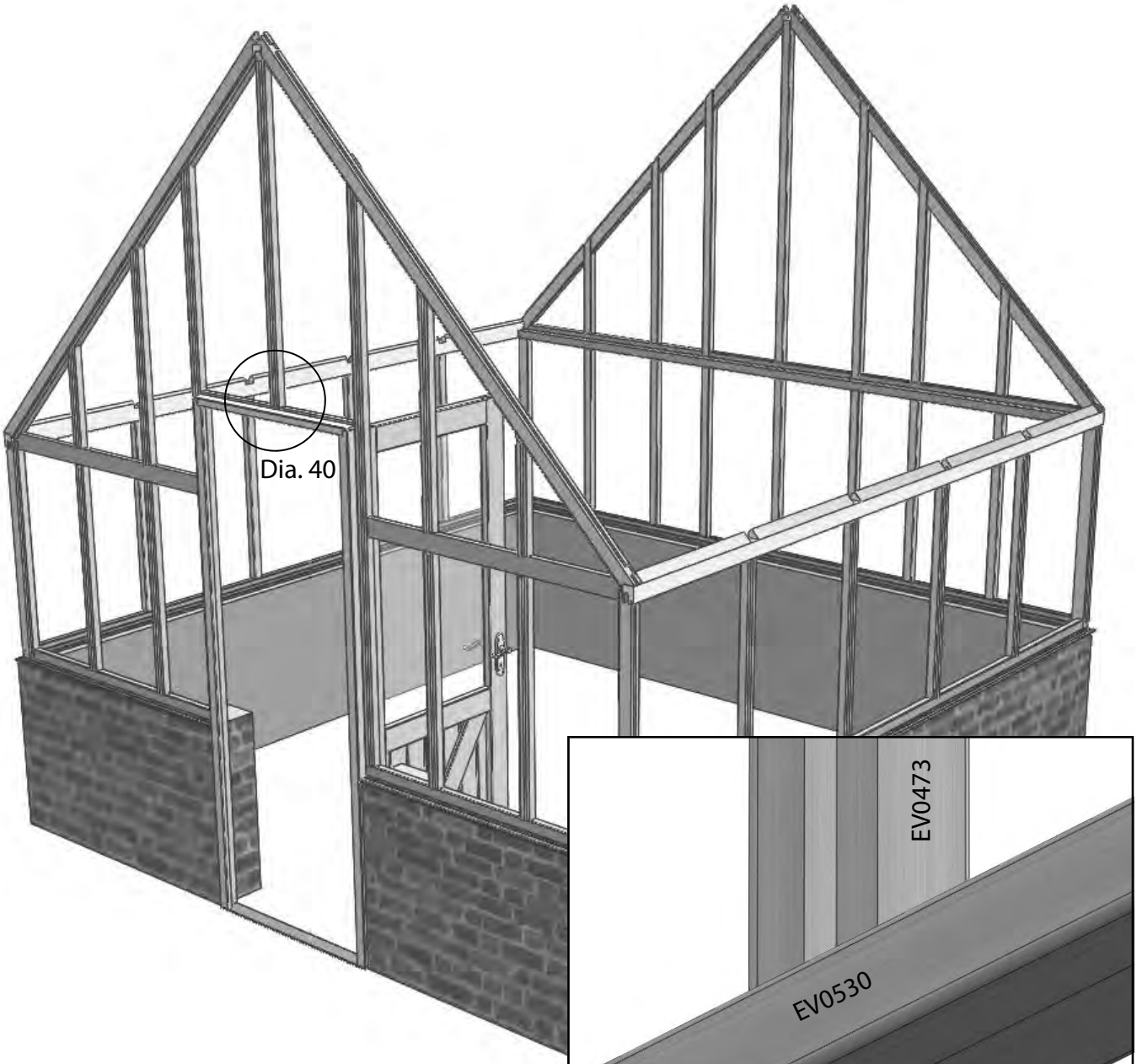


Diagram 39

Once the frame is secure drill a pilot hole through the mortise slot in the door frame header (diagram 39).

Door Installation



Slot the above door glazing bar into the mortise slot in the door frame header and secure it with a 50mm screw.

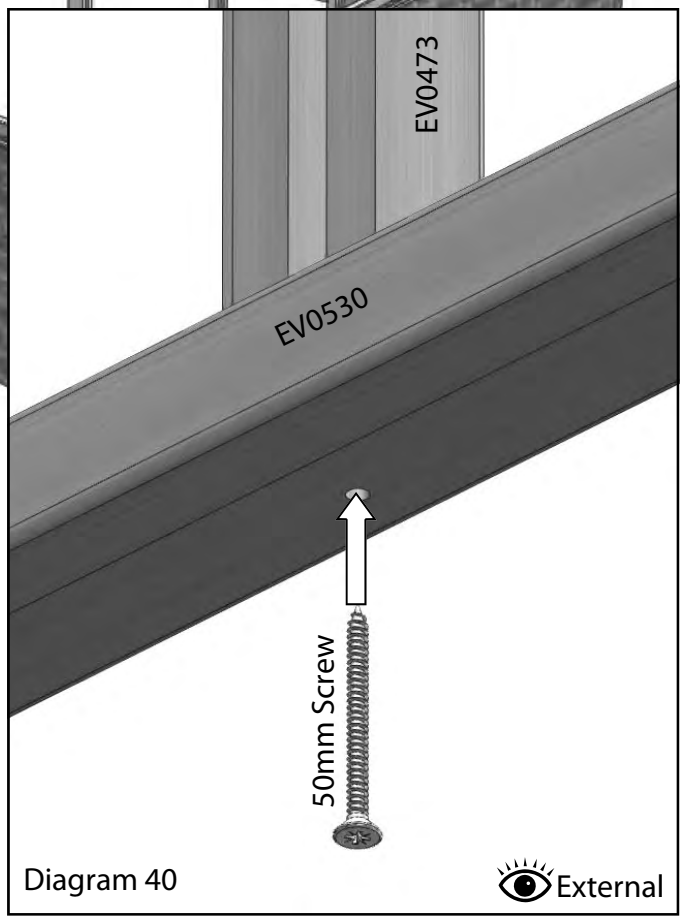


Diagram 40

6

Roof Assembly

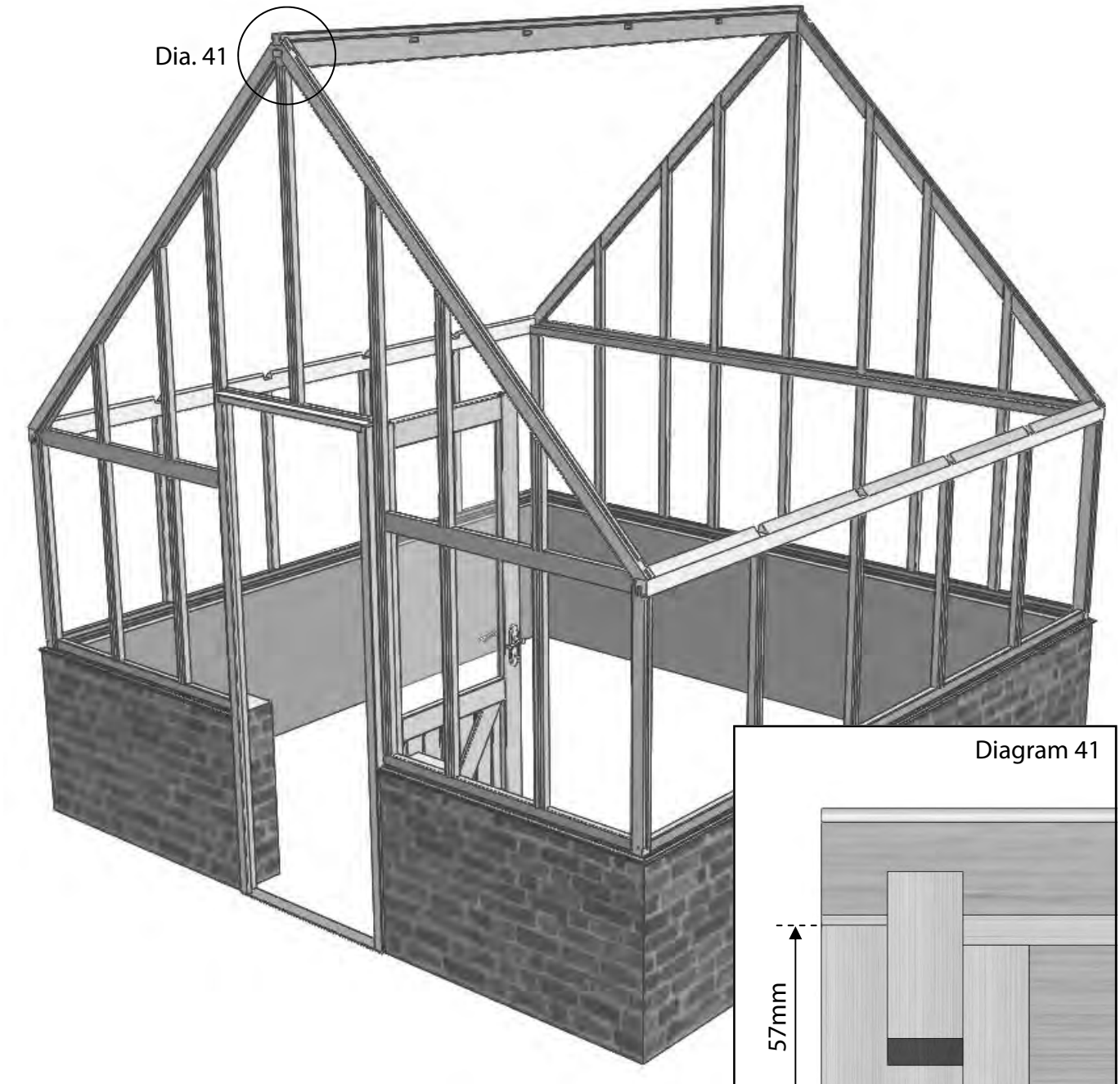
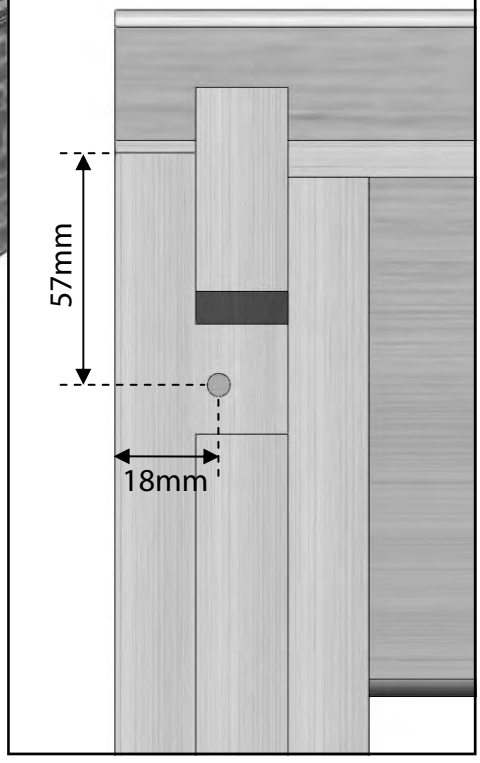


Diagram 41

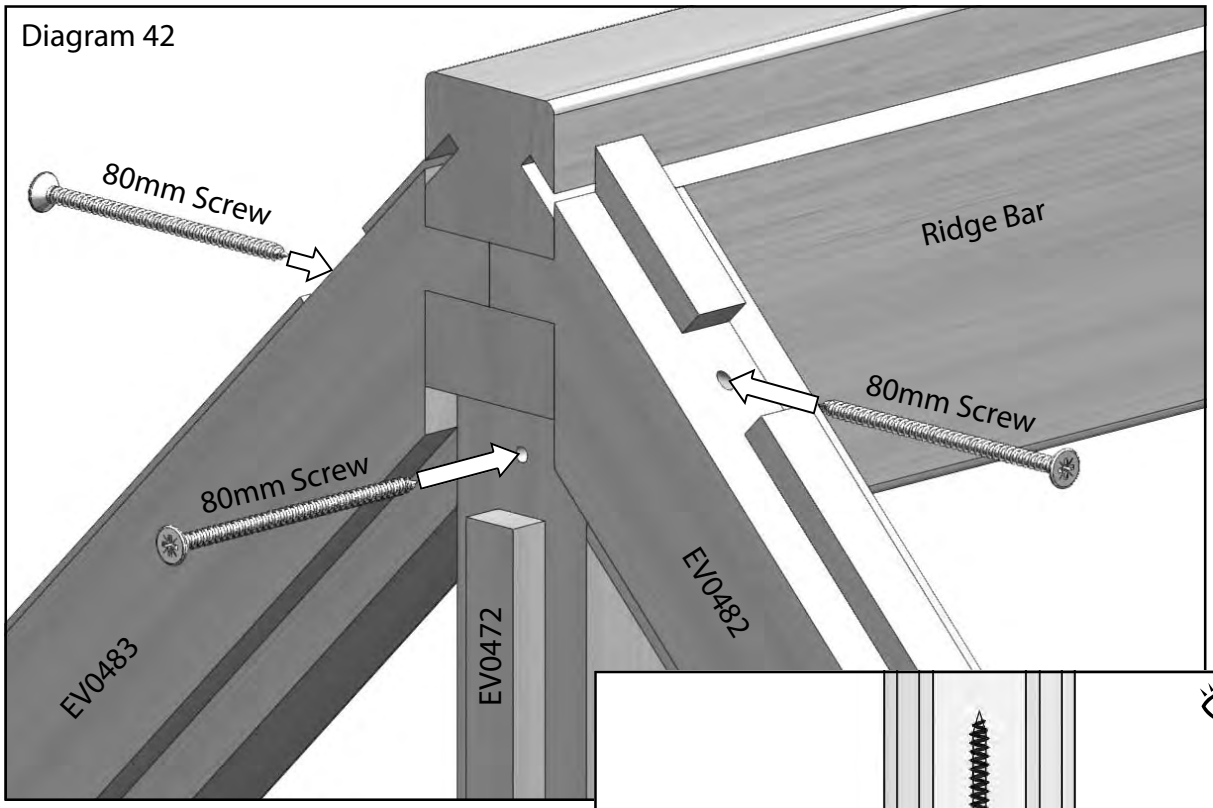


You will need two sets of step ladders at this point and a helper. Slot the ridge bar onto the tenons of the roof corner bars at both ends of the building. The central glazing bars should locate with the ridge bar below this joint (diagram 42). Once in place still with your helper securing one end drill the roof corner glazing bars as shown in diagram 41 to 44. The pilot holes should be drilled horizontally and off centre as shown so that the screw on the other side misses this screw. If you always drill the holes for the roof bars 18mm from the left hand side of the bar this will prevent any problems. Fix the roof bars with 80mm screws (diagram 42).

7

Roof Assembly

Diagram 42



The central glazing bars should also have a pilot hole drilled and be fixed to the ridge bar with an 80mm screw (diagram 42).

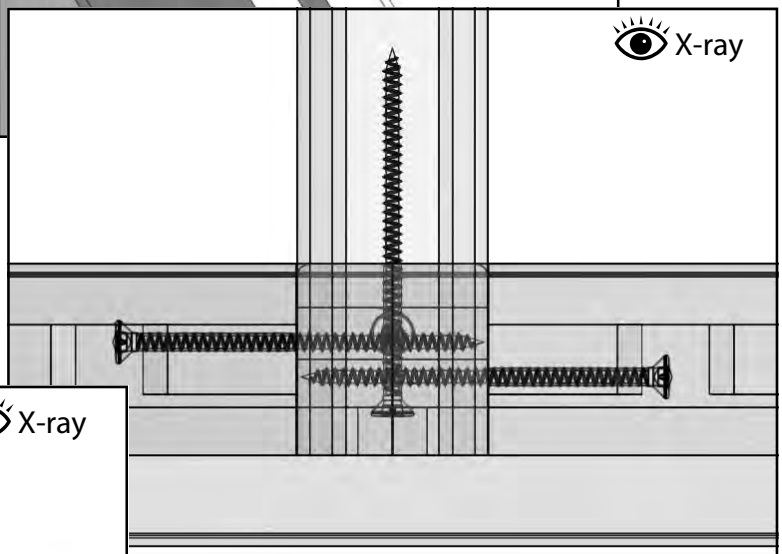
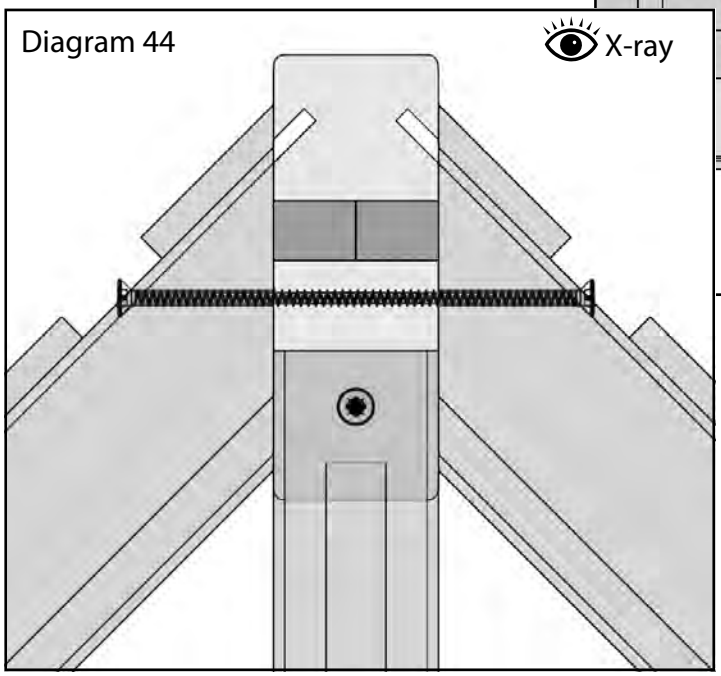


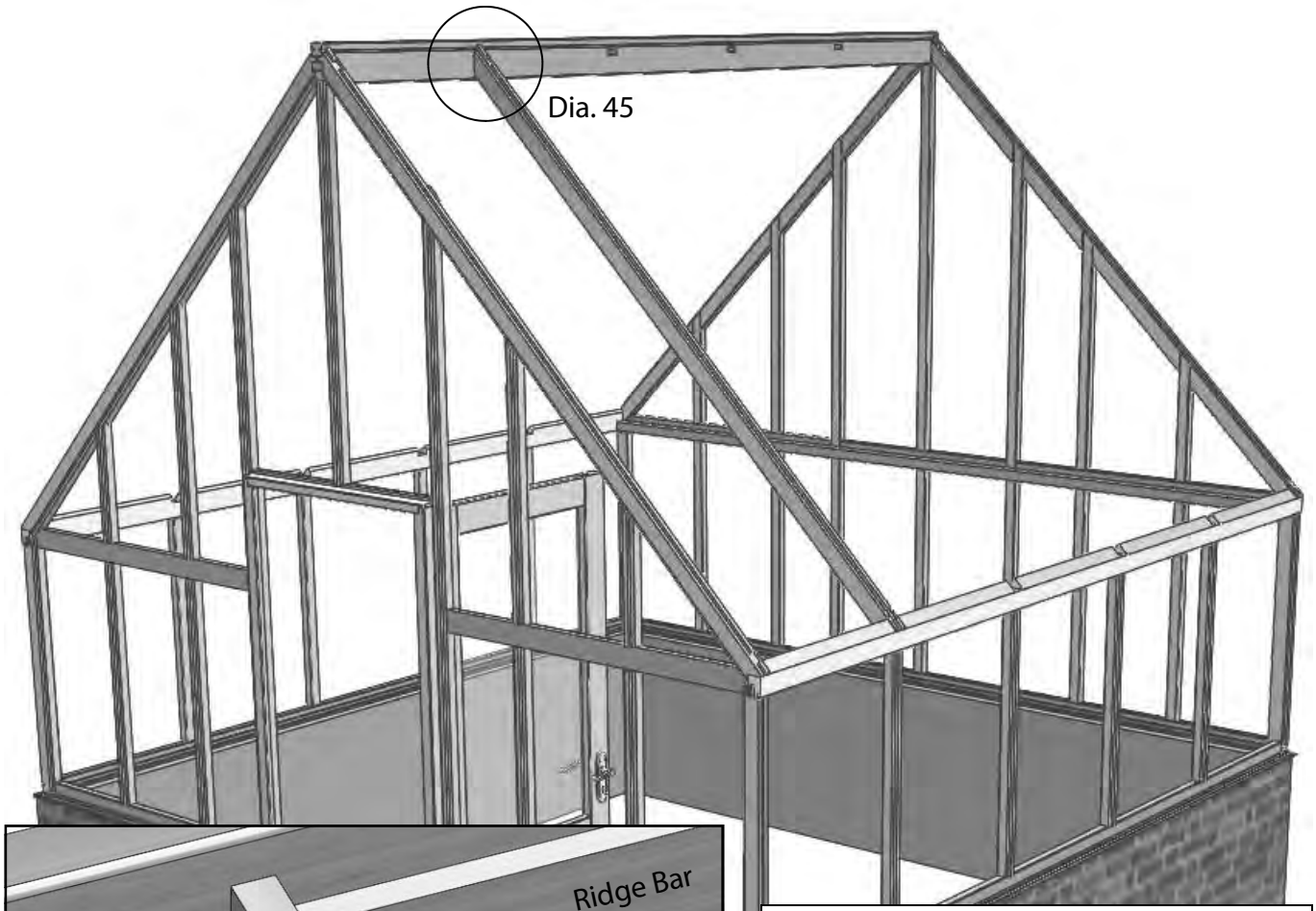
Diagram 43

Diagram 44



Roof Assembly

Now the ridge is in place you can install the roof bars. Slot the bar into the ridge first, the tenon may be a little tight so this might require a tap with a wood or rubber mallet. Once this has located correctly locate the bottom of the bar with the trench in the eaves bar. This again may require some persuasion to get this to drop into place. Once the bar is fitted at both ends drill a pilot hole at the top of the bar as shown in diagram 45. This again should be drilled off centre as the roof corner bars were in diagram 41. Now fix with an 80mm screw. Don't fix the bottom until all the roof bars are in place.



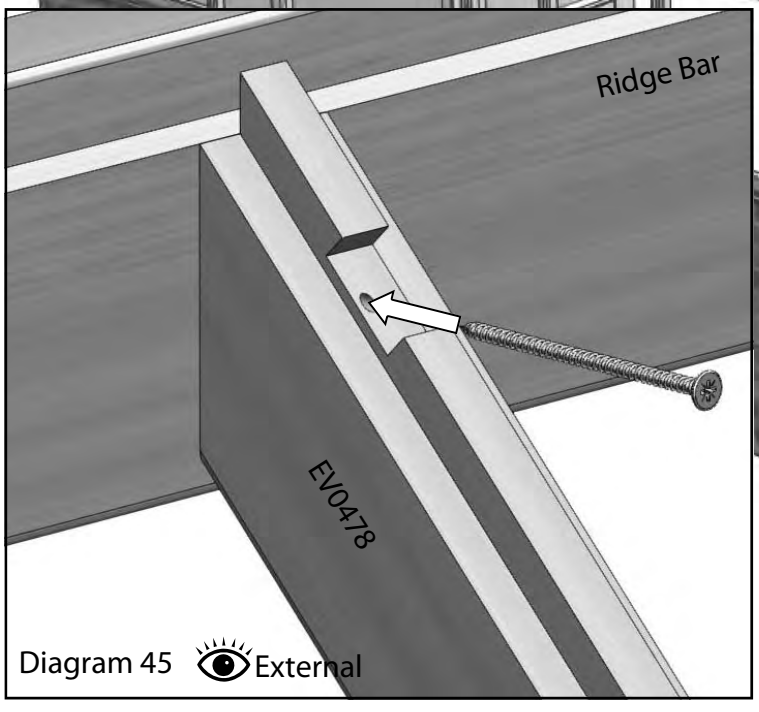
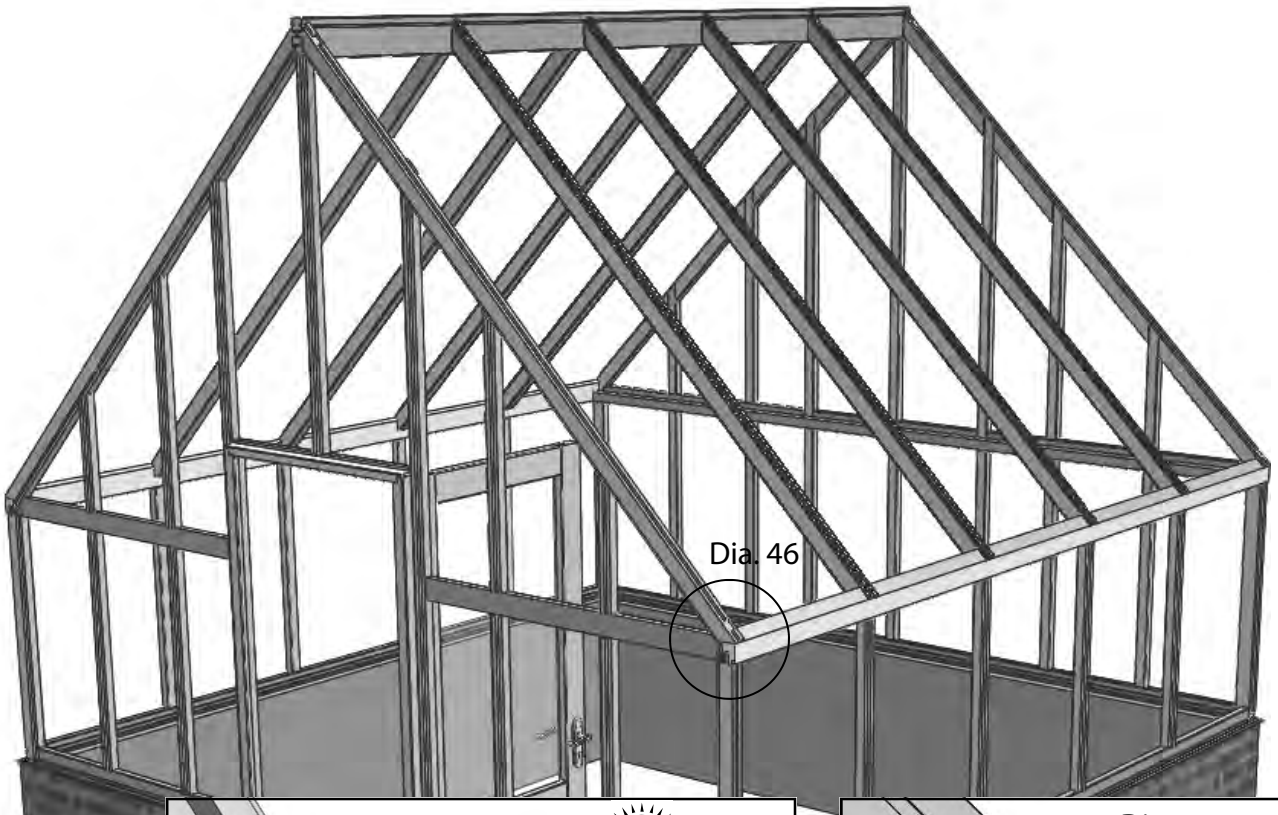


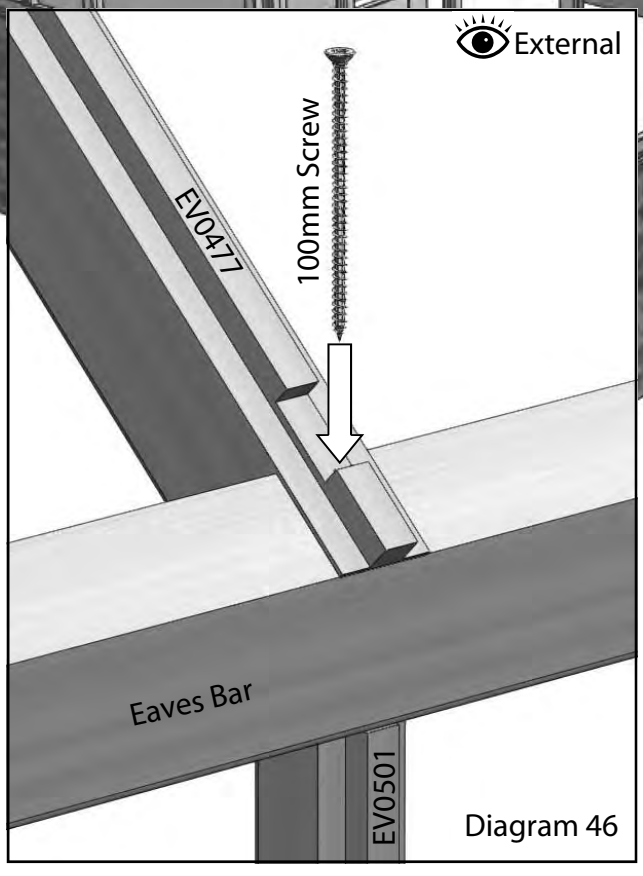
Diagram 45

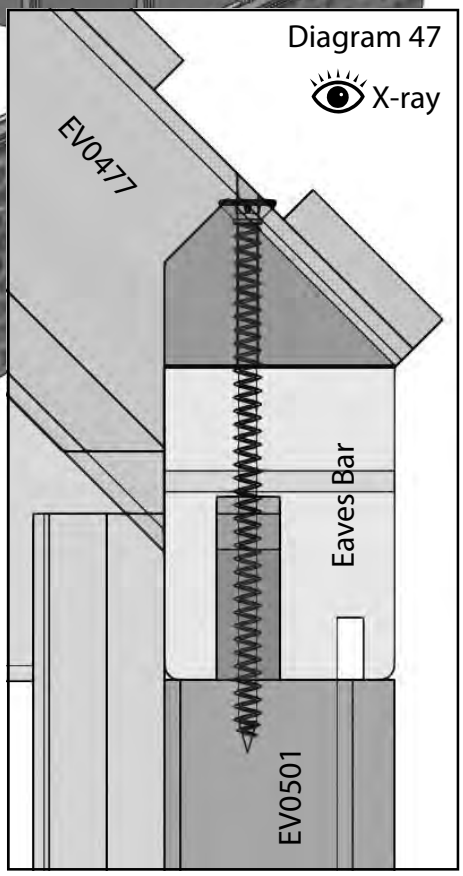
Roof					
Part Name	Part Number	Qty			
Ridge:		6ft	8ft	10ft	12ft
6ft long	EV0444	1			
8ft long	EV0445		1		
10ft long	EV0446			1	
12ft long	EV0447				1
Roof Bars	EV0477	4	6	8	10
Eaves Bracing	EV0537M	4	6	8	10
Ridge Bracing	EV0538M	2	3	4	5

Roof Assembly

With all the roof bars in place drill pilot holes vertically down through the roof bars, refer to diagram 30 (page 23) for the location of this hole. Make sure the roof bars are tight in to the eaves bar on the inside of the building and fix with 100mm screws (diagram 46).

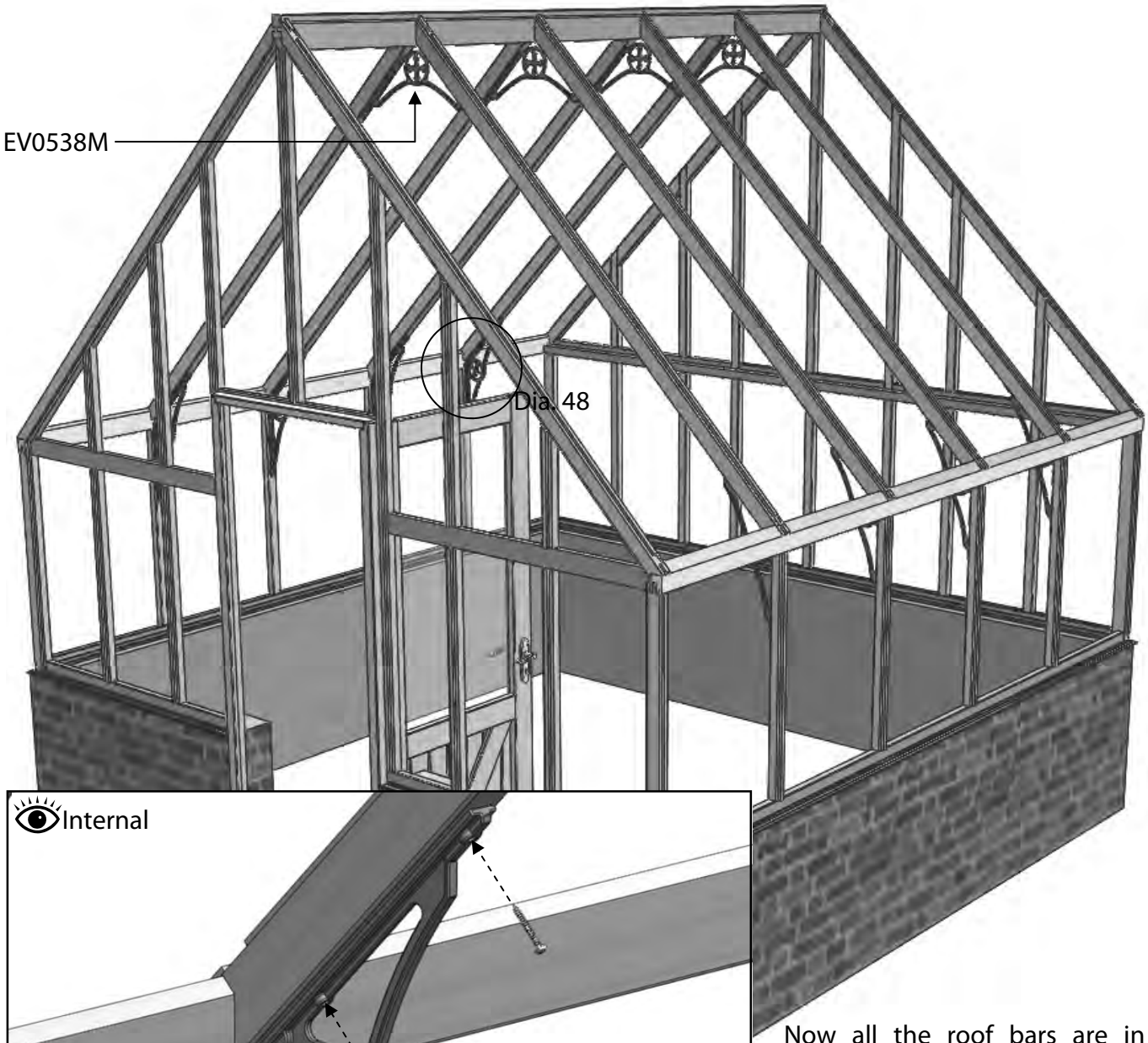






7

Roof Assembly



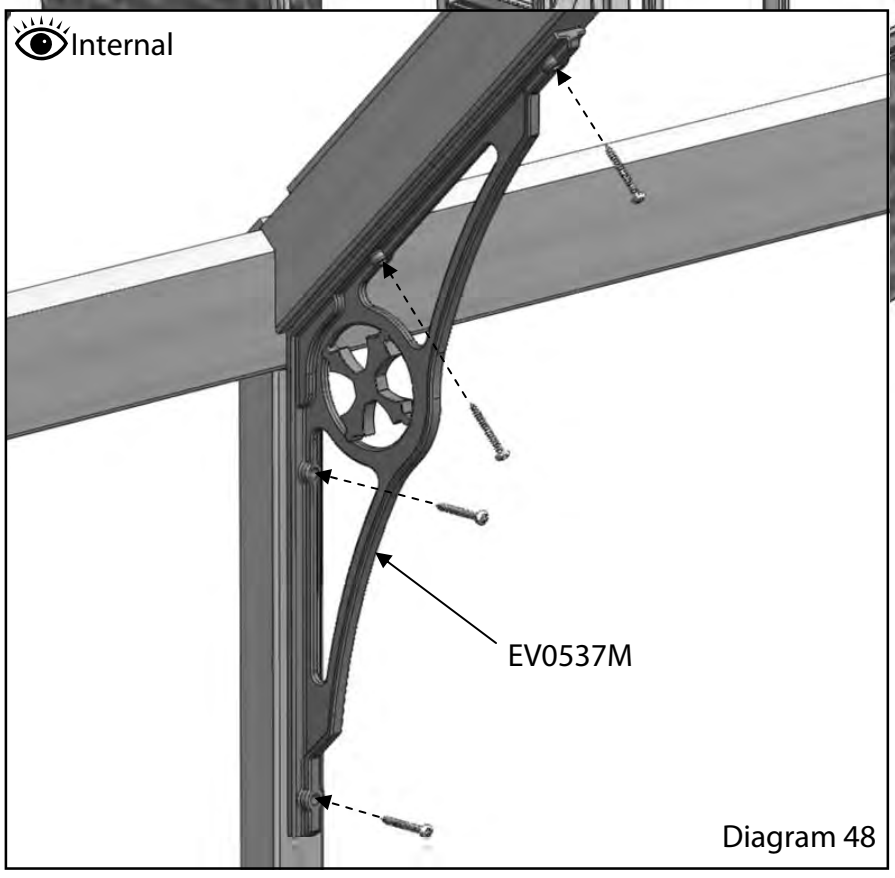
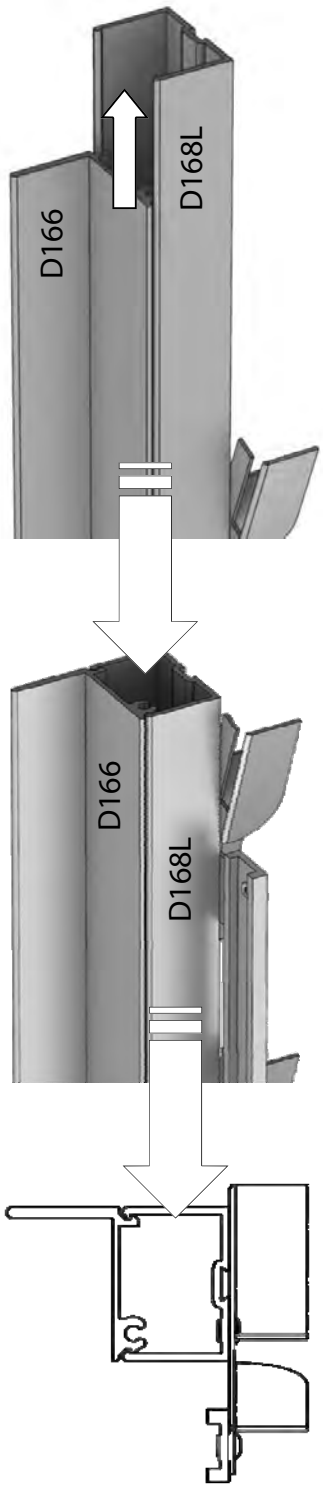


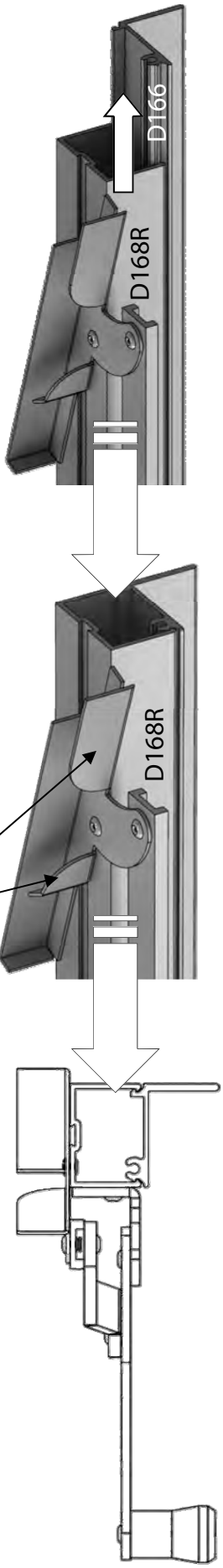
Diagram 48

Now all the roof bars are in place and fully secured you can fit the eaves bracing (EV0537M) and ridge bracing (EV0538M).
These are fitted to every roof and side bar in the building. Use 40mm screws to fix these to the building. (It looks better if you have all the manufacturing marks facing to the rear of the building).

Louvre Assembly

To start building your louvre you first need to assemble the sides. Connect the two side section with the two inserts as shown here.

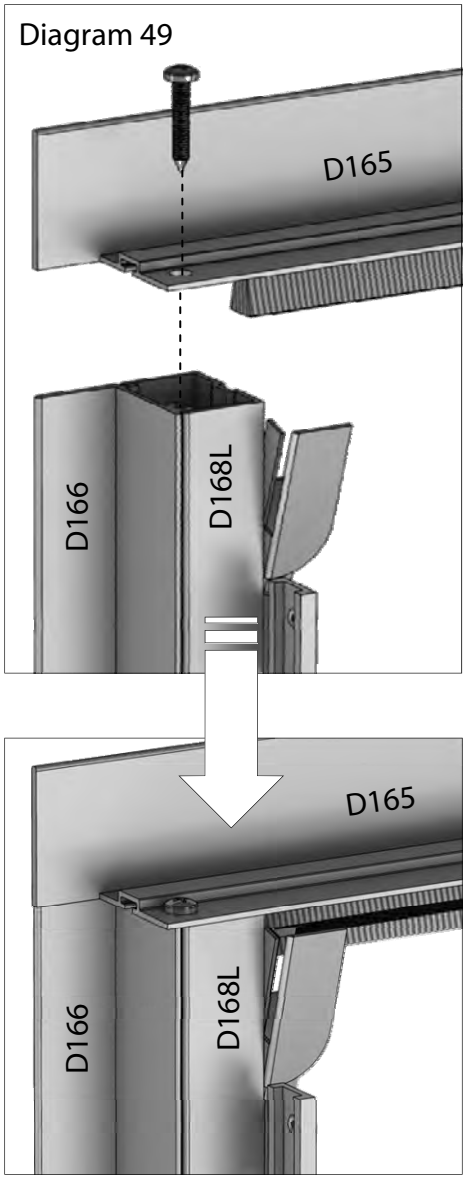


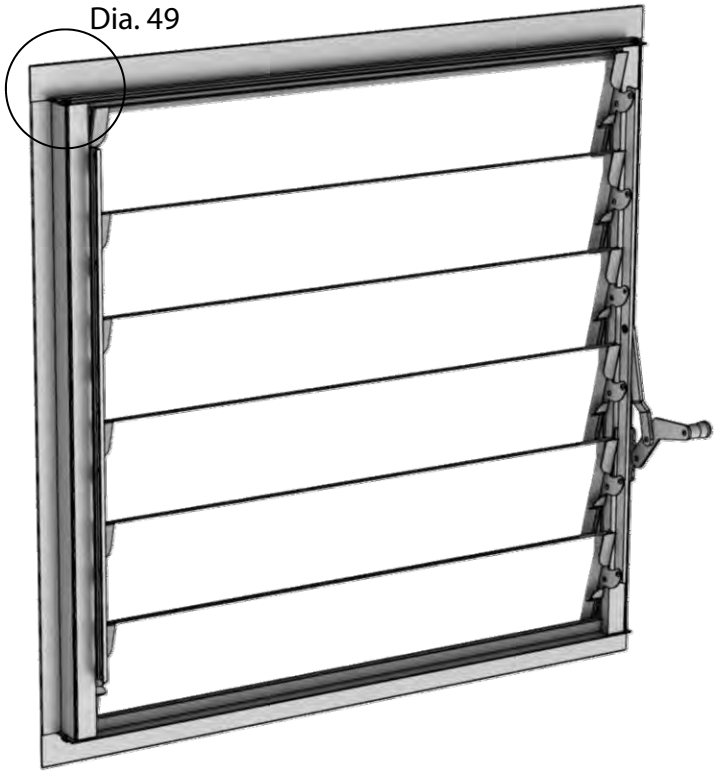


8

Louvre Assembly

Louvre			
Part Name	Part Number	Size (mm)	Qty
Louvre Top/Bottom	D165	612	2
Louvre Side Insert	D166	552	2
Louvre Side	D168L	552	1
Louvre Side (handle)	D168R	552	1
Assembly Screw	FS6013	12	4
Louvre Glass	D729TG	100 x 525	6

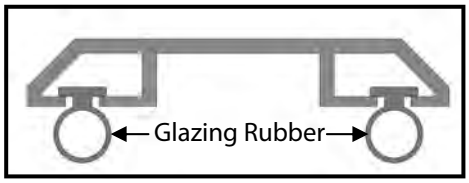




Now you have assembled the side, trim the rubber seal flush with the ends. Attach the top and bottom of the louvre with the 12mm assembly screws. In each end. This locates with a screw channel in the side sections. Makes sure you pinch the glass retainers as this helps secure the glass when in place. You will find your louvre glass in the box with the louvre, you can install this now but it is easier to do so when the louvre is in the frame of the greenhouse.

Glazing *Standard cedar capping or the upgrade aluminium capping?*

If you have the Aluminium capping you need to slide the glazing rubber into channels on the back of the capping. Use a Stanley knife or scissors to cut to length, it is best to use a complete length per side.



If you have the cedar capping you can pre load each strip with the 25mm screws. Also before you install each pane you need to run a thin bead of silicone up each glazing bar (no greater than 5mm is needed).

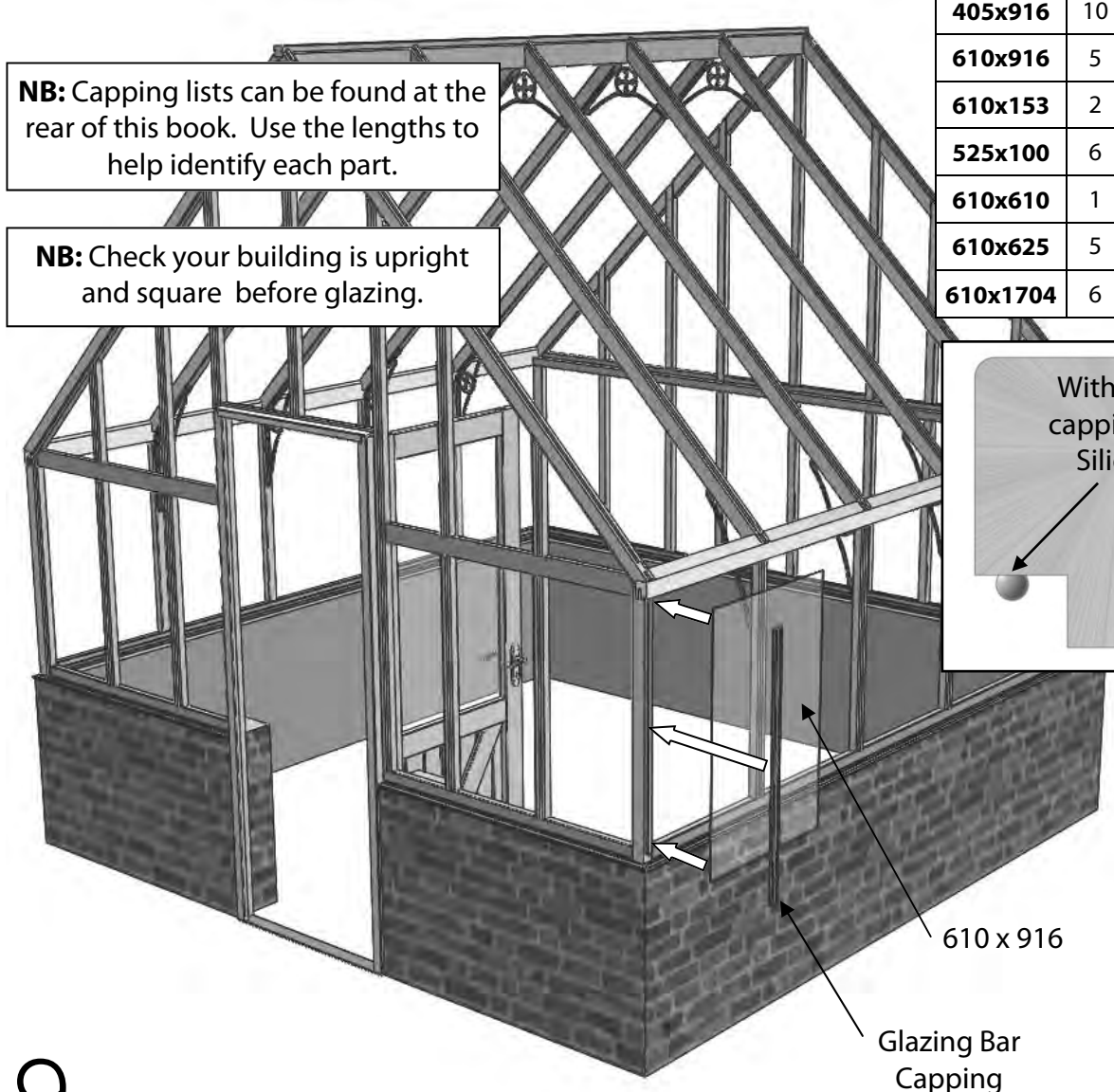
All of the capping is pre-cut to length, so sort through it placing the capping around the building close to were you can reach it. Start by glazing the first side section. Make sure you have the first piece of capping to hand.

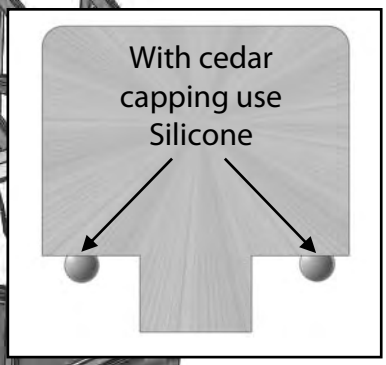
NB: Before you start glazing check the squarness of the greenhouse, installing an under vent roof pane will often tell you more than a

Glass Size	10 6	10 8	10 10	10 12
A	4	4	4	4
B	4	4	4	4
C	2	2	2	2
D	2	2	2	2
E	2	2	2	2
295x916	4	4	4	4
405x916	10	10	10	10
610x916	5	6	8	10
610x153	2	4	4	4
525x100	6	12	12	12
610x610	1	2	3	4
610x625	5	6	8	10
610x1704	6	8	10	12

NB: Capping lists can be found at the rear of this book. Use the lengths to help identify each part.

NB: Check your building is upright and square before glazing.

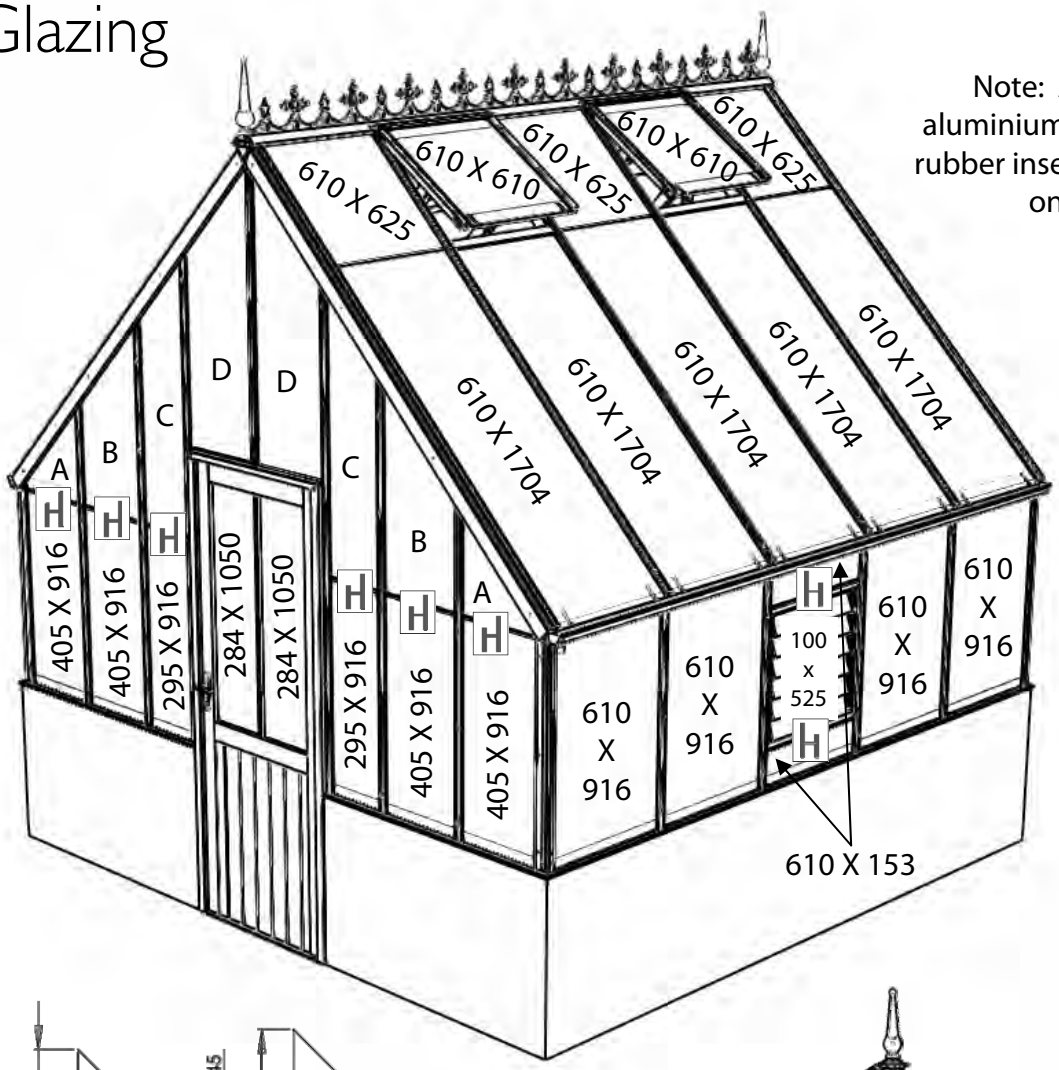




Slide the glass into the groove of the eaves bar and rest it on the base plate.

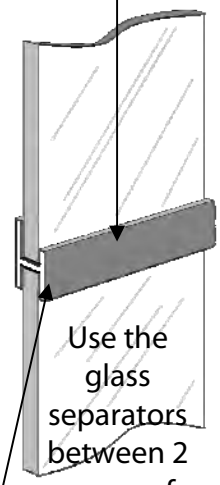
9

Glazing

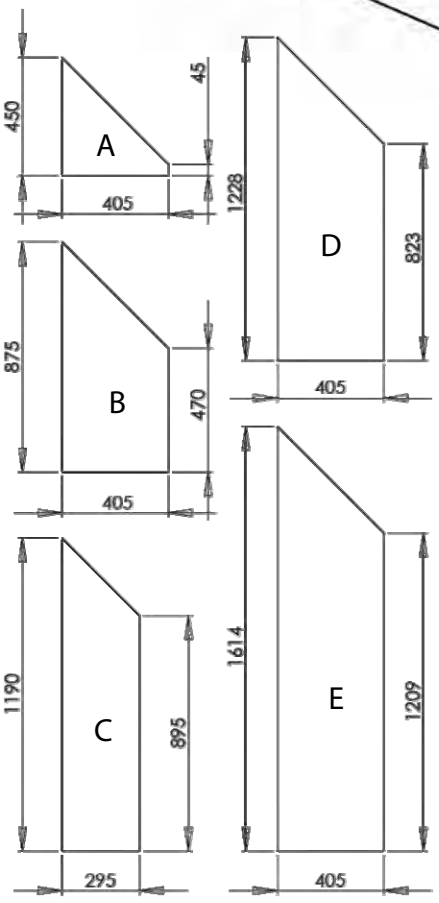


Note: All channels in the aluminium capping should have rubber inserted, even if it is going onto the timber.

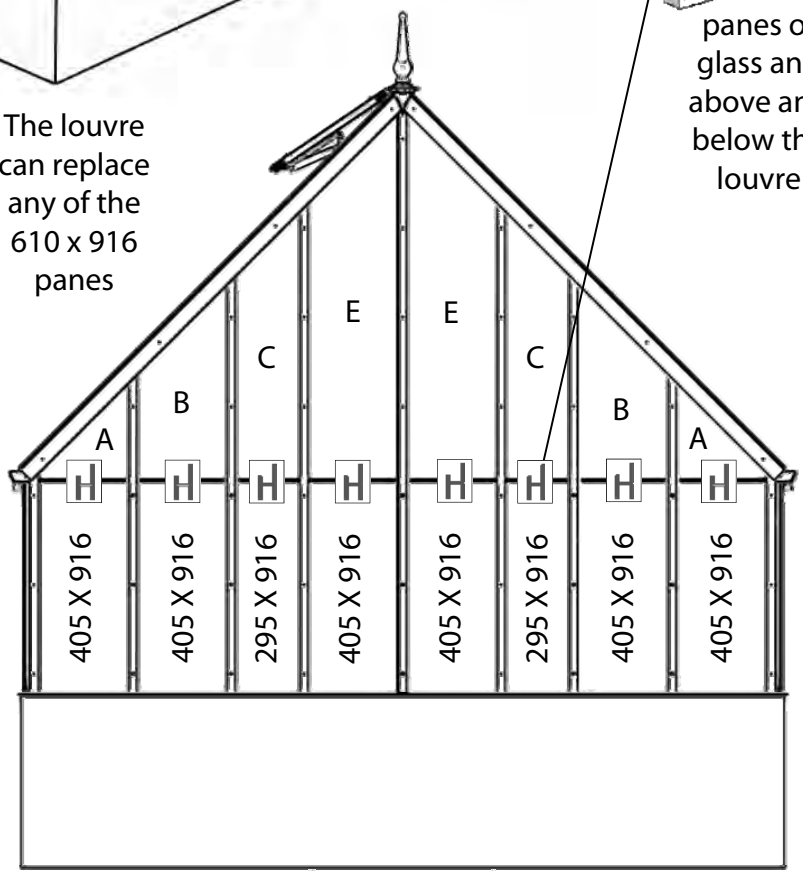
Keep the short flange pointing upwards on the outside.



Use the glass separators between 2 panes of glass and above and below the louvre

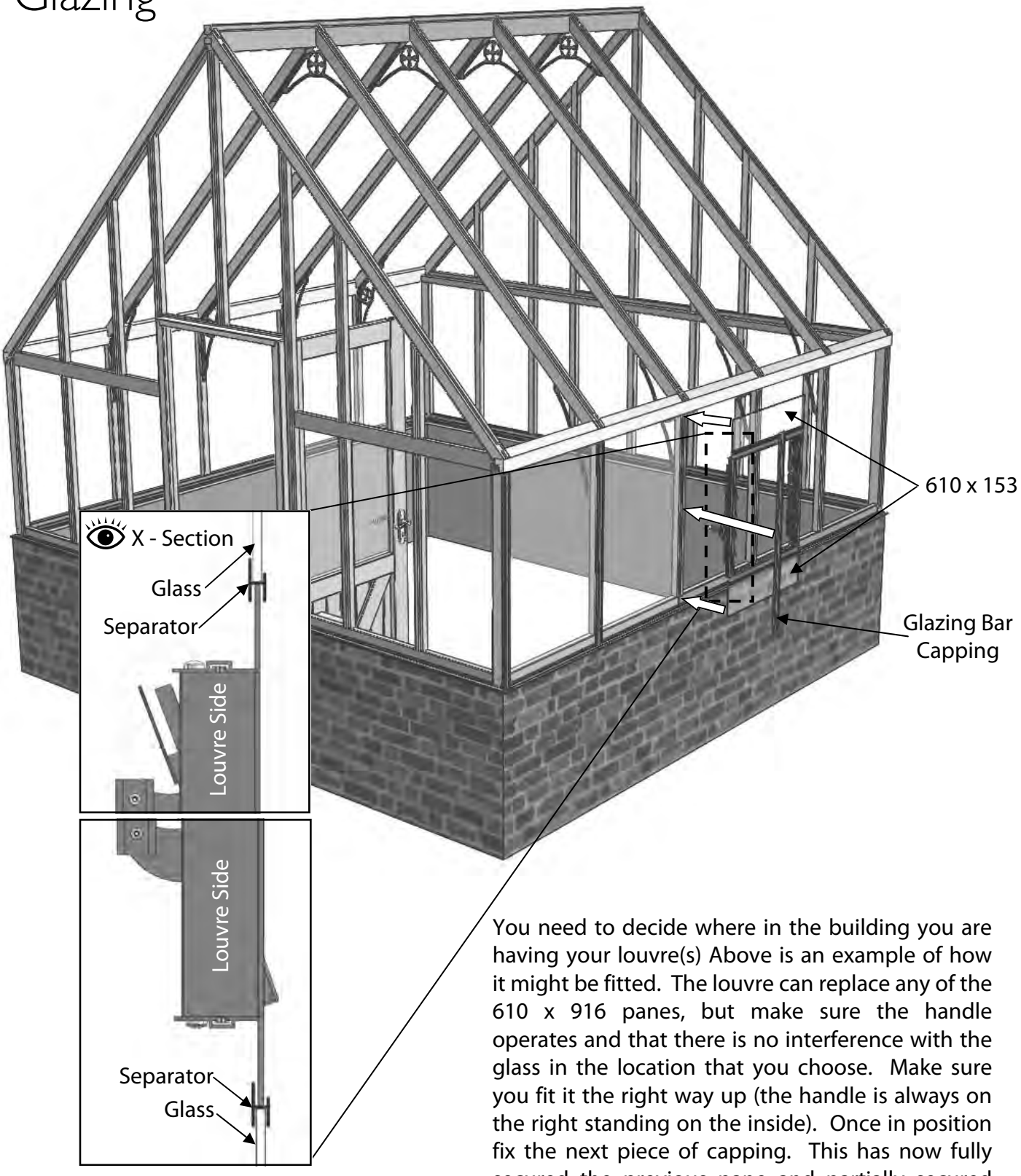


The louvre can replace any of the 610 x 916 panes



9

Glazing

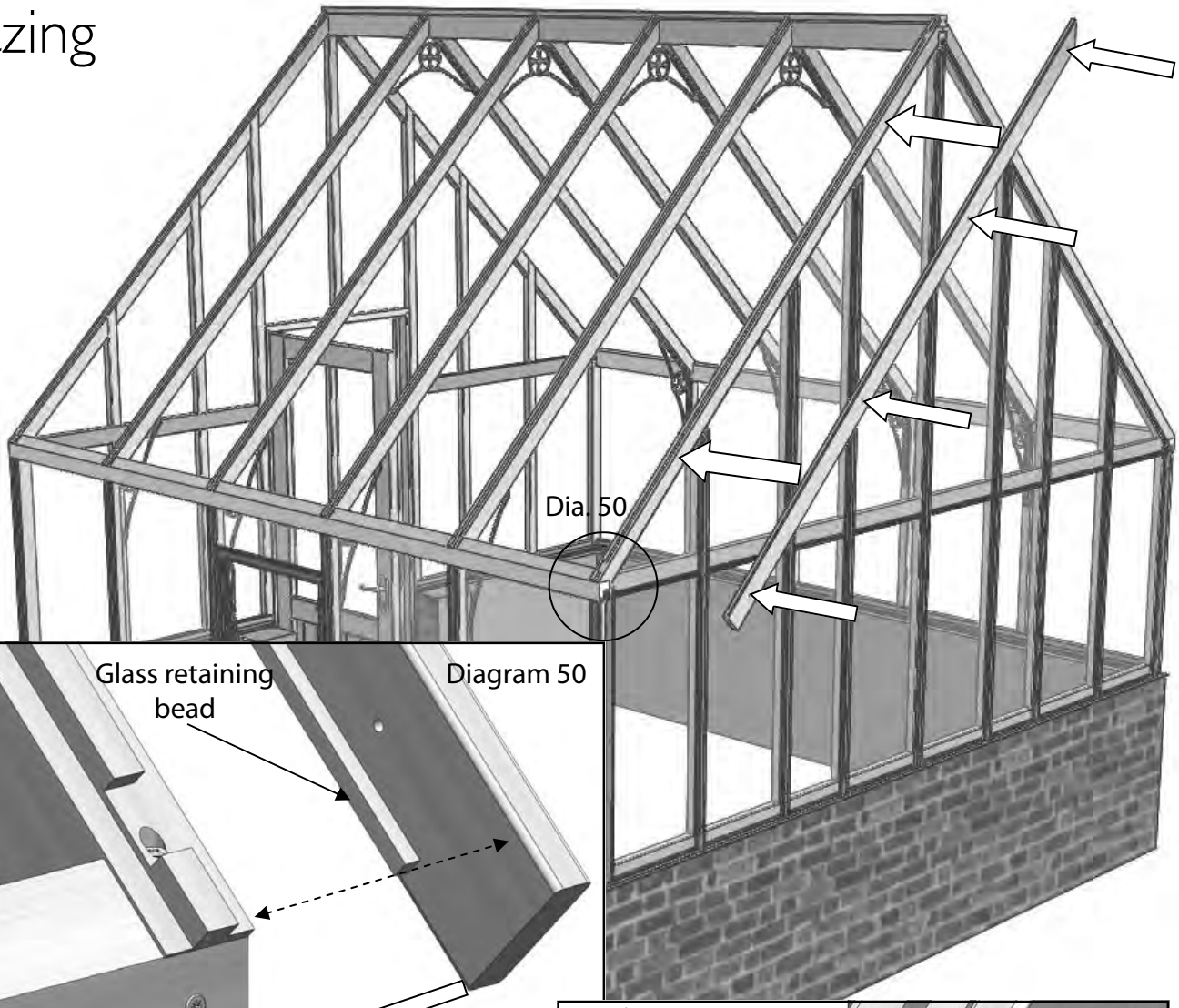


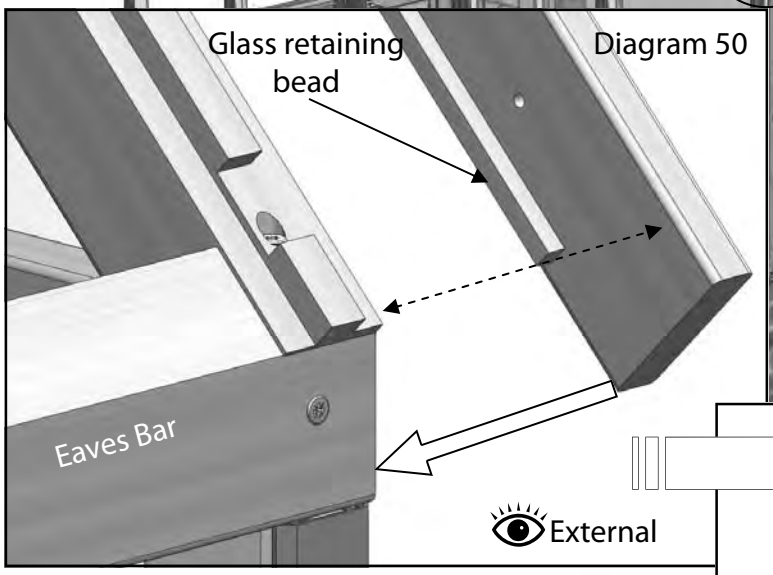
You need to decide where in the building you are having your louvre(s) Above is an example of how it might be fitted. The louvre can replace any of the 610 x 916 panes, but make sure the handle operates and that there is no interference with the glass in the location that you choose. Make sure you fit it the right way up (the handle is always on the right standing on the inside). Once in position fix the next piece of capping. This has now fully secured the previous pane and partially secured the current one.

Keep working round the building in the same direction, fitting louvres when needed. If you are right handed it is easiest to work left to right and vice versa!

9

Glazing





Install the rear glass in the same method as the side glass, the only difference is you have to stack the shaped panes on top using the glass separators. Make sure you have all the glass to hand when you are glazing this section. It is also a good idea to have an extra pair of hands to hold glass in place while you get the next section of glass in place. Always keep the glazing capping flush to the aluminium base level with the bottom of the glass.

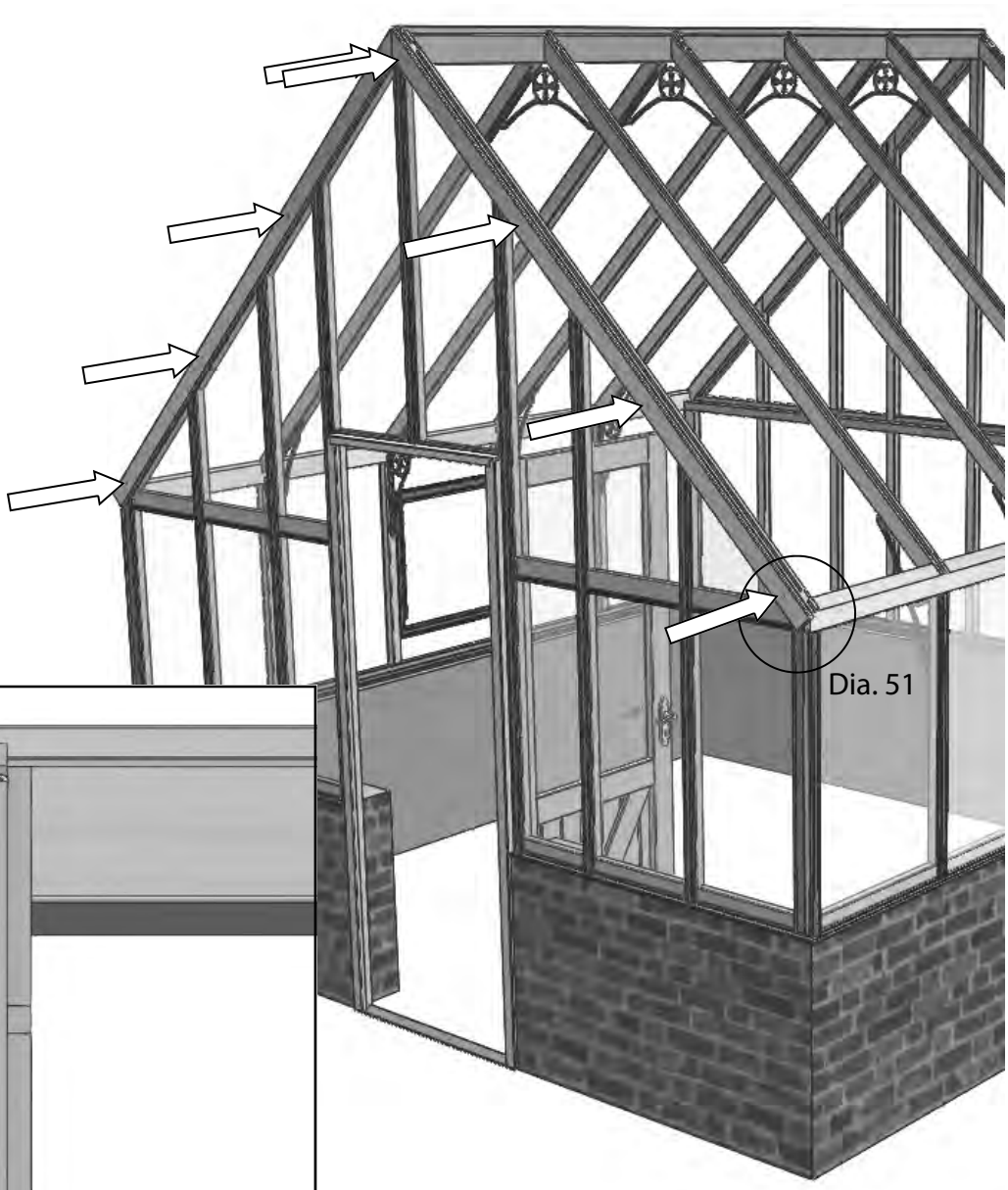
Once the vertical capping is on you can fit the roof corner cloaking strips. These are handed as they have glazing beads already attached to them to secure the shaped panes along the top edge, so make sure you have the correct one.

9

Glazing

Glaze the remaining side sections as before. When you come to the front end glaze this as you did the rear end.

Once all the roof corner cloaking strips have been installed run a bead of silicone all the way down the joint between itself and the roof corner bars (diagram 51).



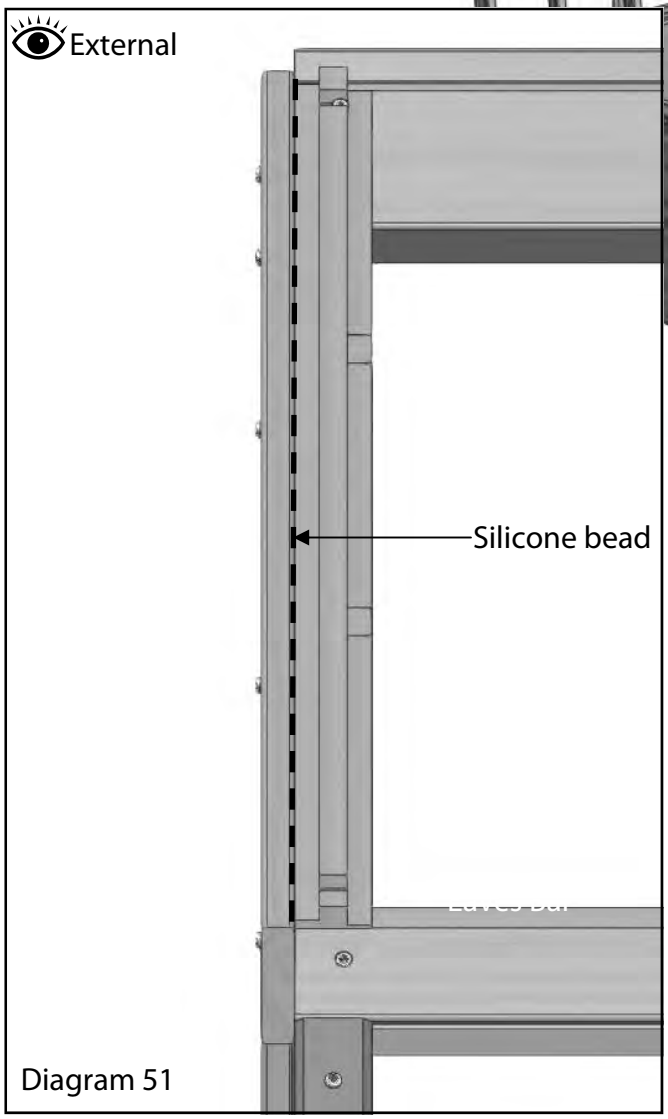


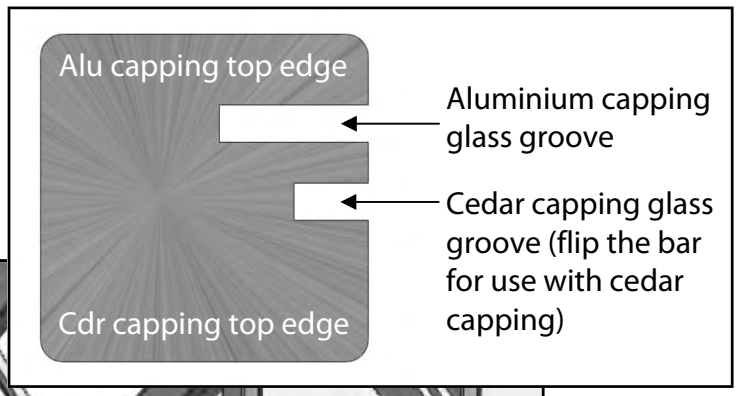
Diagram 51

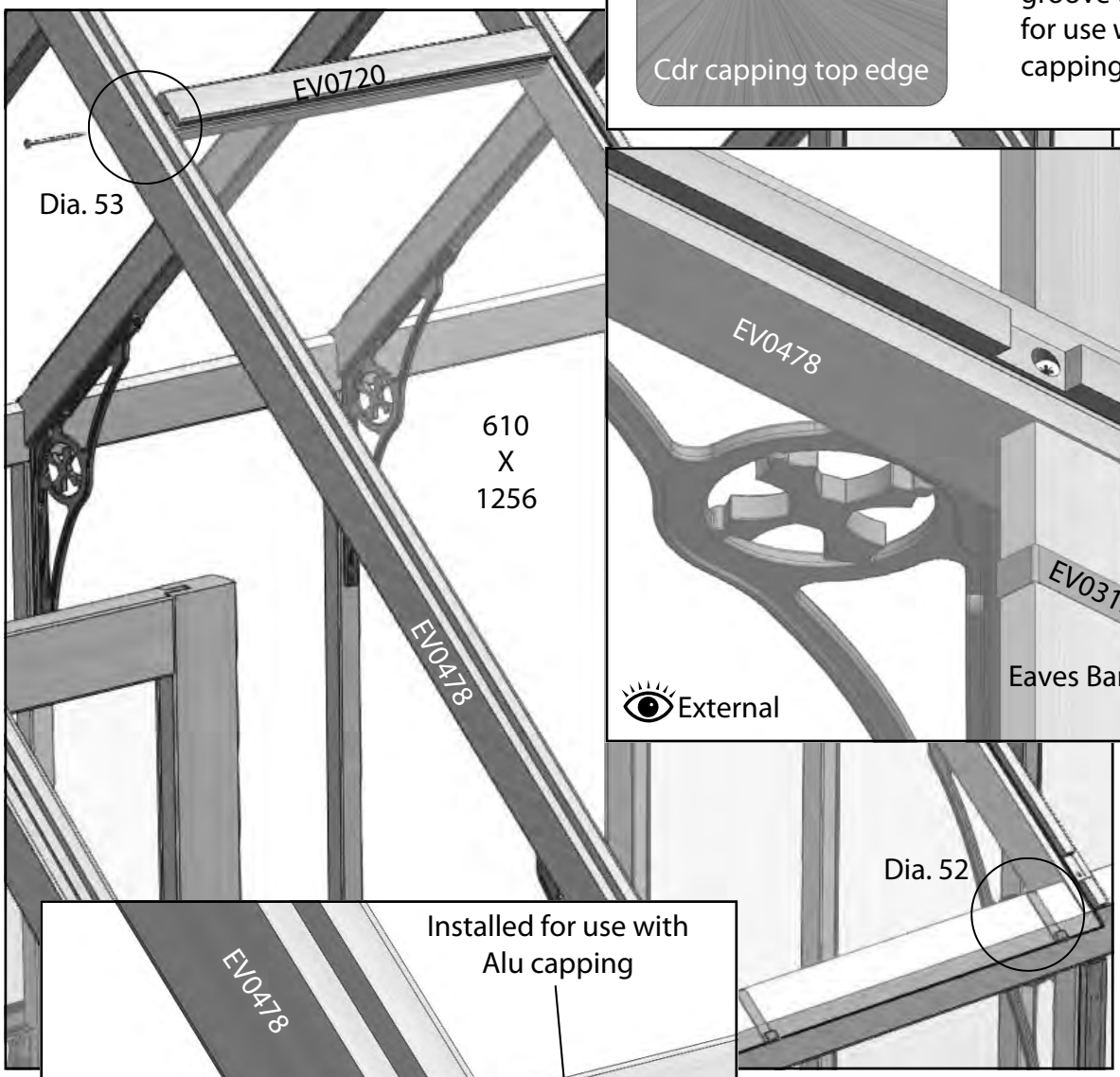
Next you need to decide on the location of your roof vents. These can NOT be fitted side by side. Once you have decided this start by installing the glass that goes underneath the vent. Use 2 of the glass stops (EV0313M) per pane diagram 52.

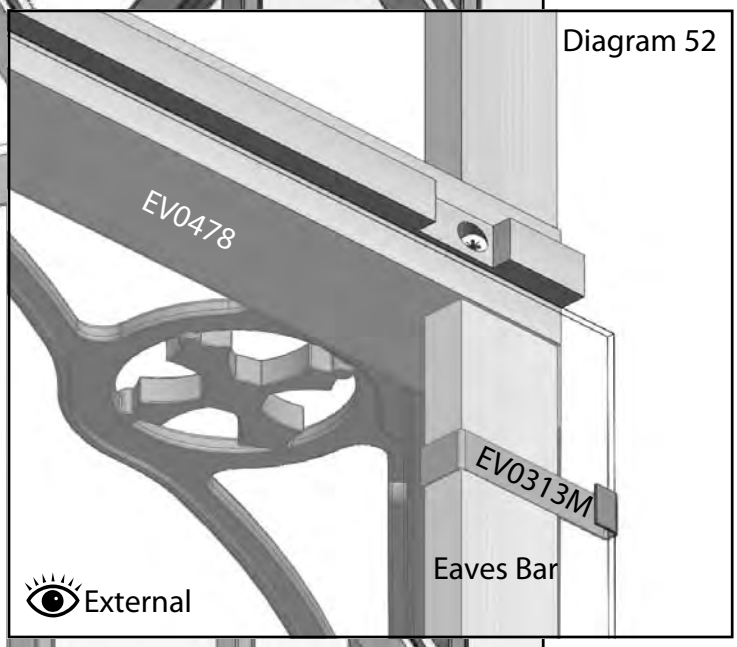
9

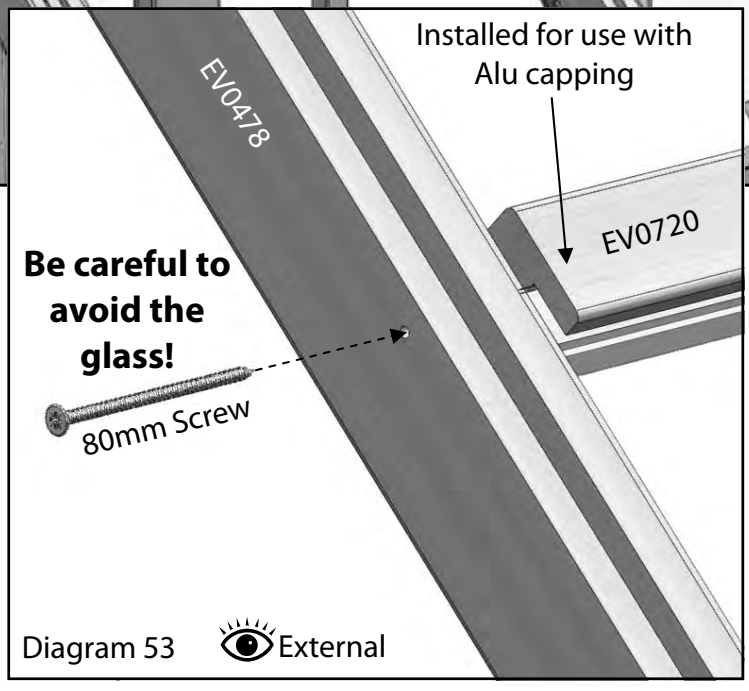
Glazing

There are 2 grooves in the slam rail, the one nearest the edge should be used for the aluminium capping and the one nearer the middle for the cedar capping.



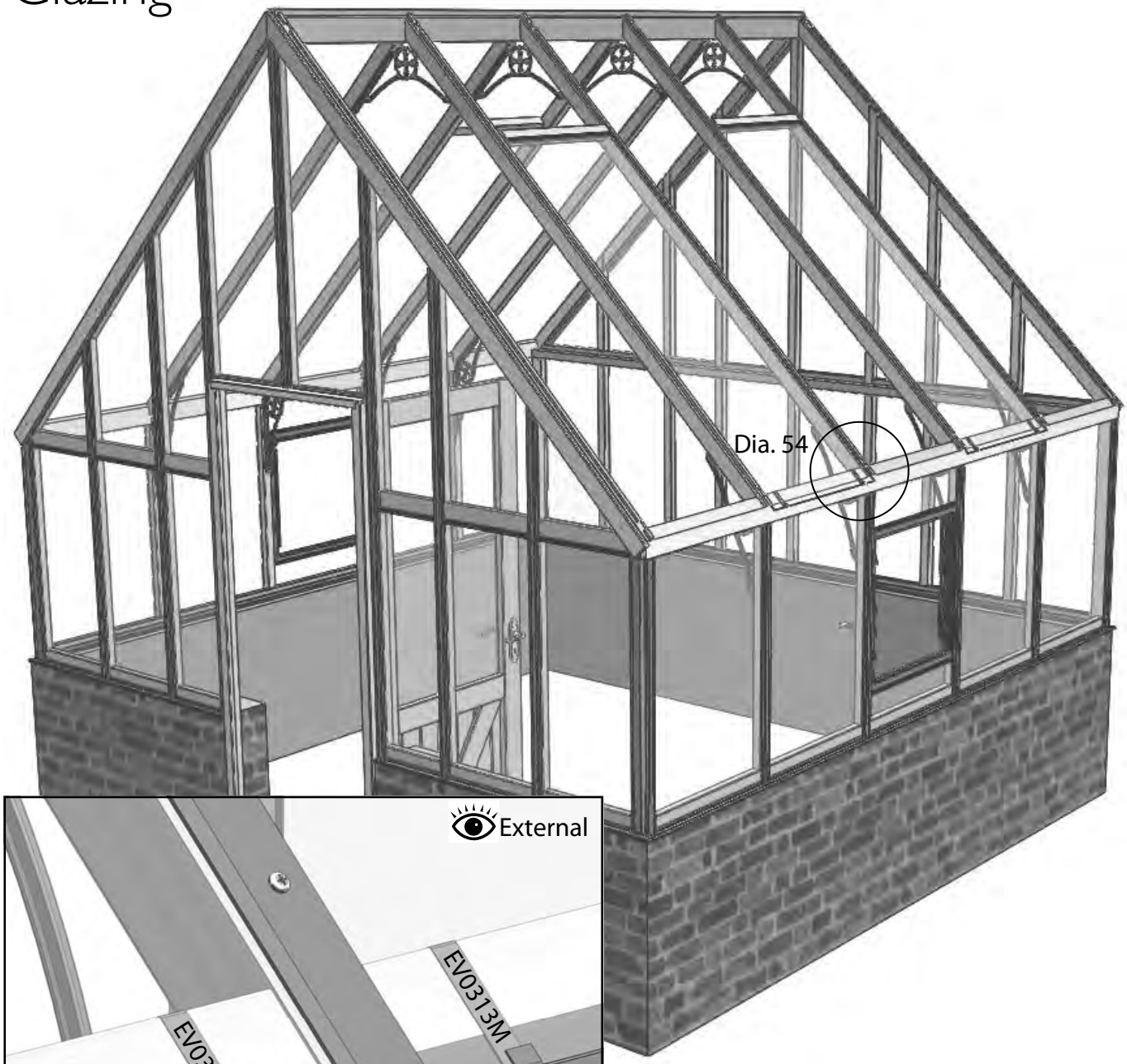






Then position the slam rail (EV0720) on top of this pane of glass. This should be fixed with an 80mm screw, diagram 53 (remember to pilot drill first), sink the head slightly into the timber for a neat finish.

Glazing



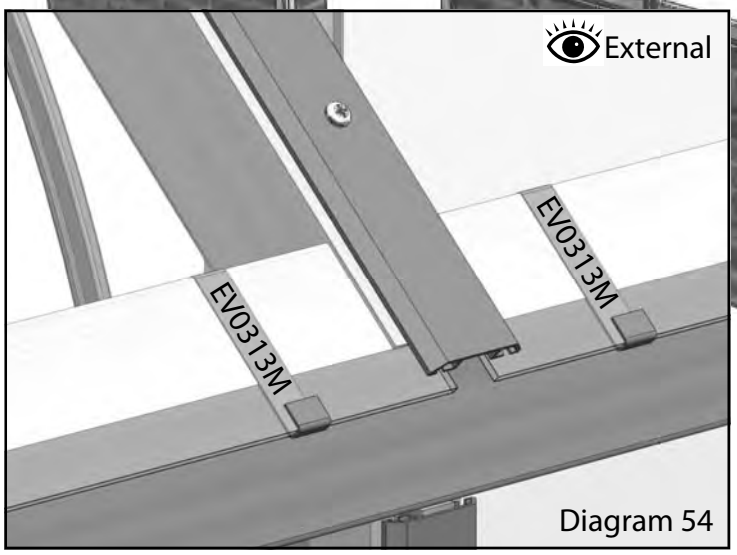
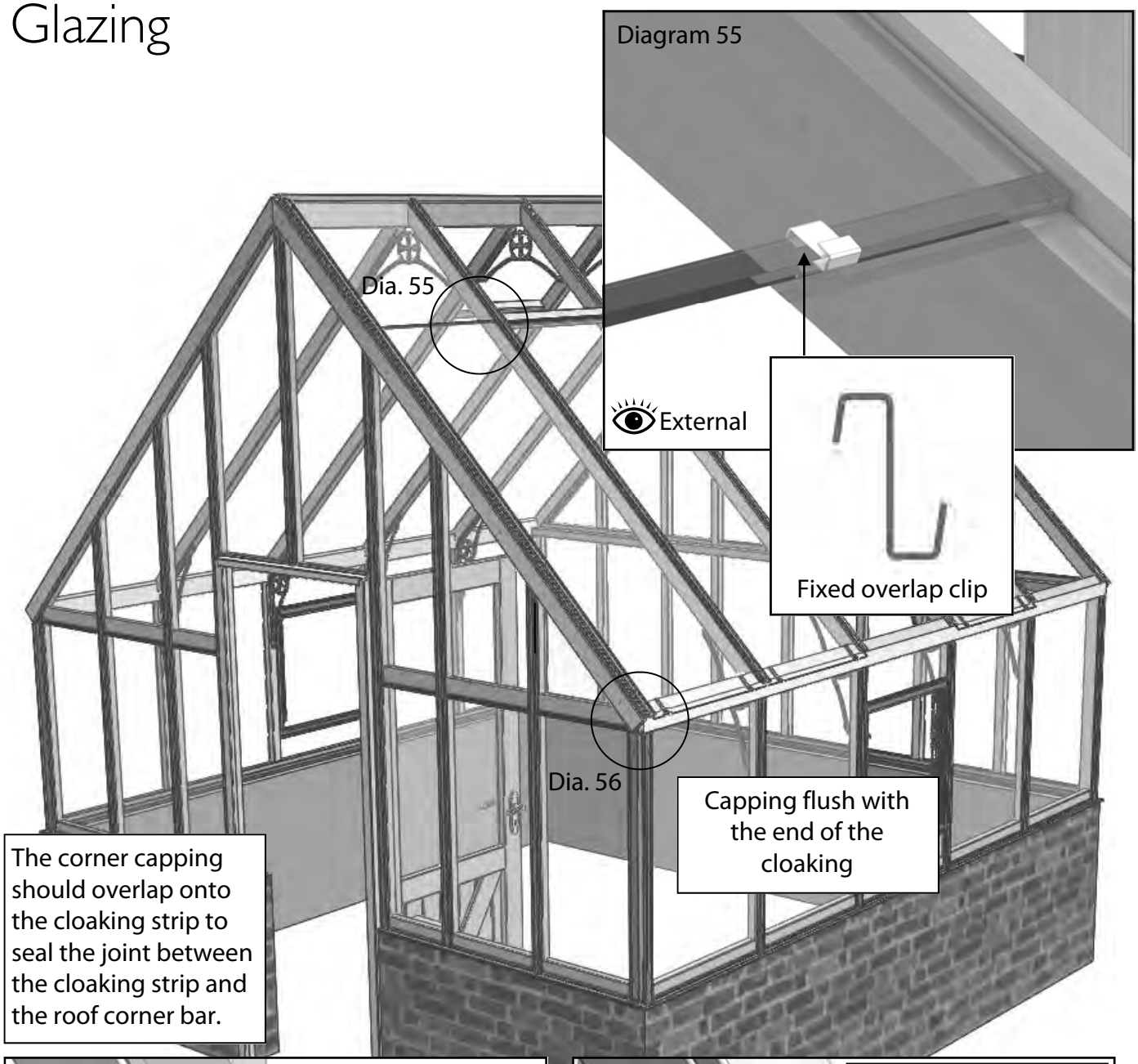


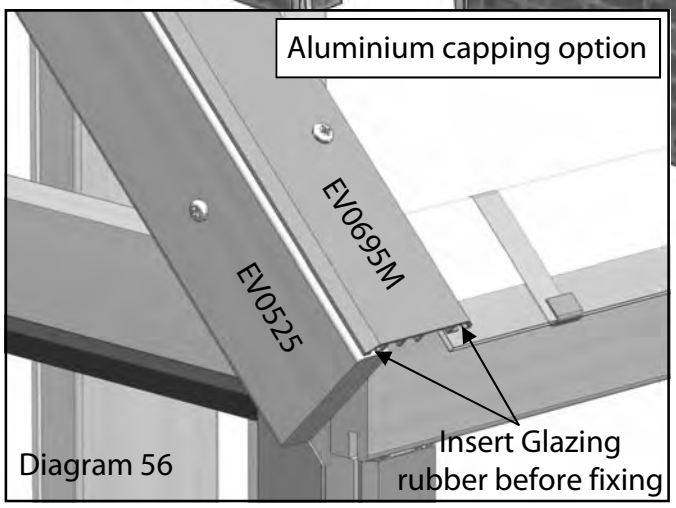
Diagram 54

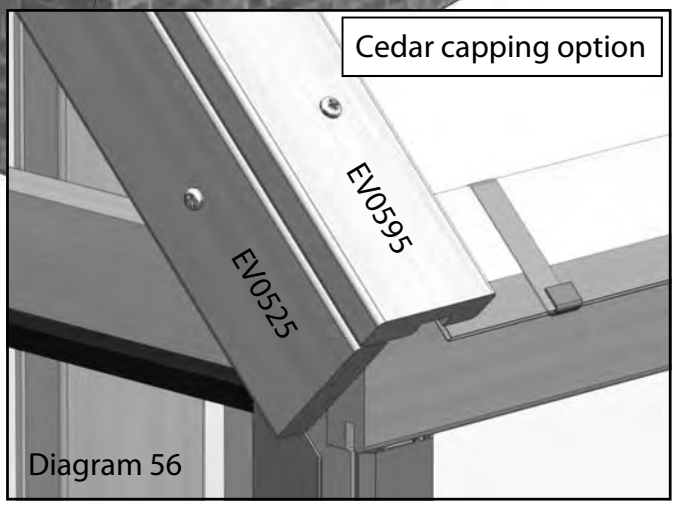
Now complete the glazing by fitting the roof panes. Slide these all the way up the glazing bars, making sure they tuck into the groove in the ridge. Slot 2 of the glass stops (diagram 52, 54) on and lower the pane down onto the eaves bar. This will now support itself while you fix the capping in place. As with the sides work in a loop around the building. The capping for the roof corners is wider than normal to cover the join of the cover strip to the roof corner glazing bar. The capping should also be fitted flush with the bottom edge of the glass at the eaves.

9

Glazing



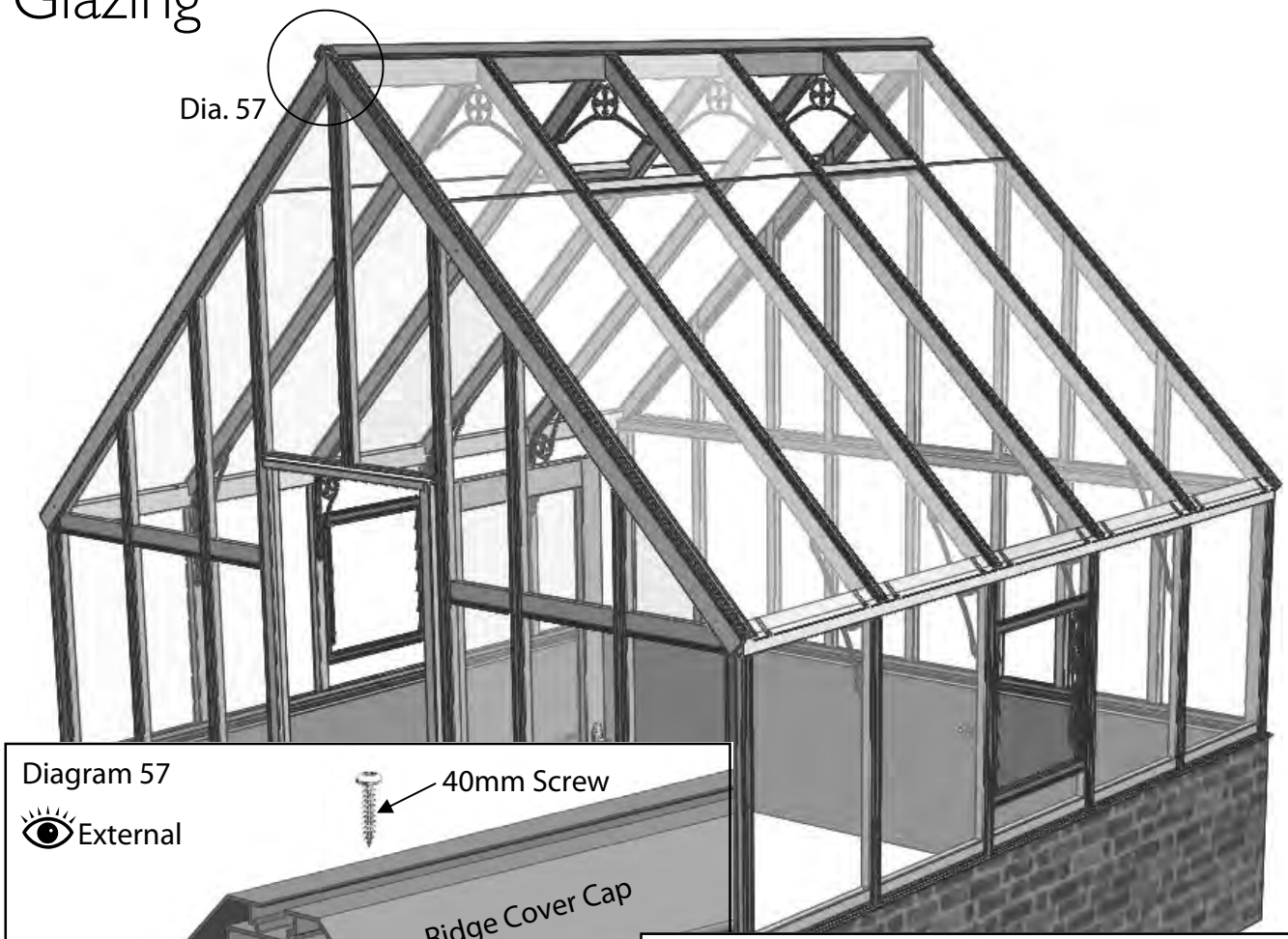


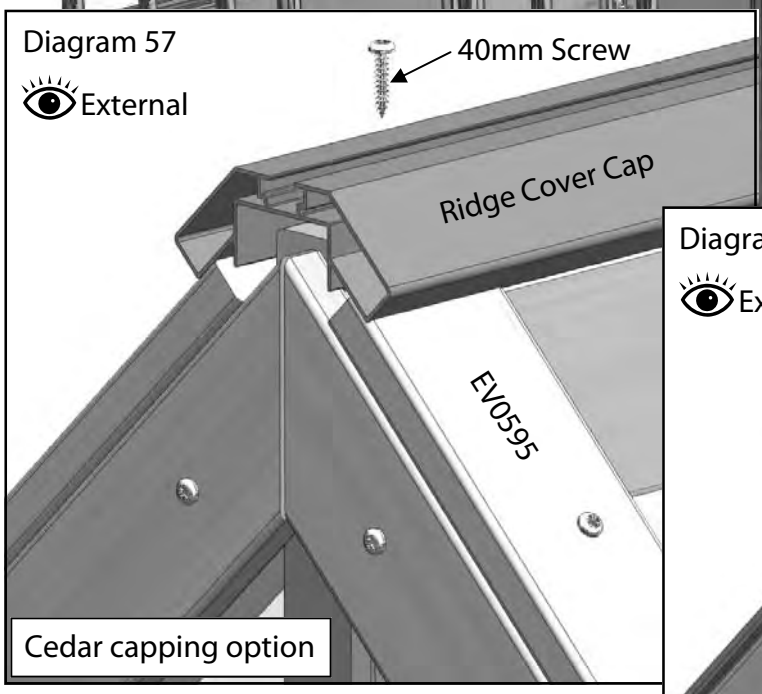


Note: Use countersunk screws where a vent is to be used so the head of the screw doesn't prevent the vent from closing properly.

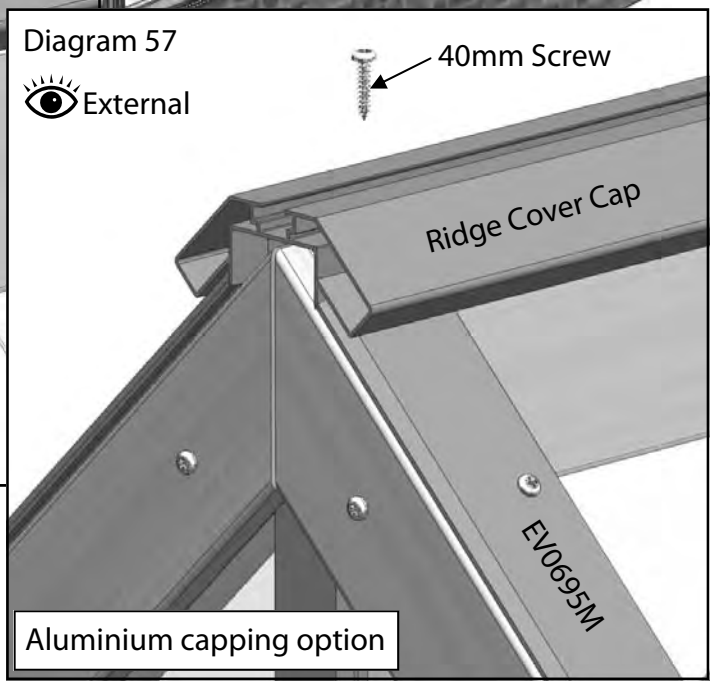
9

Glazing





Cedar capping option

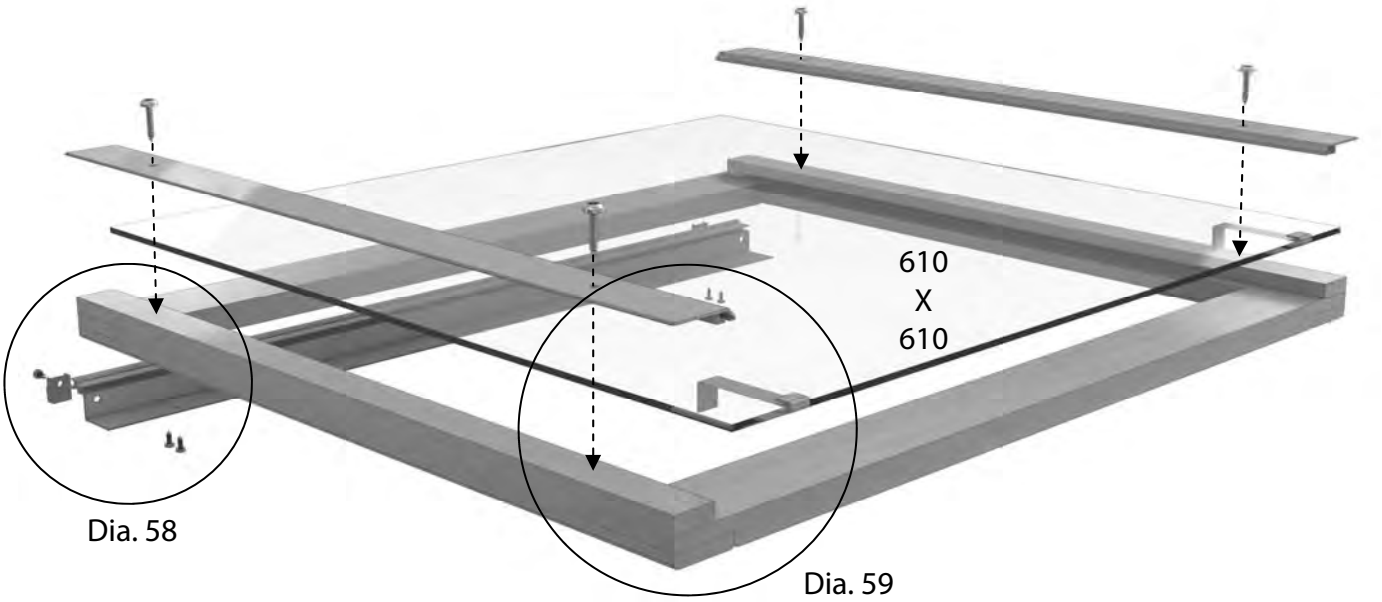


Aluminium capping option

Once all the glazing has been finished you can install the ridge cover cap. This is a universal part that can be used with either cedar or aluminium capping. Simply place this on top of the ridge bar and fix in place using 25mm screws though the pre-drilled holes.

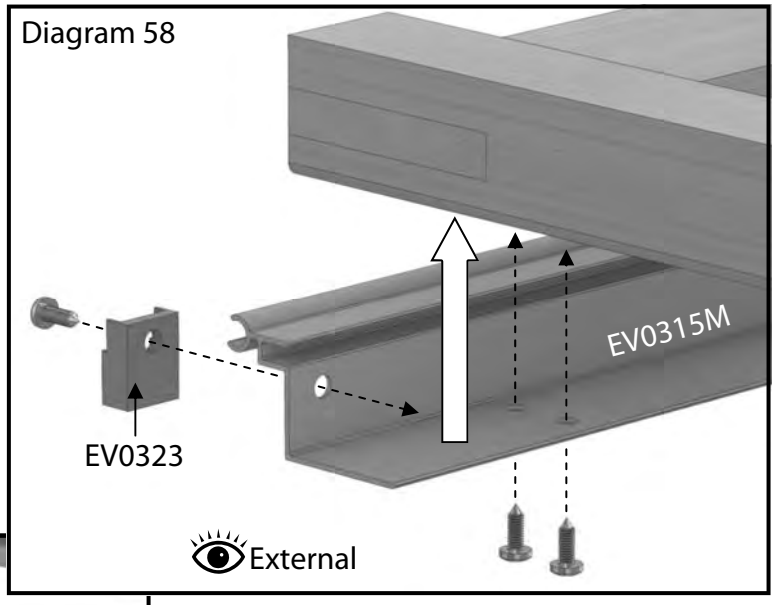
9

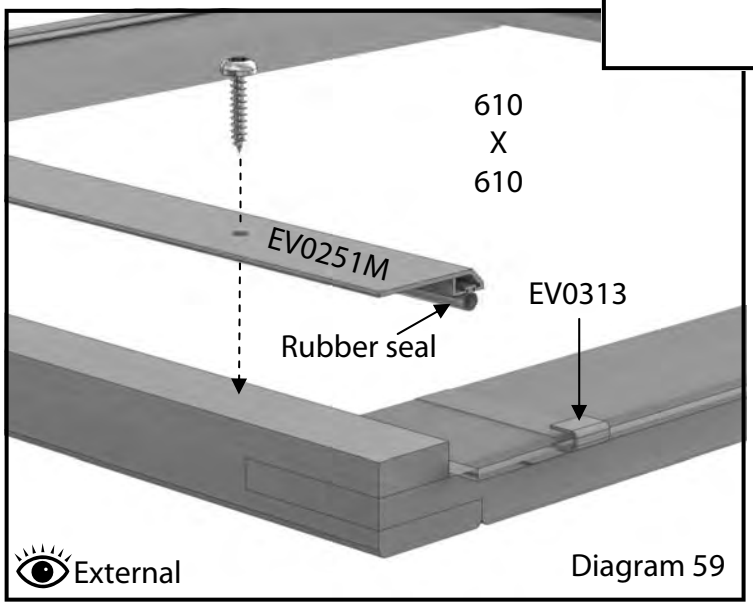
Roof Vent Installation



Take the vent frame that is ready assembled and fix the vent hinge to one end through the 4 pre drilled holes using the 19mm screws, diagram 58. Once this is in place fix the plastic vent filler (EV0323) also with a 19mm screw, its is **important** to make a pilot hole before fixing the plastic filler to prevent splitting.

Now take a 610mm x 610mm pane of glass and locate this in the vent hinge. Before lowering this down completely slot the glass stops onto the open edge.



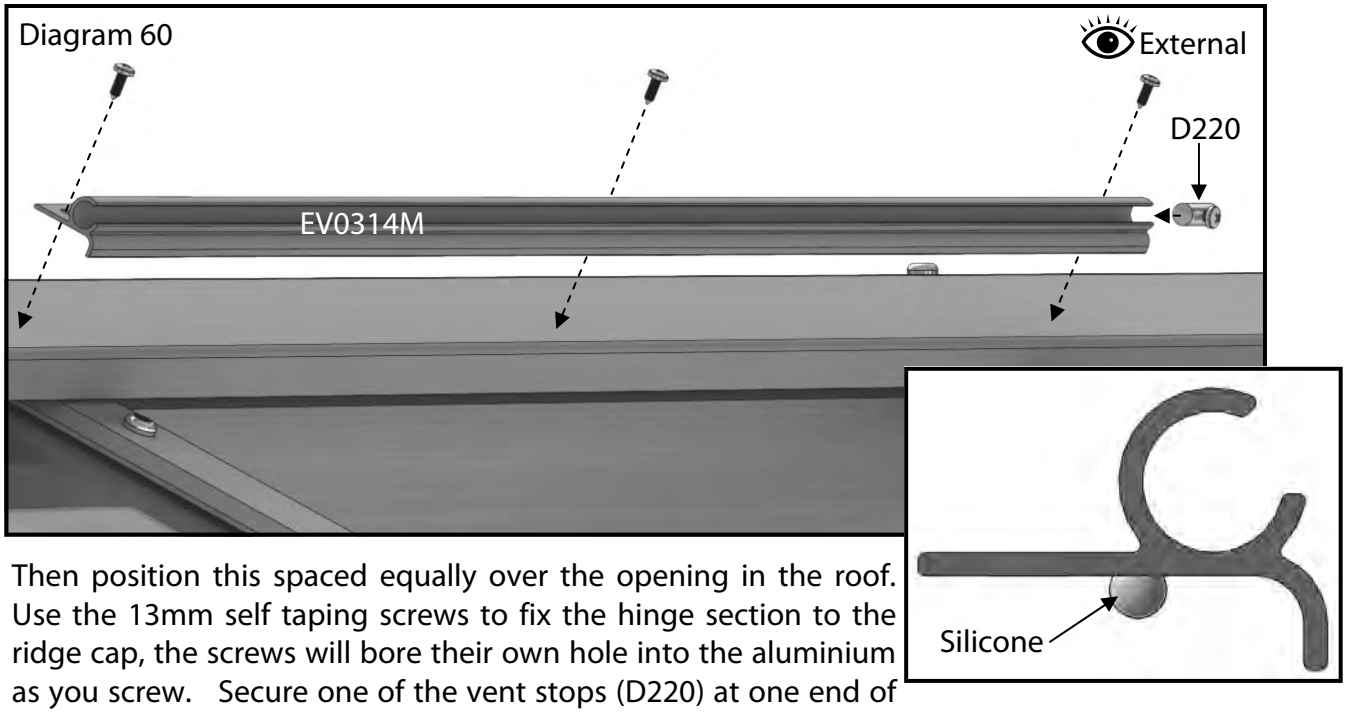


(Cedar capping part number: EV0151)

When in position you can fix the glass in place with the vent capping (either cedar or aluminium) using the 25mm screws, diagram 59. Remember if you are using the aluminium capping system you will need to insert the rubber seal before fixing it in place.

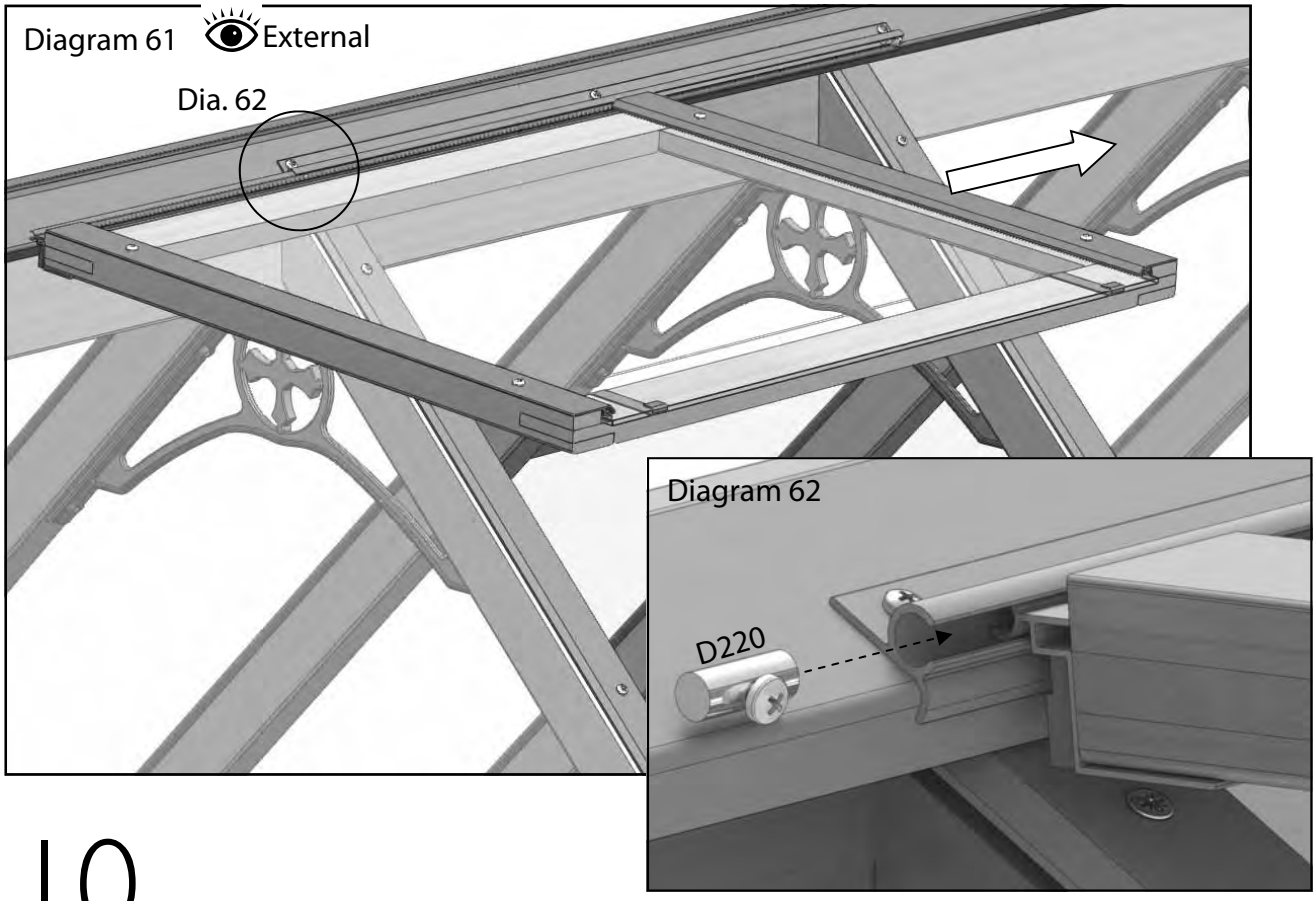
Roof Vent Installation

Once you have assembled the roof vents you can now install them to your building. Prepare the ridge hinge (EV0314M) by running a bead of silicone along the back edge.



Then position this spaced equally over the opening in the roof. Use the 13mm self taping screws to fix the hinge section to the ridge cap, the screws will bore their own hole into the aluminium as you screw. Secure one of the vent stops (D220) at one end of the ridge hinge channel.

Next slide the roof vent along the channel of the ridge hinge from one end and secure with another vent stop, diagram 61 and 62. You can now lower the vent until it rests on the roof bars.



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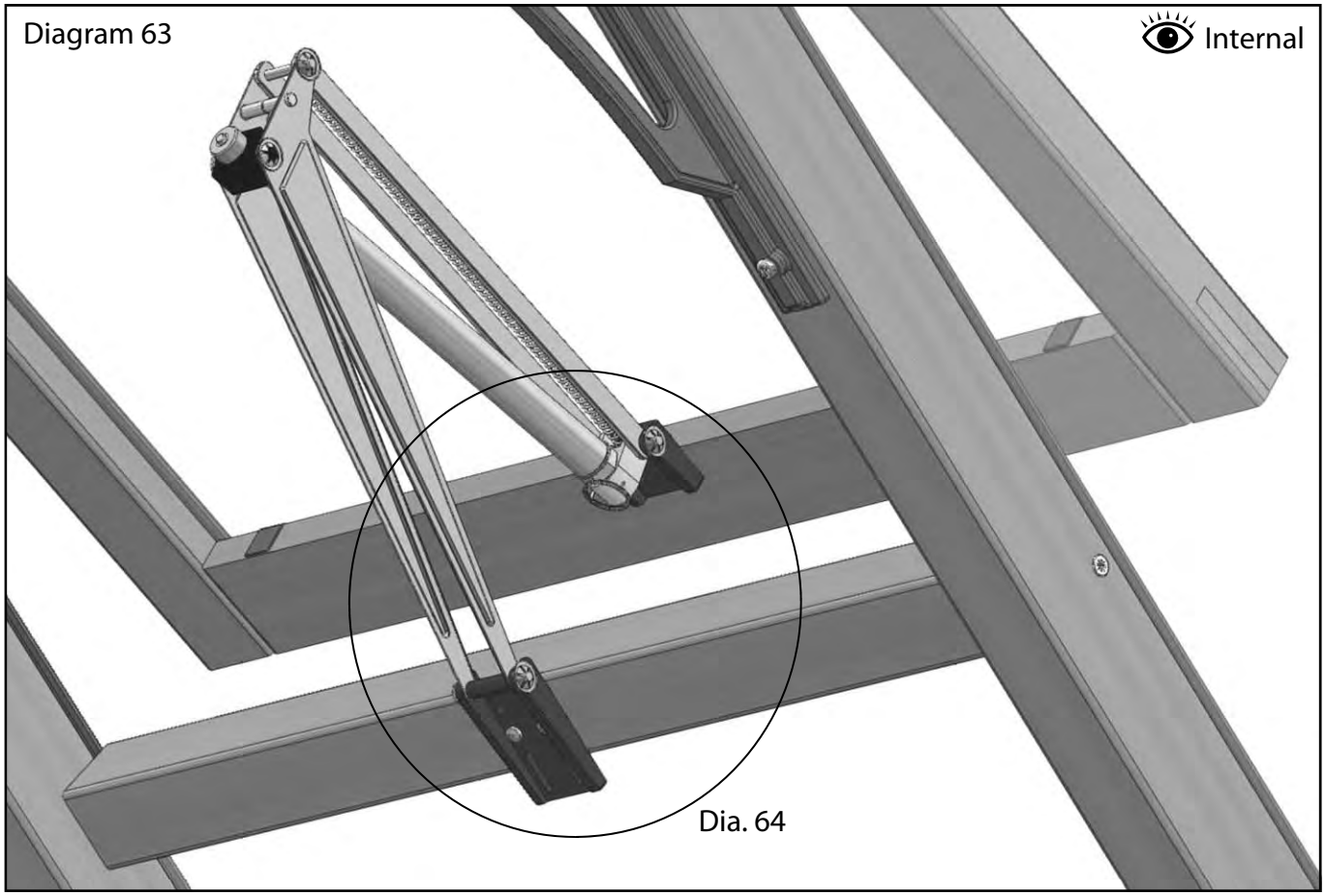
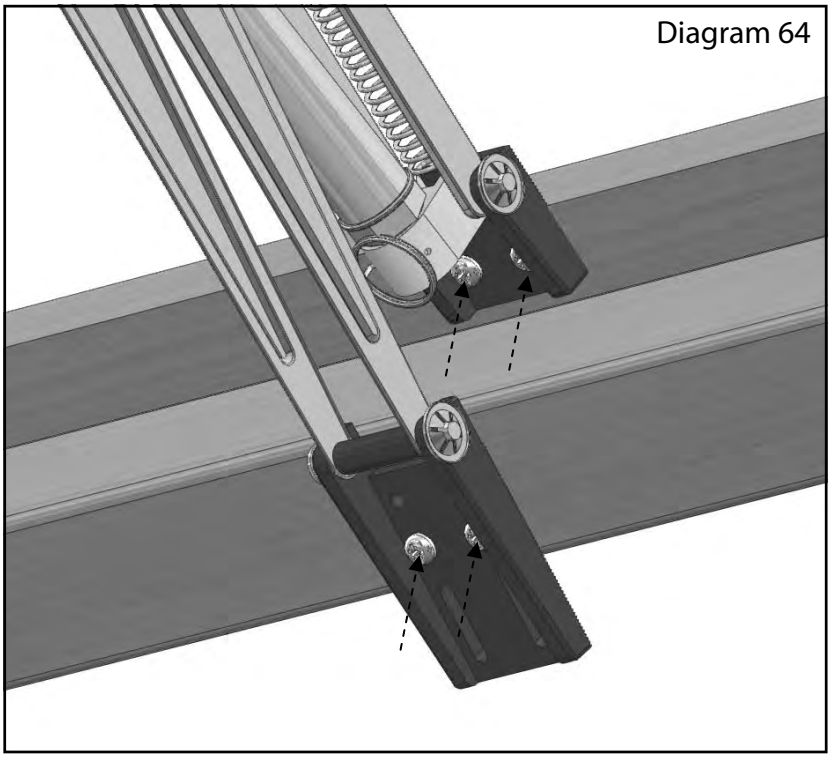
Roof Vent Installation

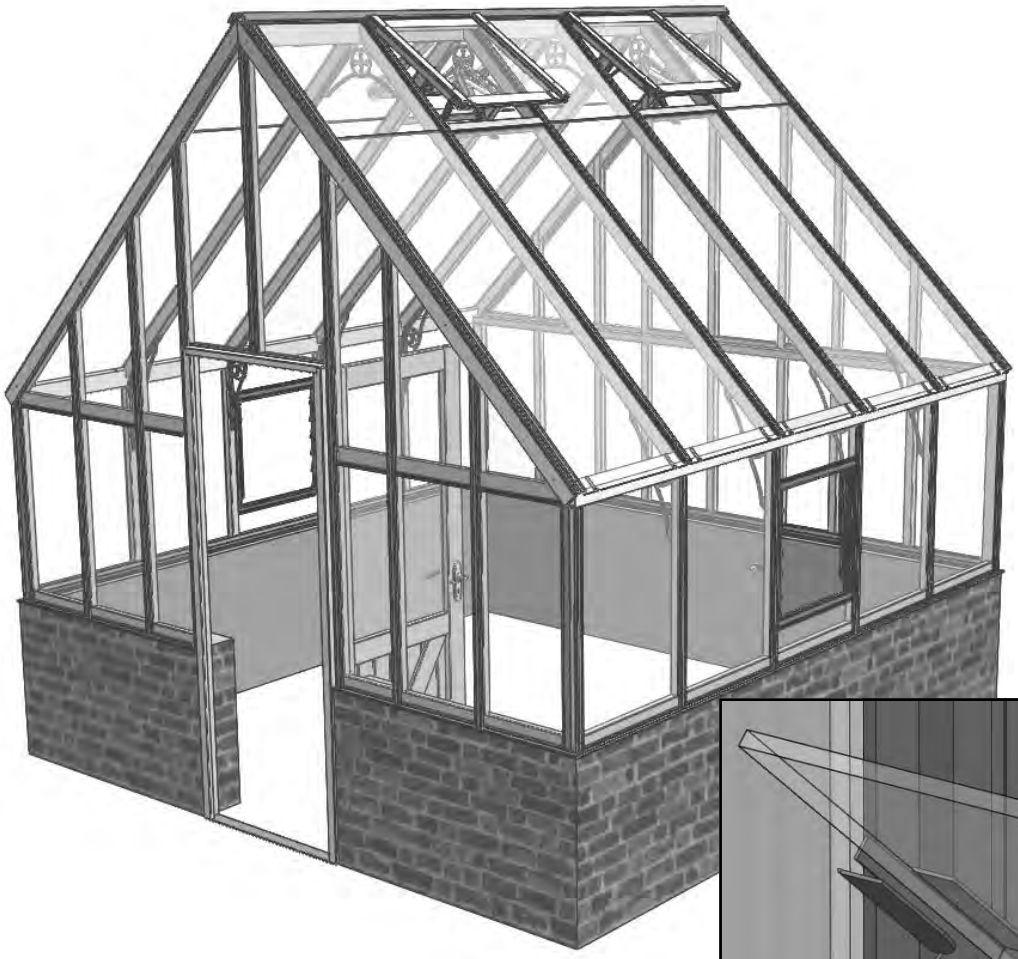


Now fit your autovents to the slam rail and to the bottom of the roof vents, diagram 64. Use 19mm screws to secure the top arm of the autovent to the roof vent, do this with the roof vent in the closed position so that you get the bracket in the correct position.
Adjust the position of the lower arm on the slam rail until the arms of the autovent are parallel with the roof as possible, then fix with 25mm screws.

NB. Disregard any fitting instructions in the autovent box and any extra plates or screws as these are for other greenhouses. However you should keep the leaflet as the operating instructions are on there.



Louvre Glazing



If you haven't already done so you could now install the louvre glass.

Make sure the tabs on the glass retainers are pinched slightly so they hold the glass tight. Standing on the inside of the building slot the first louvre slat in until it hits the bottom tab of the retainer. Repeat this until all are installed.

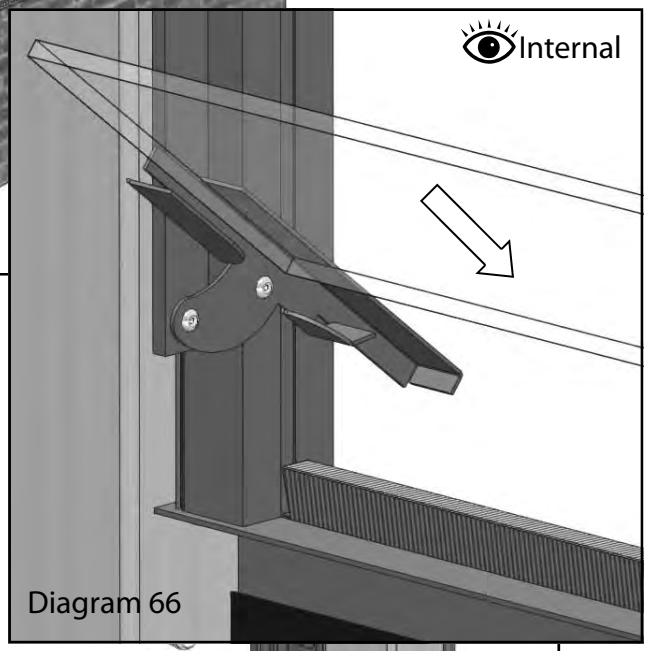


Diagram 66

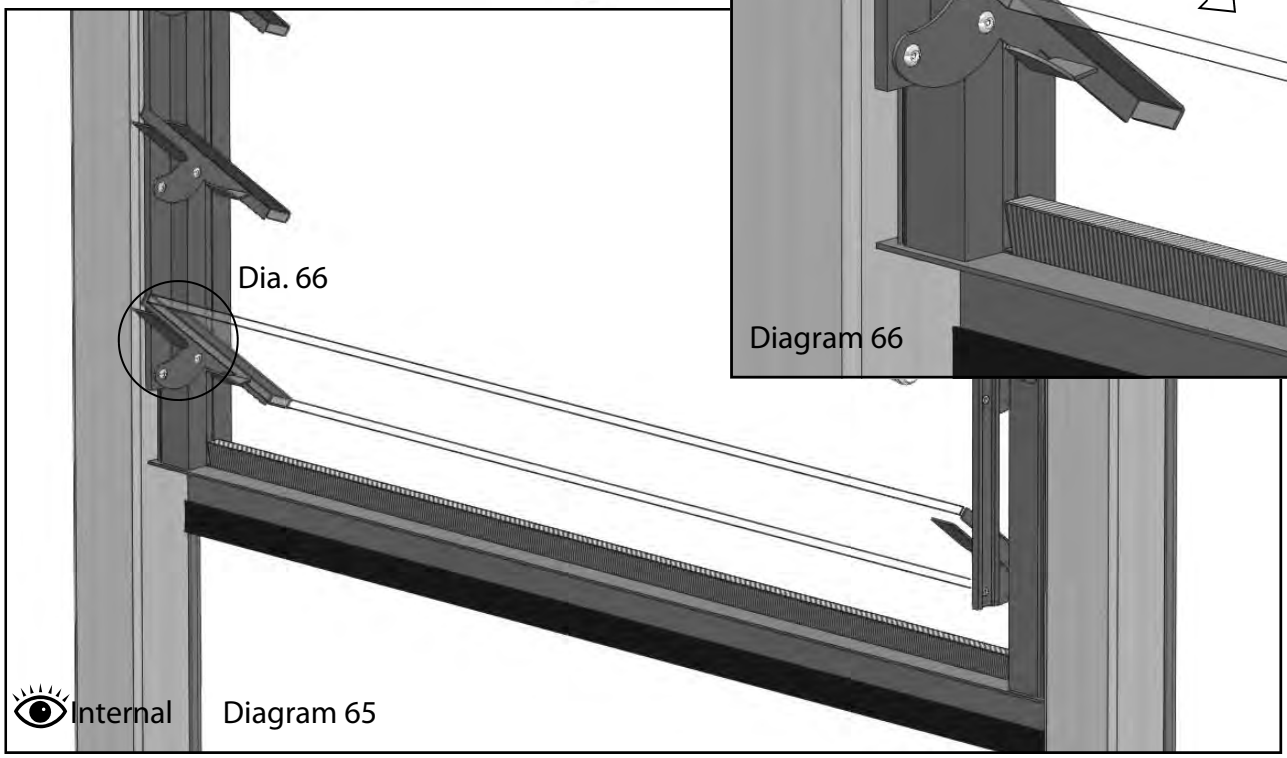
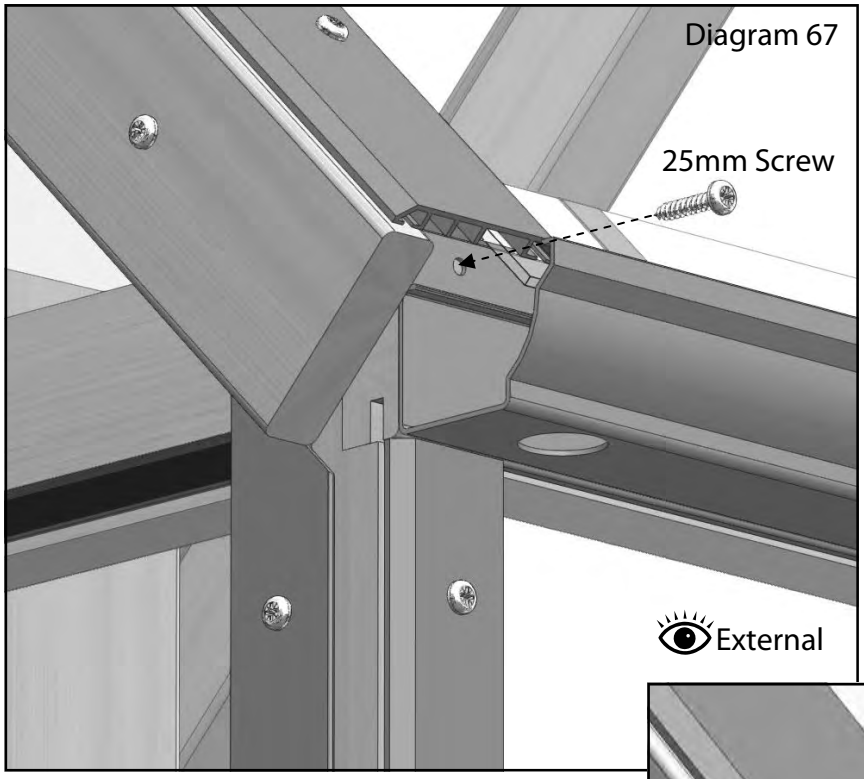


Diagram 65

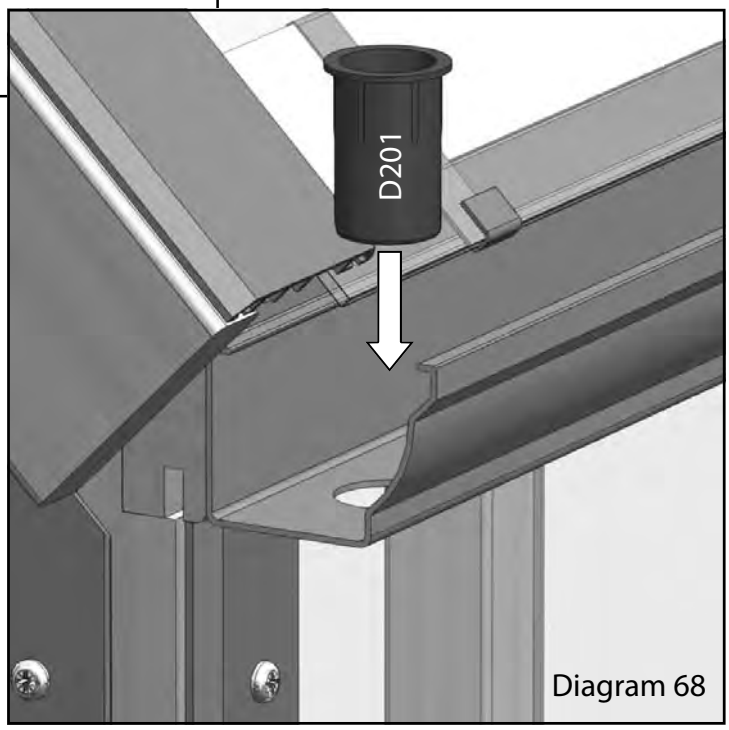
Gutter and Downpipe Installation



With help position your gutter on the side face of the eaves bars, this should be the same length as the eaves bar and fit between the ends of the roof corner bars. Fix it in place with 25mm screws, diagram 67.

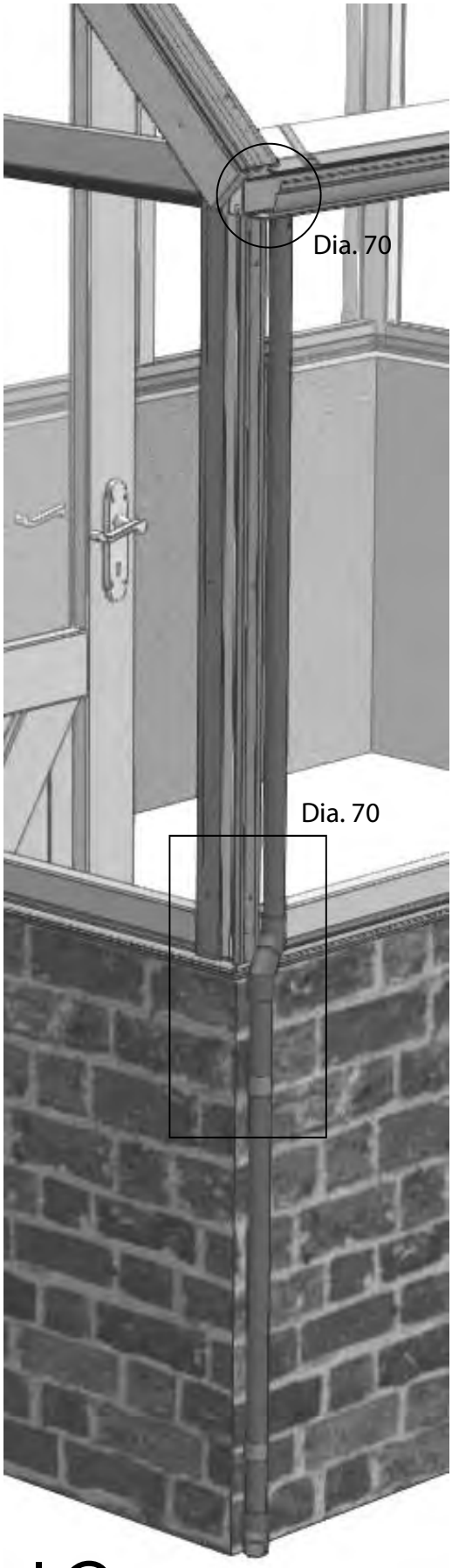
Fit the plastic pipe insert in the end of the gutter you want your down pipe to run out of (diagram 68). Use a small amount of silicone to seal this in place.

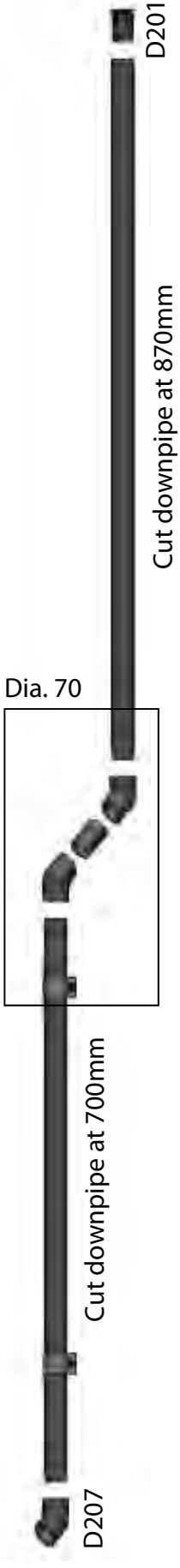
Go to the next page to see how the downpipe can be installed.



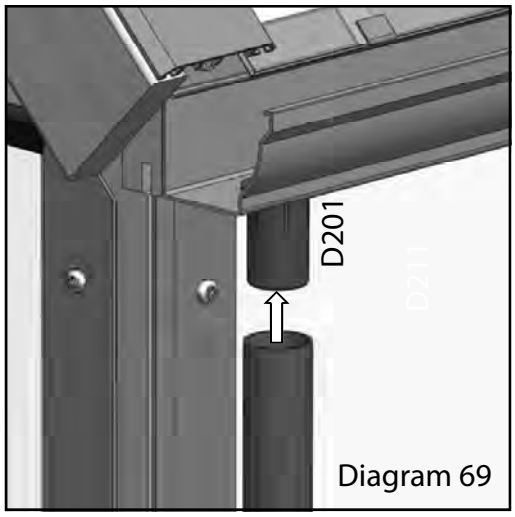
Gutter Parts		
Part Name	Part Number	Qty
Gutter:		2
6ft long	EV0621M	
8ft long	EV0622M	
10ft long	EV0623M	
12ft long	EV0624M	
Stop end RH	EV0535M	2
Stop end LH	EV0536M	2
Bracket	EV0740M	4
Downpipe Outlet	D201	2
Downpipe Shoe	D207	6
Rubber Blank	D214	2

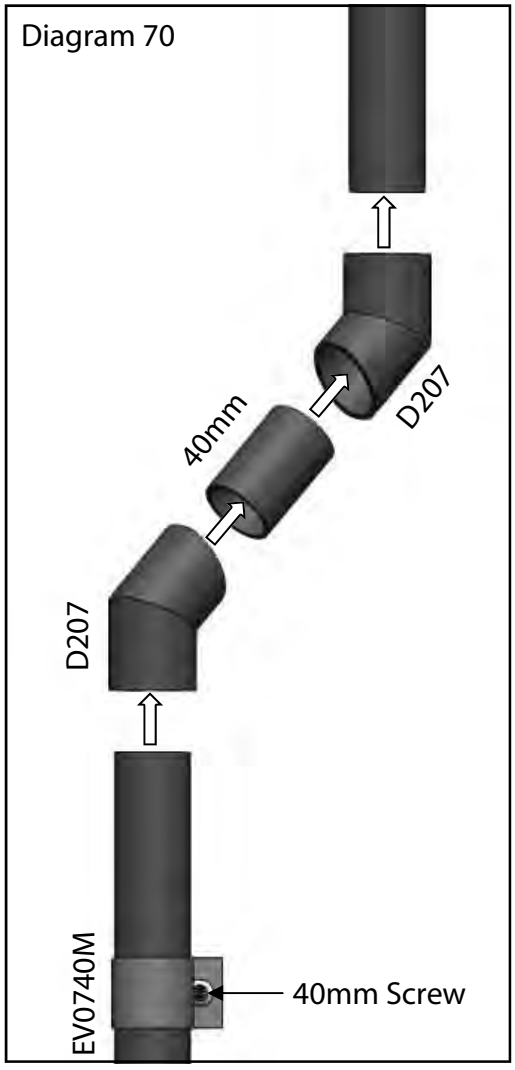
Gutter and Downpipe Installation





To install the downpipes straight to the floor cut the pipe as per the diagrams below. Use a small amount of silicone at each joint. The brackets can share the same hole as the capping for the panels. Use two M6 nuts as washers to space the brackets out so the pipe run vertical.





Gutter and Downpipe Installation

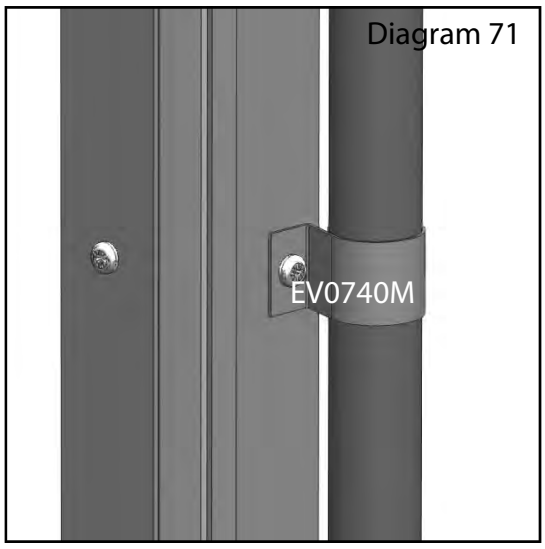


Diagram 71

If you want to connect the pipe to a waterbutt cut the pipe appropriately and simply use the D207 joints to divert the pipe. Its likely you will need to fix the downpipe brackets higher up, again try to use a standard capping screw location. If you have the aluminium capping you may find you wish to use an M6 nut to space the bracket out so the pipe runs more inline with the greenhouse frame.

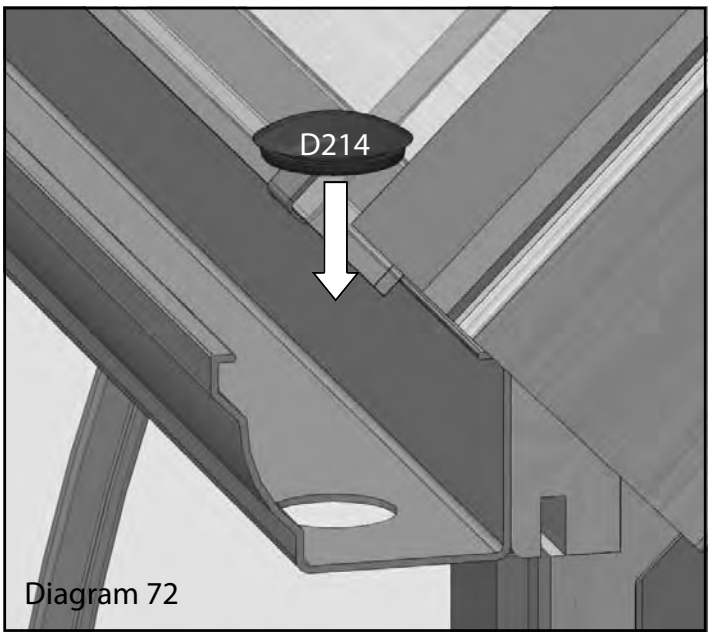


Diagram 72

Pop the small rubber blank into the hole that is not required.

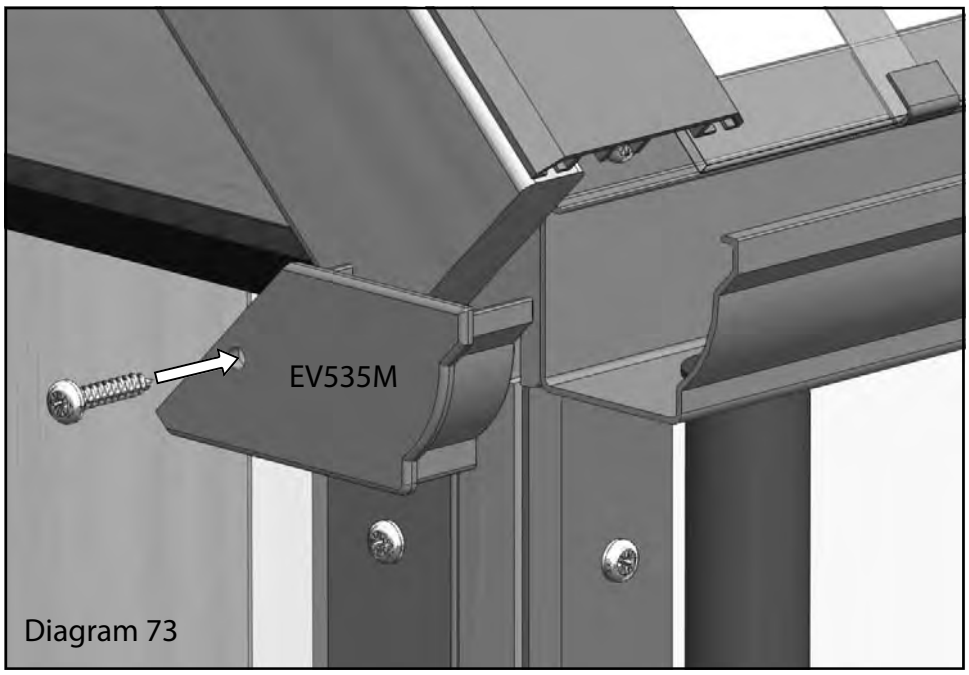


Diagram 73

You can now fit the cast aluminium end stops. These will need a good amount of silicone applied to create the seal to the gutter, any excess should be removed once in place. Fix with one 25mm screw.

Optional Cresting

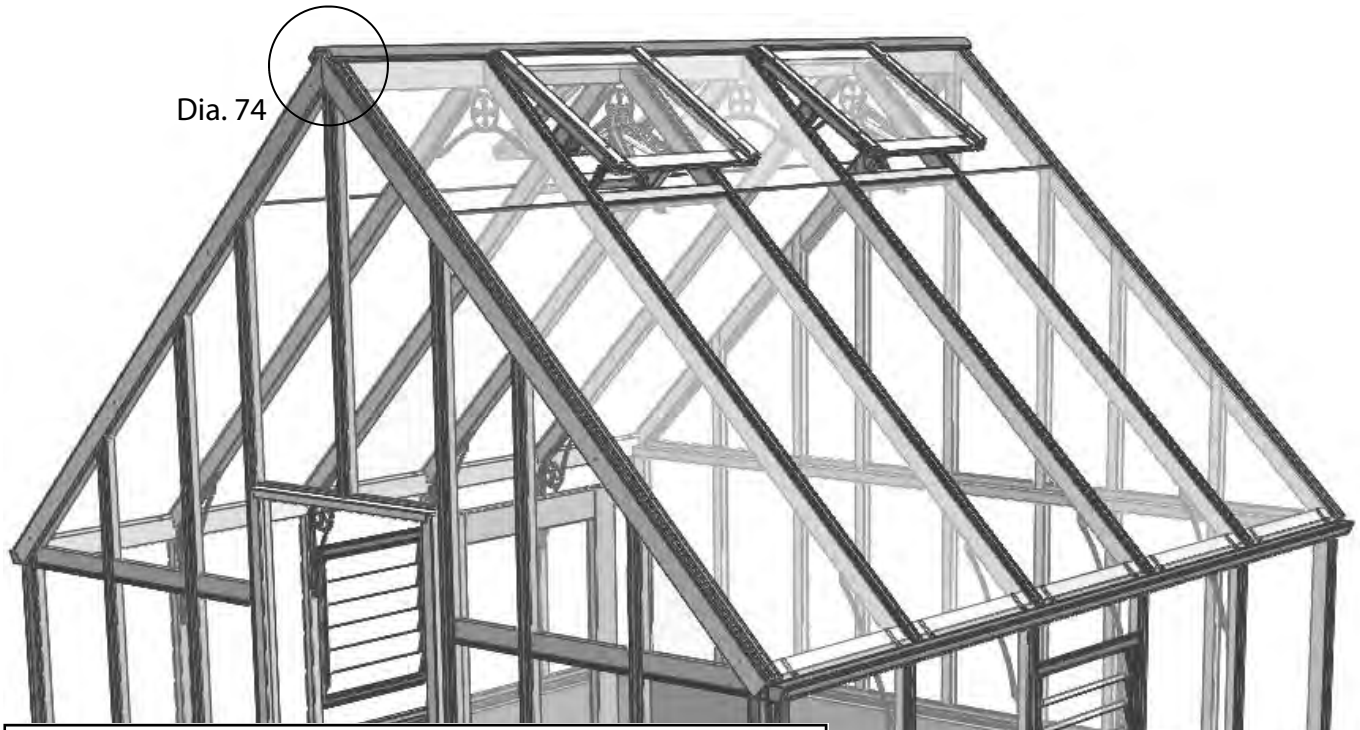


Diagram 74

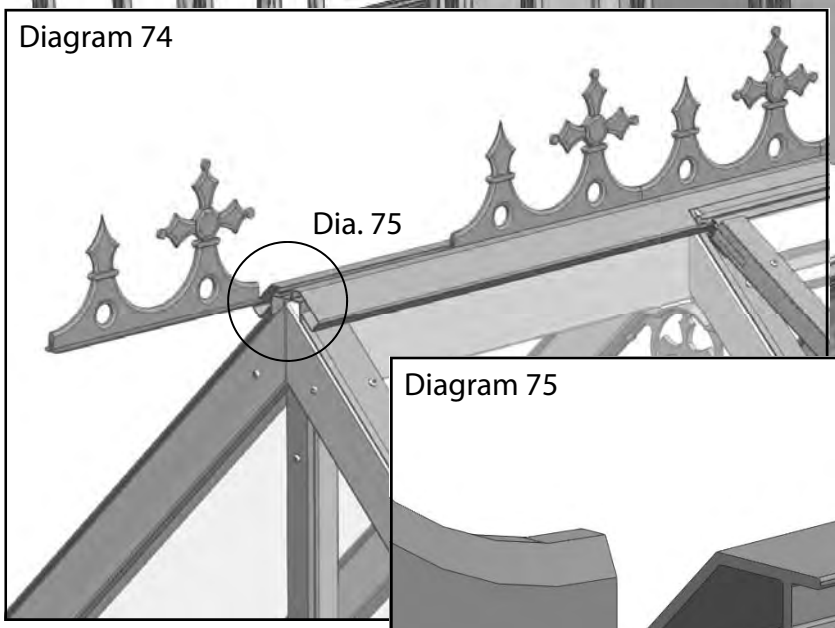
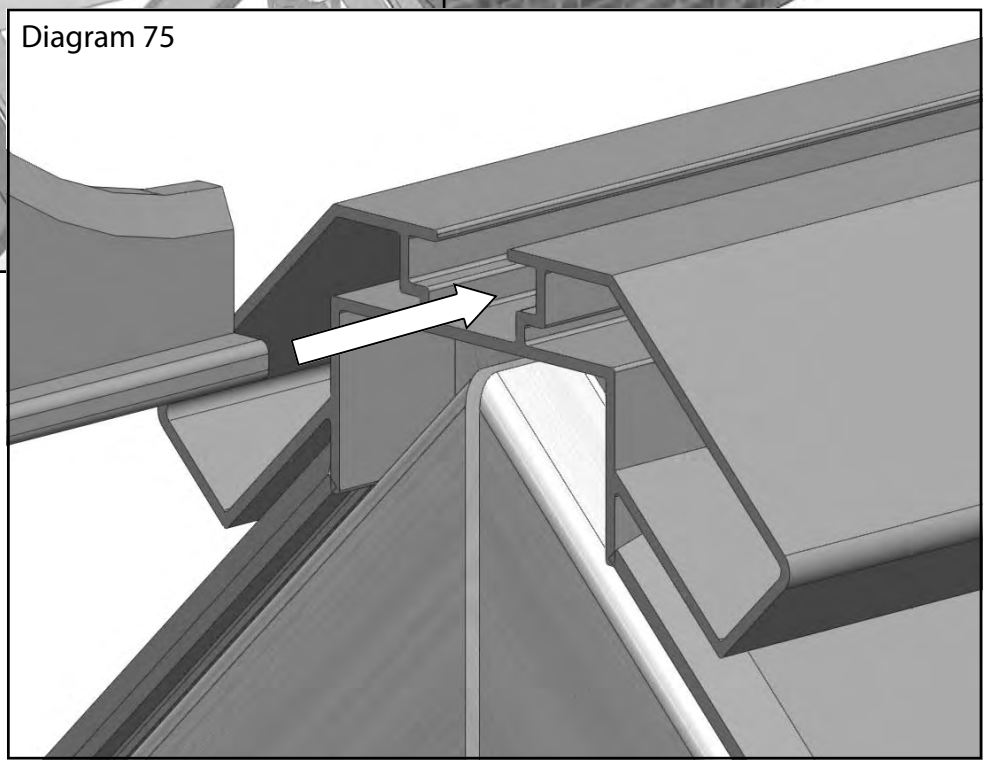


Diagram 75



From one end of the building slide your cresting pieces along the channel in the ridge cover cap.

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End cap and Finial

Diagram 76

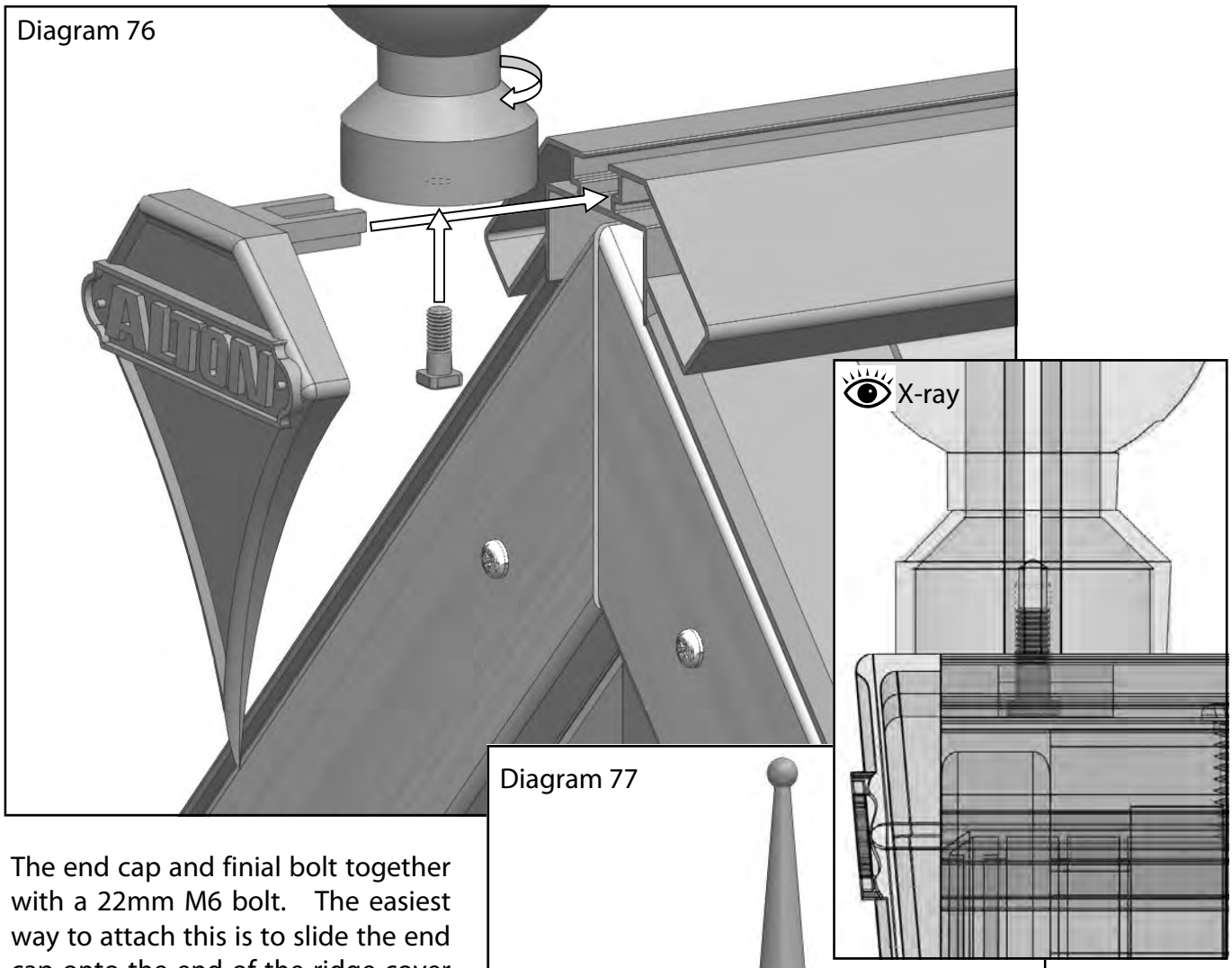
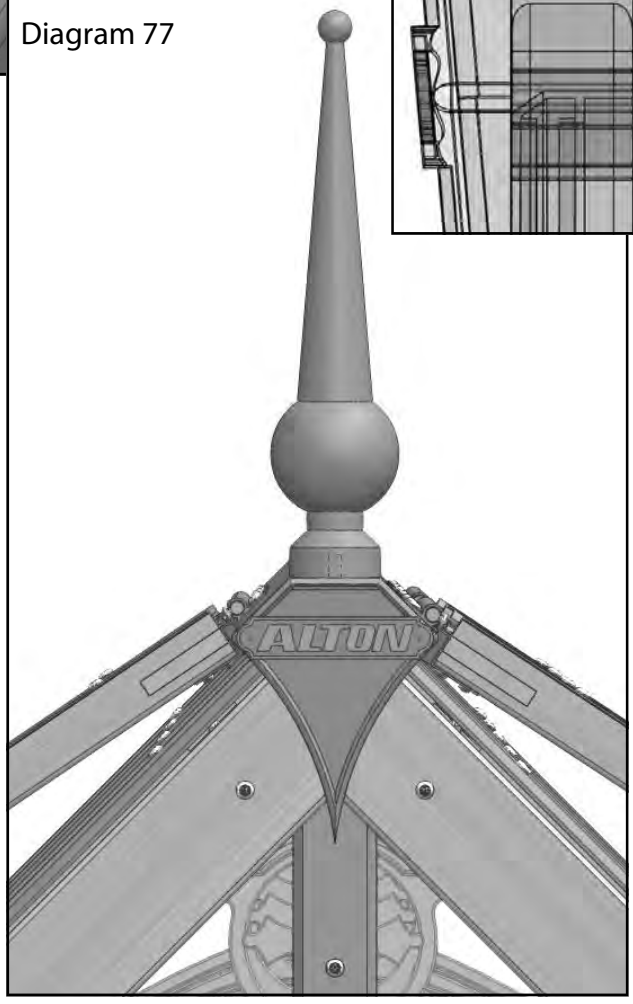
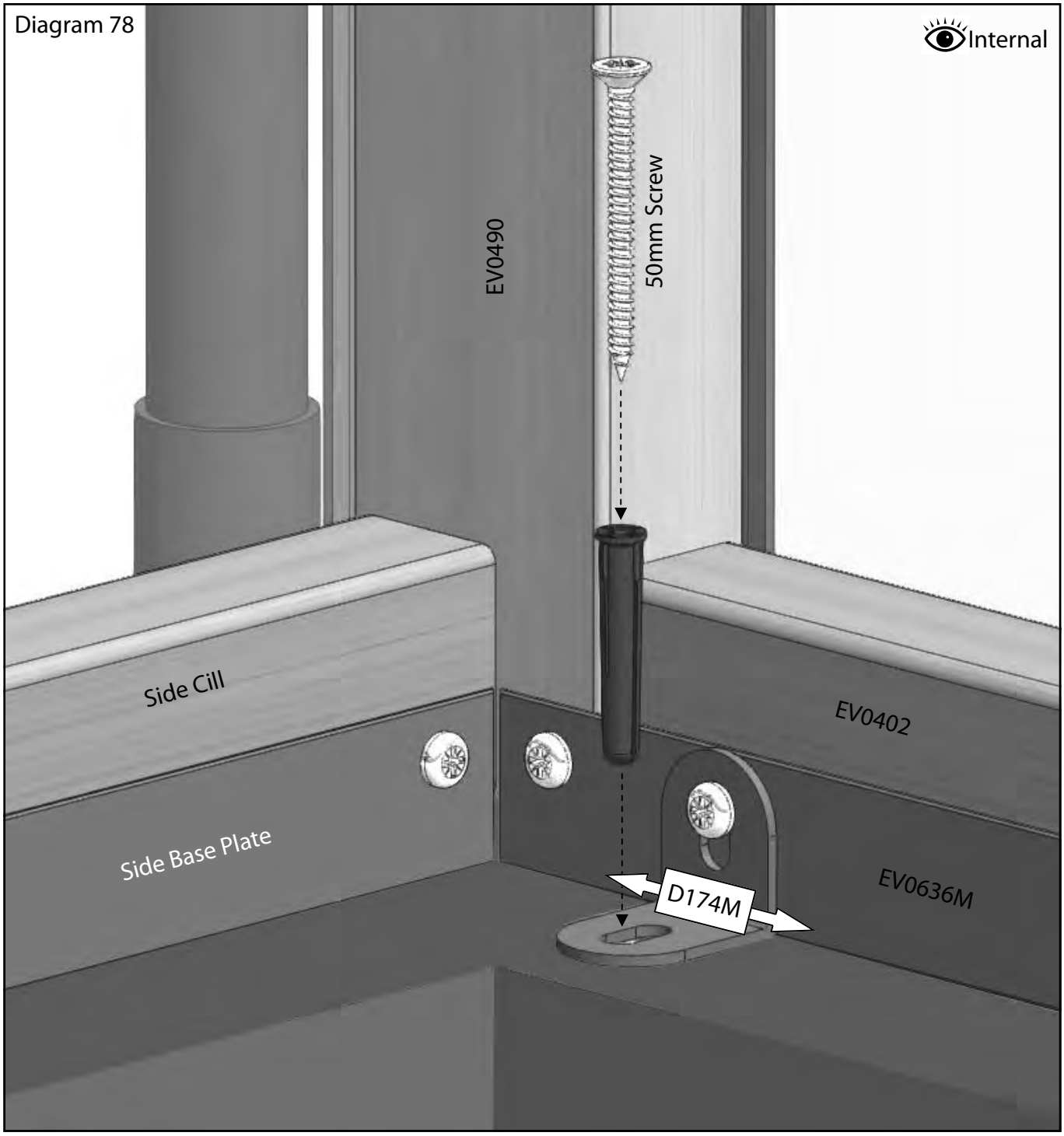


Diagram 77



The end cap and finial bolt together with a 22mm M6 bolt. The easiest way to attach this is to slide the end cap onto the end of the ridge cover cap, then slide the bolt on the end cap (the head should locate in the lower recess of the end cap), with the bolt in place you can then screw the finial down onto the bolt.

Finished installation



When you are happy with the final position of your greenhouse and all the sides are vertical and square you can fix the greenhouse to the brickwork using the small 'L' shaped brackets (D174M). You can either use the existing 25mm screws that join the aluminium base plate to the timber cills or simply drill new holes in the base plate to fix the bracket elsewhere (you may want to do this to avoid joints in the brickwork etc), diagram 78. Use brown rawl plugs, 50mm screws and a 7mm hammer drill to secure it through the base brackets.

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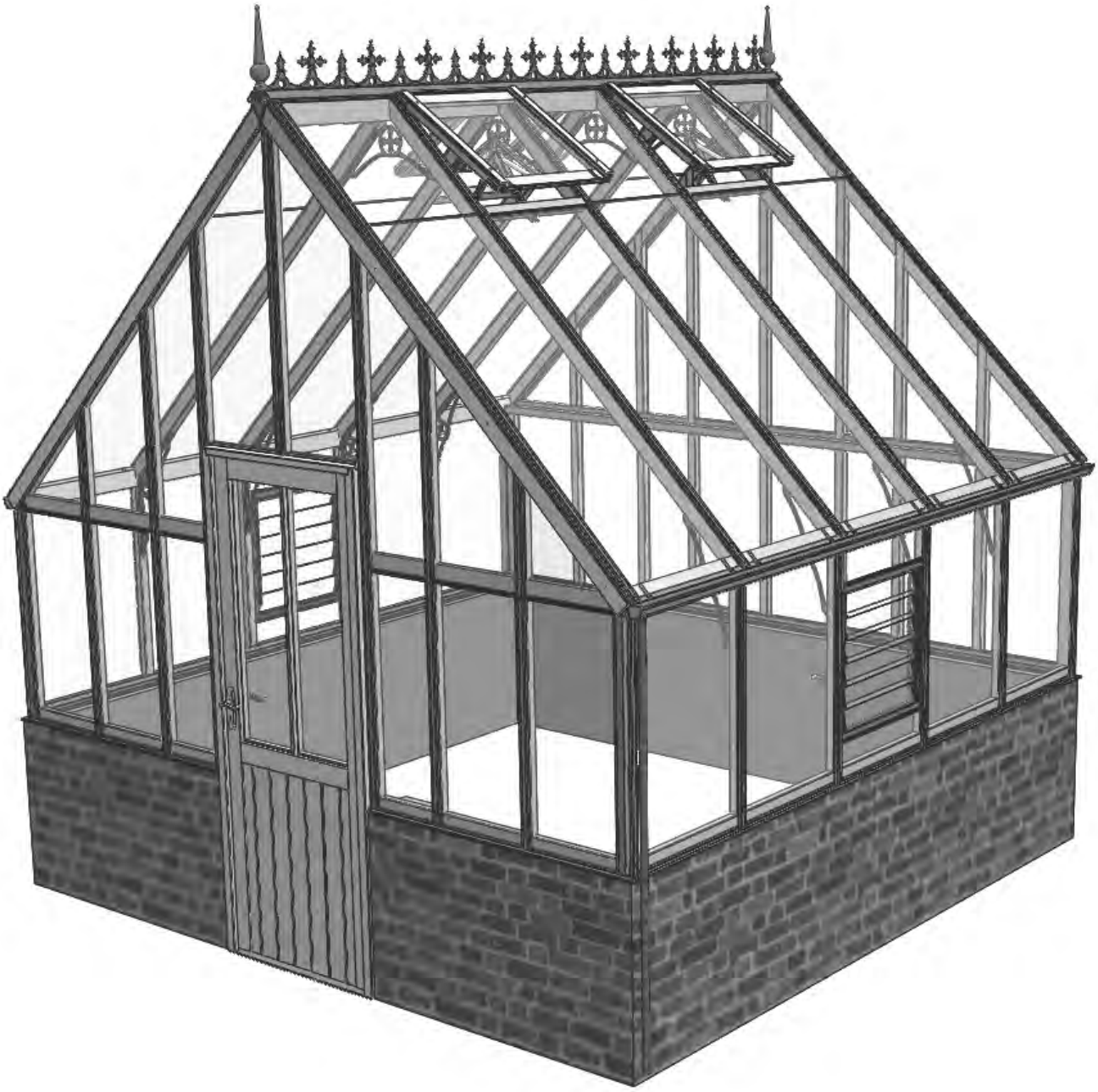
Finished installation



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Optional Auto Louvre Installation

Once the louvre is installed in the greenhouse you can replace the manual handle with the automatic unit.

First of all remove the screw to release the arm (diagram 79).

Next Remove the handle from the frame of the louvre (diagram 80).

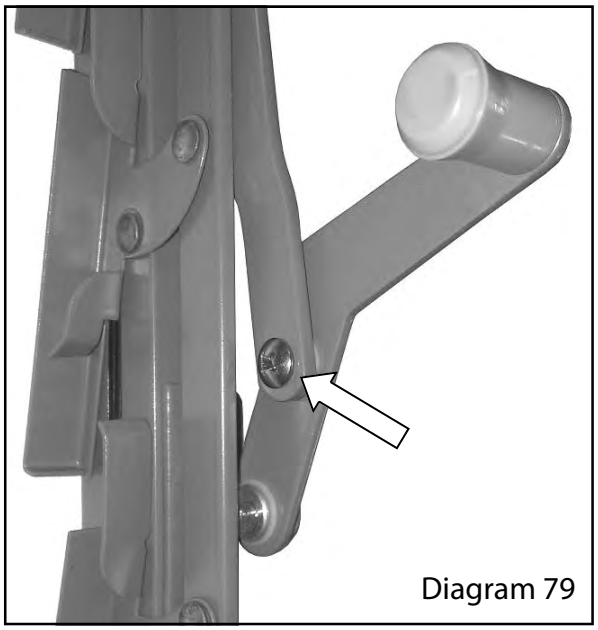
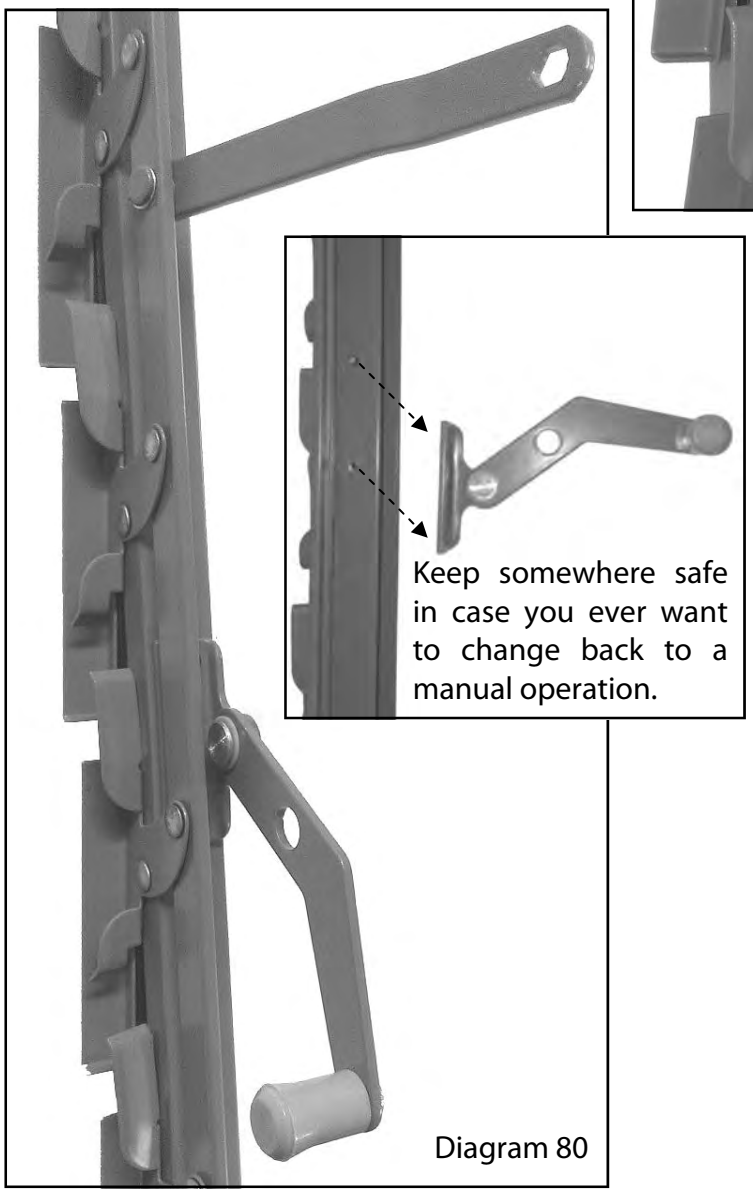


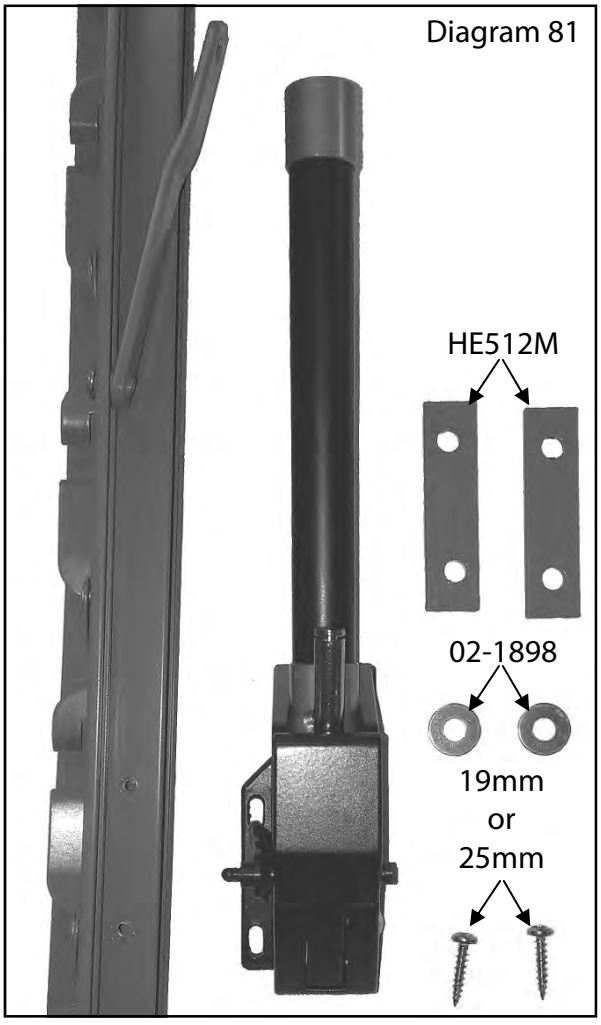
Diagram 79



Keep somewhere safe in case you ever want to change back to a manual operation.

Diagram 80

Diagram 79 shows the parts you need to attach the auto opener.



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Optional Auto Louvre Installation

You now need to mark the frame to drill the 2 holes, use a 2.5mm drill bit for this.
Offer the opener up to the frame with the plates and washers and slide the louvre arm into position. This now gives you the correct location for the opener (diagram 82). Once you have marked the frame remove the opener to drill the holes.
Now fix the opener to the frame using the 2 plates and 2 washers (diagram 83). You should have either 19mm or 25mm screws spare from the greenhouse frame for this.
Once fixed in place attached the louvre arm to the opener and hold in place with the plastic pop-on cap (diagram 84).

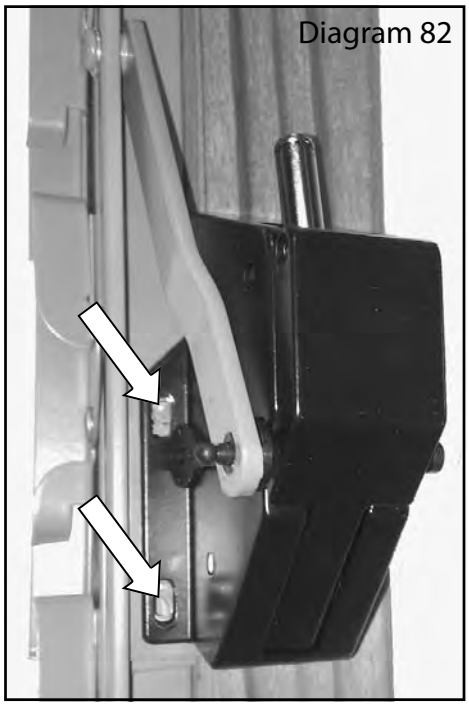
Diagram 82

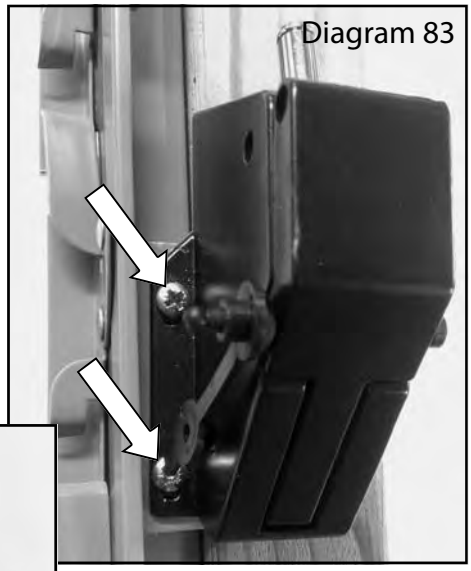
Diagram 83

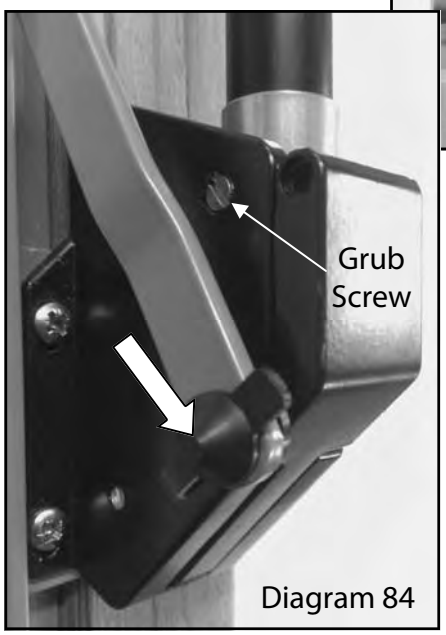

Diagram 84

Now slide the cylinder onto the shaft attached to the body of the opener, secure this in place with 2 grub screws (diagram 84).
Finally fit the thumb screw to the end of the cylinder, adjust this to get the desired amount of ventilation (diagram 85).

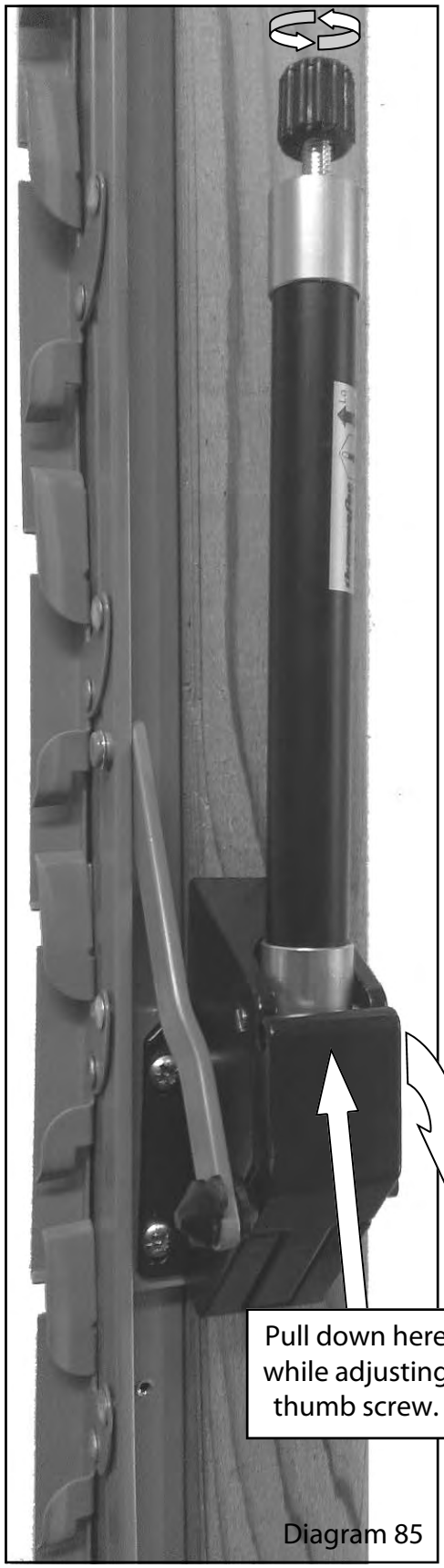

Diagram 85

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Parts Lists

Description:	Vic 10ft wide Gable box - Dwarf Wall	
Product Code	Description	Quantity
EV0489	Glazing Bar Side	9
EV0490	Glazing Bar Side Corner R	2
EV0491	Glazing Bar Side Corner L	2
EV0402	Cill Front Gable 10ft wide	2
EV0406	Cill Rear Gable 10ft wide	1
EV0410	Purling Gable 10ft wide R	2
EV0412	Rear Purling Brace 10ft wide	1
EV0413	Purling Rear Gable	1
EV0416	Purling Gable 10ft wide L	2
EV0496	Glazing Bar Gable 10ft wide R	2
EV0497	Glazing Bar Gable 10ft wide L	2
EV0462	Glazing Bar Above Middle Purling 10ft wide	1
EV0465	Glazing Bar Above Purling 8ft wide R	2
EV0466	Glazing Bar Above Purling 8ft wide L	2
EV0467	Glazing Bar Above Purling 10ft wide R	2
EV0468	Glazing Bar Above Purling 10ft wide L	2
EV0473	Glazing Bar Above Door 10ft wide	1
EV0484	Glazing Bar Roof Corner 10ft wide R	2
EV0485	Glazing Bar Roof Corner 10ft wide L	2
EV0525	Roof Corner Cloaking 10ft wide R	2
EV0526	Roof Corner Cloaking 10ft wide L	2
EV0636M	ALU Vic base plate front 10ft wide R	1
EV0637M	ALU Vic base plate front 10ft wide L	1
EV0640M	ALU Vic base plate rear 10ft wide	1
INS	****GREENHOUSE INSTRUCTIONS****	1

Description:	Vic 10ft wide House box				
Product Code		EVVIC106	EVVIC108	EVVIC1010	EVVIC1012
	Description	6ft long	8ft long	10ft long	12ft long
EVPACVIC	Victorian Component Pack	1	1	1	1
EV0313M	Glass Stop	12	16	20	24
EV0537M	Alton Eaves Bracing	4	6	8	10
EV0538M	Alton Ridge Bracing	2	3	4	5
EVPACVENT	Vent pack bundle for Evo	1	2	3	4
BAXLAU	Bayliss Auto-vent	1	2	3	4
EVSMA01	Smalls Pack No 01 for Evolution	1	1	1	1
EVSMA02	Smalls Pack No 02 for Evolution	-	1	1	1
EVSMAVIC01	Smalls Pack No 01 for Victorian	1	1	1	1
ROSEPS	Glass separators 4mm black	14	14	14	14
SC201	Pack of 25 Z Overlap Clips	1	1	1	1
EV0478	Glazing Bar Roof 10ft wide	4	6	8	10

Description:	Vic Common Length box - Dwarf Wall				
Product Code		EVCLDW6	EVCLDW8	EVCLDW10	EVCLDW12
	Description	6ft long	8ft long	10ft long	12ft long
EV0015	Side Cill	2			
EV0016			2		
EV0017				2	
EV0018					2
EV0489	Glazing Bar Side	4	6	8	10
EV0418	Eaves Bar	2			
EV0419			2		
EV0420				2	
EV0421					2
EV0444	Ridge Bar	1			
EV0445			1		
EV0446				1	
EV0447					1
EV0621M	ALU Vic Gutter	2			
EV0622M			2		
EV0623M				2	
EV0624M					2
EV0627M	ALU Vic Ridge Cap	1			
EV0628M			1		
EV0629M				1	
EV0630M					1
EV0643M	Vic base plate side	2			
EV0644M			2		
EV0645M				2	
EV0646M					2
EV0325	Evolution complete louvre kit	1	2	2	2

Parts Lists

Description:	Cedar Capping for Vic 10ft wide - Dwarf Wall				
Product Code	Description	6ft long	8ft long	10ft long	12ft long
Gable					
EV0556	Cedar Capping Side Corner R	2	2	2	2
EV0557	Cedar Capping Side Corner L	2	2	2	2
EV0558	Cedar Capping Gable 8ft wide 1st R	2	2	2	2
EV0559	Cedar Capping Gable 8ft wide 1st L	2	2	2	2
EV0560	Cedar Capping Gable 8ft wide 2nd R	2	2	2	2
EV0561	Cedar Capping Gable 8ft wide 2nd L	2	2	2	2
EV0562	Cedar Capping Gable 10ft wide R	2	2	2	2
EV0563	Cedar Capping Gable 10ft wide L	2	2	2	2
EV0568	Cedar Capping Mid 10ft wide	1	1	1	1
EV0571	Cedar Capping Above Door 10ft wide	1	1	1	1
Side					
EV0555	Cedar Capping Side	8	10	12	14
Roof					
EV0151	Cedar Capping Roof Vent	2	4	6	8
EV0590	Cedar Capping Roof 10ft wide	4	6	8	10
EV0595	Cedar Capping Roof Corner 10ft wide	4	4	4	4
02-1356	Clear Silicone	4	4	5	5

Parts Lists

Description:	Alu Capping for Vic 10ft wide - Dwarf Wall				
Product Code	Description	6ft long	8ft long	10ft long	12ft long
Gable					
EV0656M	ALU Vic Capping Side Corner R	2	2	2	2
EV0657M	ALU Vic Capping Side Corner L	2	2	2	2
EV0658M	ALU Vic Capping Gable 8ft wide 1st R	2	2	2	2
EV0659M	ALU Vic Capping Gable 8ft wide 1st L	2	2	2	2
EV0660M	ALU Vic Capping Gable 8ft wide 2nd R	2	2	2	2
EV0661M	ALU Vic Capping Gable 8ft wide 2nd L	2	2	2	2
EV0662M	ALU Vic Capping Gable 10ft wide R	2	2	2	2
EV0663M	ALU Vic Capping Gable 10ft wide L	2	2	2	2
EV0668M	ALU Vic Capping Mid 10ft wide	1	1	1	1
EV0671M	ALU Vic Capping Above Door 10ft wide	1	1	1	1
Side					
EV0655M	ALU Vic Capping Side	8	10	12	14
Roof					
EV0251M	ALU Roof Vent Capping	2	4	6	8
EV0690M	ALU Vic Capping Roof 10ft wide	4	6	8	10
EV0695M	ALU Vic Capping Roof Corner 10ft wide	4	4	4	4
EV0227	Glazing PVC 10m (m700) 1729D10GP coil	1	3	4	5
EV0231	Glazing PVC 100m (m700) 1729D10GP coil	1	1	1	1

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