

INSTALLATION GUIDE

Gable Homesheds[™] FRAMEWORK



BEFORE YOU START

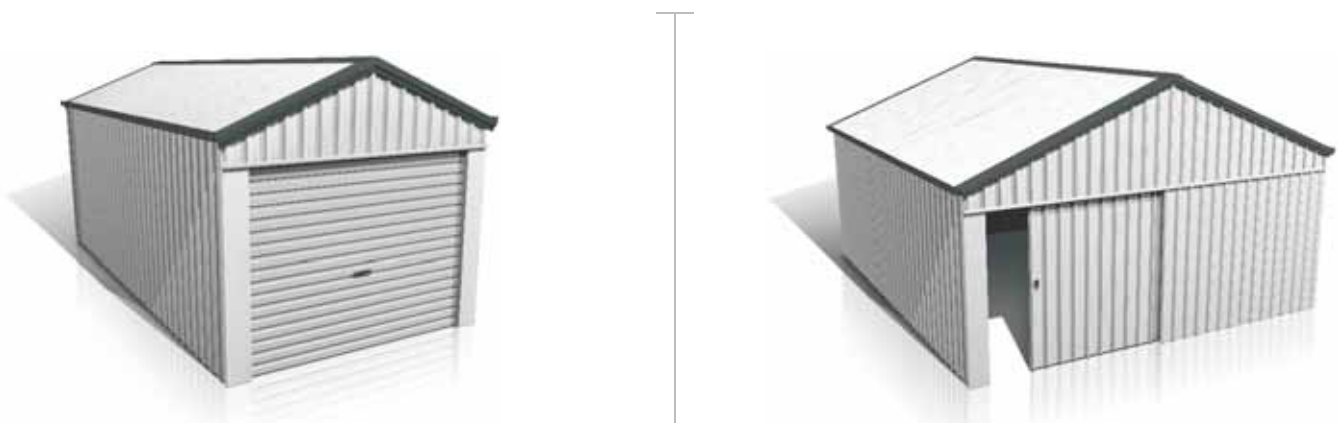
Council Approval

It is important to contact your local council before building your Stratco Gable Homeshed. You will have already received a Council application form from Stratco, including an exploded view and a plan view of the proposed structure.

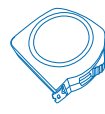
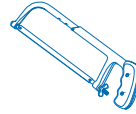
It is important to draw a plan view of your Homeshed on the second page of your "Council Copy" form. This view can be copied from Figure 1 on page two. You must include the distances from the boundaries and existing buildings.

Before Starting

Confirm that all of the material listed on the delivery document has been supplied. Carefully read these instructions to ensure you are familiar with all the steps involved. Ensure you have the correct tools and equipment for the job as listed on page two.



TOOLS REQUIRED

							
Rivet Gun	Vice Grips	Step Ladder	Tape Measure	Spanner	Hacksaw	Pliers	Spirit Level
							
Power Drill	Hex Head Adaptor 5/16"	Permanent Marker	Caulking Gun	Silicone Sealant	Tin Snips	Gloves	String Line

SITE PREPARATION

Determine the position of the Homeshed. If the ground is uneven or sloped, ensure that the slope does not exceed more than 150mm.

If your Homeshed is being fixed onto a concrete slab refer to the separate 'Fixing to Concrete Slab' instructions.

Mark out the footing hole locations as specified in Figure 1 and Table 1. Check that the corner to corner measurements are equal.

(Note the dimensions are listed in metres).

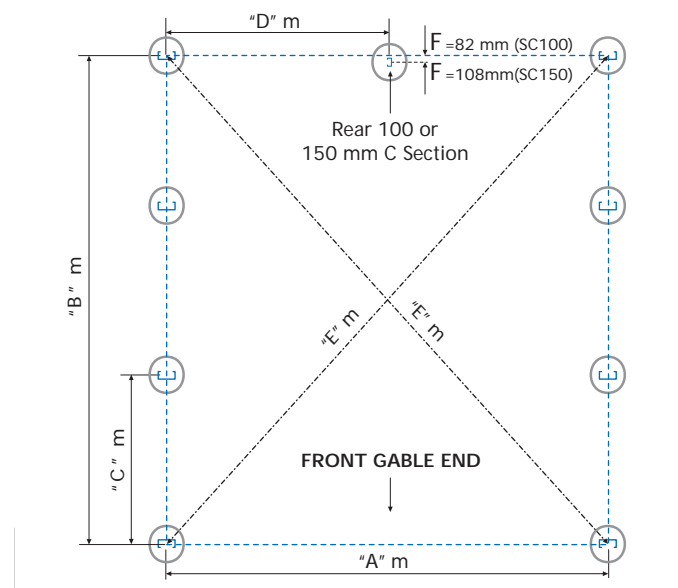


Figure 1

Footing Hole Spacing

HOMESHED DETAILS		HOMESHED FOOTING HOLE DIMENSIONS				
Size	Width x Length (m)	A	B	C	D	E
G1	3.159 x 6.207	2.801	6.087	3.045	-	6.701
G2	3.159 x 7.731	2.801	7.611	2.537	-	8.111
G3	3.159 x 9.255	2.801	9.135	3.045	-	9.555
G4	3.921 x 6.207	3.563	6.087	3.045	-	7.051
G5	3.921 x 7.731	3.563	7.611	2.537	-	8.404
G6	3.921 x 9.255	3.563	9.135	3.045	-	9.805
G7	5.445 x 6.207	5.087	6.087	3.045	2.568	7.933
G8	5.445 x 7.731	5.087	7.611	2.537	2.568	9.155
G9	5.445 x 9.255	5.087	9.135	3.045	2.568	10.456
G10	5.445 x 12.303	5.087	12.183	3.045	2.568	13.202
G11	6.207 x 6.207	5.849	6.087	3.045	2.949	8.442
G12	6.207 x 7.731	5.849	7.611	2.537	2.949	9.599
G13	6.207 x 9.255	5.849	9.135	3.045	2.949	10.847
G14	6.207 x 12.303	5.849	12.183	3.045	2.949	13.514
G15	6.969 x 6.207	6.611	6.087	3.045	3.330	8.987
G16	6.969 x 7.731	6.611	7.611	2.537	3.330	10.081
G17	6.969 x 9.255	6.611	9.135	3.045	3.330	11.276
G18	6.969 x 12.303	6.611	12.183	3.045	3.330	13.861

Table 1

FOOTINGS

Pad Footing Sizes (mm)

Eaves Height (mm)	Homeshed Width (mm)	Soil Type	N1 (W28)				N2 (W33)				N3 (W41)				
			With Slab		Without Slab		With Slab		Without Slab		With Slab		Without Slab		
			Diameter	Depth	Diameter	Depth	Diameter	Depth	Diameter	Depth	Diameter	Depth	Diameter	Depth	
2400	3159	A	375	600	375	700	375	600	450	700	450	800	600	900	
		B	375	450	375	550	375	450	375	600	375	450	450	700	
		C	375	450	375	550	375	450	375	550	375	450	375	550	
	3921	A	375	600	375	700	375	700	450	800	450	800	600	800	
		B	375	450	375	550	375	450	375	700	375	500	450	900	
		C	375	450	375	550	375	450	375	550	375	450	375	600	
	5445	A	375	700	450	700	375	700	450	900	600	800	600	1000	
		B	375	450	375	700	375	450	450	800	375	700	600	900	
		C	375	450	375	550	375	450	375	550	375	450	450	600	
	6207	A	450	700	450	800	450	800	450	900	600	1100	600	1200	
		B	375	500	375	700	375	500	450	900	450	700	600	1000	
		C	375	450	375	550	375	450	375	600	375	500	450	700	
	6969	A	450	800	450	900	600	800	600	1000	600	1000	600	1100	
		B	375	500	450	700	375	600	600	700	450	800	600	1100	
		C	375	450	375	550	375	450	375	600	375	500	450	800	
	2700	3159	A	375	600	375	700	375	600	450	800	450	800	600	800
			B	375	450	375	550	375	450	375	600	375	450	450	700
			C	375	450	375	550	375	450	375	550	375	450	375	550
3921		A	375	600	375	700	375	700	450	800	600	700	600	1000	
		B	375	450	375	550	375	450	375	700	375	500	450	900	
		C	375	450	375	550	375	450	375	550	375	450	375	600	
5445		A	375	700	450	800	450	700	450	900	450	900	600	900	
		B	375	450	375	700	375	500	450	800	375	700	600	900	
		C	375	450	375	550	375	450	375	550	375	450	450	700	
6207		A	450	700	450	800	450	900	600	900	600	900	600	1000	
		B	375	500	450	700	375	500	450	900	450	700	600	1000	
		C	375	450	375	550	375	450	375	600	375	500	450	800	
6969		A	450	800	600	900	600	900	600	1100	600	1000	600	1200	
		B	375	700	450	800	375	700	450	800	450	900	600	1000	
		C	375	450	375	550	375	450	375	700	375	600	450	900	
3000		3159	A	375	600	375	700	450	800	450	900	600	800	600	1000
			B	375	450	375	550	375	450	375	600	375	500	450	700
			C	375	450	375	550	375	450	375	550	375	450	375	550
	3921	A	375	700	450	700	450	800	600	800	600	800	600	1000	
		B	375	500	375	550	375	450	450	600	375	500	450	900	
		C	375	450	375	550	375	450	375	550	375	450	375	600	
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		B	375	500	450	700	375	500	450	800	450	700	600	1000	
		C	375	450	375	550	375	450	375	600	375	450	450	700	
	6207	A	450	900	600	900	450	900	600	900	600	900	600	1100	
		B	375	600	450	700	375	600	450	900	450	800	600	1100	
		C	375	450	375	550	375	450	375	600	375	600	450	800	
	6969	A	600	800	600	1000	600	800	600	1000	600	1100	750	1000	
		B	375	600	450	800	375	600	600	800	600	700	600	1200	
		C	375	450	375	550	375	450	375	700	375	700	450	900	

Soil Type Code

- A | Compact sand, gravel and sand
- B | Fine sand, granular soil with conspicuous clay content
- C | Stiff clay

Slabs to be minimum 100mm thick and reinforced with slab mesh.

Table 2



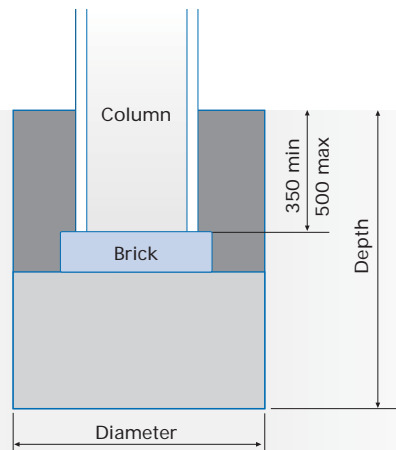
FOOTINGS

Dig the column holes as specified in Figure 2 and Table 2.

If you are pouring a concrete slab, the slab must be a minimum of 100mm deep. Refer to Figure 3 and Table 2.

Use string line and a spirit level to ensure the holes are level with each other. Measure each hole depth to ensure the Homeshed will stand level when the walls are placed in position.

Fill the base of each hole with approximately 200mm of concrete. This will ease settlement and make up the distance between the base of the column and bottom of the hole.



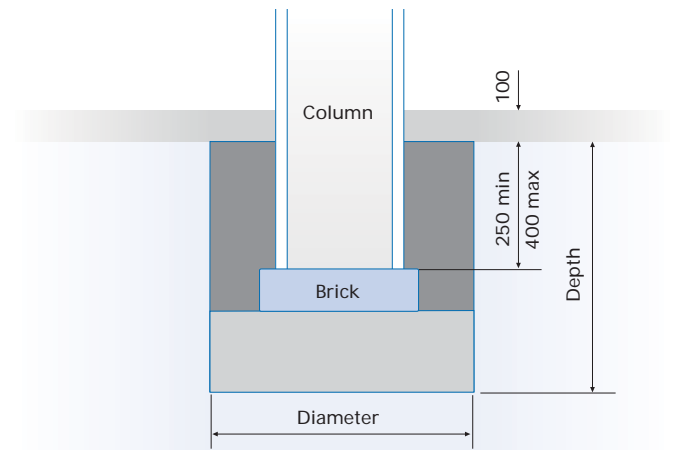
FOOTING SIZE WITHOUT CONCRETE SLAB

Figure 2

Before the concrete sets, score the top of the concrete and place a brick in the hole as illustrated in Figure 2 and Figure 3. Allow the concrete to set.

If you are installing a PA door, dig the door mullion footings at 300 wide x 300mm deep (refer to the "Personal Access Door" section in this installation guide for door mullion spacing).

Slab is to be minimum 100mm thickness, reinforced with SL72 fabric.



FOOTING SIZE WITH CONCRETE SLAB

Figure 3

CONSTRUCTING THE WALLS

Please Note: Girts will be supplied un-punched for Homesheds with non-standard lengths or non-standard bay spacings. Please refer to Table 1 on page 2 of this installation guide for a list of standard Homeshed lengths and bay spacings.

Wall Frames

The number of columns for one wall:

- 6.2m long = 3 columns
- 7.7m long = 4 columns
- 9.3m long = 4 columns
- 12.3m long = 5 columns

Depending on the length of your Homeshed, lay three, four, or five C-section columns on the ground making sure the open side of each column is facing the correct way as illustrated in Figure 1.

As a general rule, the open side of each column will face the rear of the Homeshed, except for the front columns which face the front of the Homeshed. Refer to Figure 4.

Please note that in standard Homesheds the columns have been pre-punched at every wall girt/column connection, and at the rafter/eaves connection. At this stage, the columns must have the wall girt/column holes facing up.

CONSTRUCTING THE WALLS

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Wall Girts

Similarly, in standard Homesheds the wall girts have been pre-punched at each wall girt/column connection.

Place the wall girts across the columns and match the pre-punched holes. Refer to Figure 4.

Fasten the top girt to the column with a high-tensile 12x30mm flanged purlin bolt through each hole. The top girt is fixed through the top pre-punched hole in the columns.

Note: If a boxgutter is to be installed, the top wall girt will be offset from the top of the column by 100mm. (Refer to the boxgutter assembly instructions).

Wall Sheeting

Ensure the framework is square and the diagonal measurements are equal. Start laying the sheeting from the back-end of the shed, to make sure the overlap seam is not visible from the front of the shed. Ensure the top edge of the wall sheets are aligned parallel with the top edge of the top wall girts as illustrated in Figure 5.

Pan fix the Stratco Superdek® wall sheets with 10x16mm self drilling screws at every girt junction. The sheets are laid with the short rib overlapping. Before fastening all screws, run a string line from both ends of the wall panel through the centre of the girts to ensure all the screws will be fastened in line.

The top of each wall sheet must be 5mm below the top wall girt. This will prevent any rubbing between the wall and roof sheets.

Check the wall frame remains square as the wall sheets are fixed.

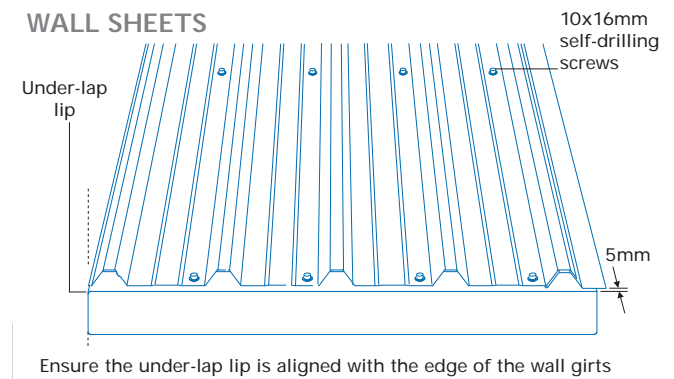
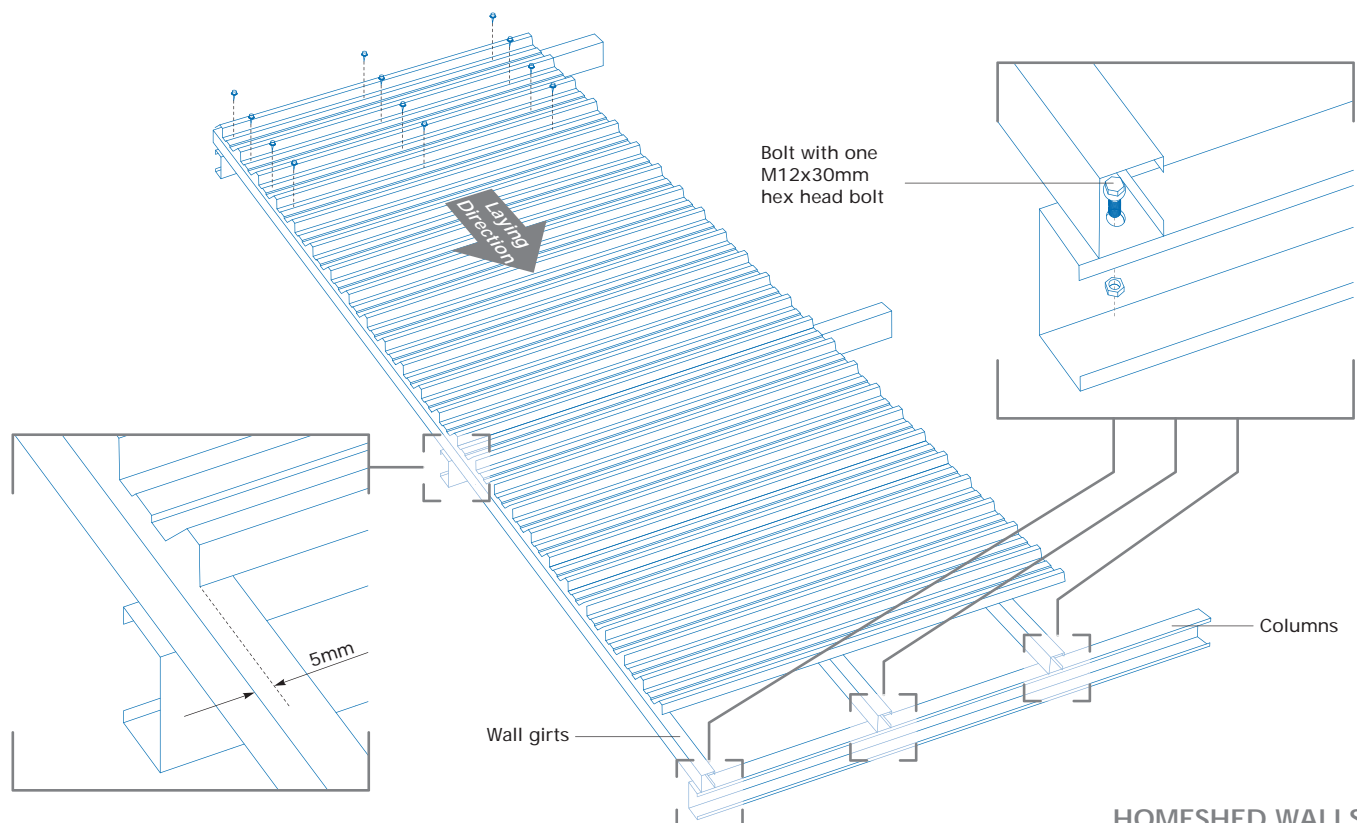


Figure 5



HOMESHED WALLS

Figure 4

GUTTER INSTALLATION

Constructing the Gutters

Rivet a left and right hand stop end to each length of gutter. Seal with silicone.

Cut a hole for each downpipe outlet and rivet the outlet into position (refer to Figure 6). Seal with silicone.

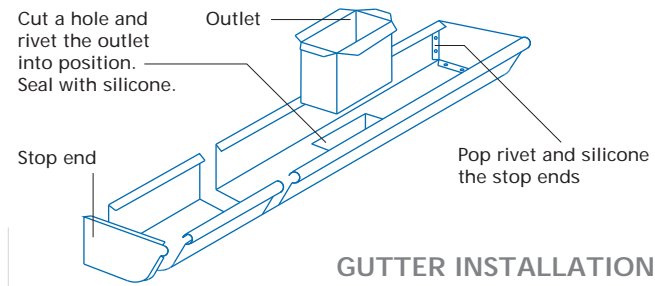


Figure 6

Gutter Brackets

Crest fix the gutter brackets to the wall sheets at approximately 1000mm centres with pop rivets (refer to Figure 7). Allow for a slight fall towards the downpipe end so the water can flow freely.

Once the gutter brackets have been installed, roll the gutter bead onto the gutter bracket and clip the back of the gutter into position.

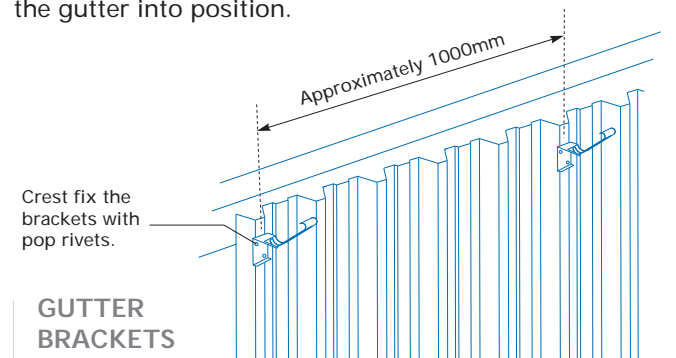


Figure 7

PERSONAL ACCESS DOOR

Gutter Side PA Door

If you are installing a PA door, leave an 835mm gap between the wall sheets. Fix the wall sheets on either side of the proposed door location. It may be necessary to rotate one of the wall sheets so the under-lap is aligned with the door opening on both sides (refer to Figure 8). To avoid cutting, the sheets may need to be lapped several times.

Once the wall sheets have been fixed, cut the middle and bottom wall girts with a hacksaw. Do not cut the top wall girt. Slide the door mullions into position so they cap the middle and bottom wall girts. Notch and fix the door mullions to the top girt with one 10x16mm self drilling screw and one rivet (Figure 9).

Please Note: Do not use the PA door lintel as a mullion spacing template. The PA door lintel is supplied longer to allow for on site tolerance and must be cut to fit between the door mullions.

Position and fix the door lintel to the door mullions with two rivets. The door lintel should finish 2250mm from the bottom of the wall sheets (refer to Figure 9).

Pan fix a wall sheet to the PA door frame with 10x16mm screws. Fix the PA door side flashing with rivets at 600mm centres.

Determine which way the door will swing. The PA door frame will be provided with two 100x75mm butt hinges

that are pre-welded in position. Fix the hinges to the door mullion with 10x16mm wafer head screws.

If PA Door sheets require cutting, the excess sheeting can be fixed above the PA Door in conjunction with a PA Door gutter flashing. Alternatively, if a PA Door header flashing is provided, rivet the PA Door header flashing to the door mullions to flash the area above the door opening.

Gable End PA Door

For Homesheds greater than 2.4m high, the installation of the PA Door mullions in the the gable end of the Homeshed follow the same process as for the gutter side, with the mullions being fixed to the top girt (under the rafter).

If the PA Door is being installed in a Homeshed less than 2.4m high the top girt also needs to be cut as the PA Door mullions are fixed to the rafter.

As gable end sheets are not rotated, two sheets will need to be trimmed to allow for the PA Door opening (Figure 10). When cutting the second sheet try to cut along the pan of the sheet to ensure a clean flat edge with no gaps. A PA Door angle trimmer is supplied to flash the edge of the second cut sheet (sheet 3 in Figure 10).

A PA Door gable end header flashing will be provided and may require cutting. This flashing will cap the bottom of the cut header sheets and act as a gutter above the door opening.

PERSONAL ACCESS DOOR

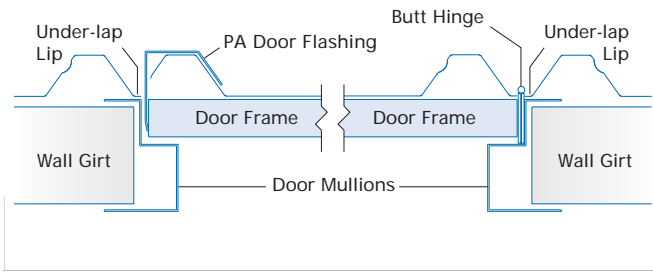


Figure 8

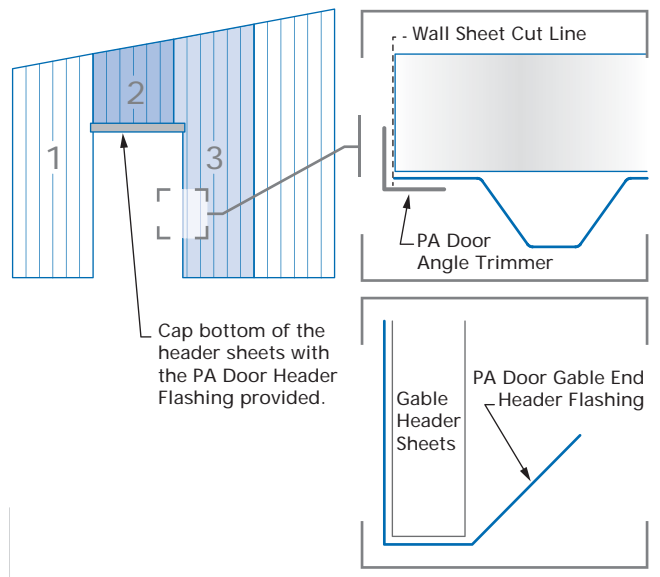
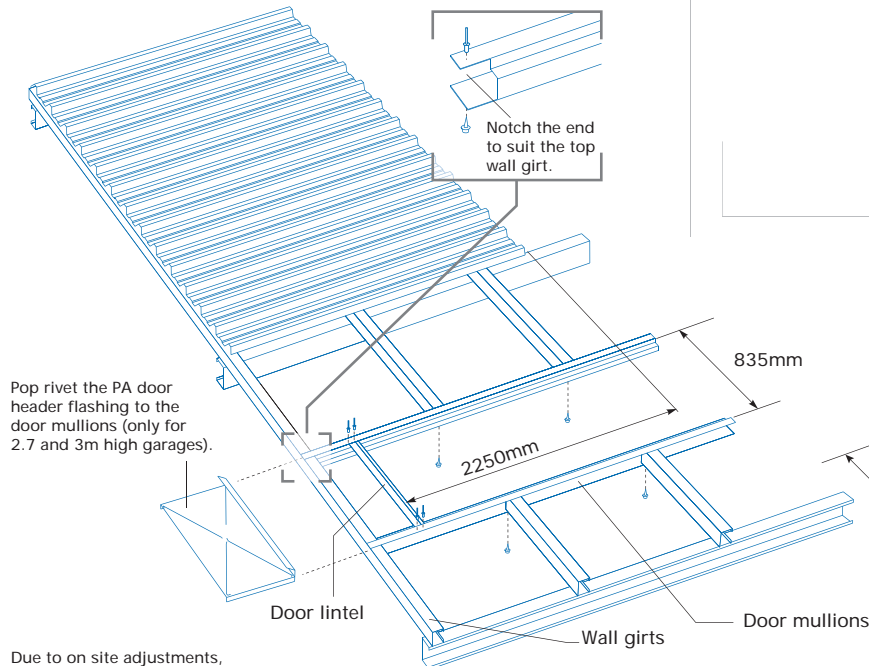


Figure 10



Pop rivet the PA door header flashing to the door mullions (only for 2.7 and 3m high garages).

Due to on site adjustments, the door lintel will be provided with an additional 30mm in length. This will need to be trimmed back to suit the space between the door mullions.

PA DOOR FRAME

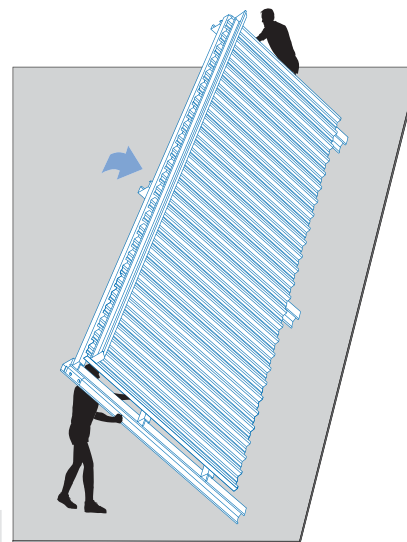
Figure 9

BUILDING THE FRAME

Standing the Wall Frame

Stand the completed wall frame in the footing holes (refer to Figure 11), and temporarily brace it. Make sure the wall is level and square.

Repeat the previous steps for the other side wall frame. Stand the two wall frames in the holes and brace them securely.



STANDING THE WALL

Figure 11

BUILDING THE FRAME

Rafters

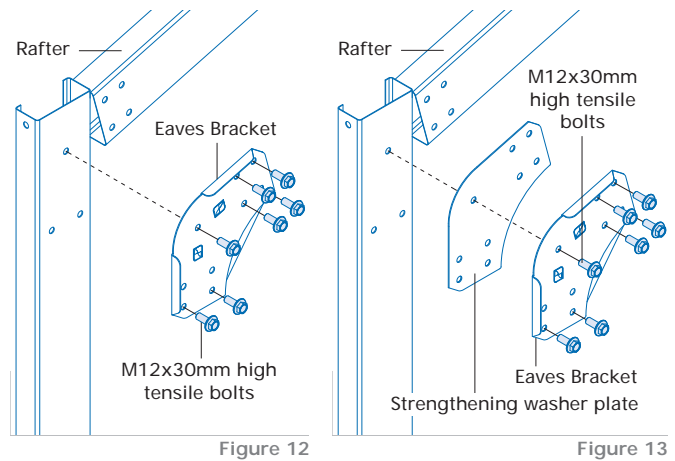
The rafters are bolted together on the ground using a ridge bracket. Lay two rafters out, making sure there is a left and a right rafter. The C-section opening on each rafter should open on the same side, with the purlin holes on the flange pointing up.

Bolt the ridge bracket in place by lining up the rafter and ridge bracket holes. Use an M12x30mm high tensile flanged purlin bolt in each hole and tighten. To eliminate any movement in the joint, screw four 12x20mm self drilling hex head screws through the ridge bracket and into each rafter as displayed in Figure 13.

Bolt the eaves bracket to each end of the rafter frames with four M12x30mm high tensile flanged purlin bolts (refer to Figure 12).

Alternatively the eaves brackets can be fastened to the ends of the columns first. The ridge bracket and rafter frame can then be lifted into position and bolted through the eaves brackets.

If strengthening washer plates are provided, bolt them between the eaves brackets and the rafter/column joint, as shown in Figure 13.



Roof Truss

Use a person on each end of the rafter frame to lift the frame into position. Bolt the eaves brackets to the column ends with five M12x30 high tensile flanged purlin bolts (refer to Figure 14).

Attach all the intermediate trusses first for stability, then the front and rear trusses as previously described.

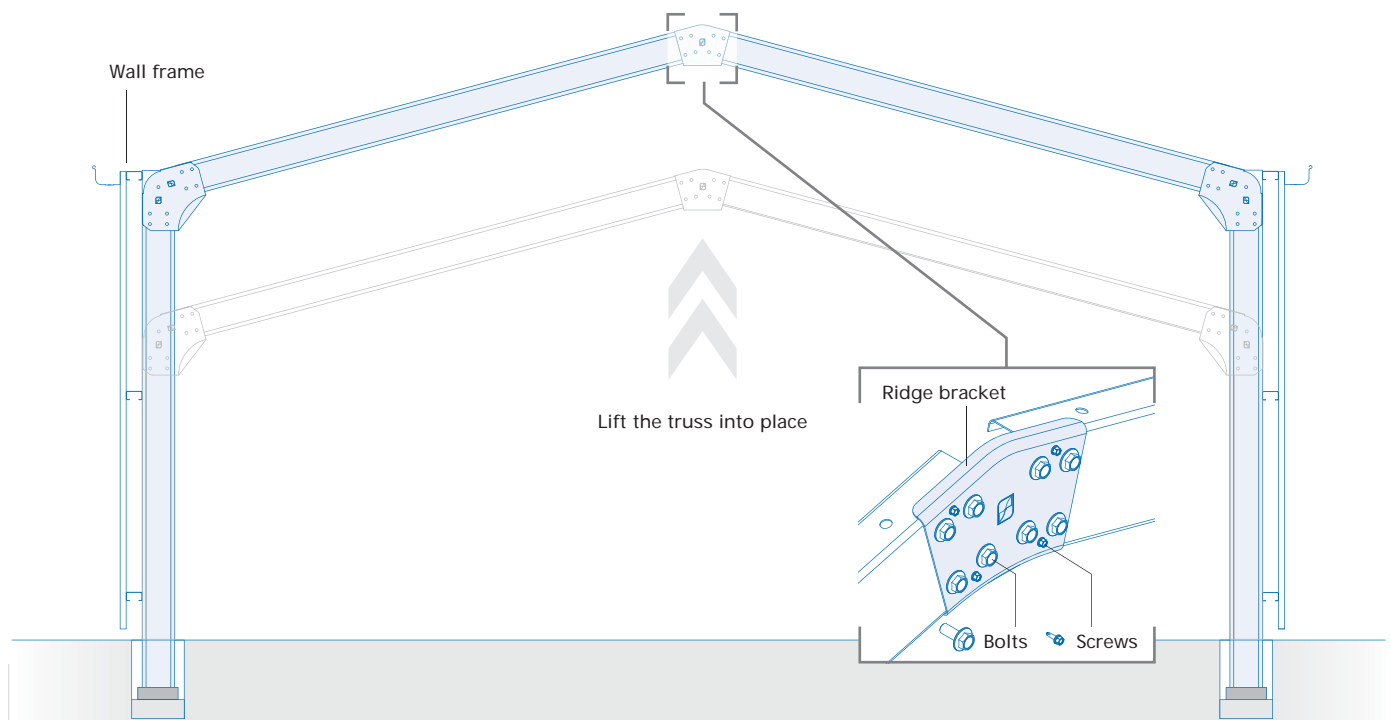


Figure 14

REAR WALLS AND ROOF INSTALLATION

End Columns

If your Homeshed is 5.4m or wider, attach the rear end column (100mm or 150mm C-section) to the rear truss with one M12x30mm hex head bolt as illustrated in Figure 15.

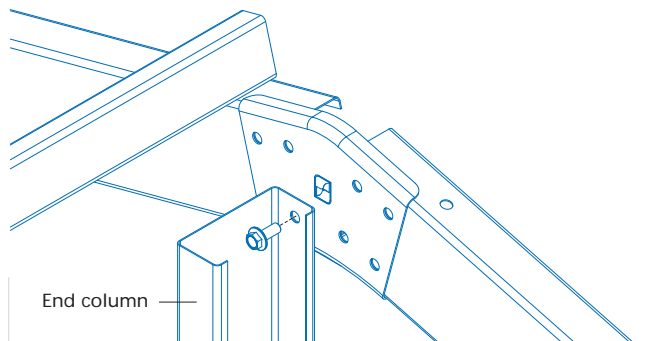


Figure 15

Rear Wall Girts

Check the frame is square and level before fixing the rear wall girts.

Fix three rear girt brackets (65x50x3mm) to both rear columns with two 10x16mm self drilling screws as illustrated in Figure 16.

Span three wall girts between each bracket and fix with two 10x16mm self drilling screws through each flange as shown in Figure 16.

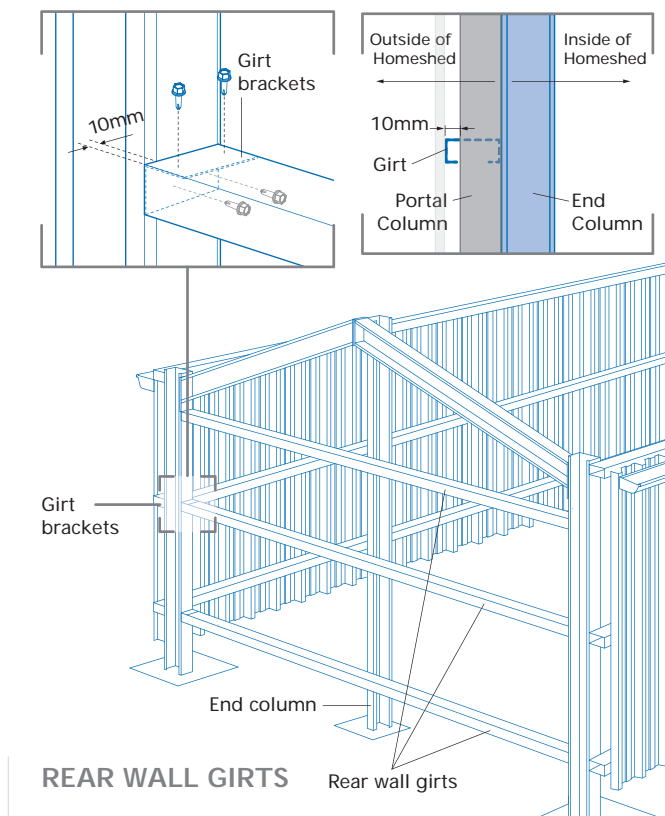


Figure 16

Bolt the rear wall girts to the end column with one M12x30mm hex head bolt. The rear wall girts have been pre-punched at the end column /girt intersection.

Purlins

Please Note: Purlins will be supplied un-punched for Homesheds with non-standard lengths or non-standard bay spacings. Please refer to Table 1 on page 2 of this installation guide for a list of standard Homeshed lengths and bay spacings.

Ensure the Gable Homeshed is square. Position the roof purlins across the rafters, match the pre-punched holes (on standard Homesheds) and bolt into position.

Gable Wall Sheets

Before fixing the gable wall sheets, locate the raking flashing so it sits on the edge of each purlin, following the roof line. Screw the raking flashing to each purlin with one 10x16mm self drilling screw.

Pan fix the gable wall sheets to the raking angle and frame with 10x16mm self drilling screws as illustrated in Figure 17.

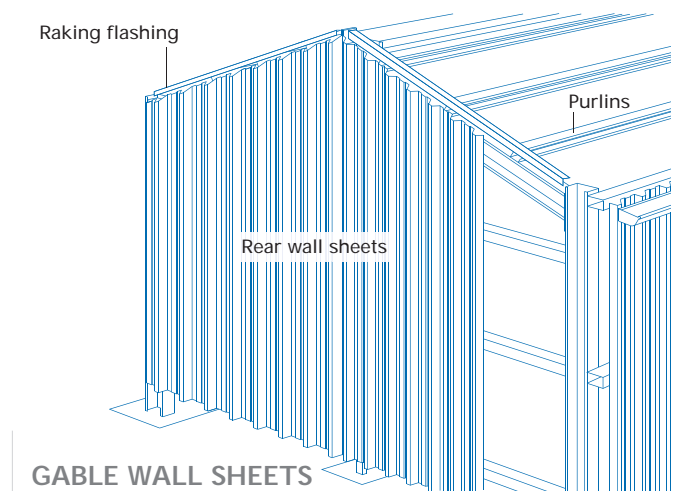


Figure 17

Footings

Check the alignment of the walls visually or with a string line. Pour the concrete footings around the column base and allow 24 hours before removing any braces. If you are fixing to a concrete slab, refer to the "Fixing to a Concrete Slab" instructions.



REAR WALLS AND ROOF INSTALLATION

Roof Sheets

Fix the roof sheets, starting from one end of the Homeshed. Sheets should be laid into the prevailing wind.

Crest fix the sheets with 12x35mm self drilling screws or M6x50 timber/steel screws with neoprene washers. Use five screws per sheet at each end support, and three screws per sheet at each internal support.

Ensure the first sheet is square with the frame and that the roof sheets overhang into the gutter by approximately 50mm.

Turn the valley flute of every corrugated roof sheet upwards as illustrated in Figure 18. This will aid in water proofing the Homeshed.

If it is necessary to walk over roof sheets, ensure that you walk over the purlins to avoid any damage. Wear flat, rubber soled shoes and walk flat footed, spreading your weight over as many corrugations as possible.

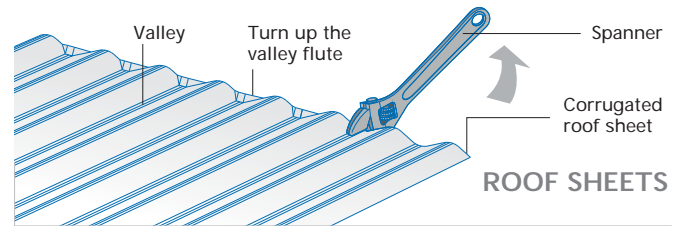


Figure 18

WALL BRACING

For Homesheds 5.4m or wider located in a N3 (W41) wind speed category, a strap brace must be fixed around the centre portal frames as illustrated in Figure 19.

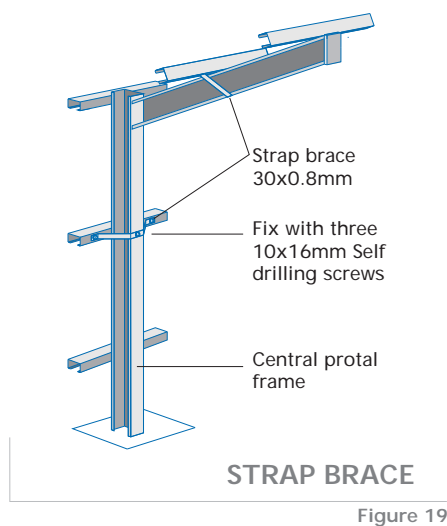


Figure 19

These sheds will also require side wall end bays to be braced, at one end of the shed only. Bracing is to be fixed as illustrated in Figure 20.

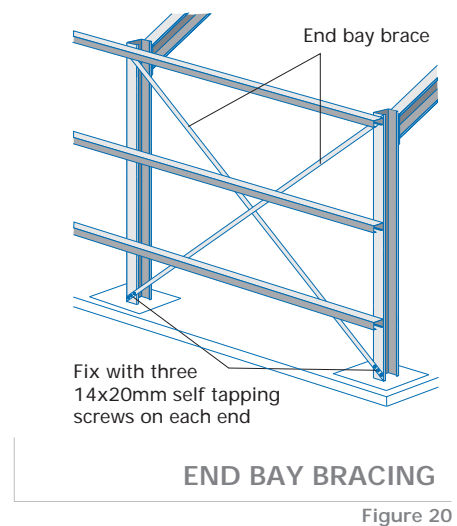


Figure 20

DOWNPIPES

Slide the small end of one downpipe into the big end of the other. Rivet the downpipe at the back, then use a hacksaw to cut to the desired length.

Fix the downpipe to the existing outlet using rivets, then use downpipe straps to fix the downpipe against the wall using 10x16mm self drilling screws.

FLASHINGS

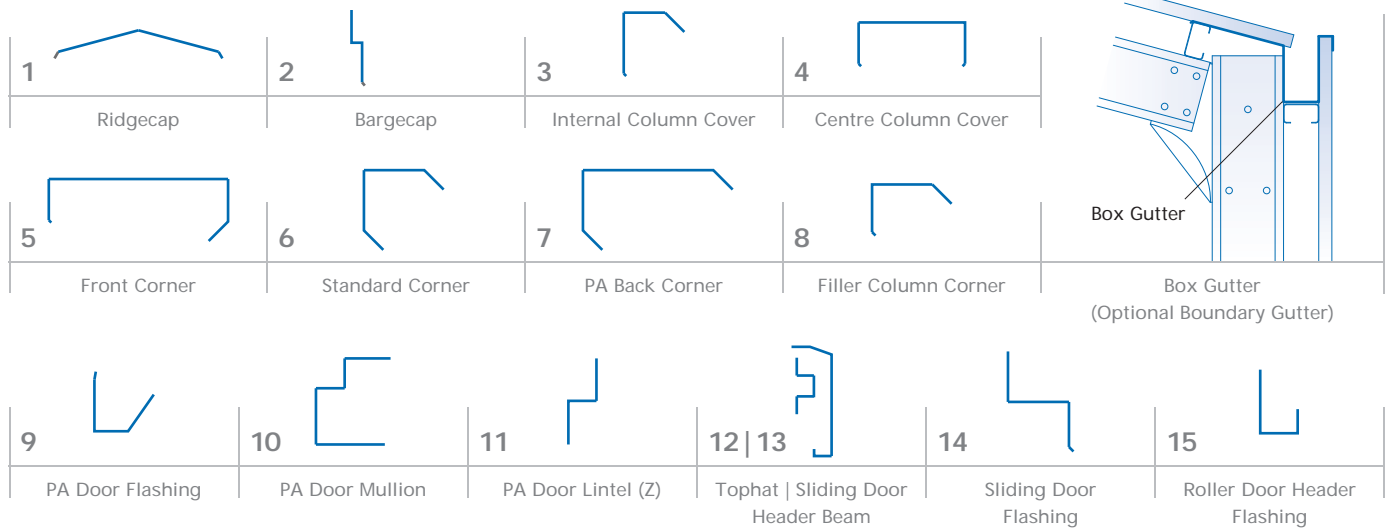
Screw the front and rear corner flashings at 600mm centres with 10x16mm self drilling screws. Corner flashings will require notching in line with the rafter pitch.

Refer to Figures 21 and 22 for the flashing details.

Ridge and Barge Cap Installation

Fix the front and rear barge capping to the roof sheets. Lap the barges at the ridge line and trim the outside piece to a vertical edge for a neat appearance.

Similarly, fix the ridge capping to the roof sheets with 12x35mm self drilling screws or M6x50 timber/steel screws at 300mm centres.



GABLE HOMESHED WITH ROLLER DOORS

- 1 - Ridgcap
- 2 - Bargecap
- 4 - Centre Column Cover
- 7 - PA Back Corner
- 9 - PA Door Flashing
- 10- PA Door Mullion
- 11 - PA Door Lintel (Z)
- 15 - Roller Door Header Flashing

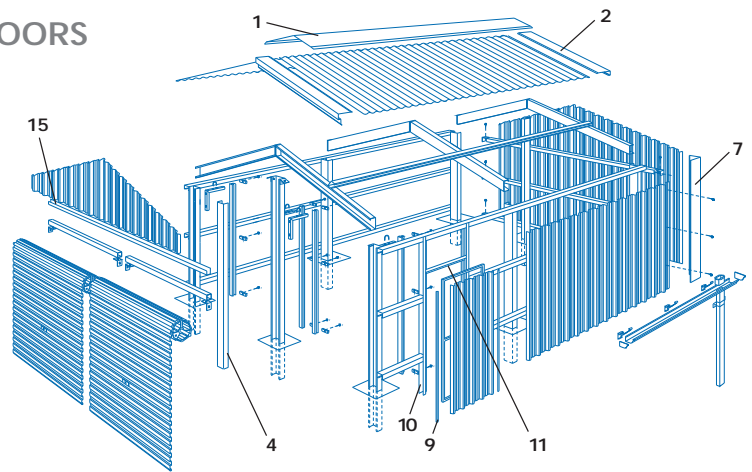


Figure 21

GABLE HOMESHED WITH SLIDING DOORS

- 1 - Ridgcap
- 2 - Bargecap
- 5 - Front Corner
- 6 - Standard Corner
- 8 - Filler Column Corner
- 14 - Sliding Door Flashing

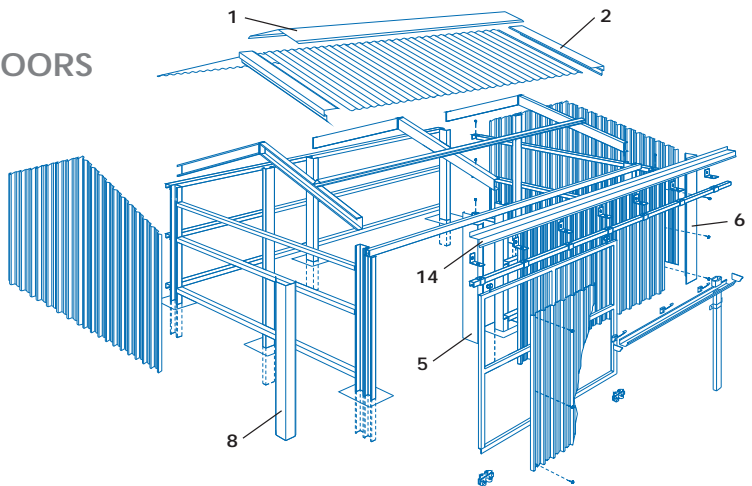


Figure 22



WINDOWS

If installing a window, please note that the louvred window requires one trimmed sheet and the sliding window requires two trimmed sheets.

During the process of fixing the wall sheets to the Homeshed frame determine the location of the window. Fix the wall sheets prior to installing the window according to the "Building the Frame" section of this installation guide. The sheet/s in the location of the window will need to be trimmed to accommodate the window, allowing for the base of the window to be supported by and fixed into a wall girt.

Place the remaining sheets loosely into position and check the window will fit the opening. Ensure the wall sheets either side of the window tightly abutt the window frame so no gaps occur. Correct spacing of the wall sheets is best achieved by ensuring the top edge of the wall sheets are aligned parallel with the top edge of the top wall girt. Place the pre-assembled window into the opening and check for squareness before continuing to lay the remaining sheets.

Install the window frame to the crest of the wall sheets using colour 10x16mm self drilling screws supplied. Ensure the screws are evenly spaced around the remaining frame (Figure 23). Place a bead of silicone in each corner of the window to prevent water entry.

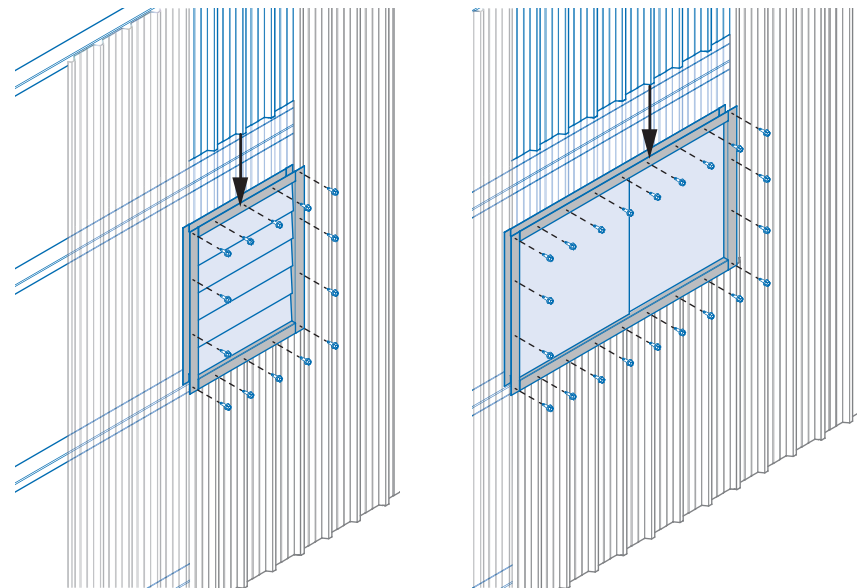


Figure 23

MAINTENANCE

Your Stratco Homeshed will maintain its good looks for even longer with a simple wash and wipe down with a soft broom. Stratco Homesheds are produced from the highest quality materials and will provide many years of service if the important recommendations set out in the Stratco 'Selection, Use and Maintenance' brochure are followed.