



The Studio

Installation Guide | Version 2.0

Gardenrooms
By Ultraframe

The Studio

Introduction

Thank you for choosing a Garden Room.

This guide is designed to make fitting as straightforward as possible. Before you commence installation, please take a moment to familiarise yourself with this guide.

This guide is written on the basis that the capability / structural performance of any foundations have been checked.

Health & Safety

Site safety is paramount. The Construction (Design & Management) Regulations 2015 apply to the whole construction process, on all construction projects from concept through to completion. Compliance is required to ensure construction projects are carried out in a way that secures health and safety. The installation company shall be responsible for the safety of all of the fitting team, the customer and members of the public.

The Surveyor should have carried out a risk assessment to reduce risk on site and this should have been discussed with you prior to starting.

Please use safe working platforms and ladders that comply with BS EN 131. Always use equipment in line with manufacturers recommendations. Personal Protective Equipment - such as goggles, mask and ear defenders – should be used when appropriate.

Careful consideration should be given to the safe disposal of all packaging - packaging is predominantly made from recycled materials and can be readily recycled.

Product

The kit is supplied with a location plan, a quality control check list for the box in which this guide arrives and, of course, this installation guide. The location plan is used to match individual components to their respective position on the roof. Our numbering convention always starts at the top left, as you look from outside back at the front elevation.

The majority of aluminium and PVCu components contain identification codes, usually by inkjetting or labelling - should you need to re-order a part this should help.

Sealing

It is important to use the correct sealant when sealing the roof.

1. For the solid panels a low modulus neutral cure brand of silicone must be used
2. For the individual 'self cleaning' glass panels use MS Polymer sealant such as Rotabond 2000.

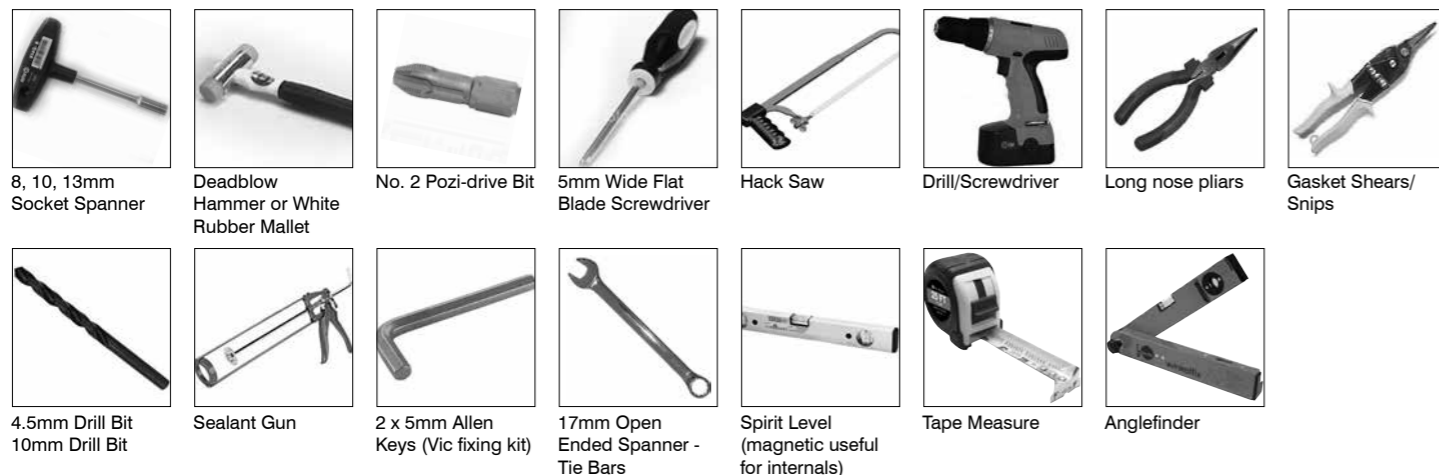


- Solid Panels
- Standard sealed units



- Self cleaning glass

Tools Required



Aluminium Products

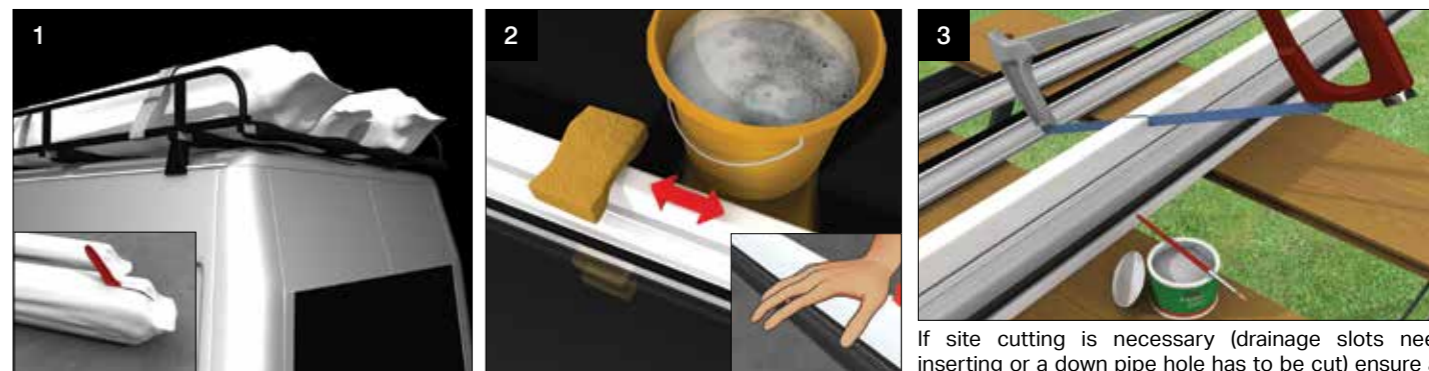
Painted aluminium products - Please Note

All paints will 'chalk' to some extent and there will be a reduction in gloss level over time. (See cleaning and maintenance guidelines below)

Quality expectations on installation.

Appearance: This is assessed based on the selection of the 'significant' (primary) surface. From a distance of 3m, stand at an oblique angle of 60° and then defects such as blisters, runs, pin holes etc should NOT be seen.

Colour and gloss: Viewed from 5m, the coating must be of even colour and gloss with good coverage.



If storing in warehouse racking or on rails/roof racks, take care to support the products and do not over tension straps and ropes. When opening sealed packs, use a special box knife.

Grease marks, dirt and mastic spillage may be removed using soapy water. Take care when fitting aluminium products to not use excessive force.

If site cutting is necessary (drainage slots need inserting or a down pipe hole has to be cut) ensure all swarf is kept away from the painted surface and then seal with a primer/corrosion inhibitor and then top coat. Alternatively, use a suitable gap sealant to prevent the onset of corrosion. These steps are critical in marine environments.

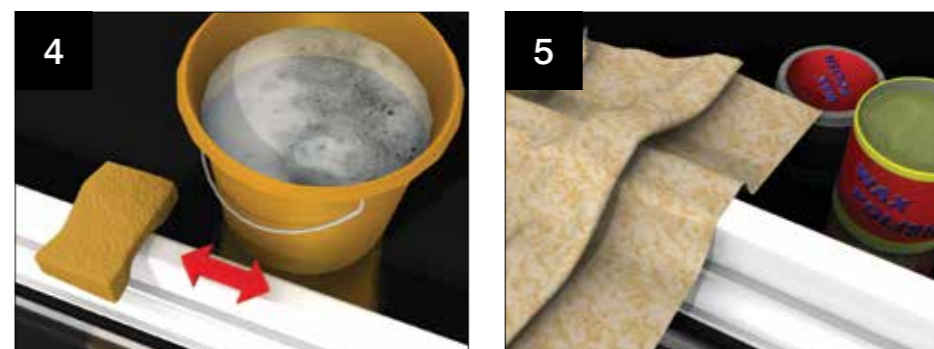
Cleaning and Maintenance



If surface damage is encountered, use 120-360 grit paper to prepare the surface. Wipe clean with white spirit.

Ensure the surface is dry – apply a thin primer coat using a fine brush.

Finally, apply an air drying top coat with a fine brush.



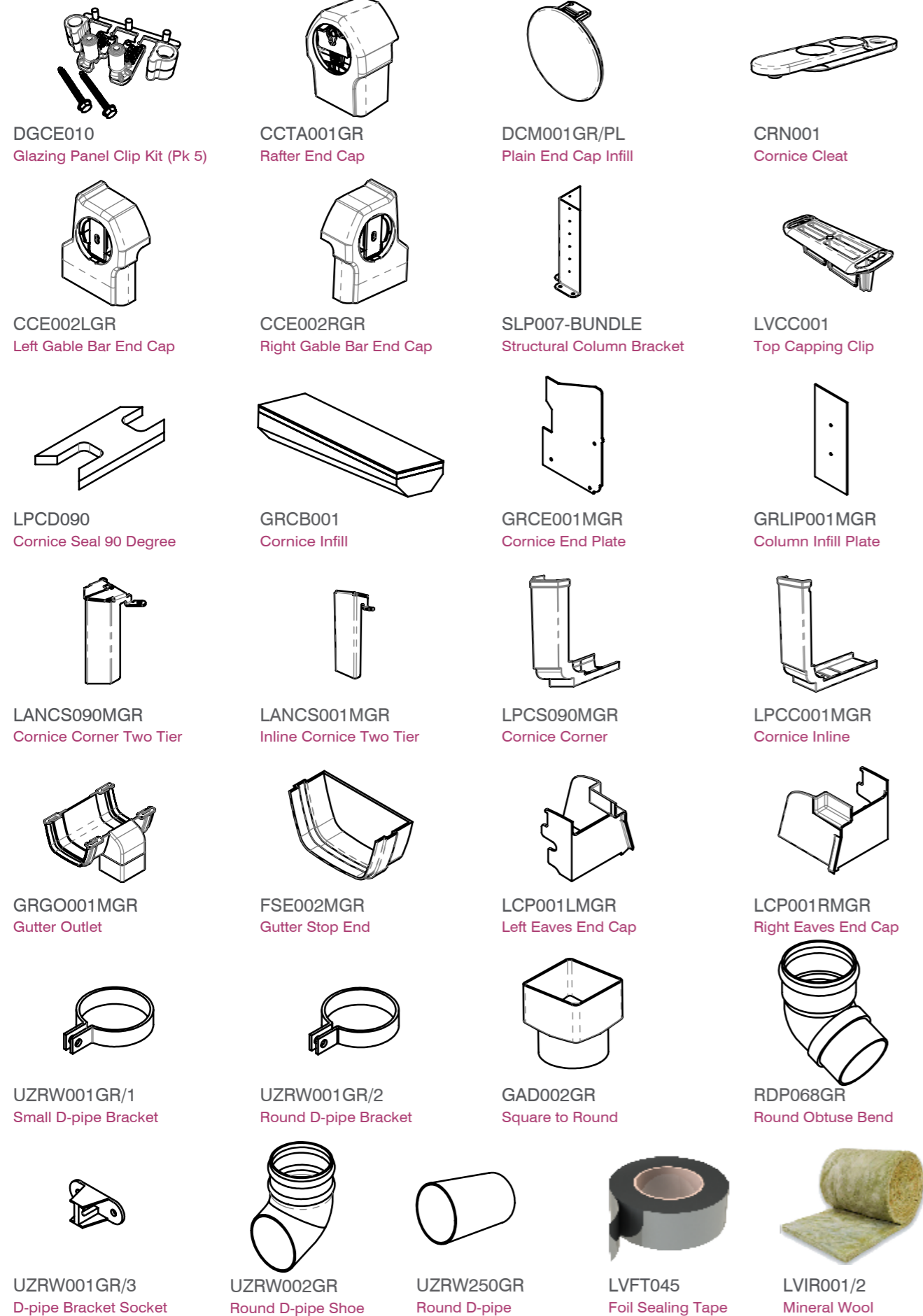
General cleaning can be undertaken by a wash with warm soapy water.

For added protection, a wax polish can be applied up to twice per year – follow the polish manufacturer's instructions carefully.

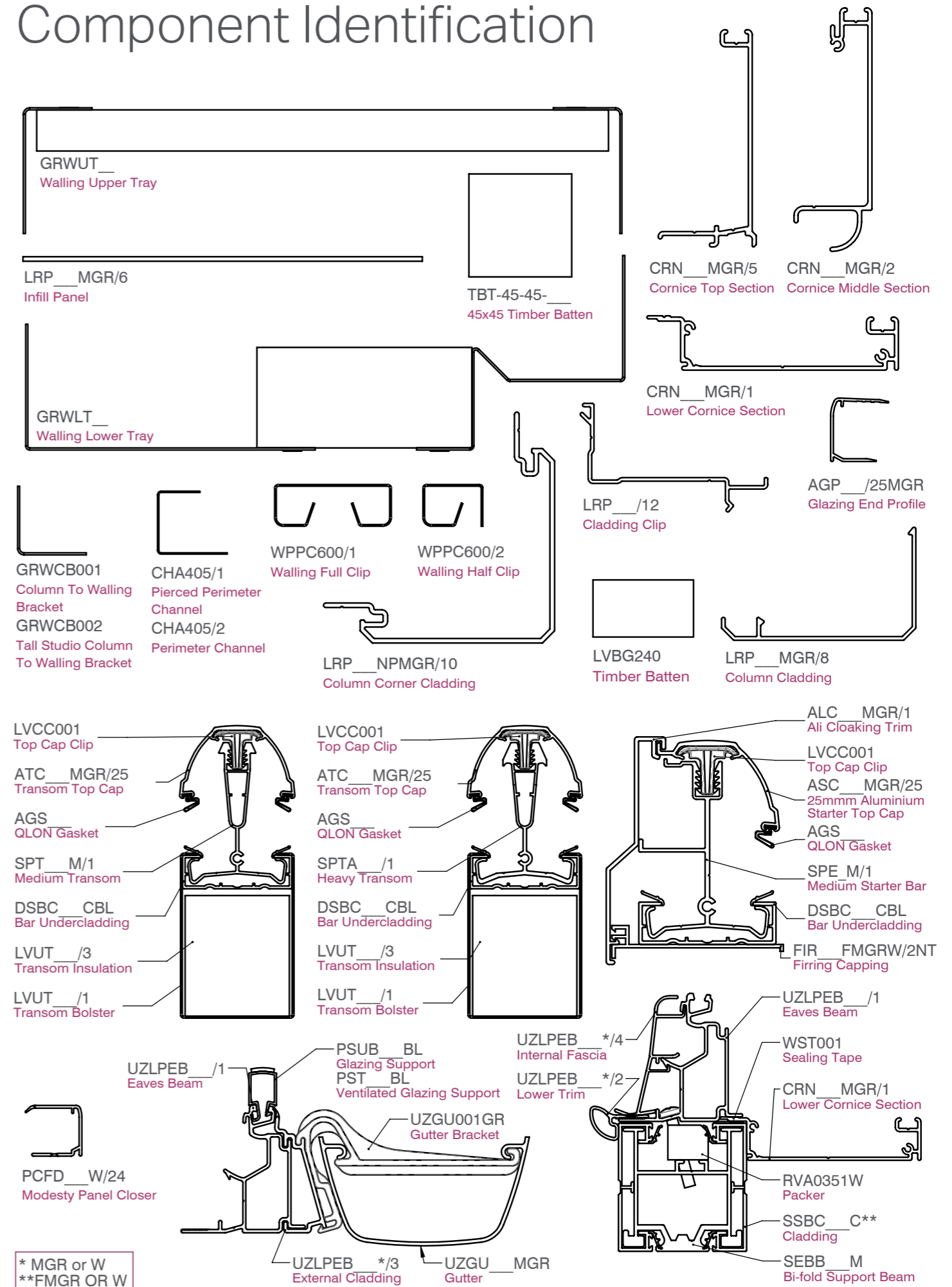
PLEASE PASS TO HOMEOWNER

It should be noted that polyester powder coatings are not maintenance free – the extent of cleaning depends upon the local environment and on the attitude of the building owner. Think cars here...if the building owner wants a finish like that, more regular cleaning is needed. All paints will 'chalk' to some extent and there will be a reduction in gloss level over time – this can be restored.

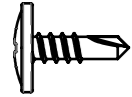
Component Identification



Component Identification



Fixings Identification



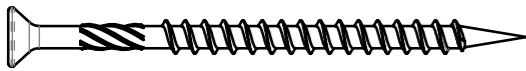
CHAA006
4 x 13mm Self Drilling Wafer Head (Pk 25)
 Used: Base and top trays to walling clips, walling to column angle brackets, CHA___/1 to furring fixing.



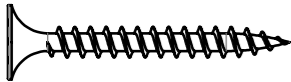
8PSR42-25BLK
4.2 x 25mm Self Drilling Black Stainless Steel Screw (Single)
 Used: Cornice end caps, cornice inline joints and cornice corners.



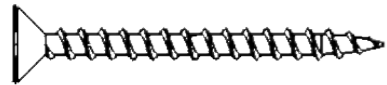
CHA007
4.8 x 19mm Self Drilling Screw (Pk 25)
 Used: Cornice corners and inline joints, cornice mid section to lower, cornice upper section to mid section and cornice cleats.



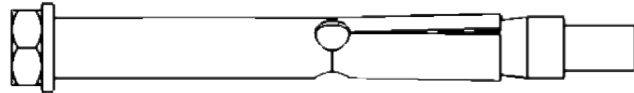
NRDS070
4.5 x 70 CSK Screw (Single)
 Used: Timber walling battens to columns, eaves to walling.



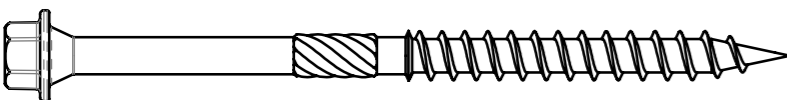
LVBK060
Livnroof Batten Fixing Kit (Pk 60)
 Used: Internal battening out.



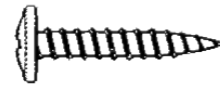
CHA017
4.8 x 70mm Wafer Head Self Drill Screw (Single)
 Used: Gable bars to firrings.



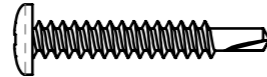
SLP005
Structural Bracket Fixing Kit
 Used: Column bracket to slab and to column.



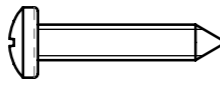
FRFC008-100
6 x 100mm Deck Screw (Pk 8)
 Used: Firrings to walling.



NRTF050
4.2 x 25mm Piercing Wafer Head (Pk 50)
 Used: Base/top trays to walling battens, walling angle brackets to column, cornice return to column, column infill panel to column.



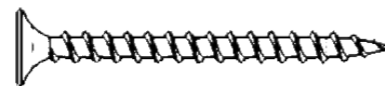
CRN010
4.8 x 32mm Pan Head SS Self Drill Screw (Pk 25)
 Used: Glazing bar top caps to glazing bars.



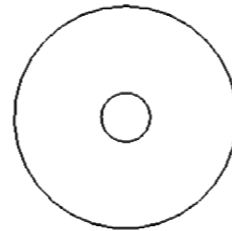
EFSA021
4.8 x 25mm Pan Head Self Tapping Screw (Pk 20)
 Used: Glazing bar end cap brackets, column cladding clips and column claddings.



FSW-55-70/10
5.5 x 70 TX CSK Self Drill Winged Screw (Pk 10)
 Used: Walling battens to walling clips.



LVIK025
25mm Insulation Fixing Kit (Pk 25)
 Used: Internal 25mm roof insulation.



CHA017
4.8 x 70mm Wafer Head Self Drill Screw (Single)
 Used: Gable bars to firrings.



FLNS001
M6 Spiggot Nut
 Used: Glazing bars to eaves.

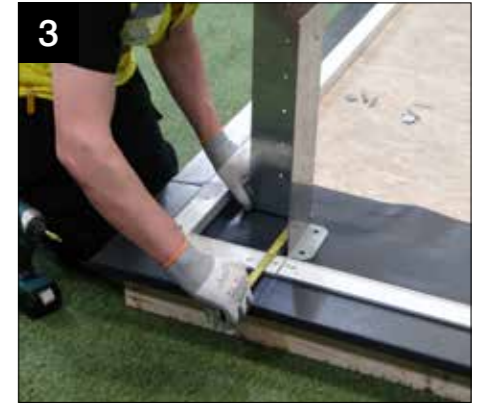
Installation



1 Lay out the DPC roll around the perimeter of the base where walls are to be positioned, aligning to the outside edge. Once walls and cills are in place the excess can be trimmed away.



2 Evenly position cill on slab/base sealing any joints with an appropriate sealant. Check level and diagonals to ensure square and fix cill in place to aid positioning.



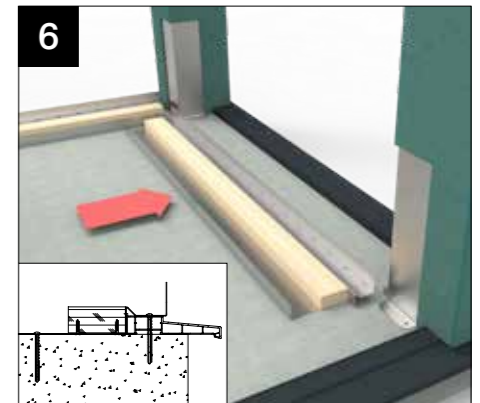
3 Measure back from the internal frame (this datum is provided by the cill) by 189mm to the inside face of the insulated column structural bracket. Mark hole positions, remove bracket and drill marked positions using a Ø10mm drill bit.



4 Reposition brackets over drilled holes. Fix the bracket down to the slab using anchor fixings provided (SLP005) ensuring you are fixing into a substantial base.



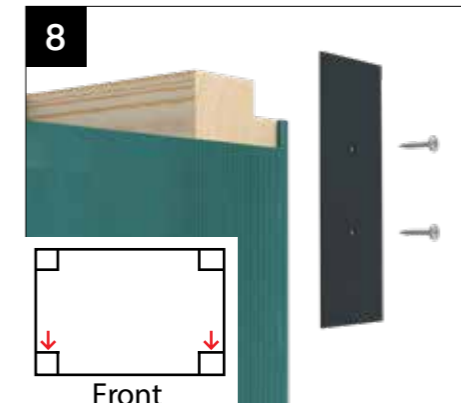
5 Lift column into place and fix to the structural bracket using fixings from SLP005 kit. Ensure that the tall columns are positioned to the front of the structure. Repeat steps 3, 4 and 5 for each of the four columns. **Fitters Tip:** Packers can be placed temporarily on the cill under the column to alleviate column wobble.



6 Apply sealant along the top surface of the cill where walls are located. Position the walling base trays centred between columns and hard up against the cill. Check the tray is level and fix down to slab using appropriate fixings through the pre-punched holes in both internal and external steels. Ensure the tray is level and pulled down tight to the slab.



7 Positioning the longer leg against the column align the steel angles to the corner of the column as shown above. The bottom of the angle should be aligned to top of the column structural bracket. Once positioned secure to the column using NRTF050 (4.2 x 25mm wafer head screws) through the pre-punched holes.



8 Attach the column infill plate to the front column on the faces adjacent to the garden room projection. Aligning it with the top and internal faces of the column timber. Fixing in place using NRTF050 through the pre-cut holes.



9 Lift the walling panels into place starting at the ends before filling in towards the middle.

Installation



Secure walling panels together using the provided steel clips both internally and externally, these can either be pushed into place or slid down from the tops of the panels. Ensure the walls are plumb and level.



Position the walling top tray on the walls so that the internal steel flange is against the walling clips. It may help at this stage to secure the top tray to the column by diagonally fixing into the column through the OSB tray pulling the two components together. Ensure the top tray is level and flush with the tops of the rear columns.
Fitters Tip: A timber block can be temporarily fitted to the top of the top tray and a clam used to pull the columns and walling in tight together.



Ensure the walls are pushed against the internal steel of the base trays and fix in position through the pre punched holes in the base trays using the provided screws (CHAA006).



Secure the column angles and top tray to the interior wall panels through the pre punched holes using the supplied 13mm self drilling screws (CHAA006).



Using the provided roll of membrane, stretch out horizontally across the lower half of the wall and temporarily pin in place using staples or tacks into the corner columns. Repeat across the upper half of the wall overlapping the lower covered area. Repeat the process on all walls.



Cut the 45 x 45mm battens to length, these should be cut to the same length as the external walling clips.



Starting with the clips closest to the columns, fix the battens to the columns using provided fixings (NRDS070), pushing the batten up against the underside of the top tray. The timbers can then be fixed into the walling panel clips using FSW-55-70/10 towards the top, centre and bottom of the timber batten.



Secure the battens to each of the clips by positioning it behind the base tray and top tray steels and centred vertically with the walling panel clips using the provided 5.5mm x 70mm screws (FSW-55-70/10) towards the top, centre and bottom of the timber.

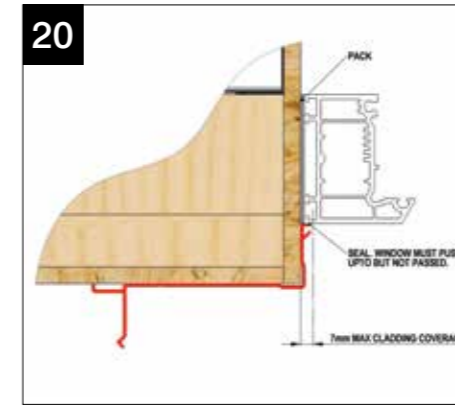


Now secure the top tray and base tray steels to the timber through the pre punched holes using 4.2x25mm wafer head screws provided (NRTF050).

Installation



Remove the plastic column corners. Fix the column cladding clips in position aligning the top edge of the column outer boarding, this is important to prevent interference when the eaves beam is fitted. Screw fix through the holes into the column using the 4.8 x 25mm screws provided (EFSA021). These clips can then be used as a datum point for setting out the frames.



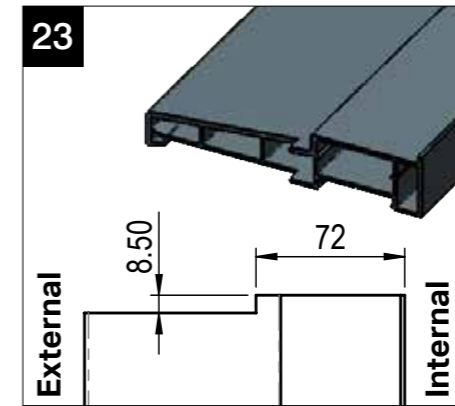
Fit the window and door frames into position against the vertical aluminium clip, ensure plumb and level and secure using appropriate fixings.



Fit recommended frame add-on (15mm min.) above the front elevation frames.



Weatherseal any joints/gaps under columns/walls and between windows/doors/walls and columns. Use foam and/or appropriate sealant.



Prepare the cill that abuts the tall columns with the detail shown to accommodate the column claddings.



Run a bead of sealant across the top of the rear and side walls/frames. Position the cill so that the internal frame datum of the cill lines through, measure the diagonals to ensure square and fix in place.



Run a bead of sealant across the top of the front frames and rear/side cills.



Locate the front eaves beam (which has a factory fitted lower cornice section) so that the eaves beam leg is in line with the internal frame and timber upstands on columns. Fix the eaves down into the columns and the frames using an appropriate fixing.



To fit the short cornice returns, start by fitting the cleats and offering up to the fitted section.

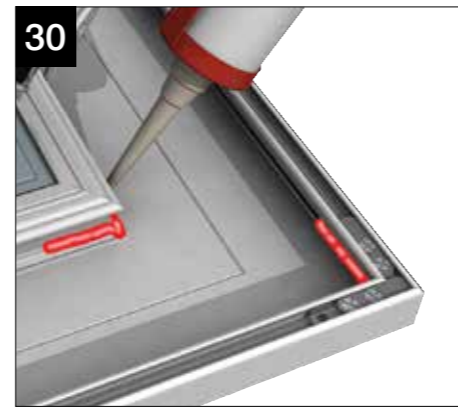
Installation



Secure these cleats in place using (CHA007) fixings provided.



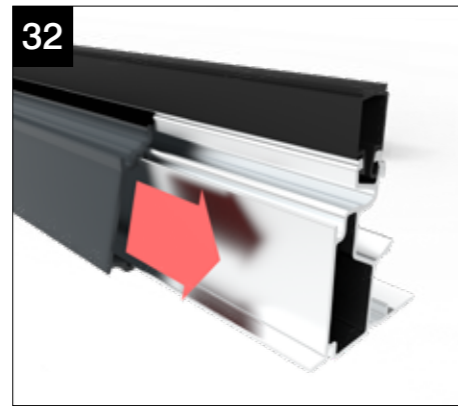
Fix the small cornice returns to the columns through the pre-drilled holes using fixing NRTF050.



Silicone seal front and back edge of lower cornice sections (be generous).



Apply sealant to the foam sealer strips and foam 'H' component. Position foam components into the lower cornice section and press down.



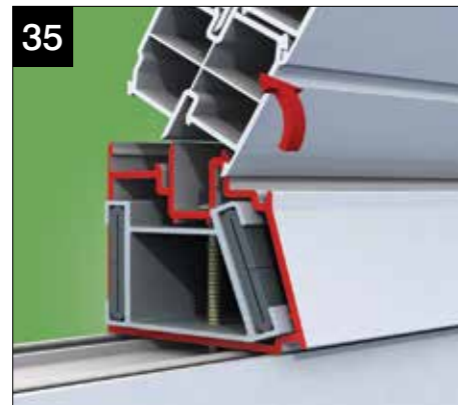
Prior to fitting the rear eaves beam slide on the external fascia to the rear eaves beam.



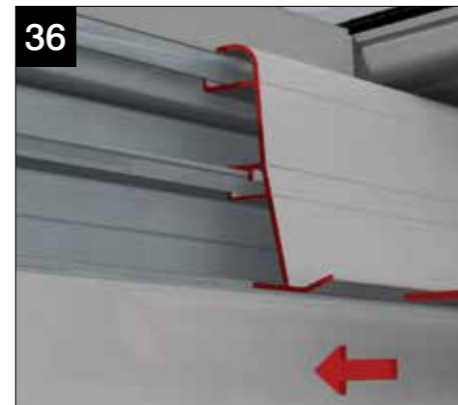
Locate the rear eaves beam onto the cill aligning to the inside upstand and fix down through the cill into the top tray timber using fixing NRDS070.



Separate the firing frame connector from the firings and position the frame connector onto the cill and secure down into the walls/frames. Fixing FRFC008-100 has been supplied for the fixing into the walled sides. Suitable fixings into frames are to be sourced separately.

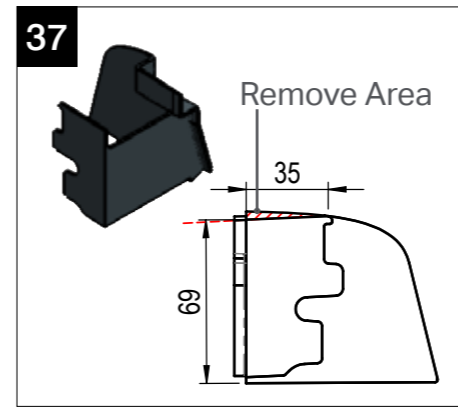


Reassemble the firing by clipping the firing top section into place.

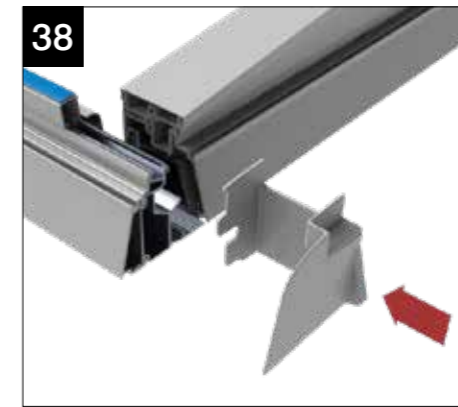


Clip the internal fascia onto the front eaves beam by hooking under and clipping.

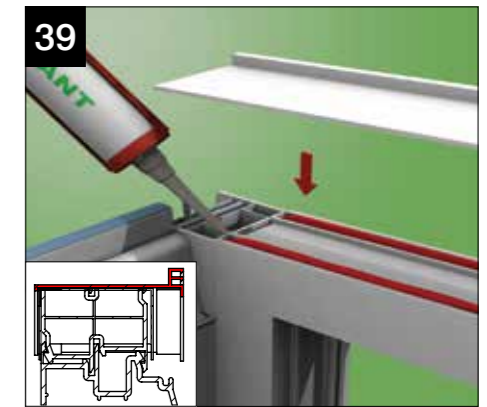
Installation



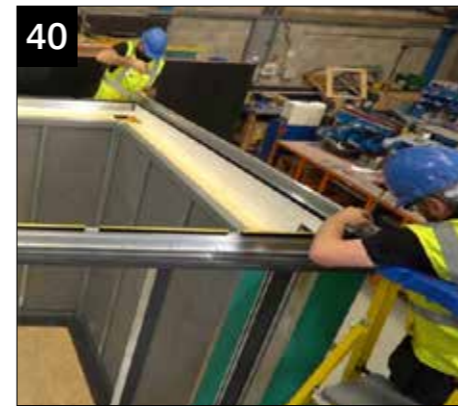
Prepare the two eaves beam end caps as shown to be used with the front eaves beam above the tall columns.



Apply silicone to all four eaves end caps and slide into respective places.



Apply sealant along the top of the firings. Place the firing capping in place.



Position gable bars over the eaves bolts and firing capping aligning with lip on firing capping and secure in position using nuts on the eaves bolts and screw fixing through the glazing bar into the firing at 500mm centres using CHA017.



Lower roofing bars onto eaves beams locating bolts, between glazing supports and secure in place with nuts.



Offer up the long cornice mid section into position along the front of the structure and secure using fixings provided (CHA007) at 400mm centres.

If an inline joint is required, ensure cleats are fitted at the joint. This can be seen in step 48.



Fix cleats into the small return cornice mid sections and offer up to the cornice section fitted previously fixing with CHA007.



Offer up the cornice upper sections fixing inline with the glazing bars centres using CHA007. The upper sections do not require the corner cleat. The corner end caps perform this function.



Whilst ensuring that the corner remains located in position, screw fix using self drilling screws 8PSR42-25BLK.

Installation



Slide down LANC090 upper corner cover so bracket cleats slot into top section.



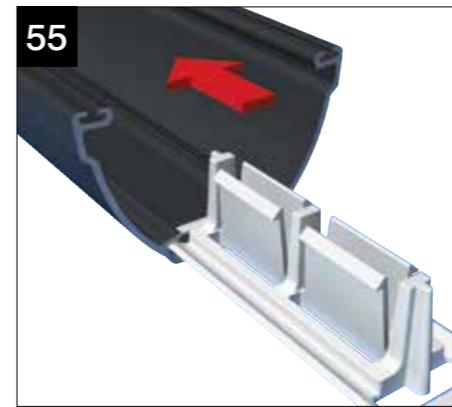
Whilst ensuring the corner remains in position, screw fix using CHA007. If an in-line joint is required, see following step.

For 6000 width Garden Room only:



Whilst ensuring that the joint remains located in position, screw fix using self drilling screws 8PSR42-25BLK. Slide the bracket into place ensuring bracket cleats slot into the top cornice section and screw fix using CHA007. This is done similar to the corners shown previously.

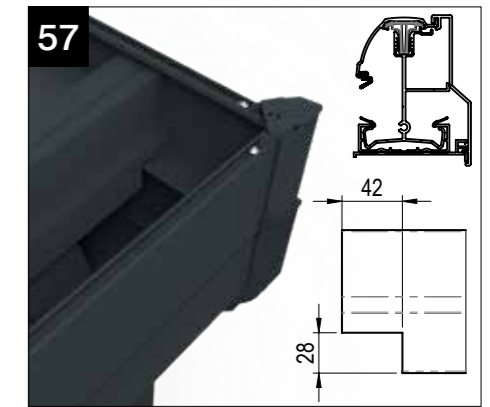
Installation



Place the aluminium top caps onto a protected surface. Slide clips into each bar - position down from ridge / eaves at a max centre of 100mm and then at 500 centres (max) inbetween.



Position bar top cap. Using the heel of your hand, push down on the top cap to engage the clips, working from cornice to eaves. Ensure the rubber gaskets are fully compressed for a watertight seal and that the top caps are up against the cornice section.
NOTE: on longer bars it may be necessary to use a soft mallet and timber block.

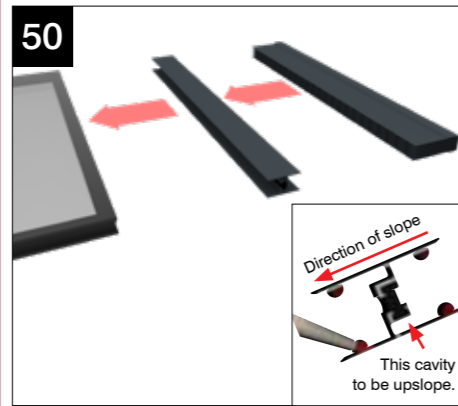


Prep the gable cloaking trim with the detail shown to allow the cladding to run through into the cornice and clip into place on each of the gable bars.



Take the coated profile and protect its surface. Apply a bead of relevant sealant (MS polymer on self cleaning glass). Slide into position on panel and/or glass, wipe clean any sealant from surface.

For 3600 projection with glazing only:



Run a bead of sealant along all four muntin bar legs. Fit the muntin bar to the glazing and the 80mm panel ensuring the external faces are correct facing. When fitting the glazing ensure the muntin end is positioned to the front of the garden room so that the 80mm panel shrouds the cornice.



Tease the 'tail' of the glazing support trim tape free (ready to be pulled away when the sealed unit is finally in position). This will need to be pulled inside the roof at the front as access will not be possible once panels are fitted. The rear film maybe easier to access externally.



Drill a 6mm hole through the aluminium top cap. Use the fixing provided (CRN010) to attach the top cap to the glazing bar.



At the lower eaves end fix the glazing bar end cap brackets onto the end of the bars using fixing EFSA021.



Fit the glazing bar end caps by sliding onto the end of the bars using the fixing blocks. Push fit the insert into the end cap.



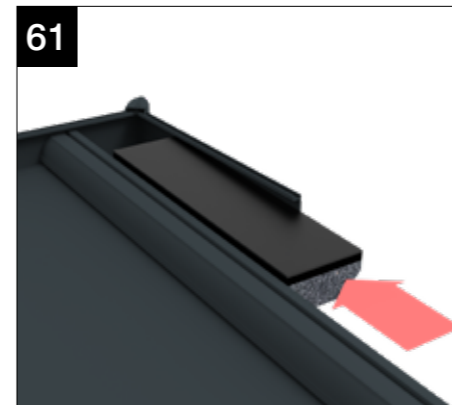
Position the panels and glazing onto the roofing bars and centralise. Pushing up as high as possible against the upper cornice. If necessary pack it out on each side.



Snap off appropriate handed glazing stop. Handing marked on base of moulding. Line up the rounded edge on base plate next to central web of glazing bar then tuck neatly under gasket side of bar. Rotate moulding into position. Push the grommet over the post as shown.



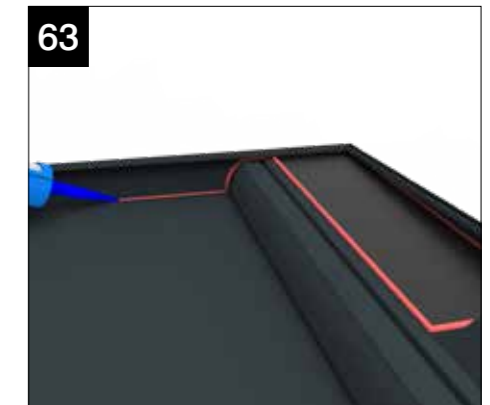
Pushing the glazing/panel up against the upper cornice. Using the fixings provided, screw down the glazing stop into the bar as shown. Now fully peel away protective film from glazing support at eaves and press glazing down firmly.



Fit cornice infill bung into the side return cornice by sliding into the open end of the profile until it is flush with the end, ensuring that it fits under the short leg on the cornice. Repeat on the opposite side.



Fit cornice end caps on both sides using the provided screws 8PSR42-25BLK.



Carefully seal along the upper edge of the roofing panels against the cornice upstand and around the cornice infill.

Installation



64 Position corner against column ensuring it is a good tight fit against the underside cornice/cill. Screw fix through holes into column using the 4.8 x 25mm pozi pan screws supplied (EFSA021).



65 Run a continuous bead of sealant along the corner claddings and the cladding clips as shown.



66 Fit powder coated infill panel into one side of the corner cladding and rock back into the cladding clip. Pressing into sealant.



67 Clip on cladding as shown by locating inside clip first and rocking over the external clip. This motion may be more difficult where the cill terminates into the side of the column, it may require a gentle tap to engage the clip.
External claddings of choice can now be fitted to the walls.



68 Decide on the location of the outlet. Assemble the gutter, brackets, stop end and stop end outlet and lift into position on the external fascia. Push down to locate the lower leg of the bracket. Assemble the rain water pipe, attach to the gutter and screw the down pipe bracket to the frame.



69 Now moving onto the installation of the insulation. Take the 90mm insulation board - each part is numbered/lettered to identify where it goes (label always to the inside of the structure). Spot the board with sealant. It may be necessary to cut the insulation for ease of fitting, seal these joints using foil tape (LVFT045).
Fitters Tip: Cut insulation in half for ease of fitting.

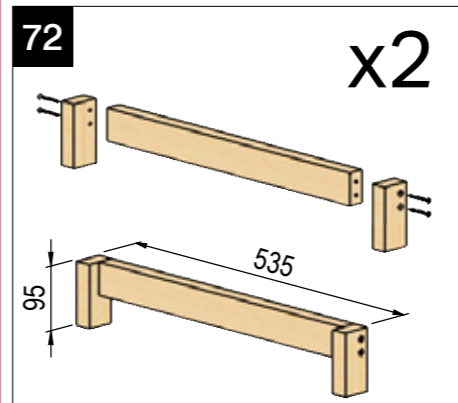


70 Use mineral wool to close any gaps between 90mm insulation and eaves beam and along the top of the walls.



71 Down each side of glazed area and perpendicular to the glazing bars at the top and bottom end of the solid roof section, attach 25 mm x 40mm batten, ensure it sits 6mm outboard of bolster.

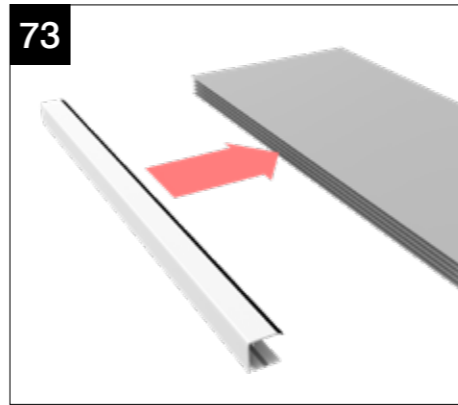
For Garden Room with glazing only:



72 Using spare 25mm x 50mm batten construct two frames as shown.

Installation

For Garden Room with glazing only:



73 Fit end profile to modesty panel. This end profile gives a detail to finish up to when boarding internally.



74 Sit modesty panel inbetween the bars of the glazed section and on the shelf of the eaves beam. Position the previously constructed frame so that it lifts the front panel and supports it.



75 The frame, previously constructed, should sit flush with the walls then fix into the bolstered element of the roof bars. Once fixed fill the void below the panel with mineral wool.



76 For the roof panel adjacent to the firring, after fitting the 90mm insulation, screw fit CHA405/1 channel where the 90mm insulation converges with the inside face of the firring using CHAA006 fixings. This serves to carry the edge of the 25mm insulation and offers a surface to screw the plasterboard to. The channel should span front to back.

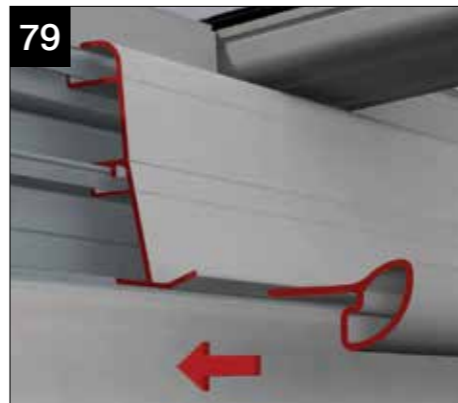


77 Next fit the 25mm insulation board. These boards must be laid at right angles to the glazing bars and run across the bars. Fix in position using LVIK025 fixing kit. Seal the joints using the foil tape (LVFT045).



78 Above the walled areas access is restricted for fixing chosen internal boards to the ceiling. It may be required to use the battening to construct a small frame or to fix batten into the firrings to act as support for the boarding.
The Garden Room installation is complete and internal boarding and finishing can commence.

For Garden Room with glazing only:



79 Push the internal fascia lower trim into place at on the front eaves beam where there are glazed units located between bars.



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Gardenrooms
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