

# INSTALLATION GUIDE

## Gable Homesheds™

LARGE SPAN



### 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 a plan view and elevations of the proposed structure. It is important to detail a plan view of your Homeshed and include the distances from the boundaries and existing buildings.

#### Before Starting

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

### TOOLS REQUIRED

Spirit Level	String Line	Permanent Marker	Tape Measure	Adhesive Tape	Clamps	Silicone + Caulking Gun	Multi-Grip Pliers	Tin Snips
Rivet Gun	Power Drill	5/16" Hex Head Adapter Phillips Head Adapter Ø13, Ø14, Ø18 Drill Bits	Adjustable Combination	Socket Set	Rubber Mallet	Spray Lubricant	Personal Safety	Cutting Tools
								Height Frame Bracing Earth Moving Concrete Laying Heavy Lifting Non-Specific Tools



# COMPONENTS

## Frame

Mitred 10° on site Internal Column	Centre Column	RHS Stiffener	Top Plate Bottom Plate	End Column	Portal Columns	End Columns, Portal Columns, Roller Door Columns, Sliding Door Columns	Internal Portal Columns	End Portal Columns
Internal & Centre Column Components				End Column	Portal Columns	Stirrup	Spigot	
Gable End						Footing		
Eaves Bracket	Eaves Plate	Ridge Bracket	Rafter	Raking Angle	100 C-Section Wall Girt & Roof Purlin	Girt / Purlin Connector	Girt Extension	100 C-Section Bridging Member
Eaves Connection								
100 - 150 >200 Angle Connector	100 - 150 >200 Clamp Plate	Apex	Header Beam	Angled Girt	Girt Bracket			
Brackets								

## Personal Access (PA) Door

Welded Door Jamb	PA Door Frame	100 C-Section Door Mullion	100 C-Section Door Head Support	Door Handle + Tongue
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## Roller Door





Roller Door Guide Lug	Roller Door Guide	Roller Door Support Brackets	Roller Door	Channel Header Beam Gable End	Gable End & Side Wall Header Beam Flashing	300 C-Section Door Jamb	Header Beam	100 C-Section Header Girt
						Gutter Side Wall Roller Door		

## Sliding Door

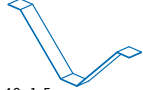
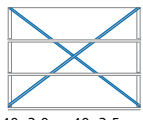
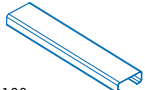
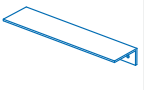
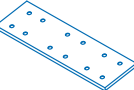
Frame Halves	Angle Track	Spigot	Carriage Wheels	Tracking Pad	300 C-Section Sliding Door Header Beam	Channel	Joiner	Bracket
Sliding Door Frame			Sliding Door Frame Fixings		Sliding Door Header Beam	Sliding Door Header Beam Bracketry		
200 C-Section Filler Column (When Required)	Single Bracket	Double Bracket	Track Support	Flashing Bracket	M10x20 Sidefix Support Bolt & Washer Track Support Bolt	Track	Track Joiner	Track Stop
		Sidefix Support		Track Support	Flashing Bracket	Sliding Door Track Bracketry		

# COMPONENTS

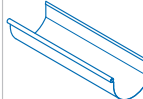

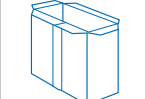
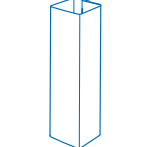
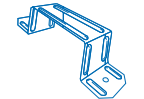

## Sheets

	 Mitred on site		
Wall Sheet (Stratco Superdek®)	Gable Wall Sheet (Stratco Superdek®)	Roof Sheet (CGI)	Sliding Door (Stratco Superdek®)

## Bracing

				
40x1.5 G300 Strap	40x2.0 or 40x2.5 G300 Strap	100 C-Section		
Fly Brace	Diagonal Bracing	Roof Brace	Rafter Angle	Ridge Plate
Rigid Roof Bracing				


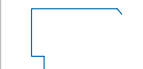



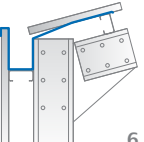





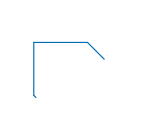

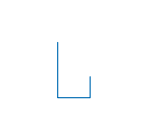


## External Gutter

					
Gutter	Stop Ends	Downpipe Outlet	Downpipe	Downpipe Straps	Gutter Bracket







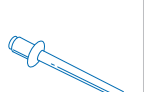
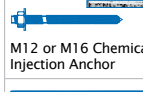

## Flashings

### All Homesheds

### Sliding Door Specific

							
1	2	3	4	5	6		
Ridge Cap	Barge Cap	Front Corner	Standard Corner	PA Back Corner (If PA door on side)	Box Gutter (Optional Boundary Gutter)	Filler Column Flashing	Sidefix Support Top Hat
							
7	8	9	10	11	12		
Header Flashing	Angle Trimmer	Door Flashing	Roller Door Wall	Roller Door Corner	Header Flashing	Single	Double
Personal Access (PA) Door			Roller Door Flashings			Sidefix Support Bracket Flashing	

## Fixings

								
M12x30 Flanged	M16x30 Hex Head	12x38 12x20 Series-500 10x16 12x20 Standard	CGI	Superdek®	10x16		M12 or M16 Chemical Injection Anchor	M8x65 Masonry Anchor
M12x30 Flanged			12x35 OR M6x50 Timber/Steel	10x16			N12 Threaded Rod + Chemical Injection	
Purlin / Girt	Footing	Miscellaneous	Roof	Wall	Wafer Head	Rivet	On Concrete (Pinned)	Tracking Pad Fixing
Bolts			Self Drilling Screws					

# SITE PREPARATION

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

## Column Locations

Figure 1 shows the orientation of the portal columns. The paper work provided with your Homeshed will show the spacing between the required footings while the tables on the following pages indicate the slab dimensions if a slab is required, as well as the footing sizes.

Mark out the footing hole locations as specified in the paper work and tables relevant to your Region and Terrain Category. Check that the diagonal corner to corner measurements are equal.

If a slab is being poured, it shall be no less than 100mm from the outside face of the columns.

If a rebate is required, ensure the top of the rebate begins in line with the outside face of the columns (Figure 1).

If the Homeshed is to be pinned onto concrete, either a stirrup or spigot footing type will be provided, as specified in the Region and Terrain Category table relevant to your Homeshed.

## Concrete Slab Preparation

The minimum recommended slab thickness is 100mm, suitable for light industrial use. For higher intended floor loading, thicker slabs are recommended:

- 125mm - medium duty floor
- 150mm - heavy duty floor

Soils compacted to recommended 95% MMDD.

Due to variations in ground surface conditions, edge thickening is recommended to a depth of between 200-250mm for 100-150mm slabs respectively. Edge thickening occurs along the perimeter of the slab on the sides of portal column locations.

The width of edge thickening will be equal to the diameter of the concrete piers outlined in the tables on the following pages.

Slab mesh is recommended in all cases with 35mm top cover.

### Notes:

- The slab designer shall ensure appropriate slab mesh is used and slab control joints are incorporated as required.
- Cover to reinforcement = 35mm top and to slab edge.
- Minimum Recommended Concrete Grade 32MPa
- Slabs suitable for Class A, S, M sites.  
For soils of higher reactivity, slabs shall be designed specifically for site conditions.
- The site manager is responsible for ensuring any relevant inspections are arranged.

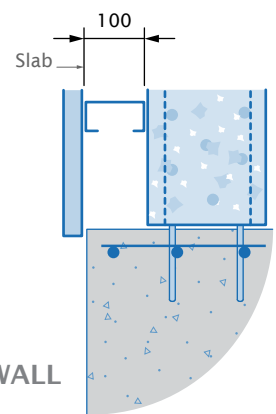
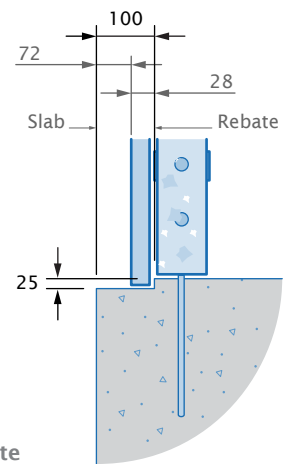
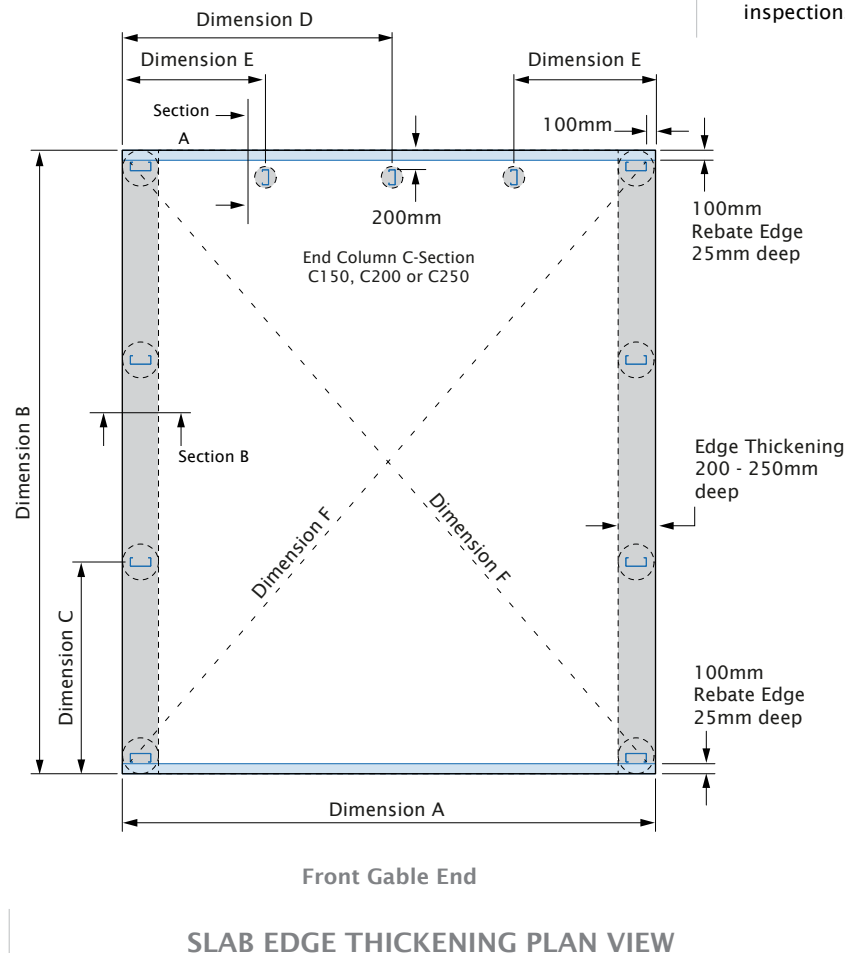


Figure 1



# SLAB DIMENSIONS AND FOOTING HOLE SPACING (3m BAYS)

Note: 3m maximum bay spacing available for all Homeshed widths.

Size	HOMESHED DETAILS				SLAB DIMENSIONS		HOMESHED FOOTING HOLE LOCATIONS					
	Width x Length (m)	No. Sheets	No. Bays	Bay Spacing	A	B	C	No. End Columns	D	E	F	
	Homeshed Overall *	Superdek		(m)	(m)	(m)	(m)		(m)	(m)	(m)	
G20	7.730 x 9.265	10 x 12	3	3.05	7.67	9.41	3.06	1	3.90	-	11.91	
G22	7.730 x 12.310	10 x 16	4	3.05	7.67	12.45	3.06	1	3.90	-	14.36	
G23	7.730 x 15.355	10 x 20	5	3.05	7.67	15.50	3.06	1	3.90	-	17.03	
G25	7.730 x 18.400	10 x 24	6	3.05	7.67	18.54	3.06	1	3.90	-	19.81	
G27	7.730 x 21.445	10 x 28	7	3.05	7.67	21.59	3.06	1	3.90	-	22.66	
G31	8.490 x 9.265	11 x 12	3	3.05	8.43	9.41	3.06	2	-	2.80	12.40	
G33	8.490 x 12.310	11 x 16	4	3.05	8.43	12.45	3.06	2	-	2.80	14.77	
G34	8.490 x 15.355	11 x 20	5	3.05	8.43	15.50	3.06	2	-	2.80	17.38	
G36	8.490 x 18.400	11 x 24	6	3.05	8.43	18.54	3.06	2	-	2.80	20.11	
G38	8.490 x 21.445	11 x 28	7	3.05	8.43	21.59	3.06	2	-	2.80	22.92	
G42	9.255 x 9.265	12 x 12	3	3.05	9.20	9.41	3.06	2	-	3.06	12.92	
G44	9.255 x 12.310	12 x 16	4	3.05	9.20	12.45	3.06	2	-	3.06	15.20	
G45	9.255 x 15.355	12 x 20	5	3.05	9.20	15.50	3.06	2	-	3.06	17.75	
G47	9.255 x 18.400	12 x 24	6	3.05	9.20	18.54	3.06	2	-	3.06	20.43	
G49	9.255 x 21.445	12 x 28	7	3.05	9.20	21.59	3.06	2	-	3.06	23.21	
G55	10.015 x 12.310	13 x 16	4	3.05	9.96	12.45	3.06	2	-	3.31	15.67	
G56	10.015 x 15.355	13 x 20	5	3.05	9.96	15.50	3.06	2	-	3.31	18.15	
G58	10.015 x 18.400	13 x 24	6	3.05	9.96	18.54	3.06	2	-	3.31	20.78	
G60	10.015 x 21.445	13 x 28	7	3.05	9.96	21.59	3.06	2	-	3.31	23.51	
G66	10.780 x 12.310	14 x 16	4	3.05	10.72	12.45	3.06	2	-	3.57	16.15	
G67	10.780 x 15.355	14 x 20	5	3.05	10.72	15.50	3.06	2	-	3.57	18.57	
G69	10.780 x 18.400	14 x 24	6	3.05	10.72	18.54	3.06	2	-	3.57	21.15	
G71	10.780 x 21.445	14 x 28	7	3.05	10.72	21.59	3.06	2	-	3.57	23.84	
G77	11.540 x 12.310	15 x 16	4	3.05	11.48	12.45	3.06	2	-	3.82	16.66	
G78	11.540 x 15.355	15 x 20	5	3.05	11.48	15.50	3.06	2	-	3.82	19.01	
G80	11.540 x 18.400	15 x 24	6	3.05	11.48	18.54	3.06	2	-	3.82	21.54	
G82	11.540 x 21.445	15 x 28	7	3.05	11.48	21.59	3.06	2	-	3.82	24.18	
G88	12.300 x 12.310	16 x 16	4	3.05	12.24	12.45	3.06	2	-	4.07	17.19	
G89	12.300 x 15.355	16 x 20	5	3.05	12.24	15.50	3.06	2	-	4.07	19.47	
G91	12.300 x 18.400	16 x 24	6	3.05	12.24	18.54	3.06	2	-	4.07	21.95	
G93	12.300 x 21.445	16 x 28	7	3.05	12.24	21.59	3.06	2	-	4.07	24.55	
G100	13.065 x 15.355	17 x 20	5	3.05	13.01	15.50	3.06	3	6.57	3.24	19.95	
G102	13.065 x 18.400	17 x 24	6	3.05	13.01	18.54	3.06	3	6.57	3.24	22.37	
G104	13.065 x 21.445	17 x 28	7	3.05	13.01	21.59	3.06	3	6.57	3.24	24.93	
G111	13.825 x 15.355	18 x 20	5	3.05	13.77	15.50	3.06	3	6.95	3.43	20.45	
G113	13.825 x 18.400	18 x 24	6	3.05	13.77	18.54	3.06	3	6.95	3.43	22.82	
G115	13.825 x 21.445	18 x 28	7	3.05	13.77	21.59	3.06	3	6.95	3.43	25.33	
G122	14.590 x 15.355	19 x 20	5	3.05	14.53	15.50	3.06	3	7.33	3.62	20.97	
G124	14.590 x 18.400	19 x 24	6	3.05	14.53	18.54	3.06	3	7.33	3.62	23.28	
G126	14.590 x 21.445	19 x 28	7	3.05	14.53	21.59	3.06	3	7.33	3.62	25.75	
G133	15.350 x 15.355	20 x 20	5	3.05	15.29	15.50	3.06	3	7.71	3.81	21.49	
G135	15.350 x 18.400	20 x 24	6	3.05	15.29	18.54	3.06	3	7.71	3.81	23.76	
G137	15.350 x 21.445	20 x 28	7	3.05	15.29	21.59	3.06	3	7.71	3.81	26.18	

\* Note: Width and length measured to outside of wall cladding.

Maximum 3m bays have option of 4m bay for wider door.

- In a situation when a 4m bay for a larger door is to be installed, the 4m bay must be flanked with maximum 3m bays, unless it is in the end bay, in which the first adjacent bay must be maximum 3m bay.
- Only standard 3m bays are shown in the table above. If combinations of dimensions for 3m non-standard bays are used, refer to the bay spacing on the architectural elevations or engineering letter provided as part of your council pack.

# SLAB DIMENSIONS AND FOOTING HOLE SPACING (4m BAYS)

Note: 4m maximum bay spacing only available for Homeshed with width less than 12.30m.

Size	HOMESHED DETAILS				SLAB DIMENSIONS		HOMESHED FOOTING HOLE LOCATIONS				
	Width x Length (m)	No. Sheets	No. Bays	Bay Spacing	A	B	C	No. End Columns	D	E	F
	Homeshed Overall *	Superdek		(m)	(m)	(m)	(m)		(m)	(m)	(m)
G19	7.730 x 7.750	10 x 10	2	3.81	7.67	7.89	3.82	1	3.90	-	10.73
G21	7.730 x 11.560	10 x 15	3	3.81	7.67	11.70	3.82	1	3.90	-	13.72
G24	7.730 x 15.365	10 x 20	4	3.81	7.67	15.51	3.82	1	3.90	-	17.04
G26	7.730 x 19.175	10 x 25	5	3.81	7.67	19.32	3.82	1	3.90	-	20.53
G28	7.730 x 22.985	10 x 30	6	3.81	7.67	23.13	3.82	1	3.90	-	24.11
G29	7.730 x 26.790	10 x 35	7	3.81	7.67	26.93	3.82	1	3.90	-	27.76
G32	8.490 x 11.560	11 x 15	3	3.81	8.43	11.70	3.82	2	-	2.80	14.15
G35	8.490 x 15.365	11 x 20	4	3.81	8.43	15.51	3.82	2	-	2.80	17.39
G37	8.490 x 19.175	11 x 25	5	3.81	8.43	19.32	3.82	2	-	2.80	20.82
G39	8.490 x 22.985	11 x 30	6	3.81	8.43	23.13	3.82	2	-	2.80	24.36
G40	8.490 x 26.790	11 x 35	7	3.81	8.43	26.93	3.82	2	-	2.80	27.98
G43	9.255 x 11.560	12 x 15	3	3.81	9.20	11.70	3.82	2	-	3.06	14.60
G46	9.255 x 15.365	12 x 20	4	3.81	9.20	15.51	3.82	2	-	3.06	17.76
G48	9.255 x 19.175	12 x 25	5	3.81	9.20	19.32	3.82	2	-	3.06	21.13
G50	9.255 x 22.985	12 x 30	6	3.81	9.20	23.13	3.82	2	-	3.06	24.63
G51	9.255 x 26.790	12 x 35	7	3.81	9.20	26.93	3.82	2	-	3.06	28.21
G54	10.015 x 11.560	13 x 15	3	3.81	9.96	11.70	3.82	2	-	3.31	15.09
G57	10.015 x 15.365	13 x 20	4	3.81	9.96	15.51	3.82	2	-	3.31	18.16
G59	10.015 x 19.175	13 x 25	5	3.81	9.96	19.32	3.82	2	-	3.31	21.47
G61	10.015 x 22.985	13 x 30	6	3.81	9.96	23.13	3.82	2	-	3.31	24.92
G62	10.015 x 26.790	13 x 35	7	3.81	9.96	26.93	3.82	2	-	3.31	28.47
G65	10.780 x 11.560	14 x 15	3	3.81	10.72	11.70	3.82	2	-	3.57	15.59
G68	10.780 x 15.365	14 x 20	4	3.81	10.72	15.51	3.82	2	-	3.57	18.58
G70	10.780 x 19.175	14 x 25	5	3.81	10.72	19.32	3.82	2	-	3.57	21.83
G72	10.780 x 22.985	14 x 30	6	3.81	10.72	23.13	3.82	2	-	3.57	25.22
G73	10.780 x 26.790	14 x 35	7	3.81	10.72	26.93	3.82	2	-	3.57	28.74
G76	11.540 x 11.560	15 x 15	3	3.81	11.48	11.70	3.82	2	-	3.82	16.12
G79	11.540 x 15.365	15 x 20	4	3.81	11.48	15.51	3.82	2	-	3.82	19.02
G81	11.540 x 19.175	15 x 25	5	3.81	11.48	19.32	3.82	2	-	3.82	22.20
G83	11.540 x 22.985	15 x 30	6	3.81	11.48	23.13	3.82	2	-	3.82	25.55
G84	11.540 x 26.790	15 x 35	7	3.81	11.48	26.93	3.82	2	-	3.82	29.02
G90	12.300 x 15.365	16 x 20	4	3.81	12.24	15.51	3.82	2	-	4.07	19.48
G92	12.300 x 19.175	16 x 25	5	3.81	12.24	19.32	3.82	2	-	4.07	22.60
G94	12.300 x 22.985	16 x 30	6	3.81	12.24	23.13	3.82	2	-	4.07	25.90
G95	12.300 x 26.790	16 x 35	7	3.81	12.24	26.93	3.82	2	-	4.07	29.33

\* Note: Width and length measured to outside of wall cladding.

Maximum 4m bays have option of 5m bay for wider door.

- In a situation when a 5m bay for a larger door is to be installed, the 5m bay must be flanked with maximum 4m bays, unless it is in the end bay, in which the first adjacent bay must be maximum 4m bay.
- Only standard 4m bays are shown in the table above. If combinations of dimensions for 4m non-standard bays are used, refer to the bay spacing on the architectural elevations or engineering letter provided as part of your council pack.

# PORTAL FRAME - COMPONENTS AND FOOTING SIZES

(A2)

## Region A, Terrain Category 2

Homeshed Footing Type			Pinned / Onto Concrete										Fixed / Into Concrete											
Homeshed Width (m) Overall			7.6		9.0		10.4		12.0		15.0		7.6		9.0		10.4		12.0		15.0			
Portal Location			End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid		
Rafter C-Section Size			250-19	300-24	250-19	300-24	250-24	350-24	250-24	300-24	300-24	300-30	150-19	250-19	150-24	250-24	200-19	250-24	250-19	300-24	300-24	300-24		
Column C-Section Size			250-19	300-24	250-19	300-24	250-24	350-24	250-24	300-30	300-24	300-30	250-15	250-24	200-19	250-24	250-19	300-24	250-24	300-24	300-24	350-24		
Eave Connection	Number of Bolts		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	12	8	8		
	Number of Plates		1	1	1	2	1	2	2	2	2	2	1	1	1	1	1	1	1	2	2	2	2	
Footing	Type		Stirrup		Stirrup		Stirrup		Stirrup		Stirrup		N/A											
	Bolt Size (to Column)		M12		M12		M12		M16		M16		N/A											
	Chemical Injection Anchor Size		M12		M12		M12		M16		M16		N/A											
	Chemical Injection Anchor Embedment Depth (mm)		120		120		120		140		140		N/A											
Portal Column	Footing with minimum 100mm thick concrete slab	Compact Sand, Gravel	Diameter of Pier (m)		0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.60	0.45	0.45	0.45	0.45		
			Pier Depth (m)		0.60	1.00	0.70	1.10	0.80	1.30	0.90	1.50	0.80	1.30	0.50	0.60	0.50	0.80	0.60	0.70	0.70	1.30	0.70	1.10
		Fine Sand, Granular Soil	Diameter of Pier (m)		0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	
			Pier Depth (m)		0.50	0.70	0.50	0.80	0.60	0.90	0.60	1.00	0.60	0.90	0.50	0.50	0.50	0.60	0.50	0.70	0.60	0.90	0.50	0.80
		Stiff Clay	Diameter of Pier (m)		0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.50	0.50	0.50	0.50	0.50	0.50	0.45	0.45	0.45	0.45	
			Pier Depth (m)		0.40	0.50	0.40	0.50	0.40	0.60	0.50	0.60	0.40	0.60	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.60	0.50	0.50
	Footing without concrete slab	Compact Sand, Gravel	Diameter of Pier (m)		0.60	0.60	0.60	0.60	0.60	0.60	0.75	0.45	0.60	0.60	0.60	0.60	0.60	0.75	0.60	0.75	0.60	0.45	0.60	
			Pier Depth (m)		0.80	1.30	0.90	1.40	0.90	1.50	1.00	1.30	1.20	1.50	0.70	1.10	0.70	1.20	0.60	1.30	0.70	1.50	1.20	1.40
		Fine Sand, Granular Soil	Diameter of Pier (m)		0.45	0.45	0.60	0.45	0.60	0.60	0.60	0.60	0.45	0.45	0.45	0.60	0.45	0.60	0.45	0.60	0.45	0.60	0.45	0.45
			Pier Depth (m)		0.80	1.20	0.60	1.30	0.70	1.00	0.70	1.10	0.80	1.40	0.60	0.80	0.70	0.80	0.80	0.90	0.80	1.00	0.90	1.30
		Stiff Clay	Diameter of Pier (m)		0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
			Pier Depth (m)		1.30	1.50	1.30	1.60	1.40	1.60	1.40	1.70	1.40	1.70	1.30	1.60	1.40	1.70	1.40	1.80	1.50	1.90	1.50	1.90
Gable End - No Doors	Number of End Columns		1		2		2		2		3		1		2		2		2		3			
	End Column C-Section Size		200-15		150-15		200-15		200-15		200-15		200-15		150-15		200-15		200-15		200-15			
	Footing Size Diameter (mm)		300		250		300		300		300		300		250		300		300		300			
	Min. Concrete Edge Distance (mm)		50		50		50		50		50		N/A											

### Notes for Region and Terrain Category Table;

Ridge Connection (Pinned and Fixed)

= 8x M12x30 flanged purlin bolts through 1 ridge bracket

Eave Connection (Pinned and Fixed)

= M12x30 flanged purlin bolts

Anchor Bolt Size for Internal Columns, Centre Columns and End Columns

= M12 or M16 chemical anchors



# PORTAL FRAME - COMPONENTS AND FOOTING SIZES

(A3)

## Region A, Terrain Category 3

Homeshed Footing Type			Pinned / Onto Concrete										Fixed / Into Concrete											
Homeshed Width (m) Overall			7.6		9.0		10.4		12.0		15.0		7.6		9.0		10.4		12.0		15.0			
Portal Location			End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid		
Rafter C-Section Size			200-19	250-24	250-19	300-24	250-19	300-24	250-24	350-24	250-24	350-24	150-19	200-19	200-15	250-19	150-24	250-24	250-19	300-24	250-19	300-24		
Column C-Section Size			200-19	250-24	250-19	300-24	250-19	300-24	250-24	350-24	250-24	350-24	200-24	250-19	200-19	250-24	200-19	250-24	250-19	300-24	250-19	300-24		
Eave Connection	Number of Bolts		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	12	8	8			
	Number of Plates		1	1	1	1	1	2	2	2	2	2	1	1	1	1	1	1	1	2	2	2		
Footing	Type		Stirrup		Stirrup		Stirrup		Stirrup		Stirrup		N/A											
	Bolt Size (to Column)		M12		M12		M12		M16		M16		N/A											
	Chemical Injection Anchor Size		M12		M12		M12		M16		M16		N/A											
	Chemical Injection Anchor Embedment Depth (mm)		120		120		120		140		140		N/A											
Portal Column	Footing with minimum 100mm thick concrete slab		Compact Sand, Gravel	Diameter of Pier (m)	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.30	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45		
				Pier Depth (m)	0.40	0.70	0.50	0.80	0.60	1.0	0.70	1.10	0.60	0.90	0.50	0.50	0.50	0.60	0.50	0.70	0.60	0.90	0.50	0.80
			Fine Sand, Granular Soil	Diameter of Pier (m)	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.30	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
				Pier Depth (m)	0.40	0.50	0.40	0.60	0.50	0.70	0.50	0.80	0.50	0.70	0.50	0.50	0.50	0.50	0.60	0.50	0.70	0.50	0.60	0.60
			Stiff Clay	Diameter of Pier (m)	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.30	0.50	0.45	0.50	0.50	0.50	0.45	0.45	0.45	0.45
				Pier Depth (m)	0.30	0.40	0.40	0.40	0.40	0.50	0.40	0.50	0.40	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Footing without concrete slab		Compact Sand, Gravel	Diameter of Pier (m)	0.60	0.60	0.60	0.60	0.60	0.60	0.70	0.45	0.60	0.45	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.45	0.60	
				Pier Depth (m)	0.70	1.10	0.70	1.20	0.80	1.30	0.80	1.20	1.10	1.30	0.80	0.90	0.60	1.00	0.70	1.20	0.80	1.30	1.0	1.20
			Fine Sand, Granular Soil	Diameter of Pier (m)	0.45	0.45	0.45	0.45	0.45	0.45	0.60	0.45	0.45	0.45	0.45	0.45	0.45	0.60	0.45	0.60	0.45	0.60	0.45	0.45
				Pier Depth (m)	0.70	1.00	0.70	1.10	0.70	1.20	0.60	1.30	0.80	1.20	0.60	0.90	0.60	0.70	0.70	0.80	0.70	0.90	0.80	1.10
			Stiff Clay	Diameter of Pier (m)	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
				Pier Depth (m)	1.20	1.50	1.30	1.50	1.30	1.50	1.30	1.60	1.30	1.60	1.30	1.50	1.30	1.60	1.40	1.70	1.40	1.70	1.50	1.80
Gable End - No Roller Doors	Number of End Columns		1		2		2		2		3		1		2		2		2		3			
	End Column C-Section Size		150-15		150-12		150-15		200-15		200-15		150-15		150-12		150-15		200-15		200-15			
	Footing Size Diameter (mm)		250		250		250		300		300		250		250		250		300		300			
	Min. Concrete Edge Distance (mm)		50		50		50		50		50		N/A											

### Notes for Region and Terrain Category Table;

Ridge Connection (Pinned and Fixed)

= 8x M12x30 flanged purlin bolts through 1 ridge bracket

Eave Connection (Pinned and Fixed)

= M12x30 flanged purlin bolts

Anchor Bolt Size for Internal Columns, Centre Columns and End Columns

= M12 or M16 chemical anchors

# PORTAL FRAME - COMPONENTS AND FOOTING SIZES (B2)

## Region B, Terrain Category 2

Homeshed Footing Type			Pinned / Onto Concrete										Fixed / Into Concrete													
Homeshed Width (m) Overall			7.6		9.0		10.4		12.0		15.0		7.6		9.0		10.4		12.0		15.0					
Portal Location			End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid				
Rafter C-Section Size			250-24	350-24	300-24	300-30	300-24	350-30	350-24	350-30	350-24	350-30	250-15	250-24	250-19	300-24	250-24	350-24	250-24	300-24	300-30	350-24	350-30			
Column C-Section Size			250-24	350-24	300-24	300-30	300-24	350-30	350-24	350-30	350-24	350-30	250-19	300-24	250-24	350-24	250-24	350-24	300-24	350-30	300-24	350-24	350-30			
Eave Connection	Number of Bolts		8	8	8	12	8	12	8	12	12	12	8	8	8	8	8	8	8	12	8	12				
	Number of Plates		1	2	1	1	2	2	2	2	2	2	1	1	1	2	1	2	1	2	2	2	2			
Footing	Type		Stirrup		Stirrup		Stirrup		Spigot		Spigot		N/A													
	Bolt Size (to Column)		M12		M12		M12		M16		M16		N/A													
	Chemical Injection Anchor Size		M12		M12		M12		M16		M16		N/A													
	Chemical Injection Anchor Embedment Depth (mm)		120		120		140		120		140		140		140		N/A									
Portal Column	Footing with minimum 100mm thick concrete slab		Compact Sand, Gravel		Diameter of Pier (m)		0.45	0.60	0.45	0.60	0.45	0.75	0.45	0.75	0.45	0.45	0.60	0.45	0.60	0.60	0.75	0.60	0.75	0.75	0.45	0.45
					Pier Depth (m)		1.00	1.30	1.10	1.40	1.30	1.20	1.40	1.30	1.30	2.30	0.60	1.20	0.70	1.10	0.60	1.30	0.70	1.20	1.20	2.00
			Fine Sand, Granular Soil		Diameter of Pier (m)		0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.60	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.60	0.45	0.45	0.45
					Pier Depth (m)		0.70	1.20	0.80	1.30	0.90	1.40	0.90	1.20	0.90	1.40	0.60	0.80	0.60	1.00	0.70	1.20	0.70	1.40	0.80	1.30
			Stiff Clay		Diameter of Pier (m)		0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.50	0.50	0.50	0.50	0.50	0.50	0.45	0.45	0.45	0.45
					Pier Depth (m)		0.50	0.70	0.50	0.80	0.60	0.80	0.60	0.90	0.60	0.80	0.50	0.60	0.50	0.60	0.50	0.70	0.60	0.80	0.50	0.80
	Footing without concrete slab		Compact Sand, Gravel		Diameter of Pier (m)		0.60	0.75	0.60	0.75	0.60	0.90	0.60	0.90	0.45	0.60	0.60	0.60	0.60	0.75	0.60	0.75	0.60	0.90	0.45	0.60
					Pier Depth (m)		1.10	1.40	1.20	1.50	1.20	1.30	1.30	1.40	1.80	2.20	0.90	1.50	1.00	1.30	1.10	1.40	1.20	1.30	1.70	2.00
			Fine Sand, Granular Soil		Diameter of Pier (m)		0.45	0.60	0.45	0.60	0.45	0.60	0.45	0.60	0.45	0.45	0.45	0.60	0.45	0.60	0.45	0.60	0.45	0.60	0.45	0.45
					Pier Depth (m)		1.00	1.20	1.10	1.30	1.10	1.40	1.20	1.50	1.20	1.90	0.80	1.00	0.90	1.10	1.00	1.20	1.10	1.40	1.10	1.80
			Stiff Clay		Diameter of Pier (m)		0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
					Pier Depth (m)		1.40	1.80	1.50	1.80	1.50	1.90	1.60	2.00	1.60	1.90	1.50	1.90	1.60	2.00	1.60	2.10	1.70	2.20	1.80	2.20
Gable End - No Roller Doors	Number of End Columns		1		2		2		2		3		1		2		2		2		3					
	End Column C-Section Size		250-15		200-15		250-15		150-24		200-19		250-15		200-15		250-15		150-24		200-19					
	Footing Size Diameter (mm)		350		300		350		250		300		350		300		350		250		300					
	Min. Concrete Edge Distance (mm)		60		50		60		60		60		N/A													

### Notes for Region and Terrain Category Table;

Ridge Connection (Pinned and Fixed)

= 8x M12x30 flanged purlin bolts through 1 ridge bracket

Eave Connection (Pinned and Fixed)

= M12x30 flanged purlin bolts

Anchor Bolt Size for Internal Columns, Centre Columns and End Columns

= M12 or M16 chemical anchors

# PORTAL FRAME - COMPONENTS AND FOOTING SIZES (B3)

## Region B, Terrain Category 3

Homeshed Footing Type			Pinned / Onto Concrete										Fixed / Into Concrete												
Homeshed Width (m) Overall			7.6		9.0		10.4		12.0		15.0		7.6		9.0		10.4		12.0		15.0				
Portal Location			End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid	End	Mid			
Rafter C-Section Size			250-24	300-24	250-24	350-24	300-24	300-30	300-24	350-30	300-24	350-30	150-24	200-24	200-19	250-24	250-19	300-24	250-24	350-24	250-24	350-24			
Column C-Section Size			250-24	300-24	250-24	350-24	300-24	300-30	300-24	350-30	300-24	350-30	250-19	300-24	250-19	300-24	250-24	300-24	250-24	350-24	300-24	350-30			
Eave Connection	Number of Bolts		8	8	8	8	8	12	8	12	12	12	8	8	8	8	8	8	8	8	8	12			
	Number of Plates		1	1	1	2	2	2	2	2	2	2	1	1	1	2	1	2	1	2	2	2			
Footing	Type		Stirrup		Stirrup		Stirrup		Spigot		Spigot		N/A												
	Bolt Size (to Column)		M12		M12		M12		M16		M16		N/A												
	Chemical Injection Anchor Size		M12		M12		M12		M16		M16		N/A												
	Chemical Injection Anchor Embedment Depth (mm)		120		120		120		140		140		N/A												
Portal Column	Footing with minimum 100mm thick concrete slab		Compact Sand, Gravel	Diameter of Pier (m)		0.45	0.45	0.45	0.45	0.45	0.60	0.45	0.60	0.45	0.45	0.45	0.45	0.45	0.45	0.60	0.45	0.60	0.60	0.45	0.45
				Pier Depth (m)		0.80	1.40	0.90	1.50	1.00	1.20	1.20	1.40	1.00	1.70	0.60	0.90	0.70	1.10	0.60	1.40	0.70	1.20	0.90	1.50
			Fine Sand, Granular Soil	Diameter of Pier (m)		0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
				Pier Depth (m)		0.60	0.90	0.70	1.00	0.70	1.10	0.80	1.20	0.70	1.10	0.50	0.60	0.50	0.80	0.60	0.90	0.70	1.10	0.70	1.00
			Stiff Clay	Diameter of Pier (m)		0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.45	0.50
				Pier Depth (m)		0.40	0.60	0.50	0.60	0.50	0.70	0.50	0.70	0.50	0.70	0.50	0.50	0.50	0.50	0.50	0.60	0.50	0.70	0.50	0.60
	Footing without concrete slab		Compact Sand, Gravel	Diameter of Pier (m)		0.60	0.75	0.60	0.75	0.60	0.75	0.60	0.75	0.45	0.60	0.60	0.60	0.60	0.60	0.60	0.75	0.60	0.75	0.45	0.60
				Pier Depth (m)		0.90	1.20	1.00	1.30	1.10	1.40	1.20	1.50	1.50	1.80	0.80	1.30	0.90	1.40	1.00	1.20	1.10	1.30	1.40	1.70
			Fine Sand, Granular Soil	Diameter of Pier (m)		0.45	0.45	0.45	0.60	0.45	0.60	0.45	0.60	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.60	0.45	0.45
				Pier Depth (m)		0.90	1.40	0.90	1.10	1.00	1.20	1.10	1.30	1.00	1.60	0.70	1.10	0.80	1.30	0.90	1.40	1.00	1.20	0.90	1.50
			Stiff Clay	Diameter of Pier (m)		0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
				Pier Depth (m)		1.40	1.60	1.40	1.70	1.40	1.70	1.50	1.80	1.50	1.80	1.40	1.70	1.50	1.80	1.60	1.90	1.60	2.00	1.60	2.00
Gable End - No Roller Doors	Number of End Columns		1		2		2		2		3		1		2		2		2		3				
	End Column C-Section Size		200-15		200-15		200-15		250-15		250-15		200-15		200-15		200-15		250-15		250-15				
	Footing Size Diameter (mm)		300		300		300		350		350		300		300		300		350		350				
	Min. Concrete Edge Distance (mm)		50		50		50		60		60		N/A												

### Notes for Region and Terrain Category Table;

Ridge Connection (Pinned and Fixed)

= 8x M12x30 flanged purlin bolts through 1 ridge bracket

Eave Connection (Pinned and Fixed)

= M12x30 flanged purlin bolts

Anchor Bolt Size for Internal Columns, Centre Columns and End Columns

= M12 or M16 chemical anchors



# GABLE END DOOR TYPE - COMPONENTS AND FOOTING SIZES

## Region A, Terrain Category 2

Homeshed Gable End Door Type		Pinned / Onto Concrete					Fixed / Into Concrete					
Homeshed Width (m) Overall		7.6	9.0	10.4	12.0	15.0	7.6	9.0	10.4	12.0	15.0	
Roller Doors	Internal & Centre Column C-Section Size	250-19	250-19	250-24	250-24	300-24	250-15	250-19	250-19	250-24	300-24	
	Footing Size Diameter (mm)	350	350	350	350	400	350	350	350	350	400	
	Min. Concrete Edge Distance (mm)	50	50	50	50	50	N/A					
	Internal & Centre Column RHS Stiffener Size	100x50 x3.5	100x50 x2.5	100x50 x3.0	100x50 x3.5	100x50 x3.5	100x50 x2.5	100x50 x2.5	100x50 x3.0	100x50 x3.0	100x50 x3.5	
	Single Roller Door Header Beam C-Section Size	250-15	200-19	200-19	200-19	200-24	250-15	200-19	200-19	200-19	200-24	
	Double Roller Door Header Beam C-Section Size	150-24	150-24	150-24	150-24	200-19	150-24	150-24	150-24	150-24	200-19	
Sliding Doors - Max Opening 4m	C-Section Size	End Column	200-15	200-15	200-15	200-15	200-19	200-15	200-15	200-15	200-15	200-19
		Header Beam	300-24	300-24	300-24	300-24	300-24	300-24	300-24	300-24	300-24	300-24
	With concrete slab	Diameter of Pier (mm)	350	350	350	350	350	450	450	450	450	450
		Pier Depth (mm)	500	500	500	500	500	750	750	750	750	750
	Without concrete slab	Diameter of Pier (mm)	350	350	350	350	350	450	450	450	450	450
		Pier Depth (mm)	500	500	500	500	500	900	900	900	900	900
Sliding Doors - Max Opening 8m +4m	C-Section Size	End Column	N/A	N/A	N/A	200-24	250-24	N/A	N/A	N/A	200-24	250-24
		Header Beam	N/A	N/A	N/A	300-24	300-24	N/A	N/A	N/A	300-24	300-24
	With concrete slab	Header Beam RHS Stiffener Size	N/A	N/A	N/A	150x50x3	150x50x3	N/A	N/A	N/A	150x50x3	150x50x3
		Diameter of Pier (mm)	N/A	N/A	N/A	350	350	N/A	N/A	N/A	450	450
	Without concrete slab	Pier Depth (mm)	N/A	N/A	N/A	600	600	N/A	N/A	N/A	1100	1100
		Diameter of Pier (mm)	N/A	N/A	N/A	350	350	N/A	N/A	N/A	600	600
Pier Depth (mm)	N/A	N/A	N/A	600	600	N/A	N/A	N/A	1100	1100		

## Region A, Terrain Category 3

Homeshed Gable End Door Type		Pinned / Onto Concrete					Fixed / Into Concrete					
Homeshed Width (m) Overall		7.6	9.0	10.4	12.0	15.0	7.6	9.0	10.4	12.0	15.0	
Roller Doors	Internal & Centre Column C-Section Size	250-19	250-19	250-19	250-24	300-24	250-19	250-19	250-19	250-19	250-24	
	Footing Size Diameter (mm)	350	350	350	350	400	350	350	350	350	350	
	Min. Concrete Edge Distance (mm)	50	50	50	50	50	N/A					
	Internal & Centre Column RHS Stiffener Size	100x50 x2.5	100x50 x2.5	100x50 x2.5	100x50 x3.0	100x50 x2.5	100x50 x2.0	100x50 x2.0	100x50 x2.5	100x50 x3.0	125x75 x2.5	
	Single Roller Door Header Beam C-Section Size	150-24	150-24	250-15	200-19	200-19	150-24	150-24	250-15	200-19	200-19	
	Double Roller Door Header Beam C-Section Size	150-24	150-24	150-24	150-24	200-19	150-24	150-24	150-24	150-24	200-19	
Sliding Doors - Max Opening 4m	C-Section Size	End Column	150-19	150-19	150-19	150-19	200-15	150-19	150-19	150-19	150-19	200-15
		Header Beam	300-24	300-24	300-24	300-24	300-24	300-24	300-24	300-24	300-24	300-24
	With concrete slab	Diameter of Pier (mm)	350	350	350	350	350	450	450	450	450	450
		Pier Depth (mm)	500	500	500	500	500	750	750	750	750	750
	Without concrete slab	Diameter of Pier (mm)	350	350	350	350	350	450	450	450	450	450
		Pier Depth (mm)	500	500	500	500	500	900	900	900	900	900
Sliding Doors - Max Opening 8m +4m	C-Section Size	End Column	N/A	N/A	N/A	200-19	250-19	N/A	N/A	N/A	200-19	250-19
		Header Beam	N/A	N/A	N/A	300-30	300-30	N/A	N/A	N/A	300-30	300-30
	With concrete slab	Header Beam RHS Stiffener Size	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Diameter of Pier (mm)	N/A	N/A	N/A	350	350	N/A	N/A	N/A	450	450
	Without concrete slab	Pier Depth (mm)	N/A	N/A	N/A	600	600	N/A	N/A	N/A	1100	1100
		Diameter of Pier (mm)	N/A	N/A	N/A	350	350	N/A	N/A	N/A	600	600
Pier Depth (mm)	N/A	N/A	N/A	600	600	N/A	N/A	N/A	1100	1100		

**Note:** For column embedment depth into concrete pier, refer to table Column Embedment, in Footing Into Concrete (Fixed) section.

# GABLE END DOOR TYPE - COMPONENTS AND FOOTING SIZES

## Region B, Terrain Category 2

Homeshed Gable End Door Type		Pinned / Onto Concrete					Fixed / Into Concrete					
Homeshed Width (m) Overall		7.6	9.0	10.4	12.0	15.0	7.6	9.0	10.4	12.0	15.0	
Roller Doors	Internal & Centre Column C-Section Size	250-24	300-24	300-24	350-24	300-24	250-19	250-24	250-24	300-24	250-24	
	Footing Size Diameter (mm)	350	400	400	450	400	350	350	350	400	350	
	Min. Concrete Edge Distance (mm)	50	50	50	50	60	N/A					
	Internal & Centre Column RHS Stiffener Size	100x50 x3.0	100x50 x2.5	100x50 x3.0	100x50 x2.5	125x75 x4.0	100x50 x3.5	100x50 x3.5	125x75 x3.0	125x75 x2.5	125x75 x4.0	
	Single Roller Door Header Beam C-Section Size	200-24	200-24	200-24	250-24	300-24	200-24	200-24	200-24	250-24	300-24	
Double Roller Door Header Beam C-Section Size	150-24	150-24	150-24	200-19	250-24	150-24	150-24	150-24	200-19	250-24		
Sliding Doors - Max Opening 4m	C-Section Size	End Column	200-19	200-19	200-19	200-19	200-24	200-19	200-19	200-19	200-24	
		Header Beam	300-24	300-24	300-24	300-24	300-24	300-24	300-24	300-24	300-24	
	With concrete slab	Diameter of Pier (mm)	350	350	350	350	350	450	450	450	450	
		Pier Depth (mm)	500	500	500	500	500	750	750	750	750	
	Without concrete slab	Diameter of Pier (mm)	350	350	350	350	350	450	450	450	450	
Pier Depth (mm)		500	500	500	500	500	900	900	900	900		
Sliding Doors - Max Opening 8m +4m	C-Section Size	End Column	N/A	N/A	N/A	250-24	300-24	N/A	N/A	N/A	250-24	300-24
		Header Beam	N/A	N/A	N/A	300-30	300-30	N/A	N/A	N/A	300-30	300-30
	With concrete slab	Header Beam RHS Stiffener Size	N/A	N/A	N/A	150x50x4	150x50x4	N/A	N/A	N/A	150x50x4	150x50x4
		Diameter of Pier (mm)	N/A	N/A	N/A	350	350	N/A	N/A	N/A	450	450
	Without concrete slab	Pier Depth (mm)	N/A	N/A	N/A	600	600	N/A	N/A	N/A	1100	1100
Diameter of Pier (mm)		N/A	N/A	N/A	350	350	N/A	N/A	N/A	600	600	
Pier Depth (mm)	N/A	N/A	N/A	600	600	N/A	N/A	N/A	1100	1100		

## Region B, Terrain Category 3

Homeshed Gable End Door Type		Pinned / Onto Concrete					Fixed / Into Concrete					
Homeshed Width (m) Overall		7.6	9.0	10.4	12.0	15.0	7.6	9.0	10.4	12.0	15.0	
Roller Doors	Internal & Centre Column C-Section Size	250-24	250-24	300-24	300-24	250-24	250-19	250-19	250-24	250-24	250-24	
	Footing Size Diameter (mm)	350	350	400	400	350	350	350	350	350	350	
	Min. Concrete Edge Distance (mm)	50	50	50	50	60	N/A					
	Internal & Centre Column RHS Stiffener Size	100x50 x3.0	100x50 x3.0	100x50 x2.5	100x50 x3.0	125x75 x4.0	100x50 x2.5	100x50 x3.5	100x50 x3.5	125x75 x2.5	125x75 x3.0	
	Single Roller Door Header Beam C-Section Size	200-19	250-19	200-24	200-24	200-24	200-19	250-19	200-24	200-24	200-24	
Double Roller Door Header Beam C-Section Size	150-24	150-24	150-24	200-19	200-24	150-24	150-24	150-24	200-19	200-24		
Sliding Doors - Max Opening 4m	C-Section Size	End Column	200-15	200-15	200-15	200-15	200-19	200-15	200-15	200-15	200-15	
		Header Beam	300-24	300-24	300-24	300-24	300-24	300-24	300-24	300-24	300-24	
	With concrete slab	Diameter of Pier (mm)	350	350	350	350	350	450	450	450	450	
		Pier Depth (mm)	500	500	500	500	500	750	750	750	750	
	Without concrete slab	Diameter of Pier (mm)	350	350	350	350	350	450	450	450	450	
Pier Depth (mm)		500	500	500	500	500	900	900	900	900		
Sliding Doors - Max Opening 8m +4m	C-Section Size	End Column	N/A	N/A	N/A	250-24	250-24	N/A	N/A	N/A	250-24	250-24
		Header Beam	N/A	N/A	N/A	300-30	300-30	N/A	N/A	N/A	300-30	300-30
	With concrete slab	Header Beam RHS Stiffener Size	N/A	N/A	N/A	150x50x3	150x50x3	N/A	N/A	N/A	150x50x3	150x50x3
		Diameter of Pier (mm)	N/A	N/A	N/A	350	350	N/A	N/A	N/A	450	450
	Without concrete slab	Pier Depth (mm)	N/A	N/A	N/A	600	600	N/A	N/A	N/A	1100	1100
Diameter of Pier (mm)		N/A	N/A	N/A	350	350	N/A	N/A	N/A	600	600	
Pier Depth (mm)	N/A	N/A	N/A	600	600	N/A	N/A	N/A	1100	1100		

Note: For column embedment depth into concrete pier, refer to table Column Embedment, in Footing Into Concrete (Fixed) section.

# FOOTING INTO CONCRETE

(FIXED)

Considering the information provided in the "Site Preparation" section of this installation guide, mark out and dig concrete pier footing holes to the size and depth specified in the Region and Terrain Category table relevant to your Homeshed. For piers with no concrete slab refer to Figure 2, or for piers with concrete slab refer to Figure 3.

Make certain the M12x30 flanged purlin bolts required for pier footing depths less than 1000mm are installed in the columns prior to the pouring of any piers (Figure 2 and Figure 3).

Ensure the pier footing holes are level and in line with each other. Use a string line and a spirit level to determine this. 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 concrete and let it set before placing the columns in the holes. This will ease settlement and make up the distance between the base of the column and the bottom of the hole.

To establish the depth of concrete to be poured for portal columns;  
**Pier Footing Depth - Column Embedment = Concrete Base Depth**

Examples for Region A, Terrain Category 2

12.0m wide Homeshed, without slab in fine sand;

End Columns; 0.8m - 500mm = 300mm of concrete

Mid Columns; 1.0m - 500mm = 500mm of concrete

15.0m wide Homeshed, with slab in compact sand;

End Columns; 0.7m - 500mm = 200mm of concrete

Mid Columns; 1.1m - 1000mm = 100mm of concrete

In the gable ends of the Homeshed the pier footing depth for any centre column/s, end column/s and internal column/s are minimum 500mm, with the column embedment 100mm from the bottom of the pier footing. The diameter is specified in the Region and Terrain Category table relevant to your Homeshed.

The minimum pier footing diameter for side wall roller door jambs is Ø450mm, with minimum depth 500mm.

If a Personal Access (PA) door is being installed, the door mullion pier footings are minimum Ø250mm, with minimum depth 500mm (refer to section "Personal Access Door" for door mullion spacing).

All fixed base concrete footings shall have a minimum 20MPa concrete grade.

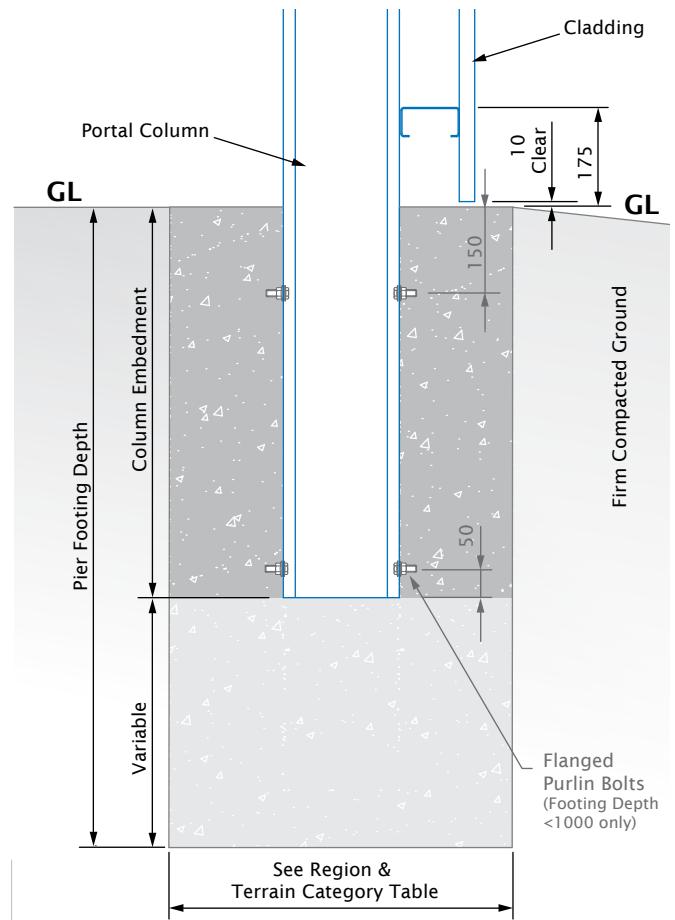


Figure 2

## COLUMN EMBEDMENT

Pier Footing Depth (mm)	Column Embedment (mm)	Purlin Bolts Required
600 - 1000	500	Yes
1100 - 1500	1000	No
1600 - 2000	1500	No
2100 - 2500	2000	No

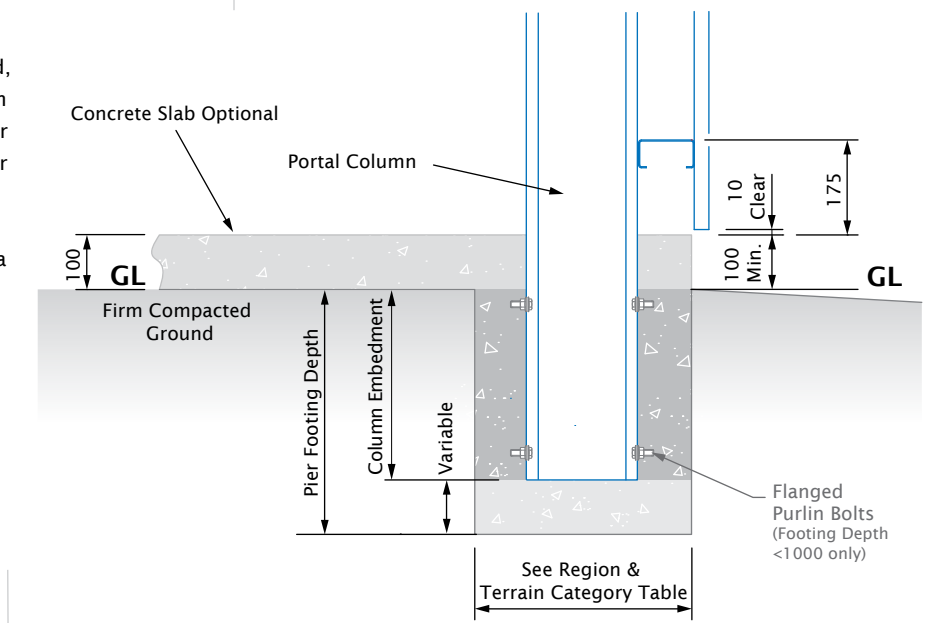


Figure 3

## Concrete Slab with Bolted Footing

If the Homeshed is to be pinned onto concrete, either a stirrup or spigot footing type will be provided according to the size of the Homeshed and the Region and Terrain Category.

Considering the information provided in the "Site Preparation" section of this install guide, mark out and dig concrete pier footing holes to the diameter and depth specified in the Region and Terrain Category table relevant to your Homeshed.

Check the "Concrete Pier Footing" table to confirm if additional reinforcement is required. Fill the pier footings with concrete and if pouring a slab score the top before pouring the slab.

### CONCRETE PIER FOOTING

Footing Depth (mm)	Concrete Strength (MPa)	Additional Reinforcement
< 1000	20	No
≥ 1000	25	4 N12 with ligs at 450mm centres
≥ 2000	32	4 N12 with ligs at 300mm centres

**Note:** Minimum reinforcement cover of 50mm all around.

The concrete slab must be at least 100mm deep and have a recommended minimum compressive strength of 32MPa. The required slab thickness may need to be greater than the minimum specified, depending on site conditions and intended use (Stratco assume no liability for slab damage due to ground movement).

Before pouring the slab, confirm slab depth in the "Slab - Intended Floor Loading" table below.

### SLAB - INTENDED FLOOR LOADING

Type Of Use	Slab Thickness
Light Industrial	100mm
Medium Duty	125mm
Heavy Duty	150mm

If columns are to be secured directly to the concrete slab, provide four N12 re-entrant bars (Figure 5). Re-entrant bars align with pier longitudinal reinforcement (or 50mm edge distance if no longitudinal reinforcement) and are located mid-height of the slab.

For corner piers, rotate the bar closest to the corner by 180° and maintain 30mm concrete cover, top and bottom (Figure 9). Re-entrant bars are to have minimum 600mm legs.

**Note:** For end column, centre column and internal column pier footing diameters, refer to the Region and Terrain Category table relevant to your Homeshed. Footing depth for these columns shall be no less than 500mm. The typical stirrup system shall be used to anchor these columns to concrete.

The minimum pier footing diameter for side wall roller door jambs is Ø450mm, with minimum depth 500mm. The typical stirrup system shall be used to anchor these columns to concrete.

## Stirrup

Each stirrup is fixed to the column with four bolts and into the concrete slab or pier with two chemical injection anchors. The size of the bolts, chemical anchors and embedment depth is specified in the Region and Terrain Category table relevant to your Homeshed.

Drilled holes shall be Ø14mm or Ø18mm for M12 and M16 anchors respectively, with chemical injection required to set anchors.

## Spigot

Each spigot is fixed to the column with four M16 bolts and into the concrete pier with four M16 chemical anchors embedded to the depth specified in the Region and Terrain Category table relevant to your Homeshed.

Drilled holes shall be Ø18mm with chemical injection required to set anchors.

## Spigot Without Slab

For Homesheds where a slab will not be poured and the pier footing diameter specified in the Region and Terrain Category table relevant to your Homeshed is less than Ø600mm, a pier cap will be required. This is to ensure there is enough clearance around the spigot footing plate and chemical anchors.

In this case re-entrant bars are required and shall align with pier longitudinal reinforcement, or 50mm edge distance if longitudinal reinforcement is not required.

Bars are positioned mid-height of the cap with a 600mm leg into the pier, and the horizontal leg to approximately 50mm of the cap edge (Figure 7).

## Spigot With Slab

Edge thickening is critical to maintain anchor concrete edge distance in the situation where a slab is being poured, but the pier footing specified is less than Ø600mm.

Four re-entrant bars are to be installed with the re-entrant bars aligned with pier longitudinal reinforcement (or 50mm edge distance if no longitudinal reinforcement) and are located mid-height of the slab (Figure 8).

For corner piers, rotate the bar closest to the corner by 180° and maintain 30mm concrete cover top and bottom (Figure 9).

Re-entrant bars are to have minimum 600mm legs.

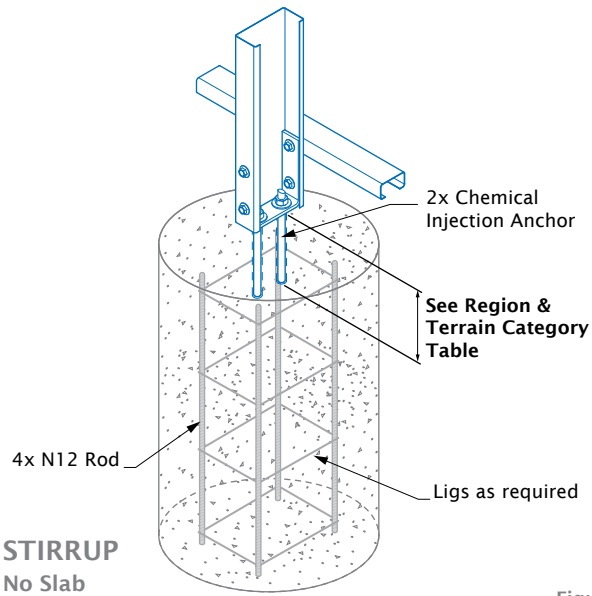


Figure 4

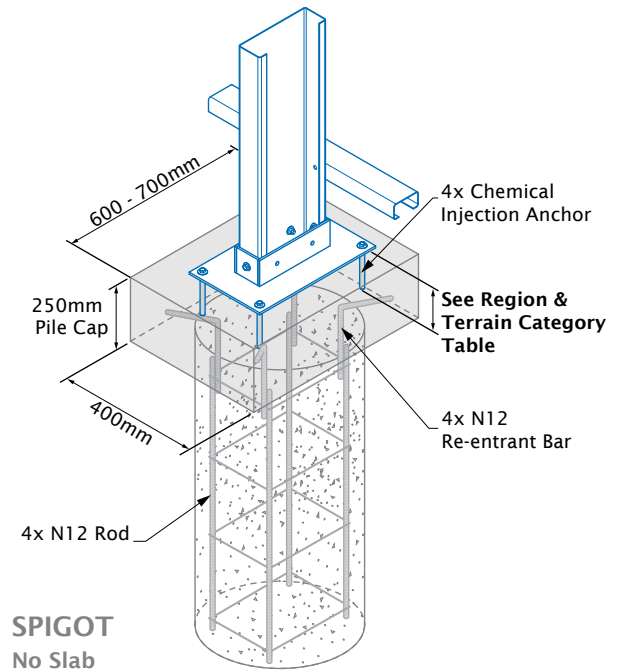


Figure 7

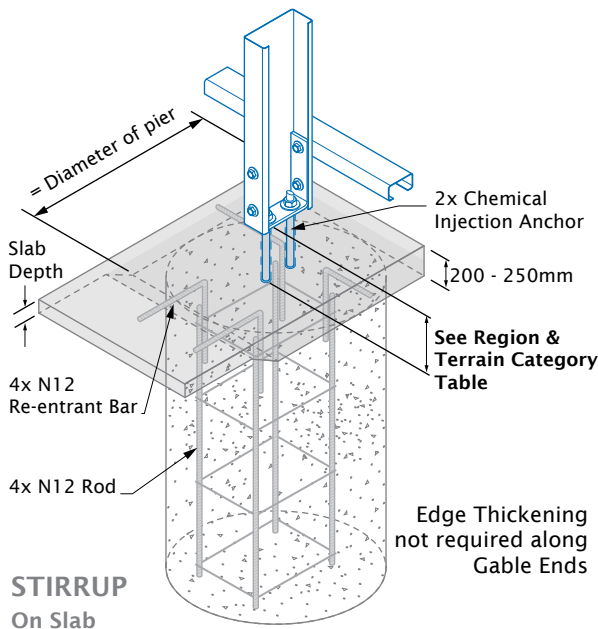


Figure 5

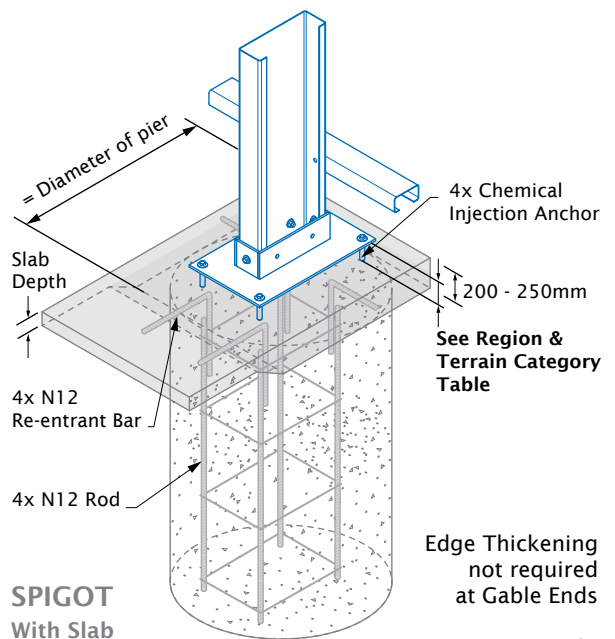


Figure 8

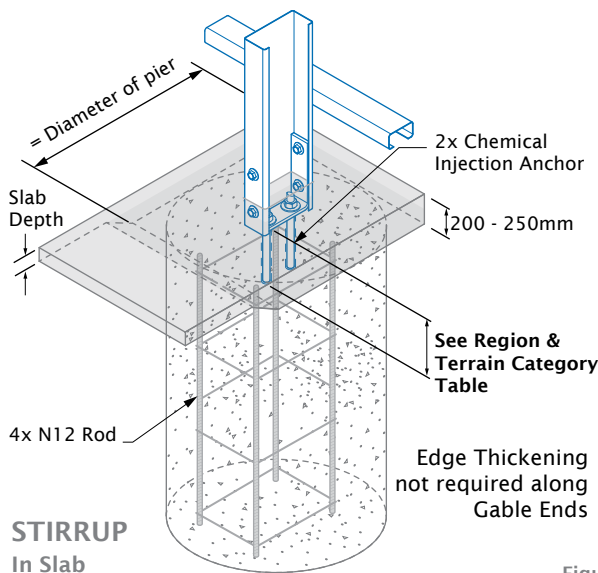


Figure 6

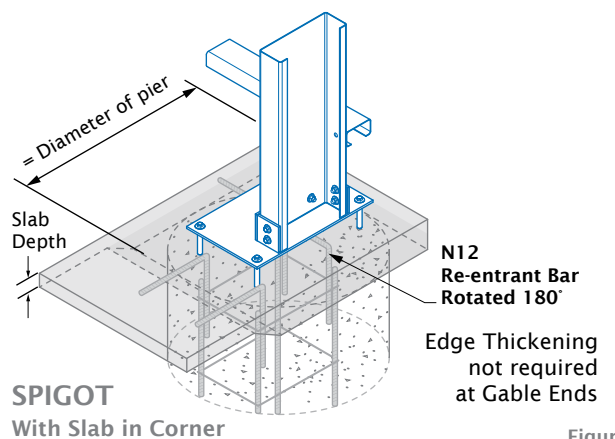


Figure 9

# BUILDING THE FRAME

## Wall Frames

Bay Size	Homeshed Length	Number of Portal Columns For One Wall					
		3	4	5	6	7	8
3m	-	-	9.265m	12.310m	15.355m	18.400m	21.445m
4m		7.750m	11.560m	15.365m	19.175m	22.985m	26.790m

**Note:** Maximum eaves height is 4.2m

Lay the C-section portal columns on their flange side on the ground making sure the portal columns are facing in the correct direction. As a general rule, the open side of each column will face the rear of the Homeshed, except for the front portal columns which have the open side of the column facing the front of the Homeshed (Figure 1).

Stand the portal columns in the footing holes (Figure 10) or onto the concrete piers/slab and temporarily brace. Ensure all framework is temporarily braced and that the bracing remains in position until the Homeshed is complete and secured at the base.

**Note:** If pinning the columns to concrete it may be necessary to pre-drill some or all of the concrete anchor holes before columns are braced in position. If columns interfere with the drill and do not allow clearance through the stirrup or spigot holes, mark and pre-drill required holes to the size and depth specified in the Region and Terrain Category table relevant to your Homeshed.

### STANDING THE PORTAL COLUMNS

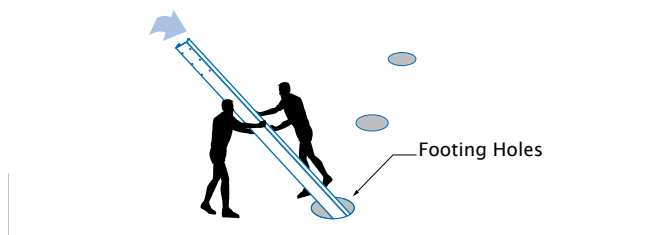


Figure 10

### Wall Girts

Position the wall girts so when fixed to the portal column the C-section opening is facing down. Fasten the girts to the portal columns through the pre-punched holes with M12x30 flanged purlin bolts. The centre of the bottom girt will be located 150mm from ground level (Figure 11).

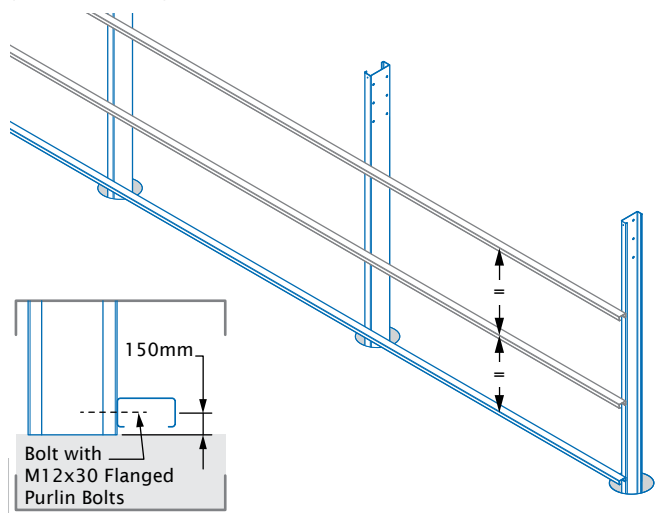


Figure 11

Fasten the remaining wall girts evenly along the portal columns as determined by the pre-punched holes.

**Note:** Do not fix the top wall girt at eaves height.

When fixing girts to the portal columns, make sure the wall is level and square. Repeat the previous steps for the opposite side wall frame.

### WALL GIRTS, PURLIN AND BRIDGING SPECIFICATIONS

	HOMESHED DETAILS		SINGLE SPAN		CONTINUOUS SPAN	
	Region & Terrain Category	Bay Width (Girt/Purlin Span)	Gauge	Bridging	Gauge	Bridging
		m	mm	Quantity	mm	Quantity
Girts	Region A, Category 2	3	1.5	N/A	1.0	N/A
		4	1.5	N/A	1.9	N/A
		5	2.4	1	2.4	1
	Region A, Category 3	3	1.2	N/A	1.0	N/A
		4	2.4	1	1.5	N/A
		5	2.4	1	2.4	N/A
	Region B, Category 2	3	1.9	N/A	1.2	N/A
		4	2.4	1	2.4	N/A
		5	2.4	1	2.4	1
	Region B, Category 3	3	1.5	N/A	1.2	N/A
		4	1.9	1	1.9	N/A
		5	2.4	1	2.4	N/A
Purlins	Region A, Category 2	3	N/A	N/A	1.0	N/A
		4	N/A	N/A	1.5	N/A
		5	N/A	N/A	2.4	1
	Region A, Category 3	3	N/A	N/A	1.0	N/A
		4	N/A	N/A	1.5	N/A
		5	N/A	N/A	2.4	N/A
	Region B, Category 2	3	N/A	N/A	1.5	N/A
		4	N/A	N/A	2.4	N/A
		5	N/A	N/A	2.4	1
	Region B, Category 3	3	N/A	N/A	1.2	N/A
		4	N/A	N/A	1.9	N/A
		5	N/A	N/A	2.4	N/A

**Note:** Pre-punched holes determine purlin/girt spacing which does not exceed 1200mm.

### Rafters

The rafters are bolted together on the ground using a ridge bracket. Pair up the rafters, making sure to use the correct left and right rafter for the associated bracket. The C-section opening on each rafter should face the same direction. As a general rule, the open side of each rafter will face the rear of the Homeshed, except for the front rafters in which the open side of the rafter will face the front of the Homeshed, as per the portal columns.

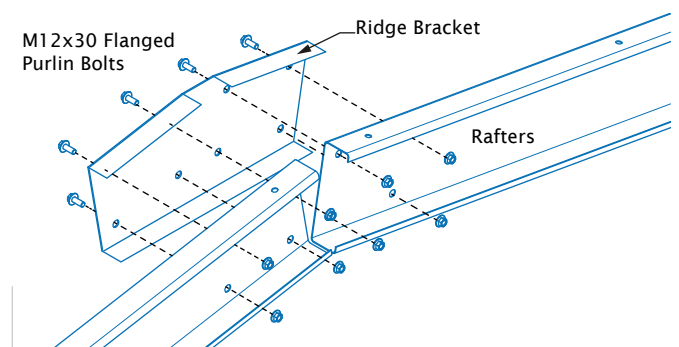


Figure 12

Bolt the ridge bracket in place by lining up the holes in both the rafter and ridge bracket. Use M12x30 flanged purlin bolts in each hole and tighten.



Refer to the Region and Terrain Category table relevant to your Homeshed to determine if an eaves plate is required along with the eaves bracket. Elevate the rafters from the ground so the weight of the roof frame does not rest on the eaves brackets once the brackets are installed.

Use the number of M12x30 flanged purlin bolts specified in the Region and Terrain Category table relevant to your Homeshed to bolt the eaves bracket (and plate if required) to the rafter (Figure 13).

**Note:** Pilot holes are included in the ridge and eaves brackets allowing 12x20 screw fixing in addition to the bolts. This is to avoid slip during construction and over time. Ensure all bolts are tight.

**Note:** In situations where a roller door header beam carries through to the portal column and would interfere with the eaves bracket, eaves plates will be supplied for the roller door portal frame only. See section "Roller Door - Gable End" (Figure 31) for details.

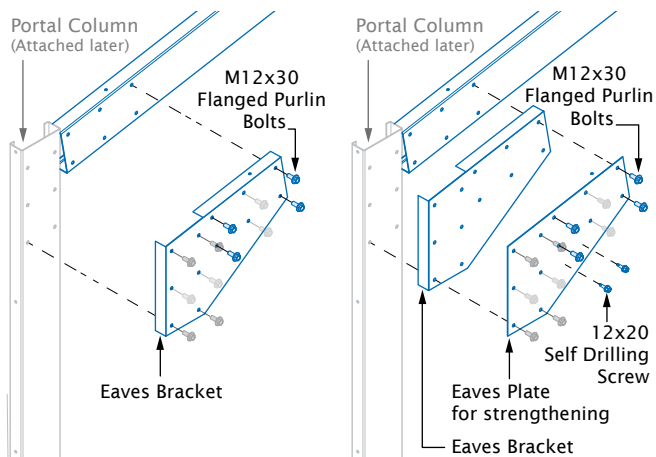


Figure 13

## Purlins

The roof purlins are positioned with the open side of the C-section facing the respective eaves of the Homeshed (Figure 14). Fix purlins to the rafters while still at ground level. Rafters may require temporary bracing to position upright whilst fastening purlins.

Position the first purlin at the eave end of the rafter. It is to be offset 450mm from the top edge of the rafter and align with the pre-punched hole (Figure 14). Fix the purlin to the rafter via the eaves bracket with M12x30 flanged purlin bolts.

Position another purlin at the ridge connection end of the rafter so it aligns with the pre-punched hole, offset 100mm from the top edge of the rafter (end portal rafters only) (Figure 14) and fix through the ridge bracket to the rafter with M12x30 flanged purlin bolts. Depending on

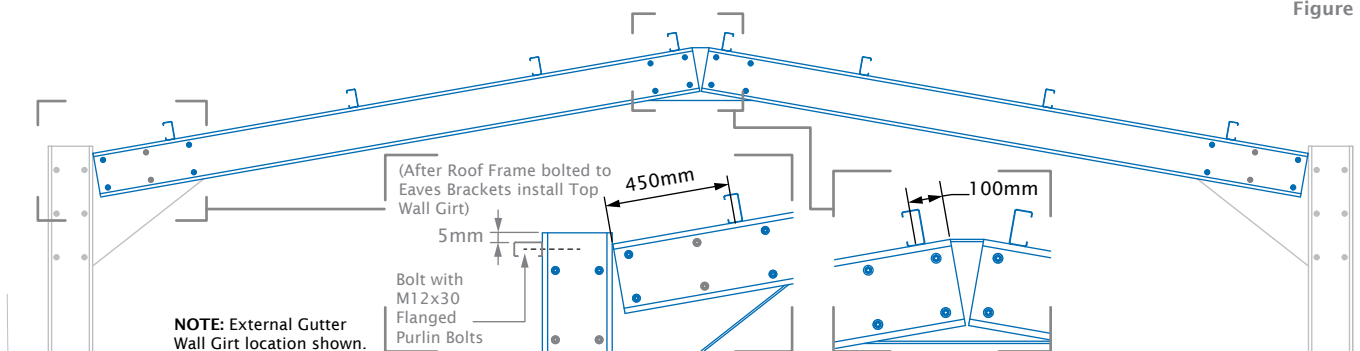


Figure 14

the Homeshed design, back-to-back purlins may be required at the eaves and ridge (see "Wall and Roof Bracing" section relevant to your Homeshed). Remaining purlins are to be positioned and fixed at each pre-punched hole with M12x30 flanged purlin bolts.

## Joining Girts / Purlins

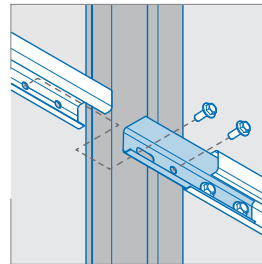


Figure 15

Where wall girts or purlins are to be joined, a girt connector is required.

The connection of wall girts shall only occur over portal or end column/s, and the joining of purlins only over rafters.

## Roof Frame

Use a crane to lift the roof frame into position. Bolt the eave brackets to the portal columns using four or six M12x30 flanged purlin bolts through the aligned pre-punched holes. Refer to Figure 17 and the Region and Terrain Category tables relevant to your Homeshed for the number of bolts required.

Install the remaining top wall girt to the portal columns on each side wall as per "Wall Girt" installation in "Building the Frame" section and Figure 14.

**Note:** If a box gutter is to be installed, the top wall girt will be offset from the top of the column by 130mm. (Refer to the "Box Gutter" section at the back of this installation guide).

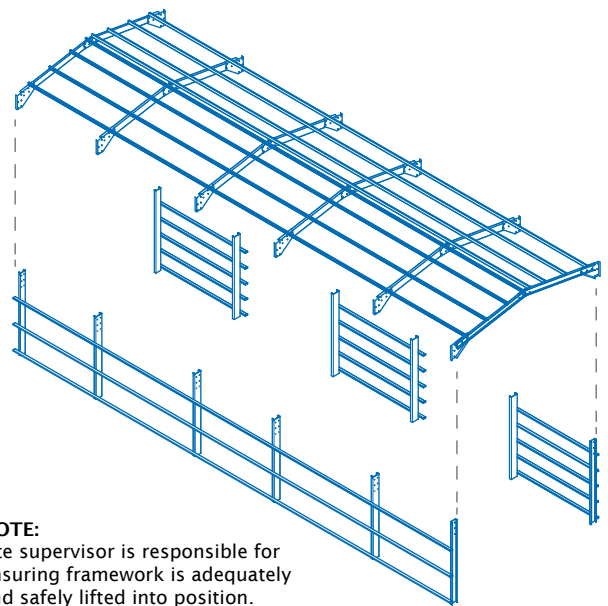


Figure 16

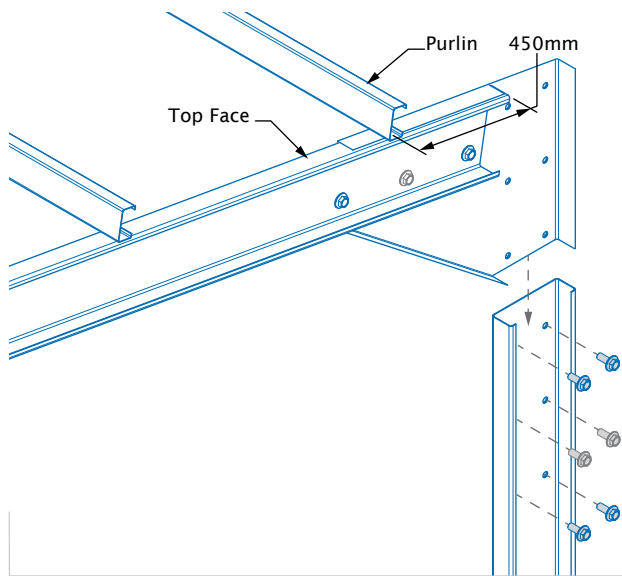


Figure 17

## End Wall Girts

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

Fix girt brackets to the insides of each end portal column using four 12x20 self drilling screws (Figure 18). Girt brackets are to be in line with side wall girts. End wall girts are to be positioned so the C-section opening is facing down and the flange side of the end wall girt must align with the lips edge of the portal columns.

Span end wall girts between each girt bracket and fix with four 12x20 self drilling screws through the girt web (Figure 18).

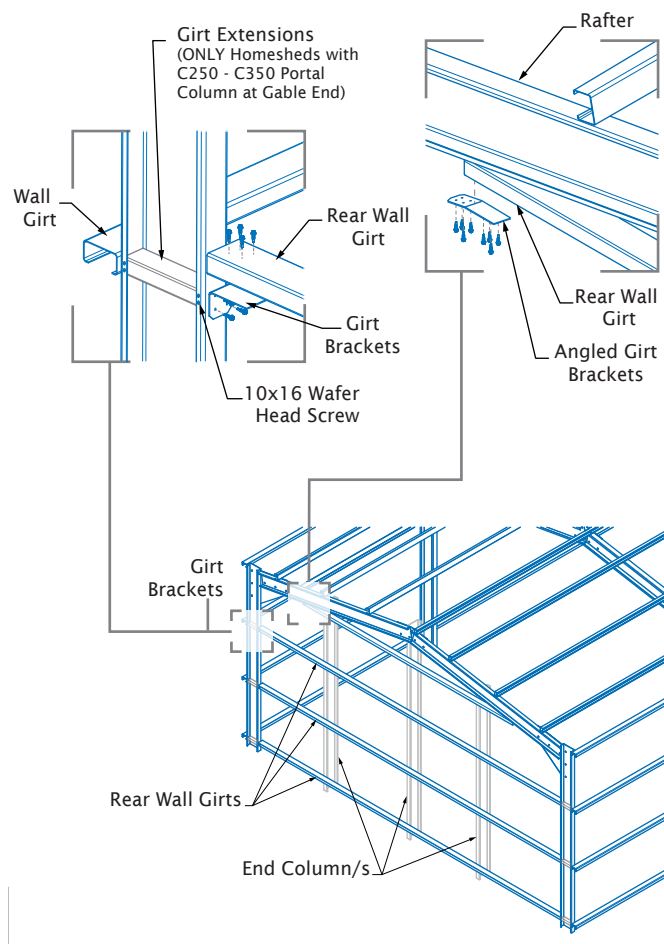


Figure 18

For portal columns C250 - C350, screw a girt extension to the inside of the portal column with two 10x16 wafer head screws. Each girt extension is to be in line with the rear wall girt (Figure 18).

An additional end wall girt must be located between the upper end wall girt and the rafter apex. This girt shall be secured to the underside of the rafters with angled girt brackets and four 12x20 screws per leg and bolted to end column/s (Figure 18).

If end wall girts need to be joined, refer to the "Joining Girts/Purlins" section. Only join the end wall girts over an end column.

## End Columns

The number of end columns required varies according to the width of the Homeshed (Figure 19). Refer to the Region and Terrain Category tables relevant to your Homeshed to determine the number of end columns required and the "Slab Dimensions and Footing Hole Spacing" table relevant to your Homeshed to determine the end column spacing.

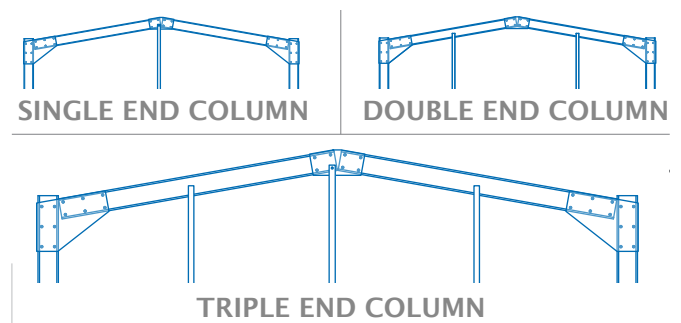


Figure 19

End columns are fixed to the rafters with a girt bracket and four 12x20 self drilling screws per leg at the top of the end column. End wall girts are fixed to each end column with one M12x30 flanged purlin bolt per intersection. Drill Ø13mm holes in the rafters as required.

**Note:** Make sure the end column is directly against the end girts (Figure 20).

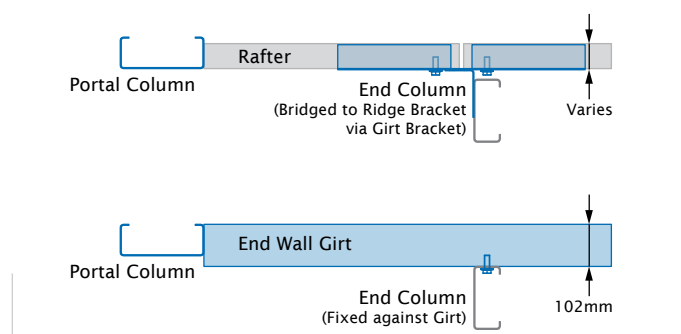


Figure 20

In Homesheds requiring one or three end columns, one end column will be centralised and fixed to the rafter at the ridge bracket connection (see Figure 19 and Figure 21). Where three end columns are required, the other two will be fixed to the end rafters with girt brackets.

When only two end columns are required they are fixed to the end rafters with girt brackets.

Homesheds with end portal column of C200 or C250 will have a gap (Figure 20) between the rafters and the flange of the end column.

While the girt bracket bridges this gap, the gap is vital to ensure the end wall girts can bolt directly to the end column. With this gap in mind fix the girt bracket to the end column/s, ridge bracket and rafters with four 12x20 self drilling screws on each leg.

Homesheds with an end portal column of C300 have a minimal gap. Girt brackets are to be installed to connect the end column to the rafters. In the situation where the end column is installed against the ridge bracket, a Ø13mm hole must be drilled in the end column in line with the bolt hole on the ridge bracket. The bolt used to fix the ridge bracket to the rafter is removed and re-installed through the rafter, ridge bracket and end column.

Homesheds with a C350 end portal column require that the end column/s are notched 30mm at the top of the end column allowing the end column to fit under the rafters and ridge bracket (Figure 21). This notch is to ensure the end wall girts can bolt directly to the end column/s.

Fix the end column/s to the ridge bracket or rafters with the girt bracket and four 12x20 self drilling screws on each leg.

When sliding doors are installed in the gable end of the Homeshed, the position of the end columns may change to suit the door widths.

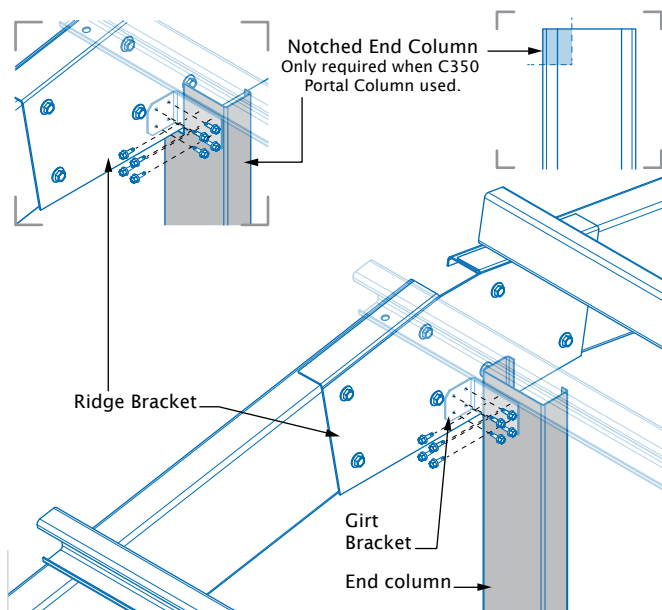


Figure 21

**Note:** In the situation where the door opening for sliding doors is greater than 4m and less than 8m, two girt brackets must be installed at the top of the end column (Figure 22).

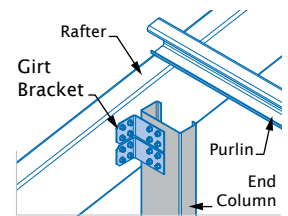


Figure 22

### Girt and Purlin Bridging

Once the Homeshed frame and PA door have been installed, refer to the "Wall Girt, Purlin and Bridging Specifications" table in the "Building the Frame" section to determine if the Homeshed requires bridging members.

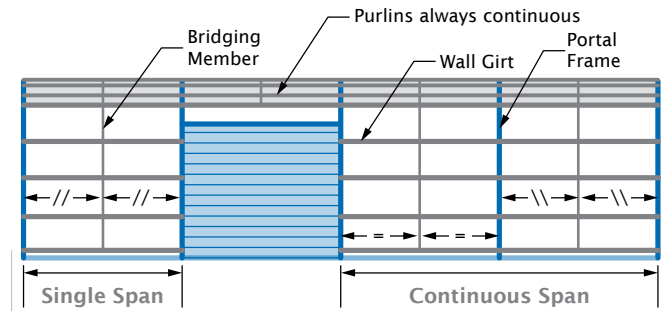


Figure 23

Single Span refers to wall girts that are fixed to two portal frames, spanning only one bay.

Continuous Span refers to wall girts that are fixed to three or more portal frames, spanning two or more bays.

Bridging is located mid-span of the bay, open side of the C-section facing the back of the Homeshed. Fix the bridging member to the girts or purlins with a girt bracket at each end of the bridging member and four 12x20 self drilling screws per girt bracket leg (Figure 24).

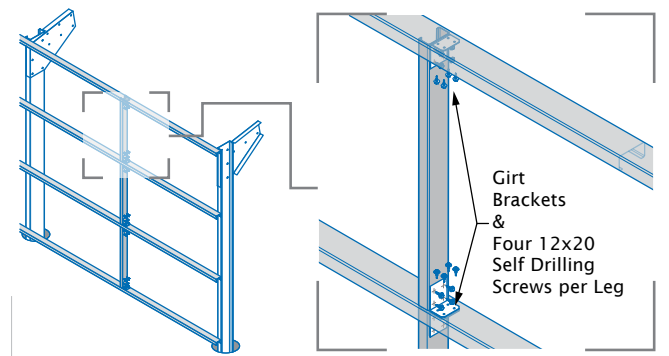


Figure 24

## PERSONAL ACCESS (PA) DOOR

### PA Door Installation

Cut the wall girts either side of the proposed PA door location, creating a 940mm clear opening between cuts, making sure the cuts are aligned (Figure 25).

**Note:** Do not cut any of the wall girts above the height of the PA Door. Check all framework clearances before permanently fixing anything into position.

Secure the first PA door mullion to the intersecting girts using angle connectors and clamp plates (Figure 25C). Secure the mullion to the continuous girt above the door with a girt bracket (Figure 25B).

Position the welded door jamb assembly inside the space created by the cut girts, beside the mullion and fix with two adjacent 12x20 self drilling screws at maximum 450mm centres (Figure 25A).

Position the second PA door mullion between the welded door jamb and cut girts. Fix the mullion to the welded door jamb before securing to the wall girts with angle connectors and clamp plates (Figure 25C) and then to the girt above with a girt bracket (Figure 25B).

Fix the C100 C-section head support to both PA door mullions with angle connectors and clamp plates (Figure 25C).

Pan fix the wall sheet/s to the PA door frame with colour 10x16 self drilling screws. Fix the PA door flashings with 12x20 self drilling screws at maximum 600mm centres (Figure 26).

Determine which way the door will swing. The PA door frame will be provided with butt hinges that are pre-welded in position. Fix the hinges to the correct PA door mullion with 10x16 wafer head screws.

Cast PA door mullions into footing prior to pouring the slab, according to the "Footing Into Concrete" section of this guide, with PA door mullion pier footings at minimum Ø250mm and minimum depth 500mm.

If pinning onto concrete cut PA door mullions to sit flush with the top of the concrete base. PA door mullions are to be fixed to concrete with angle connectors and clamp plates, anchored with two M12 chemical injection anchors (Figure 25D).

**Note:** Angle connectors are secured to clamp plates with two M12x30 flanged purlin bolts.

When installing any doors ensure the door has a smooth opening action and sits square within the welded door jamb.

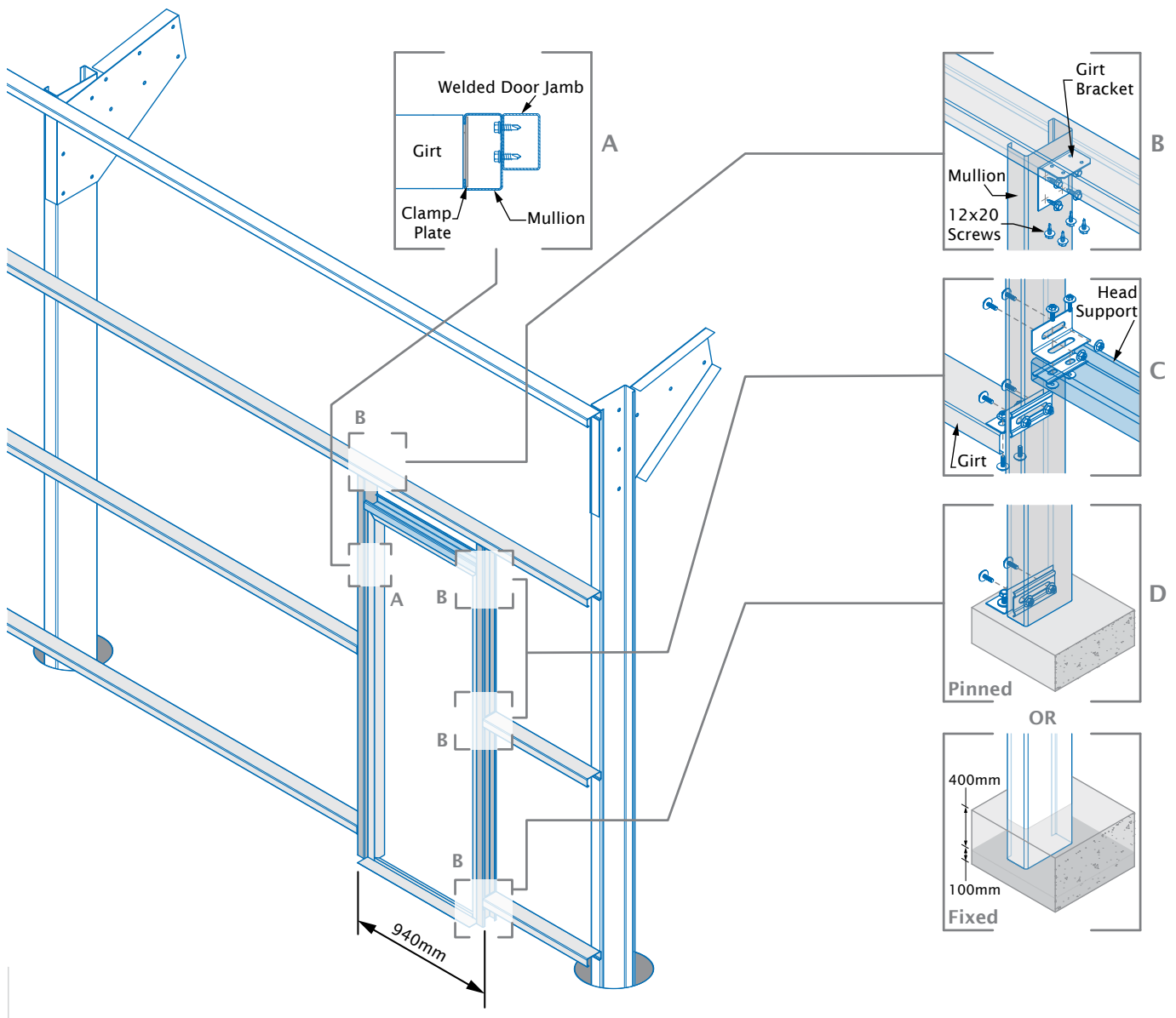


Figure 25

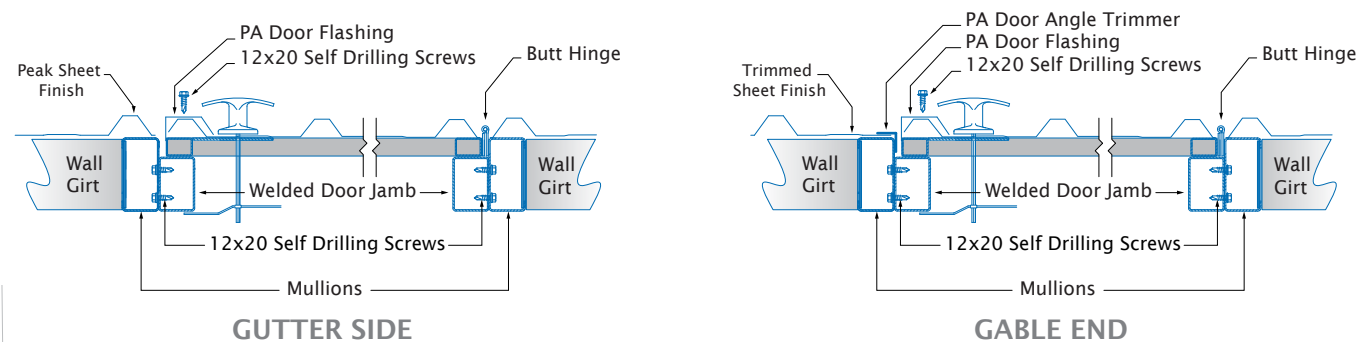


Figure 26

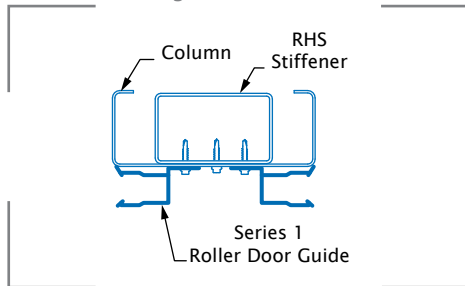
# ROLLER DOOR - GABLE END COLUMNS

(TYPE 1)

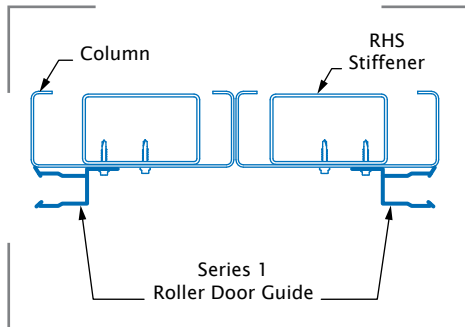
## CENTRE COLUMN TOP VIEW (if required)

### CENTRE COLUMN ROLLER DOOR GUIDE - SERIES 1

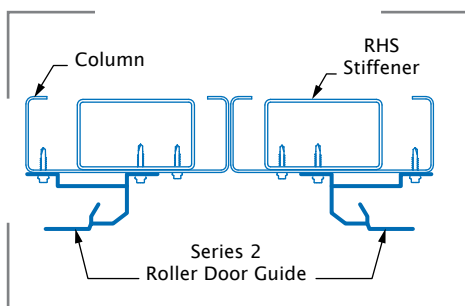
C250 & Above Only  
(For Single Centre Column)



### Double Centre Column

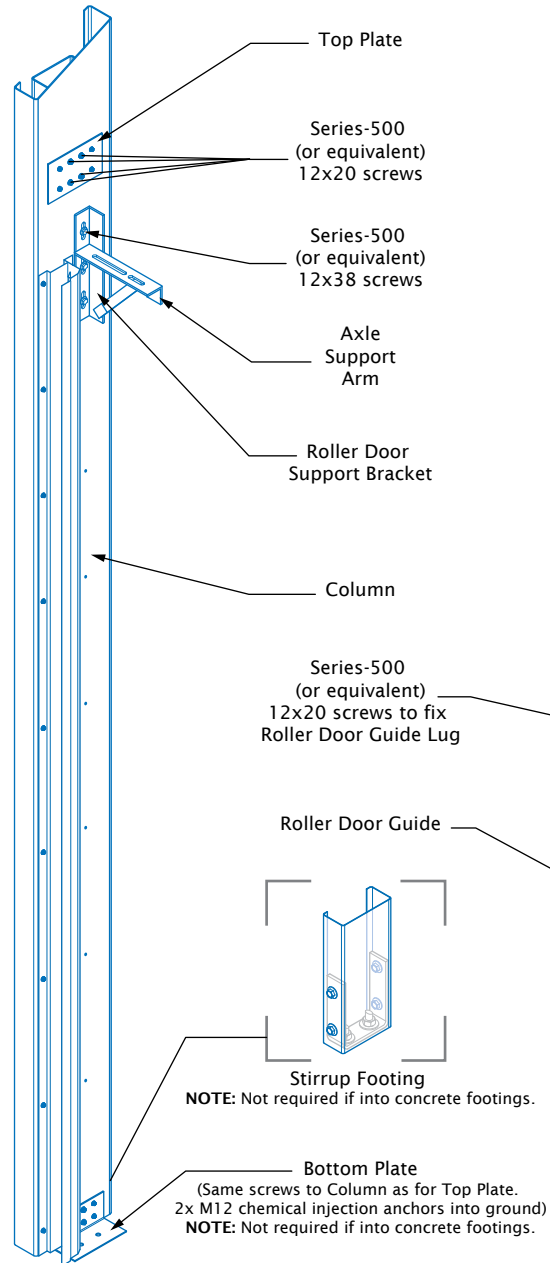


### CENTRE COLUMN ROLLER DOOR GUIDE - SERIES 2



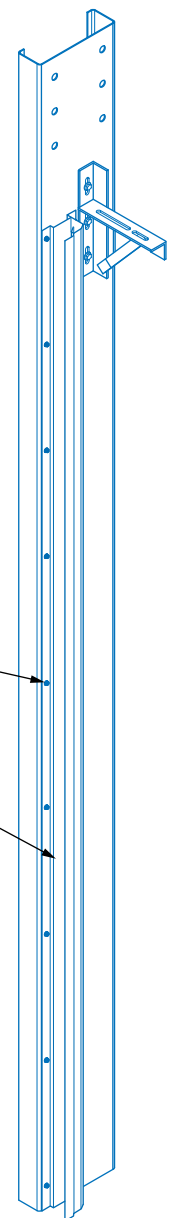
## INTERNAL COLUMN INSIDE VIEW (if required)

Series 2 shown



## PORTAL COLUMN INSIDE VIEW

Series 2 shown



NOTE: RHS Stiffener not required on portal columns.

**NOTE:**

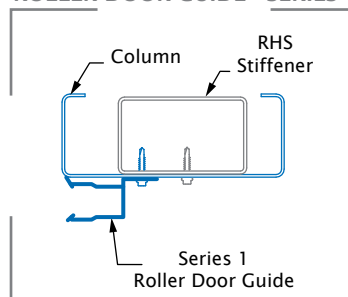
Maximum spacing of screws along length of Roller Door Guide varies depending on Region & Wind Category.

Region A, Cat 2	650mm
Region A, Cat 3	800mm
Region B, Cat 2	450mm
Region B, Cat 3	600mm

Screws to fix RHS Stiffener located in line with Roller Door Guide screws.

Where RHS Stiffener travels beyond the Roller Door Guide, same spacing for screws is applicable to fix the RHS Stiffener.

### INTERNAL or PORTAL COLUMN ROLLER DOOR GUIDE - SERIES 1



### INTERNAL or PORTAL COLUMN ROLLER DOOR GUIDE - SERIES 2

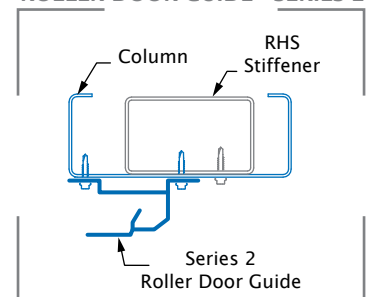


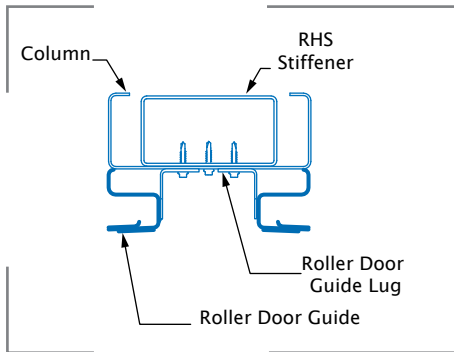
Figure 27

# ROLLER DOOR - GABLE END COLUMNS

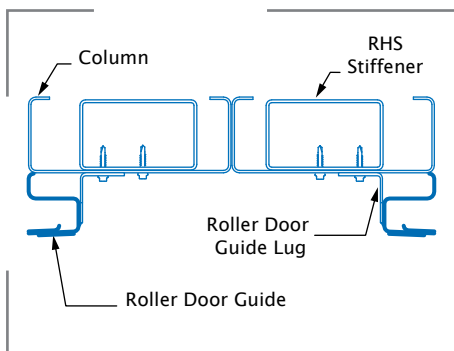
(TYPE 2)

## CENTRE COLUMN TOP VIEW (if required)

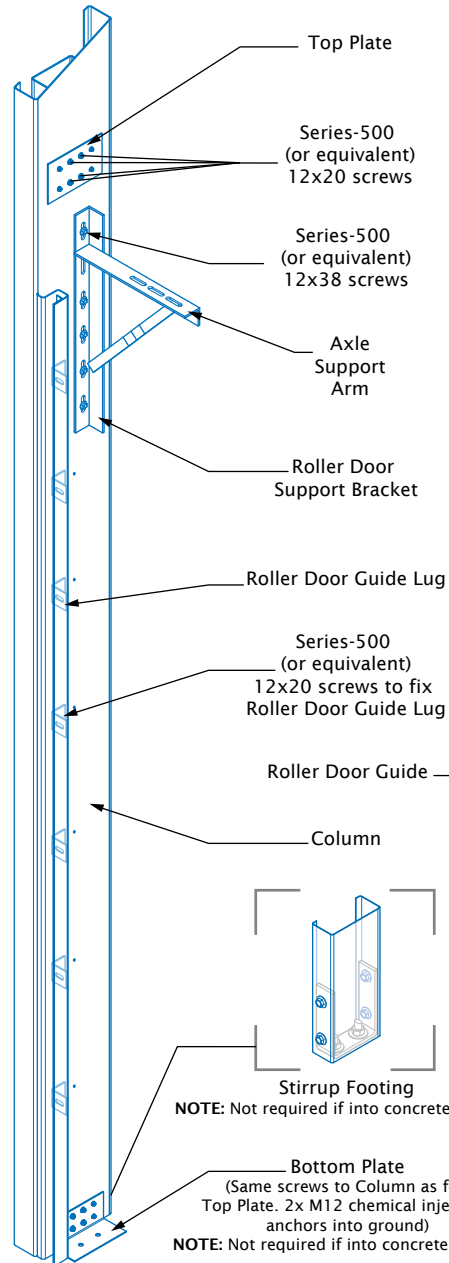
### SINGLE CENTRE COLUMN ROLLER DOOR GUIDE



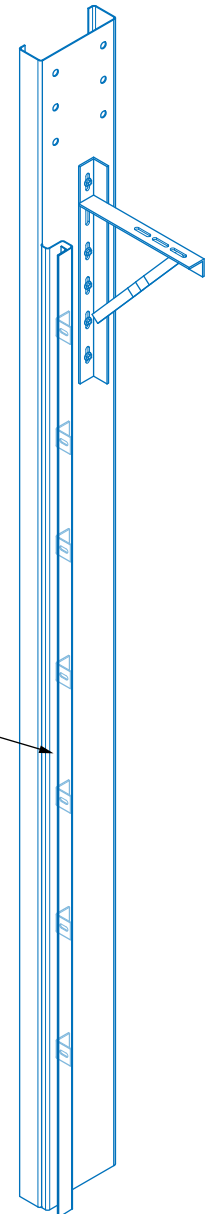
### DOUBLE CENTRE COLUMN ROLLER DOOR GUIDE



## INTERNAL COLUMN INSIDE VIEW (if required)



## PORTAL COLUMN INSIDE VIEW



NOTE: RHS Stiffener not required on portal columns.

**NOTE:**

Maximum spacing of screws along length of Roller Door Guide varies depending on Region & Wind Category.

Region A, Cat 2	650mm
Region A, Cat 3	800mm
Region B, Cat 2	450mm
Region B, Cat 3	600mm

Screws to fix RHS Stiffener located in line with Roller Door Guide Lug screws.

Where RHS Stiffener travels beyond the Roller Door Guide, same spacing for screws is applicable to fix the RHS Stiffener.

## INTERNAL or PORTAL COLUMN ROLLER DOOR GUIDE

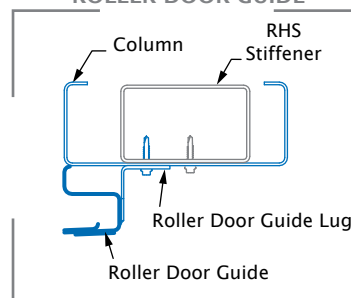


Figure 28



# ROLLER DOOR - GABLE END

Complete the steps below while building the wall frames, in conjunction with "Building the Frame" section.

Flashings are to be installed once the wall frames are braced and clad.

**Note:** All centre and internal columns shall be oriented so the open side of the C-section is facing outwards.

## Centre Columns

If roller doors are being installed directly adjacent one another, two columns are required between the doors to allow for clearance of the roller door componentry.

For C250 centre columns, use header beam brackets and three 12x20 self drilling screws per bracket leg, to secure the columns to the underside of the ridge bracket. The header beam bracket is fixed to the outside

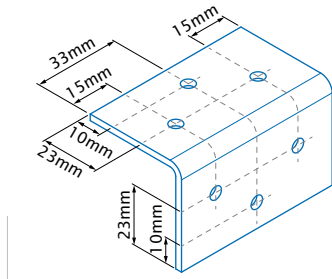


Figure 29

flange of each column. Pre-drill the holes in the header beam bracket prior to fixing the C250 centre columns to the ridge bracket flange (Figure 29).

For C300 or C350 centre columns, use apex brackets and three 12x20 screws per apex bracket leg to secure columns to the underside of the rafters. The apex bracket is fixed to the outside flange of each centre column (Figure 30).

Fix columns together through their adjoining flange with M12x30 flanged purlin bolts at approximately 900mm centres.

## Internal Column

If internal column/s are required, they must be fixed to the rafter with one left apex bracket and one right apex bracket positioned on either side of the column (Figure 30). Three 12x20 screws required per bracket leg.

Short wall girts are provided to span between the portal column/s and internal column/s. Fix the short wall girts with girt brackets at either end as per standard end wall girt installation.

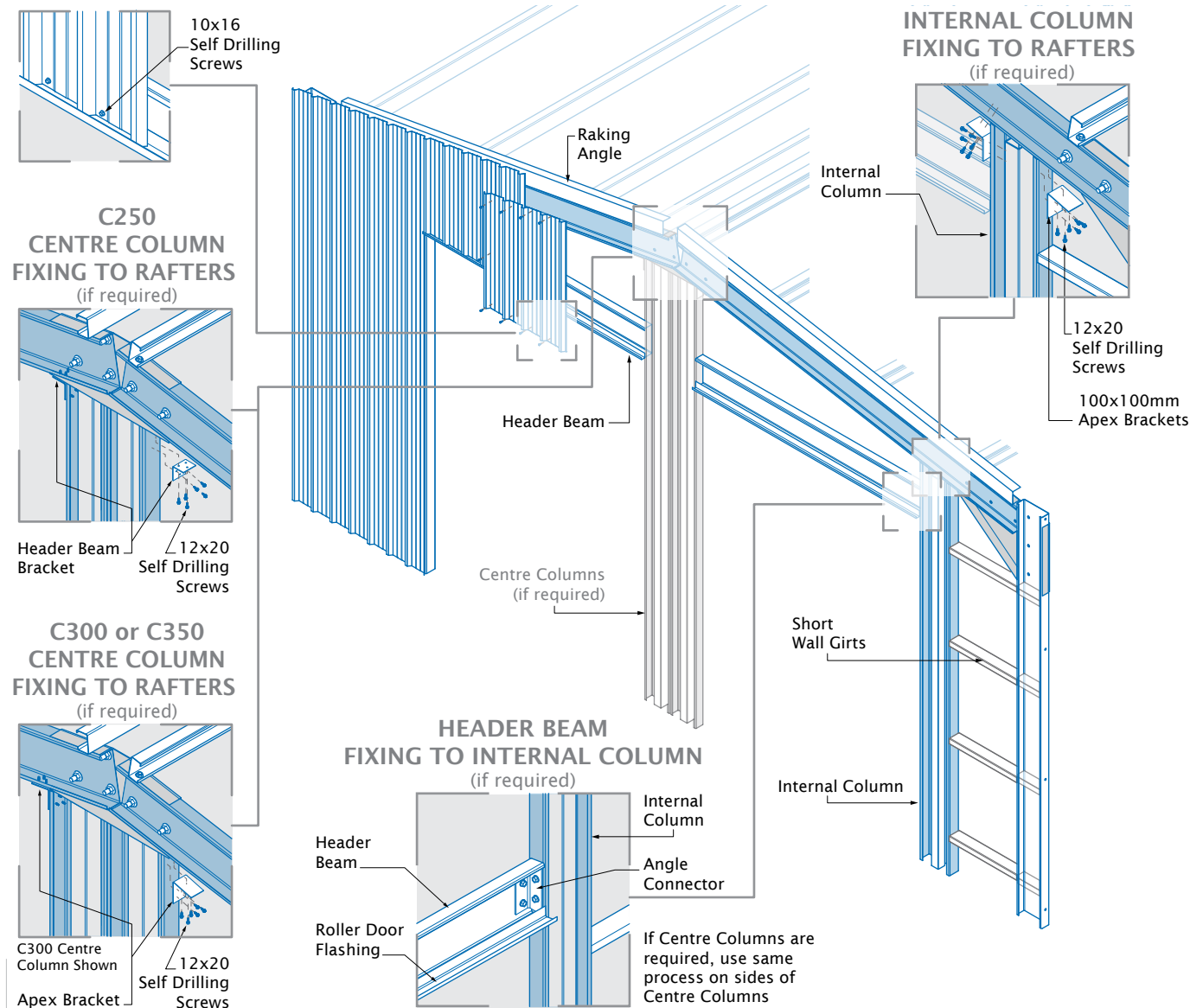


Figure 30

## Header Beam

The location of the roller door header beam/s is relative to the location of the door itself. Reference door manufacturer specifications to determine the location of the base of the header beam.

For situations where the header beam is fixed to internal or centre columns, or located below the eaves bracket when carrying through to the portal columns, attach header beam/s to the columns with angle connectors and fasten using M12x30 flanged purlin bolts (Figure 30).

**Note:** In situations where the header beam carries through to the portal column and interferes with the eaves bracket, eaves plate/s will have been provided in place of the eaves bracket. If required, trim the header beam so it is located 100mm in from the flange of the portal column/s. Drill Ø14mm holes in the header beam (Figure 31). Fix the header beam channels to the eaves plates and portal columns with angle connectors and fasten using M12x30 flanged purlin bolts. Further secure the header beam channels to the eaves plates with three 12x20 self drilling screws through each eaves plate (Figure 31). Fix the header beam to the header beam channels with six M12x30 flanged purlin bolts per connection, three located on the top of the header beam and three on the bottom. Confirm that the web of the header beam is in line with the lips of the portal column.

Install the roller door as per the manufacturers specifications.

If the roller door support bracket is fixed to the portal column and interferes with the eaves bracket, secure the roller door support bracket through the eaves bracket into the column (Figure 31). Chock the roller door support bracket to match the thickness of the eaves bracket if it falls below the base of the eaves bracket.

Rivet roller door flashing/s at maximum 300mm centres to the front lower lip of header beam/s, keeping the flashing and header beam flush at the bottom faces (Figures 30 and 31). Shorter gable wall sheets are provided to fit above the gable end roller door header beam. Mitre these sheets to accommodate the 10° pitch of the Homeshed.

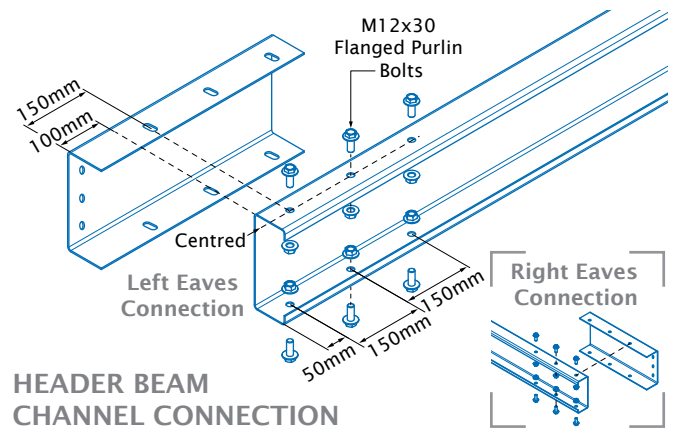
## ROLLER DOOR - GUTTER SIDE

Complete the steps below in conjunction with "Building the Frame" section. Roller door column flashings are to be installed once the wall frames are braced and clad.

The location of the header beam is relative to the door opening position, refer to door manufacturer specifications. Mark the position of the roller door header beams. Roller door header girts are positioned approximately 450mm - 600mm below the roller door header beams depending on the diameter of the roller door barrel supplied.

Bolt any header beams between portal columns with angle connectors and clamp plates if required, brackets secured with M12x30 flanged purlin bolts. Existing eaves bracket bolts and holes may be used if the header is located at this level. Fix C300 C-section roller door jambs to the header beams with two M12x30 flanged purlin bolts, roller door jambs spaced to suit the door width.

Fix the roller door header girt between roller door jambs using girt brackets with a distance of 450mm between the bottom face of the header beams and the top of the roller door header girt (Figure 32).



HEADER BEAM CHANNEL CONNECTION

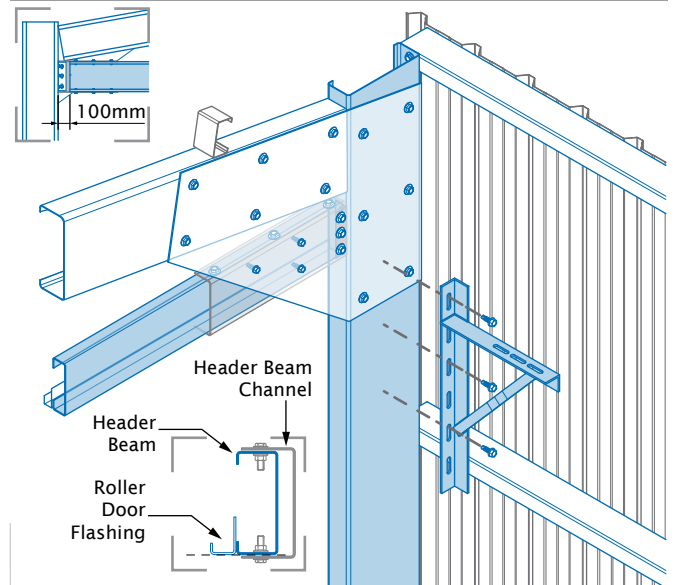


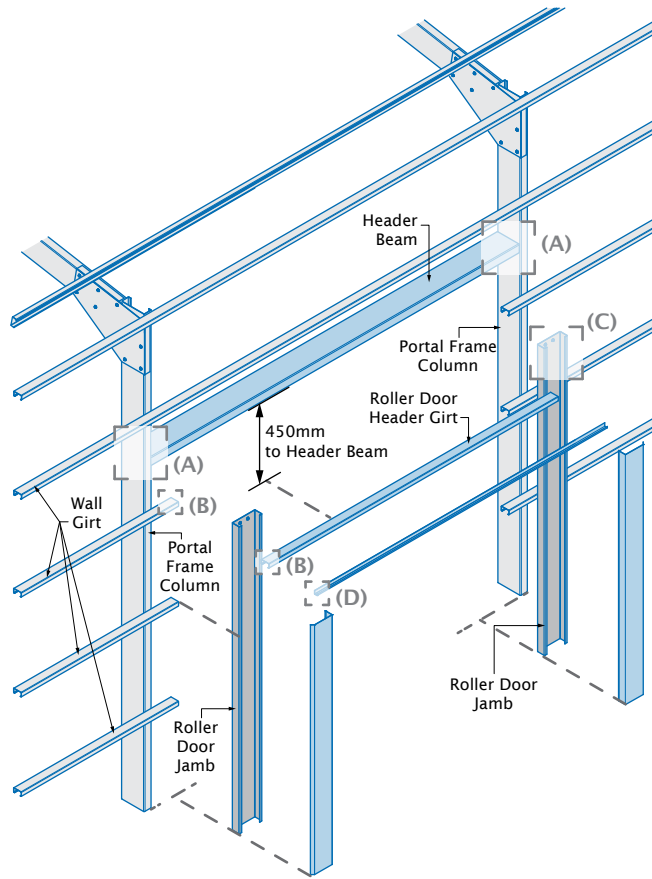
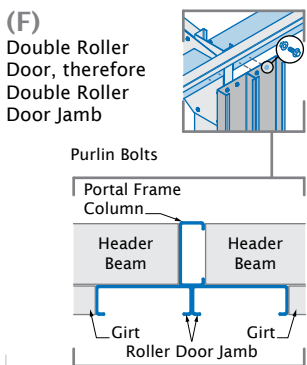
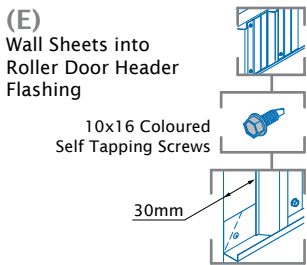
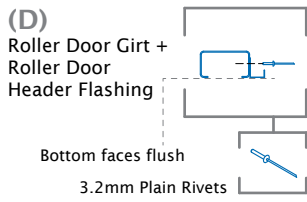
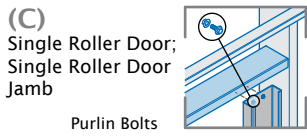
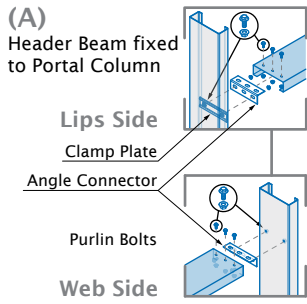
Figure 31

Once the raking angle is fixed to the purlins (see "Wall and Roof Sheet Installation - Gable Wall Sheets" section) pan fix sheets to the raking angle and header beam with 10x16 self drilling screws (Figure 30). See "Wall and Roof Sheet Installation" section for further cladding installation details. Full length sheets are provided for the remainder of the gable end. Fix flashings as outlined in the "Flashings" section of this installation guide.

Rivet the roller door header flashing to the roller door header girt using 3.2mm rivets at 600mm centres, making sure both bottom faces are flush (Figure 32).

If there are two roller door jambs positioned side by side in adjacent bays, mark and trim the Superdek wall sheet to cover the joined roller door jambs (Figure 32). Clad the walls as specified in "Wall and Roof Sheet Installation" section of this installation guide. When cladding to the roller door header girt, slide the Superdek sheets into the header flashing and fix through to the header girt and header beam above using coloured 10x16 self tapping screws in every pan (Figure 32E). Install the roller door as per the manufacturers specifications.

Position the roller door wall flashings over the roller door jambs and around the vertical edges of the trimmed Superdek wall sheet. In applications where the roller door is positioned adjacent to the end bay column, the roller door corner flashing covers the corner roller door jamb around to the gable end wall sheet. Fix any flashings as outlined in the "Flashings" section of this installation guide. Flashings that interfere with header beams will require notching.



**POTENTIAL SPACING OF ROLLER DOOR JAMB FROM PORTAL FRAME COLUMN**

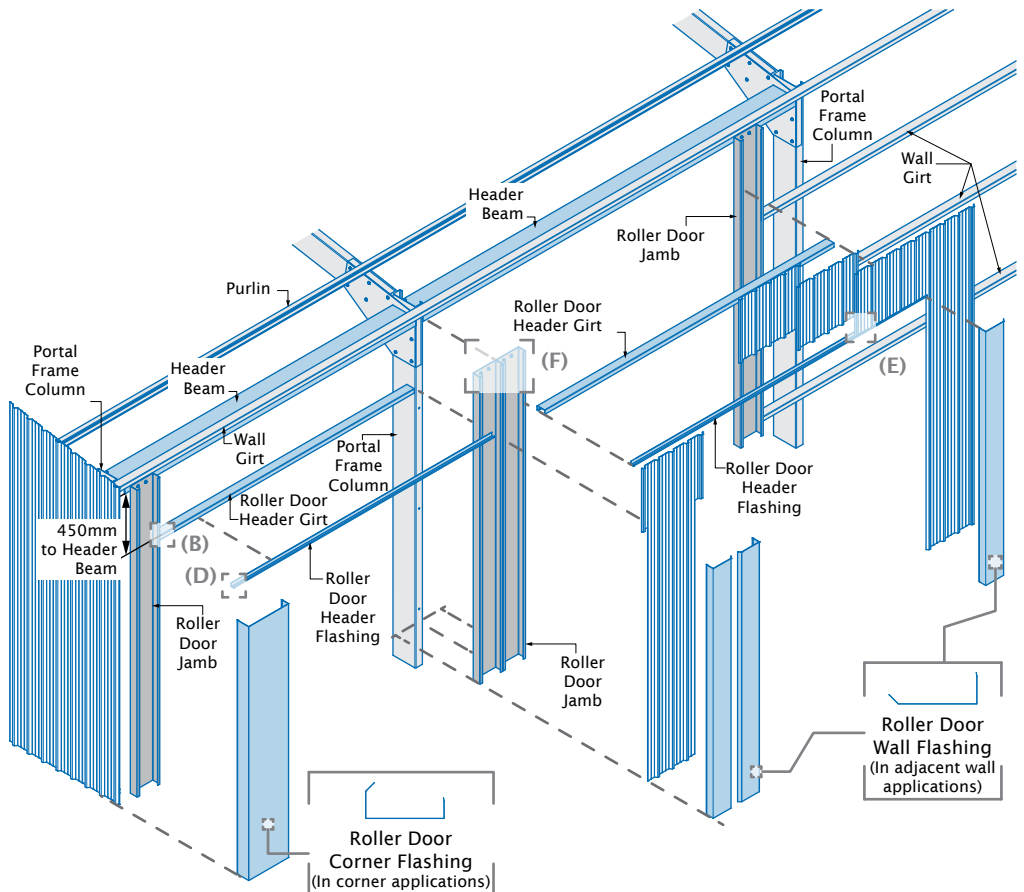
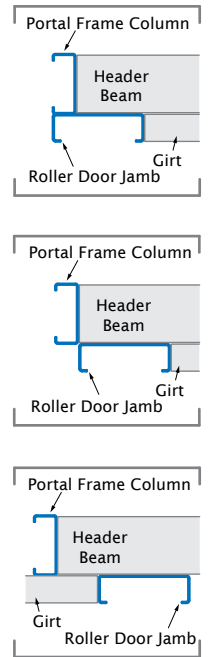


Figure 32

# SLIDING DOOR

Complete the steps below while building the wall frame, in conjunction with "Building the Frame" section. Flashings are to be installed once the wall frames are braced and clad.

## Sliding Door Frame Assembly

On each door frame half, mark and drill pilot holes where the spigots are located (Figure 33). On the top and middle horizontal members drill pilot holes for 12x20 self drilling screws on the top and bottom faces of the members at each open end. On the bottom horizontal member drill pilot holes on the top for 12x20 self drilling screws and on the front for 10x16 wafer head screws at each open end.

These pilot holes are to be located centrally along the horizontal members, spaced 50mm and 100mm back from each open end of the frame (Figure 33).

Mark each length of spigot at 150mm. Insert a spigot into each open section of frame on door half 'A' up to the 150mm mark.

At the top and middle horizontal members fix the spigot with four 12x20 self drilling screws through the pre-drilled holes (Figure 33). At the bottom horizontal member fix the spigot with two 12x20 self drilling screws through the top pre-drilled holes, and two 10x16 wafer head screws through the front pre-drilled holes (Figure 33).

Slide door half 'B' onto the three spigots and fix as specified for door half 'A'.

Clamp the angle track to the bottom of the assembled door frame, ensuring the ends of the angle track align with the ends of the door frame (Figure 33).

Drill pilot holes along the angle track, through the face located against the bottom horizontal member. The first pilot hole is to be spaced 100mm from each end of the angle track and all following pilot holes moving toward the centre of the angle track at maximum 400mm centres. If a pilot hole is located over the bottom spigot, move the pilot hole 30mm offset from the end of the spigot.

With the angle track clamped to the bottom horizontal member, fix a 10x16 wafer head screw through every pilot hole.

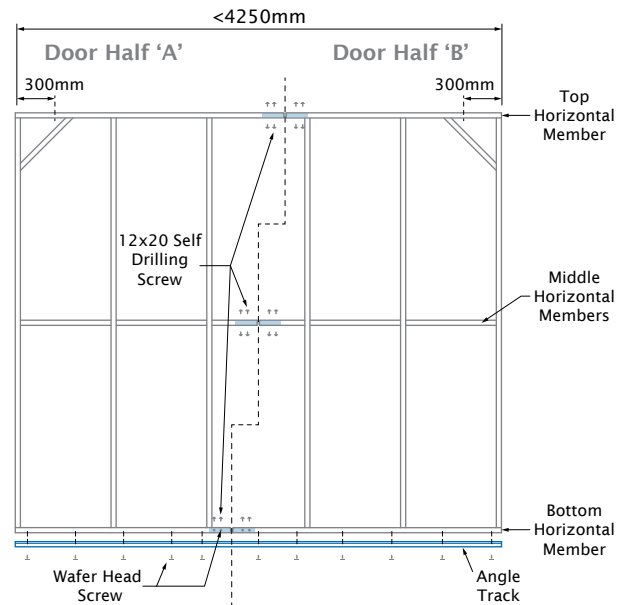
## Sliding Door Sheets

Full Superdek sheets are provided for the sliding door frames. Lay all the sheets on the sliding door frame before fixing the sheets to the frame.

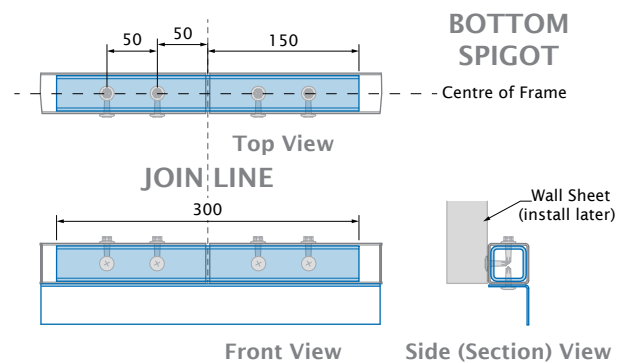
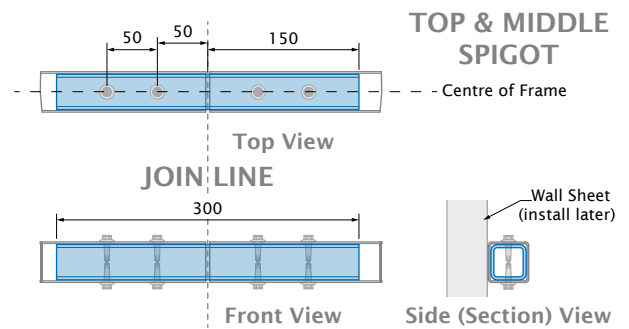
The sheets located at each end of the sliding door frame must be oriented so the underlap edge is in line with the outside edge of the vertical member (see example in Figure 34). Ensure the sheets are aligned with the bottom face of the bottom horizontal member.

**Note:** The sheets must not be located over the angle track.

Door sheets are fixed to the door frame with 10x16 self drilling screws in the pan of every sheet along each horizontal member. Use a string line to ensure the screws are aligned neatly. Drill Ø14mm holes for the sliding door carriage wheels through the top horizontal member of the door frame, 300mm in from the edge (Figure 33).



Front View  
EXAMPLE OF DOOR ASSEMBLY



SPIGOT FIXING DETAILS

Figure 33

**Note:** Do not install the carriage wheels at this stage.

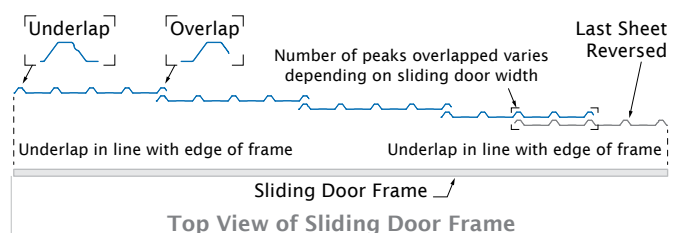


Figure 34

# SLIDING DOOR - HEADER BEAM PREPARATION

Complete the steps below in conjunction with "Sliding Door - Framework (Gutter Side)" and "Sliding Door - Framework (Gable End)".

**Note:** If sliding doors are located under the header beam, in the gable end of the Homeshed, the sliding door track support brackets, sliding door track and carriage wheels must be installed to the header beam before the header beam is fixed to the Homeshed frame.

## Before Installation of Header Beam/s

Sliding door header beam/s require holes to be pre-drilled in preparation for the framework brackets as well as the sliding door bracketry.

Beginning at one end of the Homeshed, lay the components in the positions required for the sliding door, including the header beam/s, header beam brackets, and if there is more than one header beam, the header beam joiner/s.

To determine the order in which the header beams will be installed, lay them out in the same position as they will be located on the Homeshed.

In order to determine the bottom of the header beam, keep in mind the web of the header beam will be located facing the outside of the Homeshed.

Determine the location on the header beam of the sliding door when open and closed. Lay the sliding door track under the header beam as a guide. Mark on the header beam the location of the first support bracket, approximately 150mm from the end of the sliding door track. All brackets are to be spaced along the header beam at maximum of 800mm centres. Mark the locations of the brackets.

**Note:** If a door is located in a gable end, adjacent a portal column, and header beam channel is used in conjunction with a C200/C250 portal column, the first support bracket will be located 100mm from the end of the header beam (Figure 48A).

## TRACK SUPPORT BRACKETS UNDER HEADER BEAM

If a sliding door track is located under the header beam/s, the holes to be drilled are in line with the pre-punched holes on the bottom flange of the header beam (Figure 35).

Mark the hole spacings at a maximum of 800mm along the bottom flange and drill Ø14mm holes (Figure 36).

Keep in mind that bolts and bolt holes can be shared between the header beam bracket/joiner and the sliding door track support brackets, if required.

**Note:** If two header beams are required to cover the width of the Homeshed, the holes at the adjoining ends of the header beams must be 350mm in from the ends of the header beam (Figure 37).

## SIDEFIX SUPPORT BRACKETS

If sliding door/s are located on the outside of the Homeshed, place the sliding door sidefix support brackets against the web of the header beam, with the underside of the sliding door sidefix support brackets in line with the bottom flange of the header beam (Figure 35).

Use the pilot holes in the sliding door sidefix support bracket as a template for the hole locations (Figure 35).

**Note:** Do not fix the sliding door sidefix support brackets at this stage.

See the "Sliding Door - Framework" and "Sliding Door - Track Bracketry and Doors" section relevant to your Homeshed for installation of header beam/s and header beam bracketry.

**Note:** If sidefix support brackets are to be installed in conjunction with track support brackets under the header beam, stagger the brackets by 50mm (Figure 36).

**Note:** If the sliding door will travel over a clad wall, the sidefix support brackets must be fixed in the pan of the wall sheet, through to the header beam. When pre-drilling the holes in the header beam, ensure the holes will fall in the pan of the wall sheets.

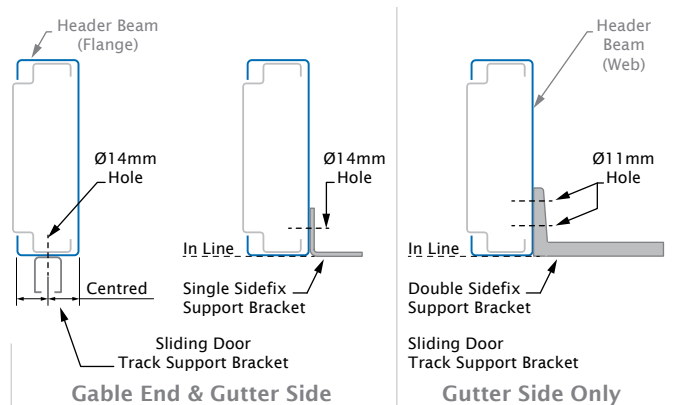


Figure 35

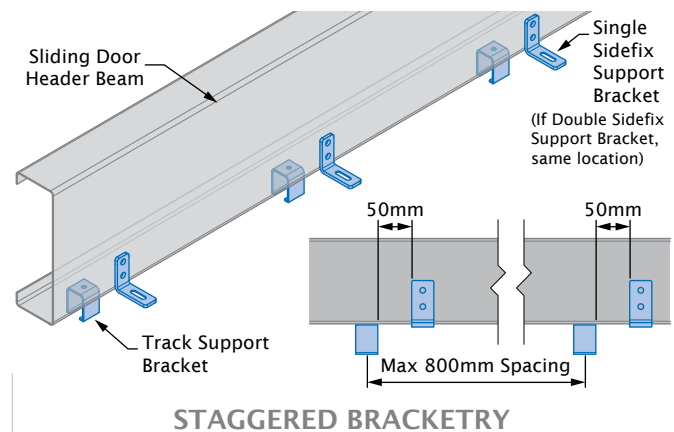


Figure 36

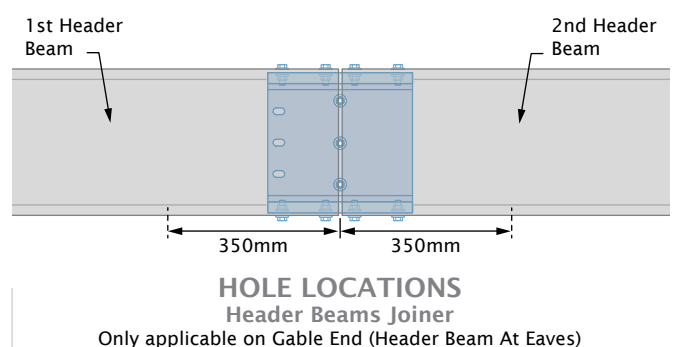


Figure 37



## SLIDING DOOR - FRAMEWORK (GUTTER SIDE)

Complete the steps below in conjunction with the “Building the Frame” section.

For ease of installation, complete the process of drilling the holes in the header beam for the sliding door brackets (section “Sliding Door - Header Beam Preparation”) before installing the sliding door framework.

**Note:** Inclusive of any joints, header beams must be continuous over a minimum of two spans.

### Header Beams

The header beam brackets and header beam joiners are installed inside the header beam, with the web of the bracket/joiner sitting between the lips of the header beam (Figure 35).

Lay the header beam on the ground with the header beam brackets located inside the header beam. Align every pair of pre-punched holes on the header beam to the slots on the brackets.

**Note:** The header beam brackets must not sit past the lips of the end portal columns once installed (Figure 38).

If two header beams require joining, locate the header beam joiner in the end of one of the header beams, with half of the header beam joiner protruding (see Figure 39).

Loosely fix the top of all the header beam brackets and header beam joiners to the header beam/s with M12x30 flanged purlin bolts.

Lift the first header beam at the end portal bay of the Homeshed. Using three M12x30 flange purlin bolts, fix the header beam to the Homeshed through the pre-punched holes on the flange of the end portal column and the slots on the web of the header beam bracket (Figure 38). Confirm the header beam bracket does not sit past the lips of the end portal column (Figure 38).

To secure the weight of the header beam fix both ends of the first header beam to the Homeshed frame. Continue fixing by securing the remaining header beam brackets to the portal columns (Figure 40).

When more than one header beam is required, lift the next header beam into place against the portal columns. Slide the open end of the next header beam over the header beam joiner of the secured header beam (Figure 39). Ensure the joining ends of the header beams are secured to the joiner and fix the other end of the adjoining header beam to the portal column as described previously. Fix all remaining brackets to the portal columns with M12x30 flange purlin bolts as previously described.

Repeat the process with any remaining header beams, until header beams are installed the full length of the Homeshed.

Use clamps to ensure the header beams remain flush when tightening all the bolts used to fix the header beams to the portal columns.

Once all the header beams are fastened securely, install the sliding door track support or sidefix support brackets along the length of

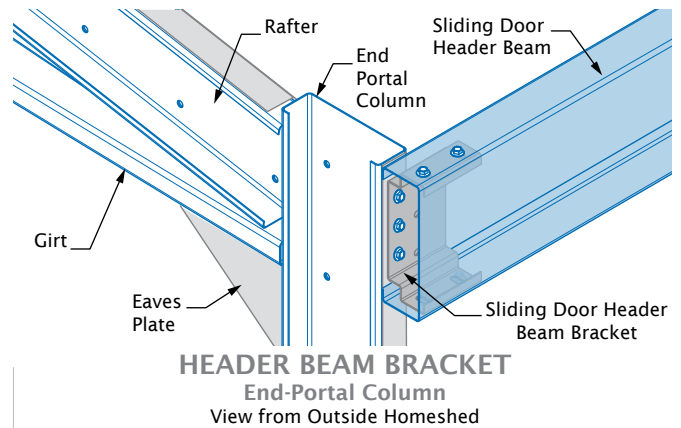


Figure 38

the header beam through the holes previously drilled, as described in sections “Sliding Door - Header Beam Preparation” and “Sliding Door - Track Bracketry and Doors”.

Return along the length of the header beam/s tightening the bolts in the header beam bracketry.

**Note:** There can be occasions where the bolt from the sliding door track support bracket located under the header beam will also function as one of the bolts used to secure the header beam to the header beam bracket or joiner.

See section “Sliding Door - Track Bracketry and Doors” for the installation of the sliding door tracks, sliding doors, door track stops and sliding door pads.

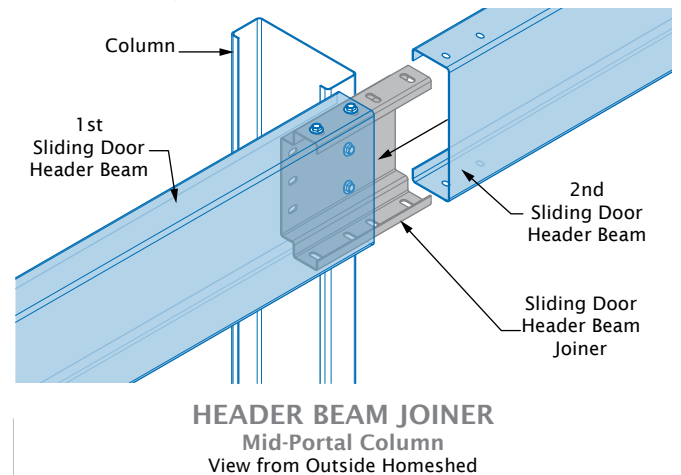


Figure 39

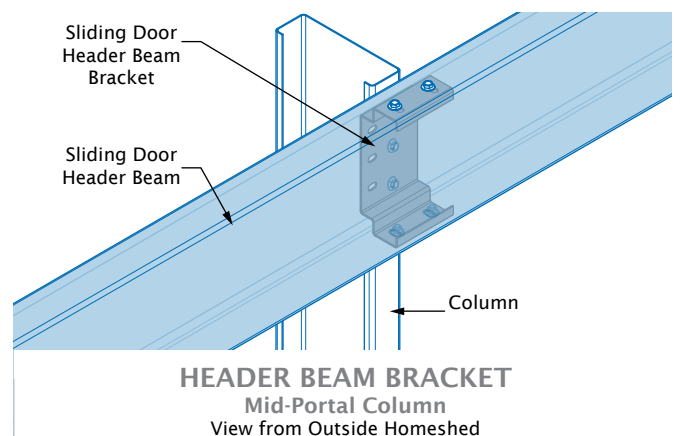


Figure 40



## Filler Columns

If the sliding door opening is located within the end portal bay of the Homeshed a C200 filler column is required.

Filler columns are oriented in the same direction as the portal end column (Figure 41). To confirm the length of the filler column is correct, place the filler column under the header beam and adjacent to the end portal column. If required, trim the length to suit.

Mark the centre of the filler column flange located against the end portal column at 100mm in from the ends, and at the mid-height of the filler column (Figure 41).

Place corresponding marks on the flange of the portal column that the filler column will be located against.

**Note:** The filler column is to be installed so the web sits flush with the web of the end portal column.

Drill  $\varnothing 14$ mm holes at the marks created on the filler column and portal column. Use these holes to fix the filler column against the portal column with M12x30 flange purlin bolts.

Repeat the filler column installation process for any other required gutter side filler columns.

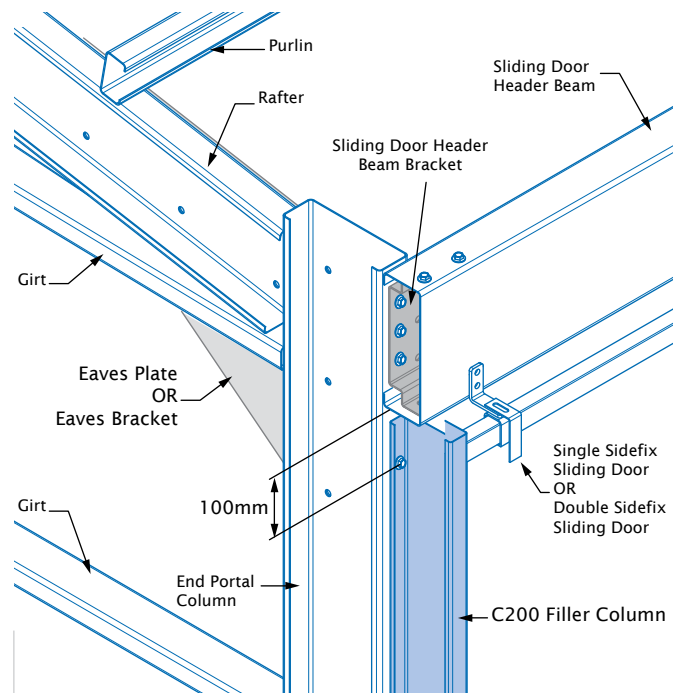


Figure 41

See "Sliding Door - Flashing" section for the process of installing header beam flashings and filler column flashings.

## SLIDING DOOR - FRAMEWORK (GABLE END)

Complete the steps in this section in conjunction with the "Building the Frame" section.

For ease of installation, complete the process of drilling the holes in the header beam for the sliding door brackets as described in the section "Sliding Door - Header Beam Preparation" before installing the sliding door framework.

**Note:** Inclusive of any joins, header beams must be continuous over a minimum of two spans.

This section is divided into two parts relating to whether the header beam will be located at eaves height, or above eaves height (Figure 42).

The header beam will be located at eaves height for Homesheds with an eaves height greater than 3.6m. In this situation the top of the header beam is in line with the internal corner of the eaves connection, and the header beam will run the full width of the Homeshed (Figure 42 - Header Beam At Eaves Height).

Where the eaves height is less than 3.6m the header beam will be inset and located above the eaves height. In this situation the top of the header beam sits above the internal corner of the eaves connection, and the header beam will only run to the end columns located in the gable end of the Homeshed (Figure 42 - Header Beam Above Eaves Height).

**Note:** If sliding door header beams are located above eaves height, the doors will only slide within the length of the header beam.

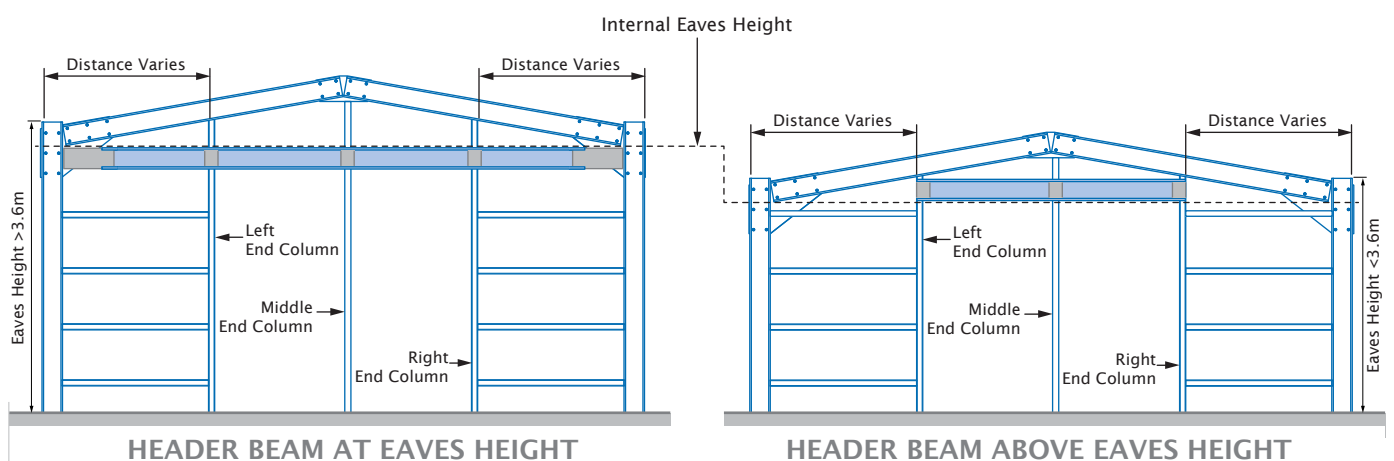


Figure 42

## Header Beam At Eaves

Begin by laying all gable end sliding door components on the ground in the positions they are to be installed.

### FRAMEWORK PREPARATION

Mark the flange of the end portal column 520mm down from the top (Figure 43). Locate an angle connector so the centre hole is oriented over the mark created with one angle connector leg against the flange of the portal column and the other leg against the eaves plate. Mark out the remaining holes of the angle connector on the portal column and eaves plate.

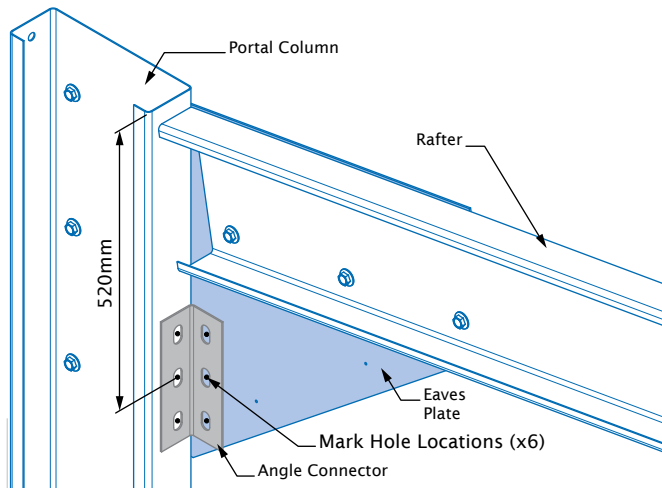


Figure 43

Replace the angle connector with the header beam channel or header beam joiner to confirm hole locations marked are correct.

### GABLE END HEADER BEAM CONNECTIONS

End Portal Column Size	Header Beam Connections Required
C200 Portal Column	Header Beam Channel + Angle Connector
C250 Portal Column	Header Beam Channel + Angle Connector
C300 Portal Column	Header Beam Channel + Angle Connector
C350 Portal Column	Header Beam Joiner + Angle Connector

Once hole locations are correct, drill Ø14mm holes on the portal column and eaves plate.

Repeat on the corresponding eaves connection.

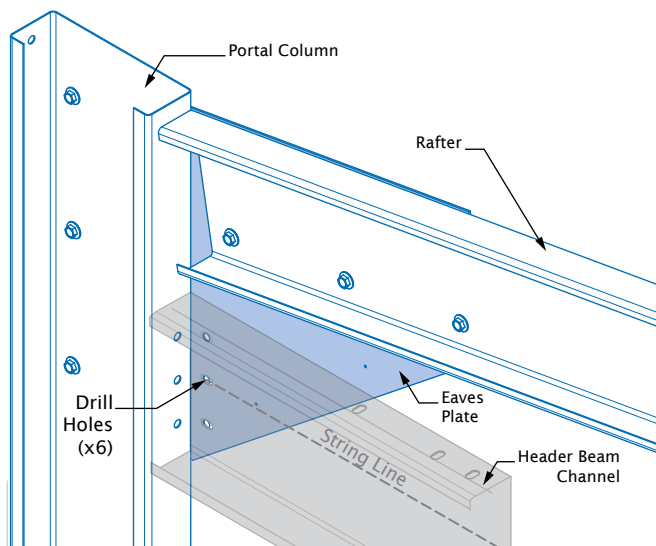


Figure 44

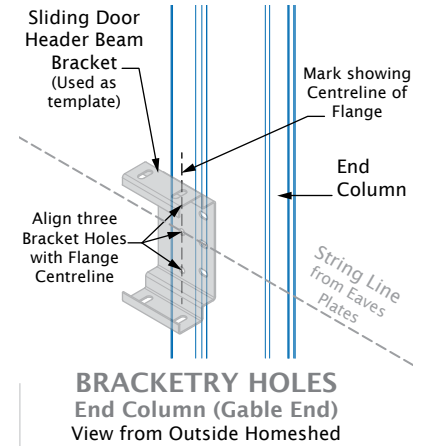
Header beams are pre-punched at the position of the header beam brackets. Use the punched holes to ensure end column/s are spaced correctly from the rafter and portal column (see “End Columns” section of “Building the Frame”).

**Note:** Wall girts are only to be installed if there is a section of clad wall on the gable end of the Homeshed.

Use the drilled holes to run a string line between both eaves plates (Figure 44).

Mark the end columns where the string line intersects (Figure 45).

Mark the centre of the flange vertically, approximately 150mm above and below the string line mark.



**BRACKETRY HOLES**  
End Column (Gable End)  
View from Outside Homeshed

Figure 45

Place a header beam bracket against the flange of the end column with the centre hole aligned with the string line mark. Use the centreline marked on the flange to orient the header beam bracket (Figure 45). Mark the other two header beam bracket holes on the end column, then drill Ø14mm holes.

Repeat the process for any remaining end columns on the gable end.

See section “Sliding Door - Header Beam Preparation”, for the process of drilling the holes for the sliding door brackets in the header beam.

**Note:** Do not install the sliding door brackets yet.

### RHS STIFFENER

**Note:** If the sliding door opening is greater than 4m, but no greater than 8m, it is likely an RHS stiffener will need to be installed in the header beam. See the “Gable End Door Type - Components and Footing Sizes” relevant to your Homeshed to confirm if an RHS stiffener is required.

Pre-drill holes on the header beam for the Series-500 12x20 screw, 50mm in from both cut ends of the header beam and 125mm in from the flange (Figure 46). Using these holes, string line the length of the header beam and drill holes at maximum 500mm centres for the rest of the Series-500 12x20 screws.

Centre the RHS along the web of the header beam and clamp in place. Ensure the end of the RHS stiffener and the joining end of the header beam are flush before fixing the RHS to the header beam with Series-500 12x20 screws.

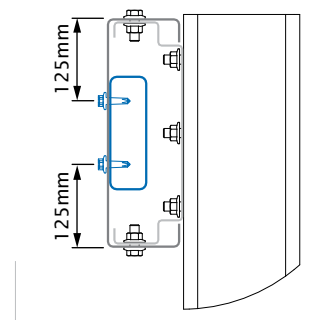


Figure 46

## HEADER BEAM INSTALLATION

Install header beam brackets inside the header beam where any end column/s will be located, indicated by the pre-punched holes on the header beam (Figure 40).

The ends of the header beam/s that will be fixed to the eaves plate and portal column will be installed with either a header beam channel, or with a header beam joiner as listed in the “Gable End Header Beam Connections” table in the “Sliding Door - Framework (Gable End)” section, and shown in Figure 48. Align the pre-punched holes of the header beam with the top and bottom slots of the header beam connection and fix with M12x30 flange purlin bolts.

### SINGLE LENGTH HEADER BEAM INSTALLATION

If the provided header beam runs the full width of the Homeshed, raise the header beam and angle connector to the eaves plate. Ensure the header beam connection is located between the angle connector and eaves plate. Align the holes on the three components and fix in place with M12x30 flange purlin bolts. Fix both header beam ends.

If there are end columns, fix the header beam brackets to the end columns through the holes drilled previously on the flange of the end column, using M12x30 flange purlin bolts (Figure 45).

Further secure the header beam channel or header beam joiner to the eaves plate with three Series-500 12x20 self drilling screws (Figure 48).

### MULTIPLE LENGTH HEADER BEAM INSTALLATION

If the header beam is broken over the full width of the shed, a header beam joiner is required to connect the two header beams over an end column. The header beam containing the header beam joiner must be the first to be installed.

In order to be able to install the second header beam, the header beam joiner must be fully inserted into the first header beam, as close to the joining end of the header beam as possible, and temporarily fixed in place using one flanged purlin bolt in the top of the header beam (Figure 47A).

**Note:** If the sliding door track is located under the header beam, the shorter of the two sliding door tracks must be installed on the same header beam that contains the header beam joiner (Figure 47).

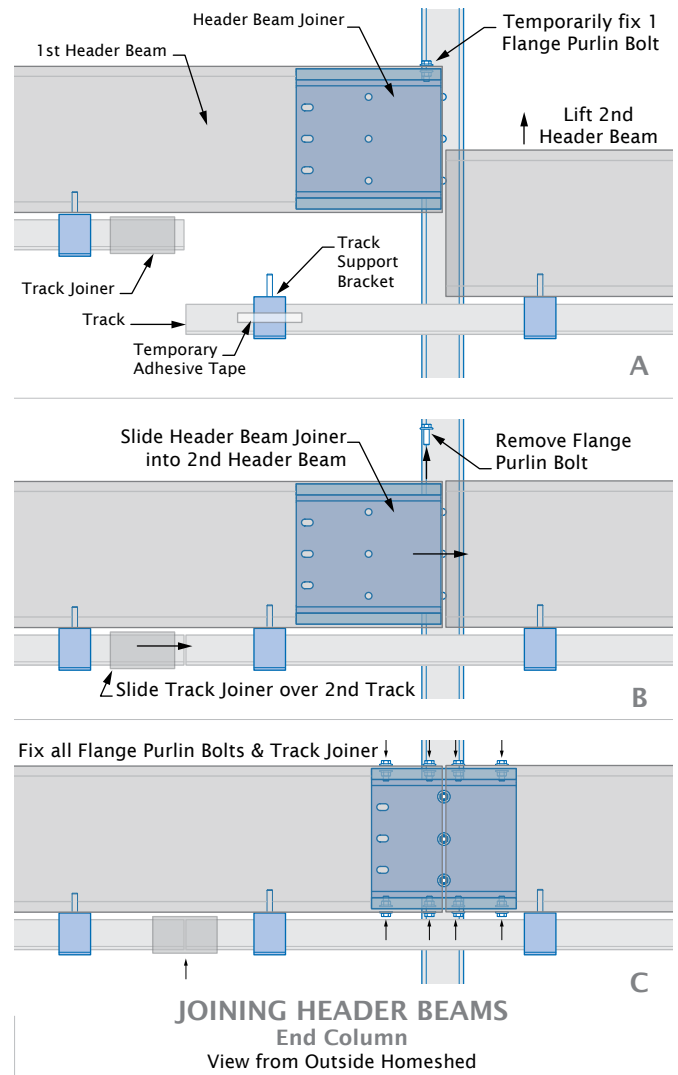


Figure 47

Fix the sliding door track support brackets to the header beams, while the components are on the ground.

Where the track support brackets are located under the first header beam, and a corresponding sliding door track is located under the second header beam, temporarily secure those track support brackets to the sliding door track with adhesive tape (Figure 47A).

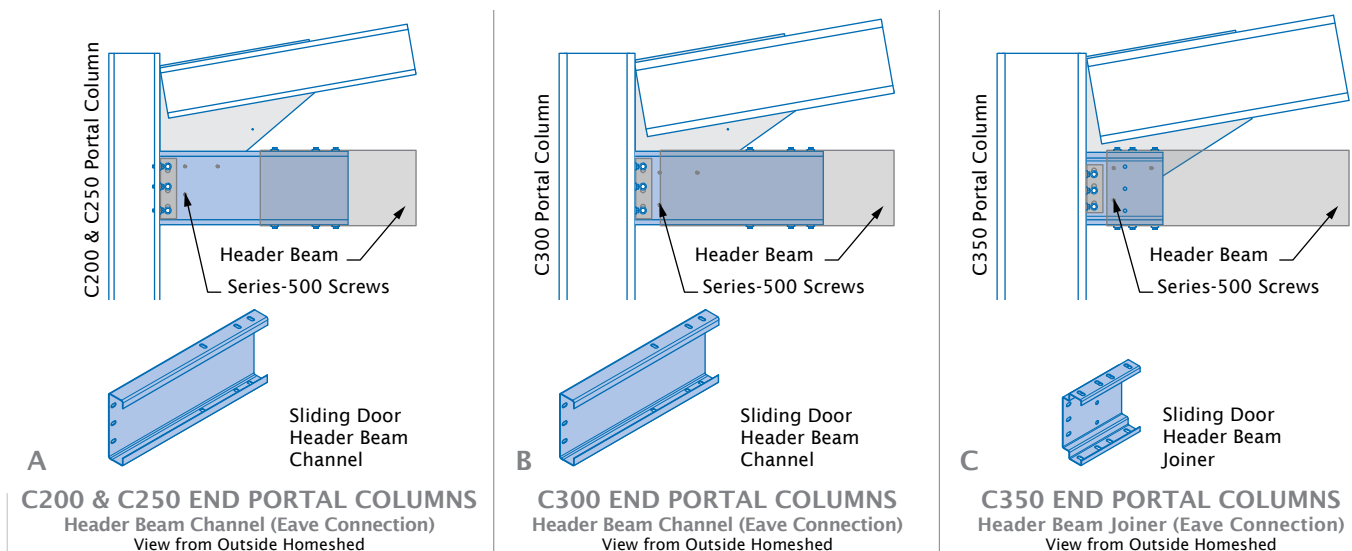


Figure 48

**Note:** If a sliding door is located under the header beams, the sliding door track support brackets, sliding door track, carriage wheels and sliding door track joiner, must all be installed on the header beams before the header beams are fixed to the Homeshed frame. Sliding door sidefix support bracket fixing details are in section “Sliding Door - Track Bracketry and Doors”.

Raise the first header beam and angle connector to the eaves plate. Ensure the header beam connection is located between the angle connector and eaves plate. Align the holes on the three components and fix in place with M12x30 flange purlin bolts.

If there is an end column located mid-length of the header beam (not at the joining end of the header beam) fix the corresponding header beam bracket to the end column with three M12x30 flange purlin bolts.

If the only end column available is located at the joining end of the header beam, prop the header beam at the joining end while installing the second header beam (Figure 47A).

Install the second header beam to the eaves using the same process as for the first header beam.

**Note:** If there are sliding door track support brackets located under the first header beam, while installing and fixing the header beam and angle connector to the second eaves plate the bolts from the sliding door track support brackets temporarily fixed with adhesive tape will need to be inserted into the pre-drilled holes on the first header beam (Figure 47B).

Free the header beam joiner from the first header beam and slide half into the second header beam. Fix to the header beams and end column with M12x30 flanged purlin bolts (Figure 47C). Also slide over the sliding door track joiner and fix to both sliding door tracks (Figure 47C).

Once both the header beams are fastened securely to the portal and end columns, return along the length of the header beams tightening the bolts. Ensure the web of the header beams remain flush.

Further secure the header beam channel or header beam joiner to both eaves plates with three Series-500 12x20 self drilling screws per eaves plate (Figure 48).

If sliding doors are also installed on the outside of the Homeshed, see section “Sliding Door - Track Bracketry and Doors” for installation of sidefix support brackets, door track/s, sliding door/s, door track stop/s and sliding door pads.

See “Sliding Door - Flashing” section for process of installing header beam flashings.

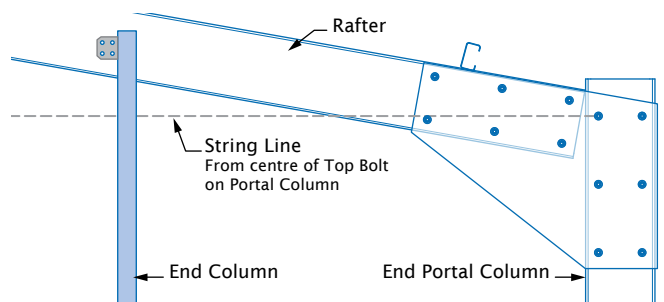
## Header Beam Above Eaves

Begin by laying all gable end sliding door components out on the ground, oriented and in the positions they will be in once installed. Determine the spacing and position of components from the end portal columns, and therefore the location of the end columns in relation to the rafter.

### FRAMEWORK PREPARATION

Install the end columns as described in the “End Columns” section of “Building the Frame”, using the wall girts as a template to ensure the end column/s are spaced correctly from the portal columns and the rafter. Install wall girts as described in the “End Wall Girts” section of “Building the Frame”, but with the internal end of the wall girt fixed to the end column.

Run a string line from the centre of the top bolt on the left end portal column, to the corresponding bolt on the right end portal column (Figure 49). Where the string line intersects the end column/s, mark the centre of the flange (Figure 50). Use this mark to create a centreline running vertically along the flange, approximately 150mm above and below the string line mark.



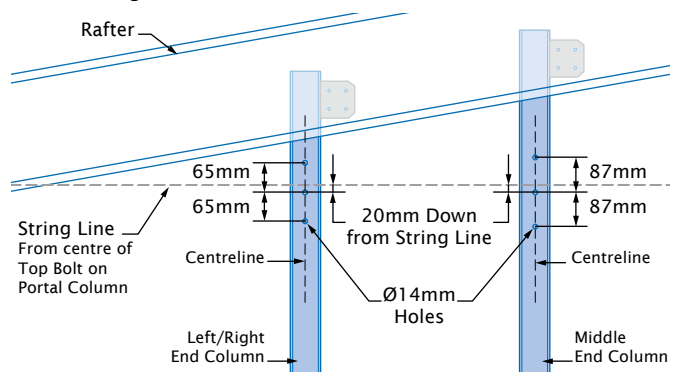
**STRING LINE LOCATION**  
End Column (Gable End)  
View from Inside Homeshed

Figure 49

Use the centreline marked on the flange of the end column to mark 20mm below the string line. This will become your centre mark. Mark above and below this centre mark at the distances specified in Figure 50.

At the left and right end columns, use the slots on the web of a header beam bracket to confirm the marks are aligned. At the middle end column, use the centre three holes of the header beam bracket to confirm the marks are aligned. Positioning is shown in Figure 51.

Once the marks are correct, drill  $\varnothing 14\text{mm}$  holes through the end column flange.



**HEADER BEAM BRACKET HOLE LOCATIONS**  
End Column (Gable End)

Figure 50

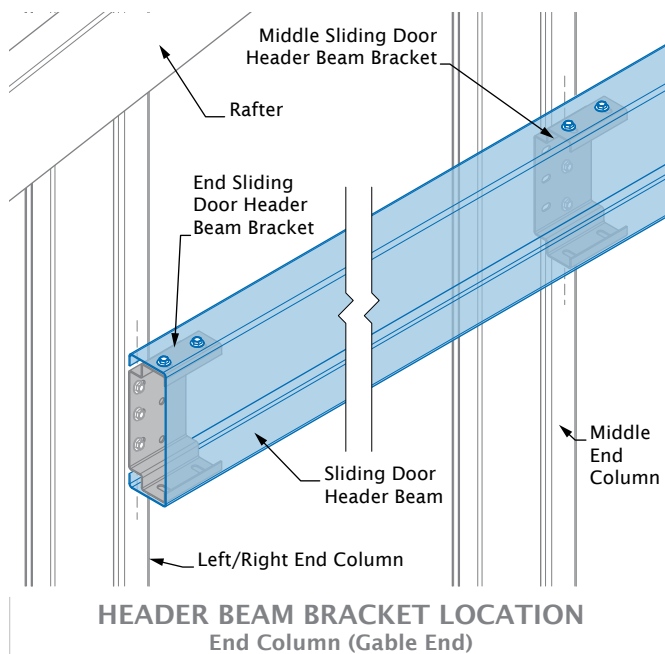


Figure 51

Repeat the process for all remaining end columns at the gable end.

Ensure the holes for the sliding door track support brackets, or the sliding door sidefix support brackets, have been pre-drilled in the header beam (see section “Sliding Door - Header Beam Preparation”).

**Note:** Do not install the sliding door brackets at this stage.

## HEADER BEAM INSTALLATION

Install the header beam brackets inside the header beam where the end column/s will be located, as indicated by the pre-punched holes on the header beam (Figure 51).

**Note:** If a sliding door is located under the header beam, the sliding door track support brackets, sliding door track, door track stop/s and carriage wheels must all be installed on the header beam before the header beam is fixed to the Homeshed frame. See section “Sliding Door - Track Bracketry and Doors” for installation details.

Lift the header beam so the header beam brackets are located over the left and right end columns.

Align the slots on the header beam bracket with the three holes drilled on the end columns and fix in place with M12x30 flange purlin bolts.

If there is a middle end column, fix the header beam bracket to the end column through the header beam bracket centre holes and the holes drilled previously on the flange of the end column, using M12x30 flange purlin bolts (Figure 51).

If sliding doors are located outside the Homeshed, see section “Sliding Door - Track Bracketry and Doors” for the process of installing the sliding door sidefix support brackets and tracks.

See “Sliding Door - Flashing” section for process of installing header beam flashings.

## SLIDING DOOR - TRACK BRACKETRY AND DOORS

When the sliding doors are located on the gutter side of the Homeshed, all the sliding door bracketry can be installed after the header beam has been installed on the Homeshed frame, but before the filler columns and header beam flashings are installed.

Where sliding doors are located under the header beam on the gable end of the Homeshed, the sliding door track bracketry must be installed before the header beam/s are installed to the Homeshed framework.

When the sliding doors are located outside the Homeshed gable wall on the gable end of the Homeshed, the sliding door track bracketry can be installed after the header beam has been installed on the Homeshed frame.

Every sliding door requires three tracking pads per sliding door, to be fixed to a concrete gutter running the length of the Homeshed that the sliding door/s will travel when opened or closed (Figure 52).

### Gutter Side - Track Support Brackets (Under Header Beam/s)

Once the header beam/s and sliding door track support brackets are installed and secure on the Homeshed frame, slide the sliding door track down the length of the Homeshed, through the track support brackets.

Where required, join two lengths of track together with the sliding door track joiner encasing the ends of the track and being fixed with the locking adjustment screws provided.

Fix the carriage wheels to the sliding door frame/s before sliding the completed door frame/s into the sliding door track/s (Figure 52).

Install the door track stops, tracking pads and locking mechanism as per the manufacturers instructions before installing the filler column (if the sliding door is located in the end bay).

## Gable End - Track Support Brackets (Under Header Beam/s)

Before installing the header beam to the Homeshed the sliding door track support brackets, track and carriage wheels must be installed along the length of the header beam.

While installing the header beam bracketry, install a track support bracket at every hole under the header beam that was pre-drilled in section "Sliding Door - Header Beam Preparation" (Figures 35, 36 and 52). Ensure the distance between track brackets is never greater than 800mm.

Slide the sliding door track along the length of the header beam, ensuring the track does not sit past the end of the header beam that will be fixed to the end portal column.

Place two carriage wheels per sliding door within the track, using adhesive tape to prevent them from falling out the end of the track when lifting the header beam.

Lift the header beam and install as described in the "Sliding Door - Framework (Gable End)" section relevant to your Homeshed.

Once all header beam/s with sliding door bracketry and tracks are installed, install the sliding door/s by attaching them to the carriage wheels already located in the sliding door tracks.

Install the door track stops, tracking pads and locking mechanism as per the manufacturers instructions.

## Gutter Side & Gable End - Sidefix Support Brackets

Fix the sliding door sidefix support brackets, single or double, to the header beam through the holes that were pre-drilled in section "Sliding Door - Header Beam Preparation" (Figures 35, 36 and 52). Ensure the distance between the sidefix support brackets is never greater than 800mm.

**Note:** If the sliding door travels over a clad wall, the wall sheets need to be installed before the sidefix support brackets (Figure 53). The wall sheets will need to have holes drilled to match the holes pre-drilled in the header beam for the sidefix support bracket as specified in section "Sliding Door - Header Beam Preparation". The sidefix support brackets must be fixed through the pan of the wall sheets (Figure 53).

Install the sliding door track support bracket assembly with the flashing brackets to each sidefix support bracket (Figures 52). Use a string line to ensure all the flashing brackets are in line down the length of the header beam/s.

Fix the carriage wheels to the sliding door frame/s before sliding the completed door frame/s into the sliding door track/s (Figure 52).

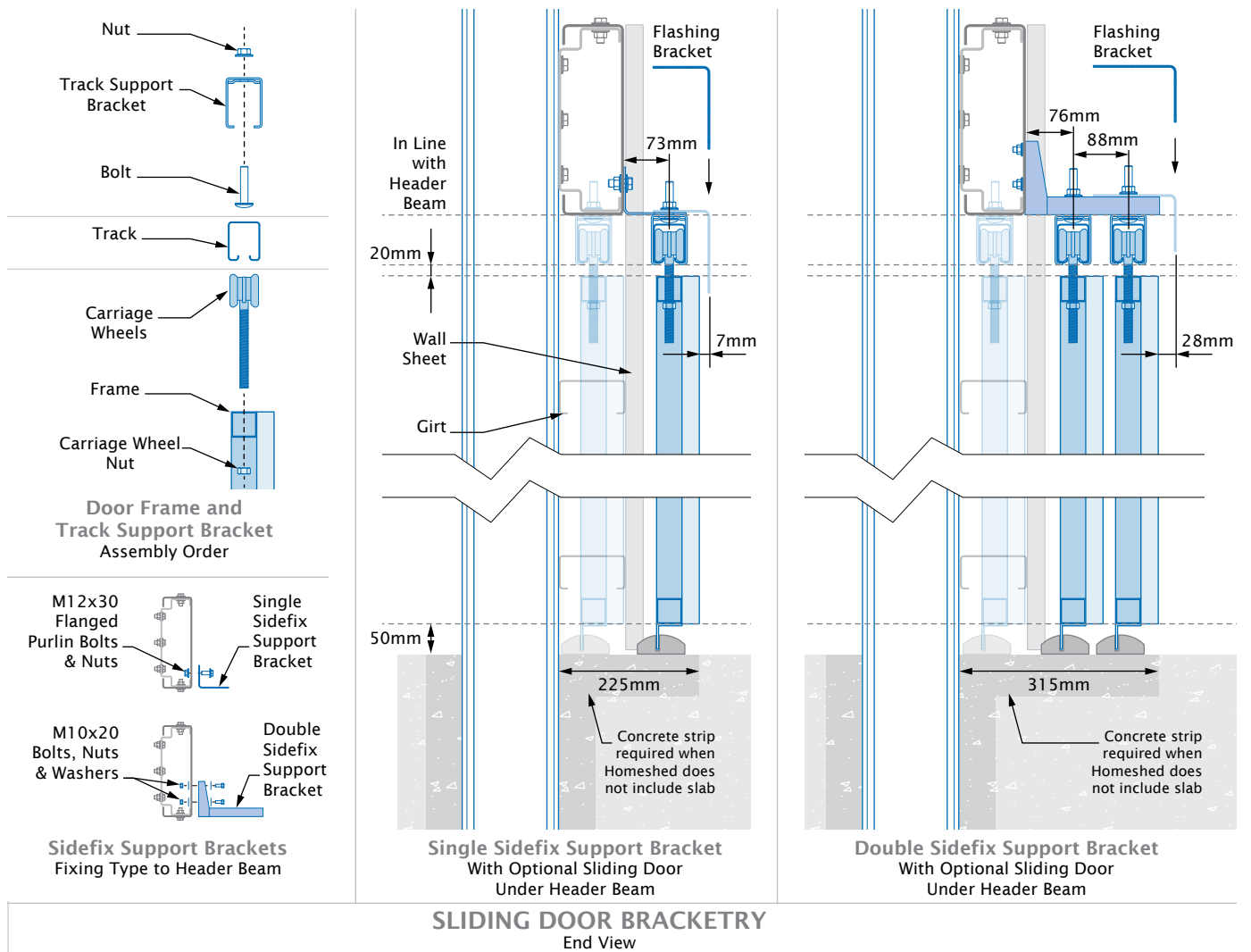


Figure 52



Install the door track stops, tracking pads and locking mechanism as per the manufacturers instructions before installing the filler column.

**Note:** Filler column is for gutter side end bay sliding door only.

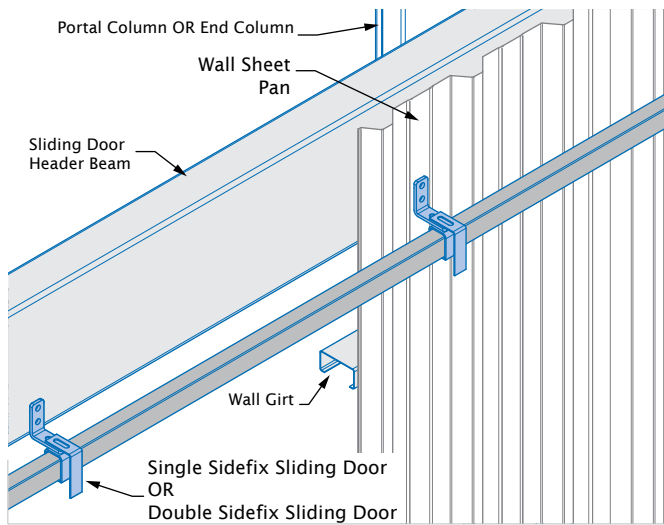


Figure 53

### Sliding Door Tracking Pads

Sliding door tracking pads are fixed to concrete with four M8x65mm masonry anchors. Use a spirit level to ensure the sliding door is vertical when locating the tracking pads. Use a string line to ensure the tracking pads are in line.

Two tracking pads are installed per door to secure the door in the closed position (Figure 54).

**Note:** This will differ with adjacent doors sharing the same track.

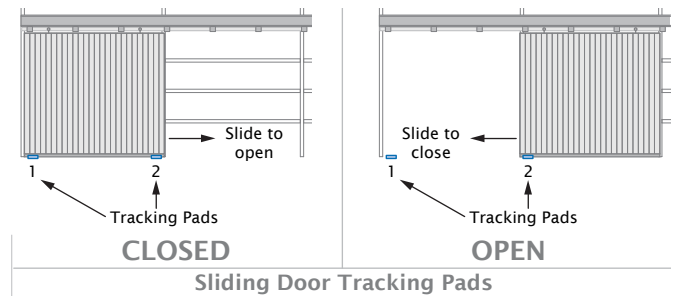


Figure 54

## SLIDING DOOR - FLASHING

### Header Beam Flashings

Header beam flashings for sliding doors are to be installed before the wall sheets (except when sliding door travels over clad wall), roof sheets and flashings shown in "Wall and Roof Sheet Installation" and the "Flashings" section.

All header beam flashings for sliding doors are to be fixed with 10x16 colour self drilling screws at maximum 600mm centres.

### Filler Column Flashings

Once header beam flashings, wall sheets and roof sheets are installed, the filler column flashings are to be fixed to the filler column with rivets at maximum 300mm centres (Figure 55).

See "Flashings" section for all other flashing installations.

**Note:** Where filler columns are not used, standard corner flashings are used.

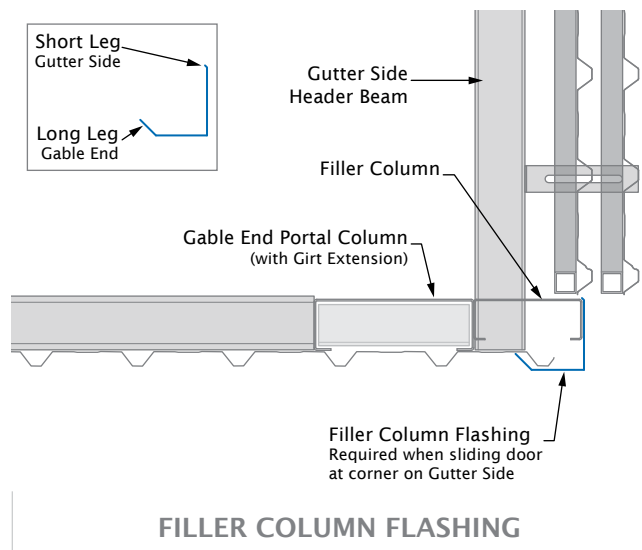


Figure 55

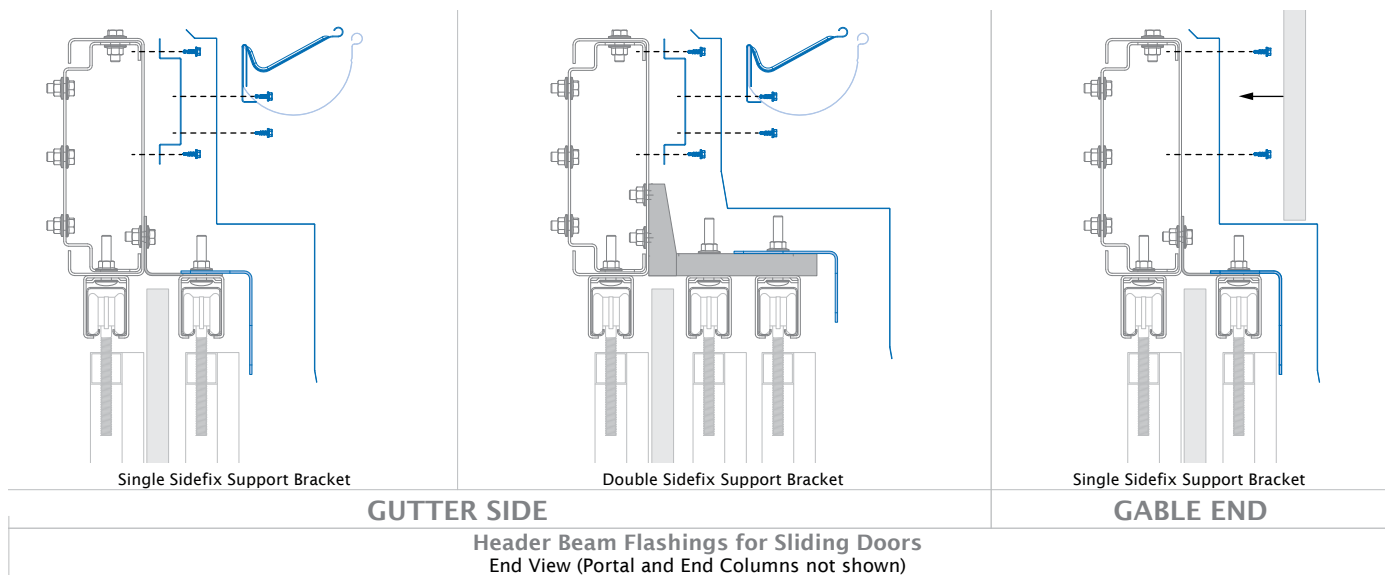


Figure 56

# WALL AND ROOF BRACING - ALL APPLICATIONS

The following information is applicable for all types of Homesheds and door configurations and must be considered in conjunction with the bracing instructions on the following pages.

- Strap bracing shall be used in all circumstances unless rigid bracing is specified.
- The minimum width of a braced bay shall be 3m.
- All bracing is set diagonally from one bay corner to the opposite corner within the same bay (unless specified otherwise or the bay is less than 3m wide).
- If bracing is required in a bay less than 3m wide, the bracing can be secured over an adjacent doorless bay in order to achieve the minimum 3m bracing span.
- Bracing is to be installed as tightly as possible and fixed with two 12x20 self-drilling screws at each end, at a minimum distance of 20mm from the end of the brace.
- The bracing is to be fixed with 12x20 self-drilling screws at every intersecting member along the length of the brace.
- If two lengths of strap bracing are to be joined, the lapped sections of bracing must locate over a minimum of two purlins or girts, with both ends of the strap joined with two 12x20 self-drilling screws (Figure 57).
- Allocated bracing requirements are suitable for sheds with a maximum of 9 bays.

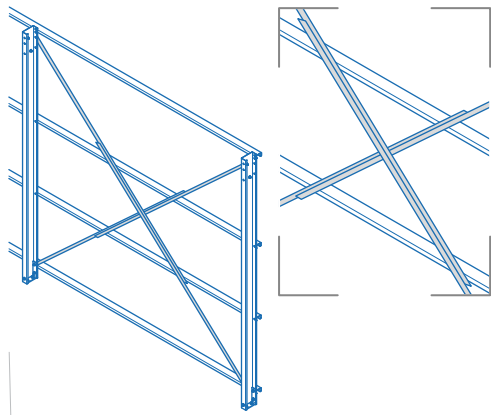
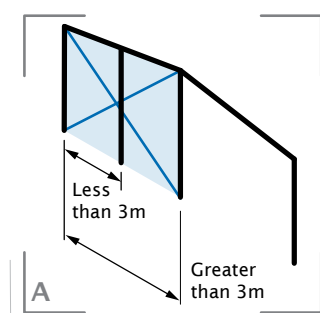


Figure 57



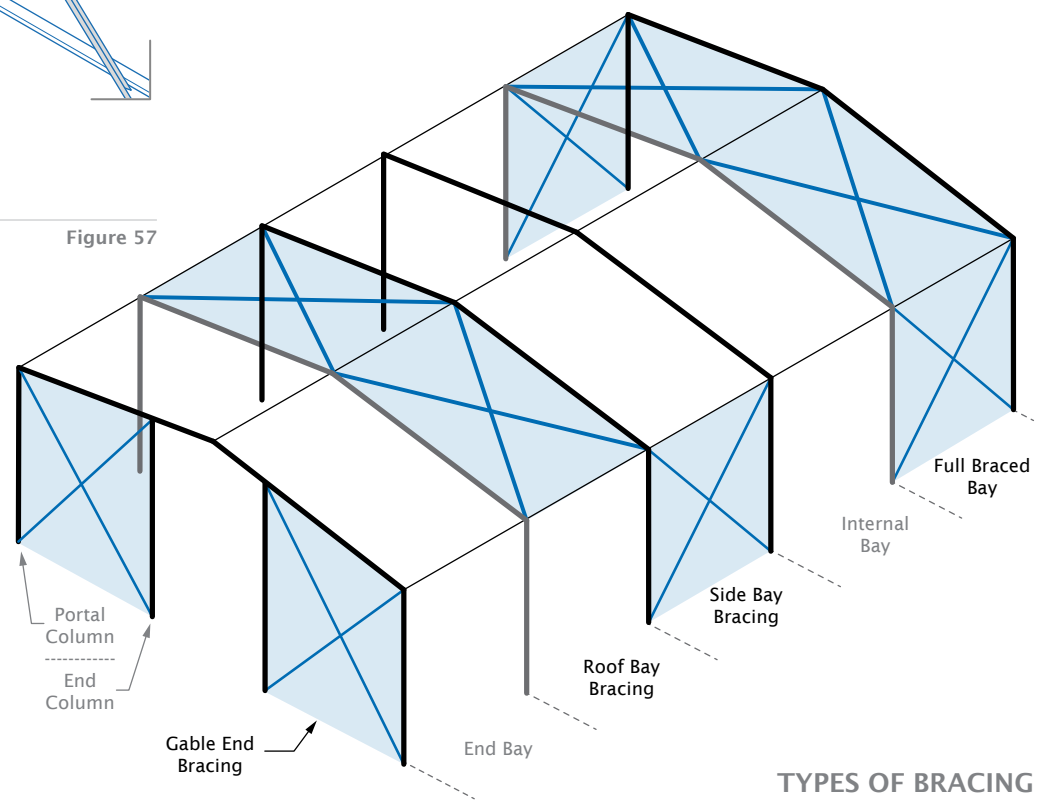
There are three areas bracing can be applied to the Homeshed, as listed below and in Figure 58.

- **Gable End Bracing** – A Gable End Bay denotes a space greater than 3m between two columns on the gable end of the Homeshed. The columns may be portal columns, end columns, internal columns or centre columns. If the distance between columns is less than 3m, the bracing must fix to the next available column (Figure 58A).
- **Roof Bay Bracing** – Bracing located from the portal rafter eave to the diagonally opposite portal rafter ridge within the same bay. Roof bracing occurs on the rafters on both sides of the ridge.
- **Side Bay Bracing** – Bracing located from the portal column eave to the diagonally opposite portal column footing within the same bay.
- **Full Braced Bay** - The bay has opposite sides braced according to Side Bay Bracing, in conjunction with Roof Bay Bracing.

Two other types of bracing that are required in some installations;

- **Rigid Roof Bracing** – C100 C-section fixed at the rafter eave and rafter ridge diagonally opposite within the one bay, in place of strap bracing.
- **Back-to-Back Purlins** – Two purlins are fastened together back to back with two 12x20 screws at 40mm spacing through the web, at quarter points between rafter supports (Figure 59). Back-to-Back Purlins are fixed to the rafter at the first purlin location above the eave and the first location below the ridgeline, running the full length of the Homeshed.

Refer to the “Wall and Roof Bracing” section relevant to your Homeshed to determine the location and type of bracing required.



TYPES OF BRACING

Figure 58

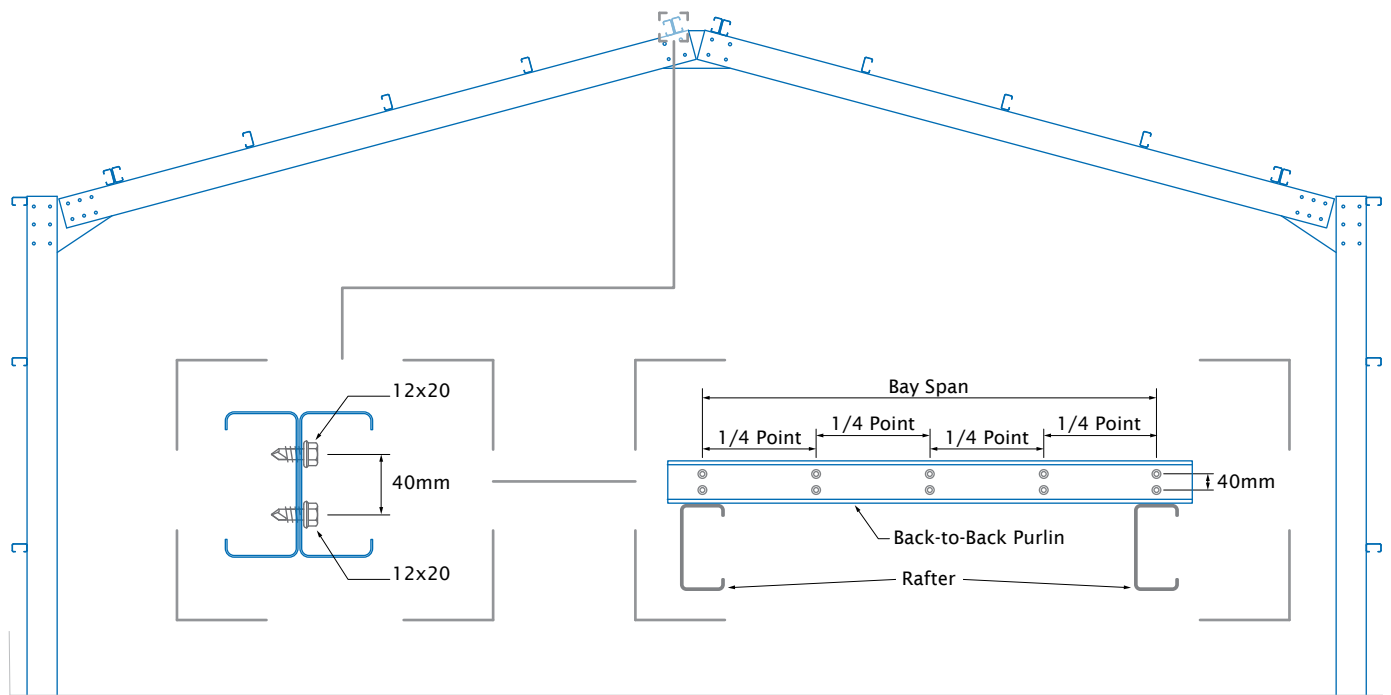


Figure 59

## WALL AND ROOF BRACING - FIXED BASE HOMESHEDS

Before fixing any bracing confirm the Homeshed frame is square and level.

If the design permits, Full Brace both end bays with 40x2.0 strapping (Figure 60A).

If it is not possible to Full Brace both end bays, at least one bay must be Full Braced (Figure 60B) with 40x2.5 strapping and Back-to-Back Purlins are to be installed at the ridge and eave locations.

If it is not possible to Full Brace any bay, Rigid Roof Bracing and Back-to-Back Purlins are required along the full length of the Homeshed (Figure 60C) with at least two side bays incorporating Side Bay Bracing to be installed using 40x2.5 strapping.

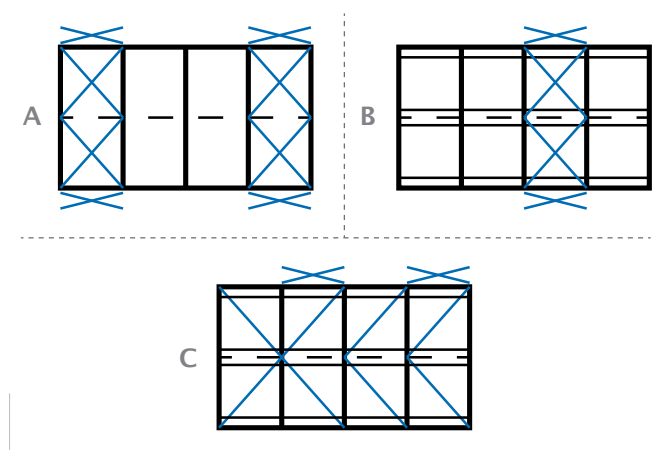


Figure 60

## WALL AND ROOF BRACING - PINNED BASE HOMESHEDS

### Two or Three Bay Homesheds

Before fixing any bracing confirm the Homeshed frame is square and level.

#### GABLE END DOOR(S) ONLY

For Homesheds with two or three bays and doors on the gable end/s only, 40x2.0 strap is to be used.

Homesheds with gable end doors at one or both ends require each end bay to be Full Braced bays (Figure 61A).

If an end bay cannot be Full Braced, the internal bay must be Full Braced to maintain the requirement that a minimum of two Full Braced Bays are installed (Figure 61B).

In this situation (Figure 61B) Back-to-Back Purlins are to be installed along the full length of the Homeshed at the ridge and eave locations.

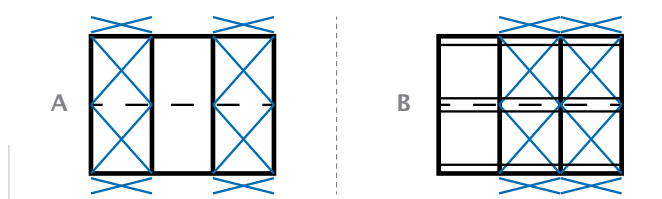


Figure 61

### GUTTER SIDE DOOR(S) ONLY

All strap bracing is to be 40x2.5 unless indicated otherwise.

**Note:** If both end bays cannot be Full Braced, Back-to-Back Purlins are required at the ridge and eave locations.

At least one bay must be Full Braced (Figure 62A). If none of the bays can be Full Braced, Rigid Roof Bracing is required along the length of the shed, and at least two side bays must incorporate Side Bay Bracing (Figure 62B).

In all circumstances Gable End Bracing must occur in at least one gable end bay at each end of the Homeshed.

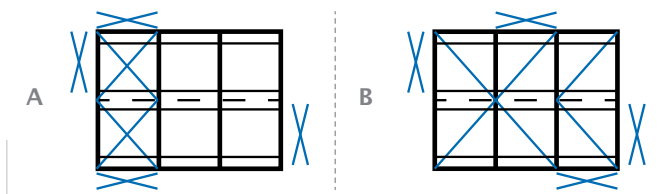


Figure 62

### GABLE END AND GUTTER SIDE DOOR(S)

All strap bracing is to be 40x2.5 unless indicated otherwise.

**Note:** If both end bays cannot be Full Braced, Back-to-Back Purlins are required at the ridge and eave locations.

At least one bay must be Full Braced and Gable End Bracing must occur in at least one gable end bay at each end of the Homeshed (Figure 63A).

If none of the bays can be Full Braced, Rigid Roof Bracing is required along the length of the shed, at least two side bays must incorporate Side Bay Bracing, and two gable end bays must be braced, either at the same end or one in each end (Figure 63B).

If Rigid Roof Bracing is required, all wall strapping is to be 40x2.0.

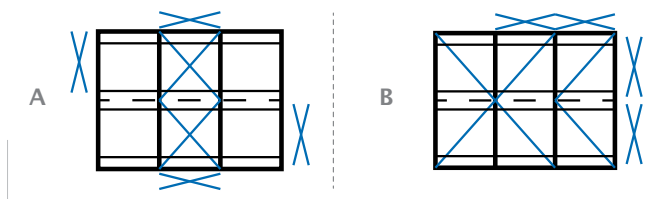


Figure 63

### More Than Three Bay Homesheds

Before fixing any bracing confirm the Homeshed frame is square and level.

### GABLE END DOOR(S) ONLY

For Homesheds with more than three bays and doors on the gable end/s only, 40x2.0 strap is to be used unless indicated otherwise.

Homesheds with gable end doors at either one or both ends require each end bay to be Full Braced bays, see Figure 64A.

**Note:** If an end bay cannot be Full Braced, Back-to-Back Purlins are required at the ridge and eave locations.

If an end bay cannot be Full Braced an internal bay must be Full Braced to compensate (Figure 64B) and the two end bays must be braced according to the Roof Bay Bracing specifications.

Gable End Bracing must occur in at least two gable end bays, either one at each end of the Homeshed or together on the same end of the Homeshed when the opposite gable end is fully installed with doors.

If Gable End Bracing cannot be installed at both gable ends of the Homeshed due to door positioning, gable end portal frames shall be upgraded to match typical internal portal sizes.

In the situation where only one gable end bay is braced at the end of the Homeshed, that bracing is to be 40x2.5 strap.

Sheds over 6 bays long are to be braced with 40x2.5 strapping throughout.

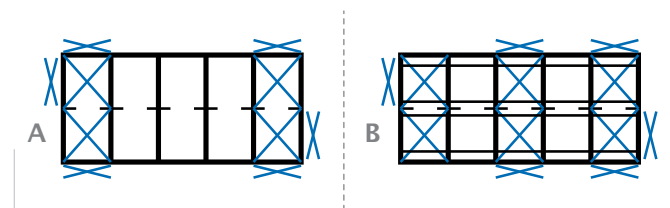


Figure 64

### GUTTER SIDE DOOR(S) ONLY

Strap bracing is to be 40x2.0 for Homesheds less than 12.0m in width and 40x2.5 for Homesheds greater than or equal to 12.0m wide, unless specified otherwise.

If the design permits, Full Brace at least two bays and Gable End Brace a minimum of two gable end bays at each end.

**Note:** Back-to-Back Purlins are to be installed at the ridge and eave locations, except in the situation where the two end bays are both Full Braced.

If it is not possible to Full Brace two bays, at least one bay must be Full Braced, with two additional Side Bays Braced (one either side of the Homeshed), along with Roof Bracing within each end bay and at least one Gable End Brace at each gable end (Figure 65A). Side wall bracing shall be 40x2.5 strap.

If none of the bays can be Full Braced, Rigid Roof Bracing is required along the length of the Homeshed in conjunction with at least two Side Bays Braced and a minimum of one Gable End Brace at each gable end (Figure 65B).

In the situation where only one gable end bay is braced, that bracing is to be 40x2.5 strap.

For sheds with 7-9 bays, additional bracing is required, refer "7-9 Bays" section in this installation guide.

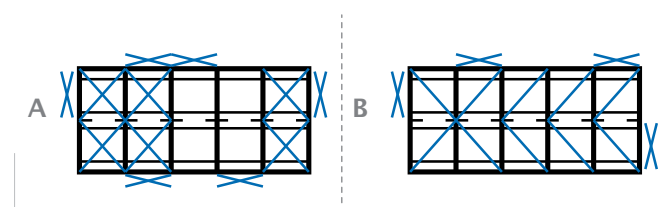


Figure 65

## GABLE END AND GUTTER SIDE DOOR(S)

Strap bracing is to be 40x2.0 for Homesheds less than 12.0m in width and 40x2.5 for Homesheds greater than or equal to 12.0m wide.

If the design permits, Full Brace at least two bays, Roof Brace both end bays of the Homeshed and Gable End Brace a minimum of one gable end bay at each end, see Figure 66A.

In the situation where only one gable end bay is braced, that bracing is to be 40x2.5 strap.

**Note:** Back-to-Back Purlins are to always be installed at the ridge and eave locations except in the situation where the two end bays are both Full Braced.

If it is not possible to Full Brace two bays, Rigid Roof Bracing is required along the full length of the Homeshed (Figure 66B) with at

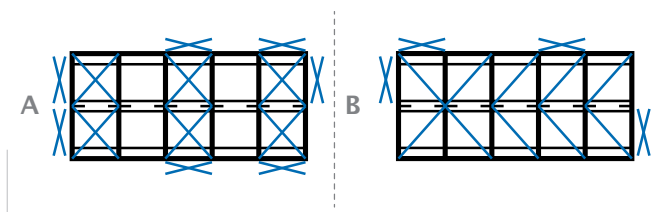


Figure 66

least two side bays incorporating Side Bay Bracing and a minimum of one Gable End Brace installed at each gable end using 40x2.5 strapping for all Side Bay and Gable End Bracing.

For sheds with 7-9 bays, additional bracing is required, refer below.

## 7 - 9 BAYS

If additional bracing is required for sheds with 7-9 bays as indicated above, refer below.

- Bracing shall be 40x2.5 strap with a minimum of two Full Brace bays and a minimum one Gable End Brace each end.
- Back-to-Back Purlins are to be installed at the ridge and eave locations except in the situation where the two end bays are both Full Braced.
- Each portal frame must be braced to gable ends with brace direction opposing from the centre of the shed (Figure 67).

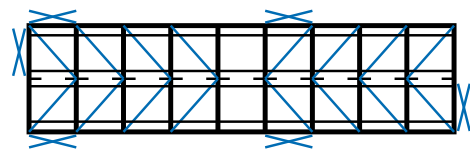


Figure 67

## RIGID ROOF BRACING

### Rigid Roof Bracing

The rigid roof bracing is located so the front bay bracing appears to be pointing towards the rear of the shed, and the bracing for the remaining bays appear to be pointing towards the front of the shed (example shown Figure 68).

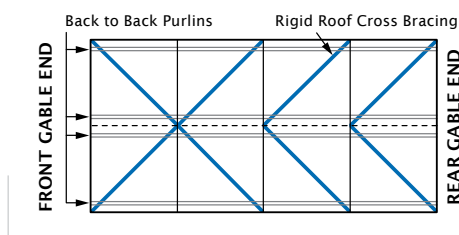


Figure 68

At the eaves connection the rigid roof bracing is bolted to the long leg on the section of rafter angle, with two M12x30 flanged purlin bolts.

The rafter angle is bolted to the eaves bracket via the short leg with five M12x30 flanged purlin bolts (Figure 69).

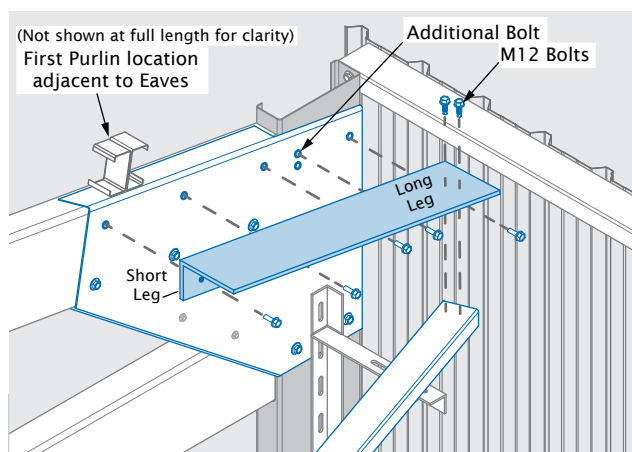


Figure 69

At the ridge, the rigid roof bracing is bolted to the rigid roof bracing plate with two M12x30 flanged purlin bolts and the plate secured to the rafter with two M12x30 flanged purlin bolts (Figure 70).

The rigid roof bracing is to be fixed to every intersecting member using two 12x20 self drilling screws.

### Back-to-Back Purlins

Back-to-Back Purlins are required on Homesheds that require rigid roof bracing.

The two purlins are fastened back to back with two 12x20 self drilling screws at 40mm spacing through the web, at quarter points between the supports (Figure 59).

The Back-to-Back Purlins are to be installed at the first purlin location adjacent to the eaves (Figure 69) and to the rafter via the rigid roof bracing plate, located at the first purlin location either side of the ridgeline (Figure 70).

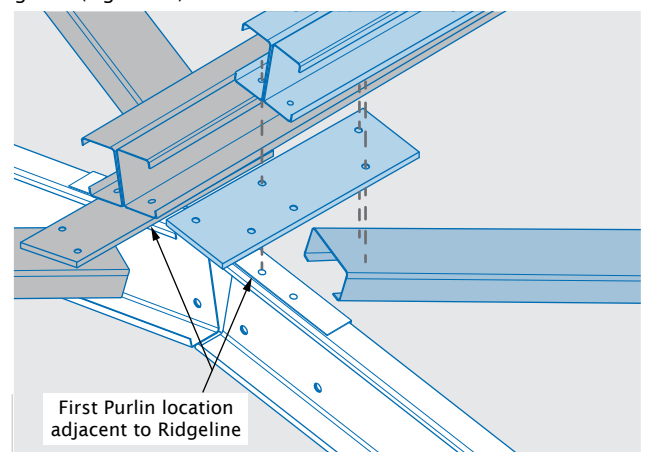


Figure 70

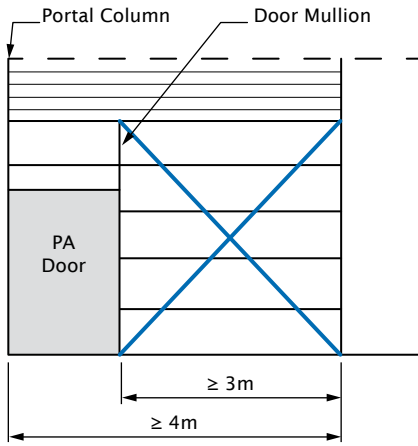
## WALL BRACING, PA DOORS

PA doors can be located in braced bays which are at least 4m wide with the door located directly adjacent a portal frame column if in a side bay, or an end column or portal column if in the gable end.

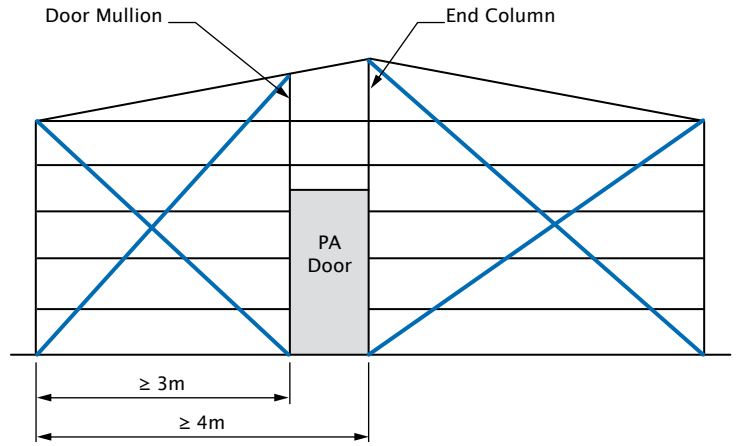
PA door jambs are to extend the full height of the shed.

In any of these cases, the bracing will end at the door location with the brace bay being minimum 3m wide.

If a PA door is to be located in a bay which is less than 4m wide, this bay shall be treated as a major door bay which cannot be braced.



BRACED SIDE BAY



BRACED GABLE END

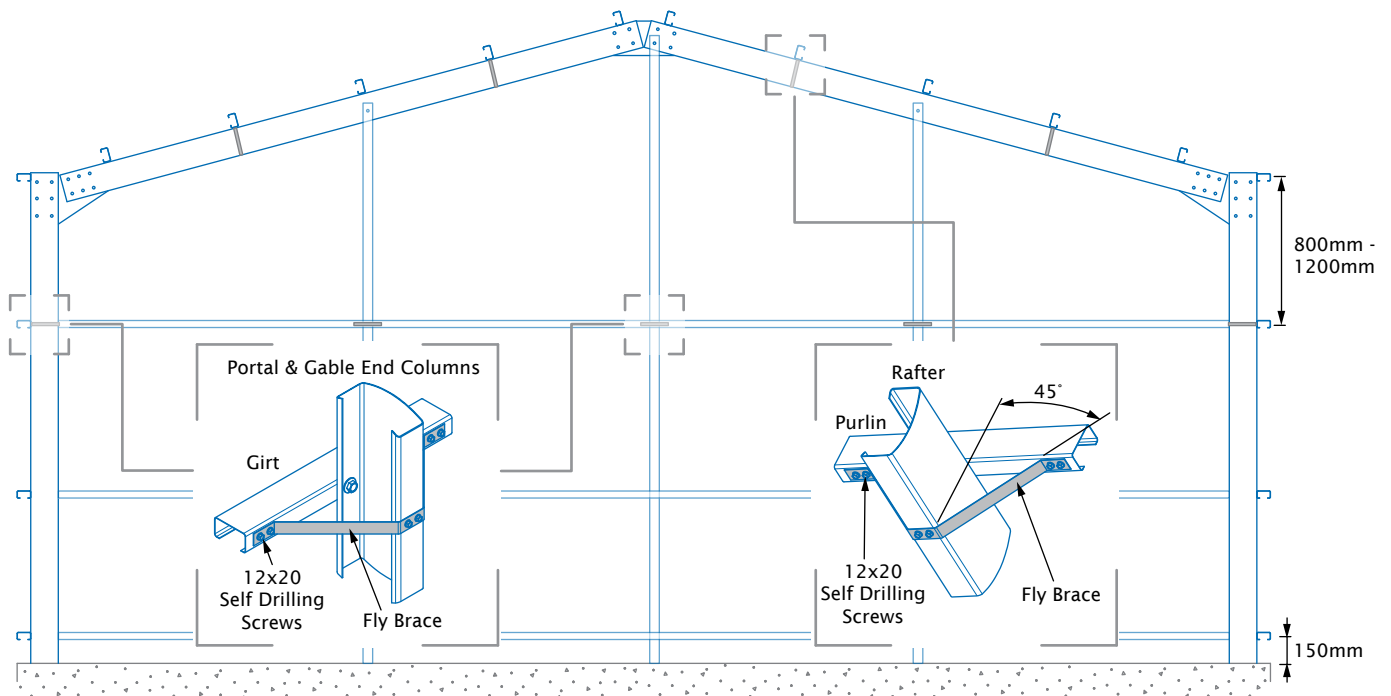
Figure 71

## FLY BRACING

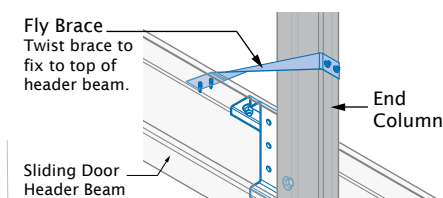
Fly bracing must be installed on the mid-portal columns and gable end columns at the first girt under the eaves bracket. Install fly bracing on mid-rafter at the second purlin down from the ridge bracket and the second purlin up from the eaves bracket (Figure 72).

Use two plain 12x20 self drilling screws at each connection and ensure the fly bracing is 45° on either side of the purlin/girt.

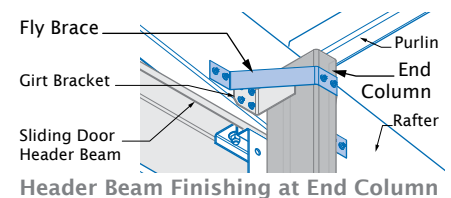
All fly bracing shall be minimum 40x1.5 strap.



FLY BRACING ON ALL HOMESHEDS



FLY BRACING SPECIFIC TO SLIDING DOOR GABLE END HEADER BEAMS



Header Beam Finishing at End Column

Figure 72



# WALL AND ROOF SHEET INSTALLATION

## Wall Sheeting

Complete the bracing, roller door frame, and PA door installation (see relevant sections in this installation guide) and ensure the framework is square and the diagonal measurements are equal. If installing a window, the "Windows" section must be read and followed in conjunction with this "Wall Sheeting" section.

**Note:** If a box gutter is to be installed, the longer wall sheets are to be installed on the box gutter side.

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 (Figure 48). The top of each wall sheet must be 5mm below the top wall girt (except in box gutter installation). This will prevent any rubbing between the wall and roof sheets.

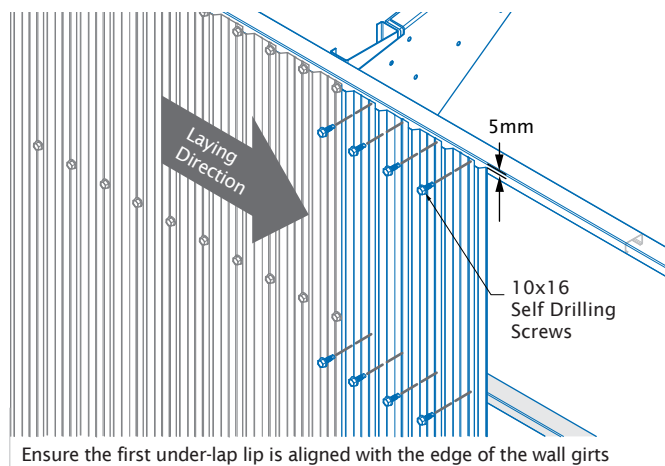


Figure 73

Before fastening all screws, run a string line from both ends of the wall through the centre of the wall girts to ensure all screws will be fastened in line.

Pan fix the Stratco Superdek wall sheets with 10x16 self drilling screws to every girt using one screw per pan. The sheets are laid with the short rib overlapping.

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

## Gable Wall Sheets

**Note:** Install the box gutter before fixing the gable wall sheets.

Before fixing the gable wall sheets, position the raking angle flashings to sit on the edge of each purlin following the roof line (Figure 74). Fasten the raking angle flashings to each purlin and top wall girt with one 10x16 self drilling screw.

Gable end wall sheets must be cut to a 10° angle at the appropriate distance along the sheet, as to match the height of the shed. Mark each sheet with a line conforming to the line of the raking angle flashing. Cut the sheets along this mark before pan fixing the gable wall sheets to the raking angle and Homeshed frame with colour 10x16 self drilling screws.

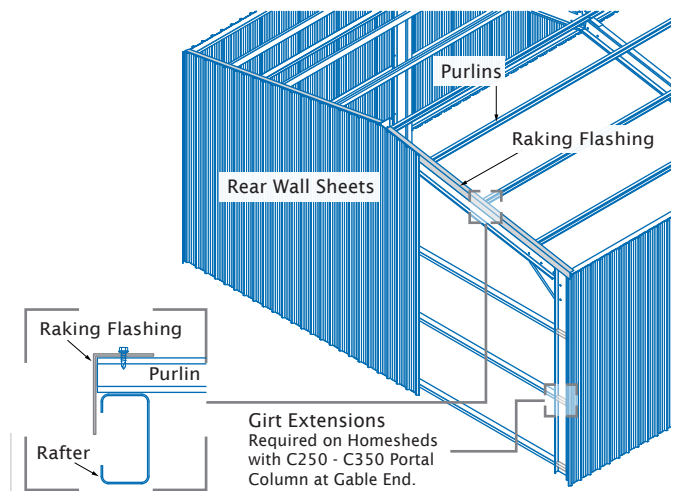


Figure 74

## Footings

Check the alignment of the walls with a string line. Pour the concrete pier footings around the column base and allow appropriate setting time before removing any temporary braces.

If you are fixing to a concrete slab, refer to the "Fixing Onto Concrete Slab" section in these instructions.

## Roof Sheets

**Note:** Install the box gutter before fixing the roof sheets. If a box gutter is to be installed, the shorter roof sheets are to be installed on the box gutter side.

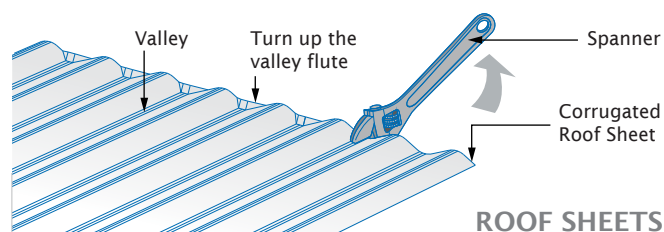
Fix the roof sheets, starting from one end of the Homeshed. Sheets should be laid into the prevailing wind.

Crest fix the sheets using 12x35 self drilling screws or M6x50 timber/steel screws with neoprene washers. Use five screws per sheet either side of the end spans, and three screws per sheet at all other internal supports.

Ensure the first sheet is square with the frame and that the roof sheets overhang into the gutter by approximately 50mm (except in box gutter installation).

At the ridge end of the corrugated roof sheets, turn every valley flute upwards (Figure 75). This will aid in water proofing the Homeshed.

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



## ROOF SHEETS

Figure 75

# WINDOWS

If installing a window, please note that the louvred window requires one trimmed sheet and the sliding window requires two trimmed sheets (Figures 76 and 77).

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 to 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 about 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.

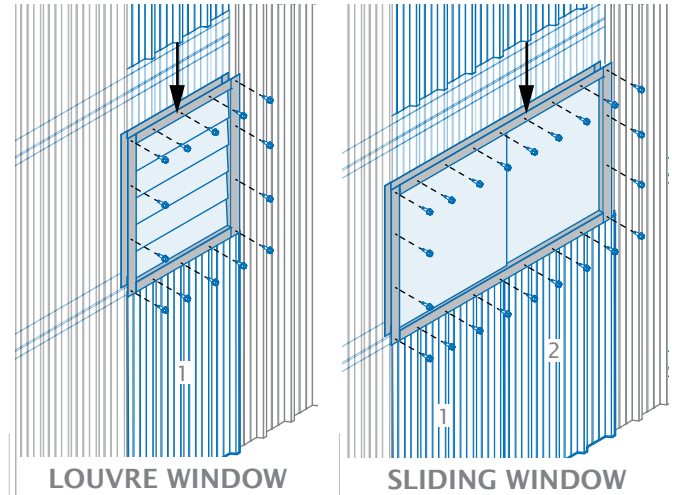


Figure 76

Figure 77

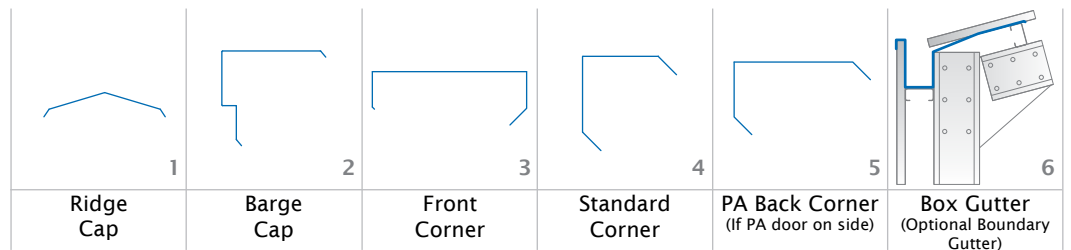
Install and fix the window frame to the crest of the wall sheets using colour 10x16 self drilling screws supplied. Ensure the screws are evenly spaced around the remaining frame (Figures 76 and 77). Place a bead of silicone in each corner of the window to prevent water entry.

# FLASHINGS

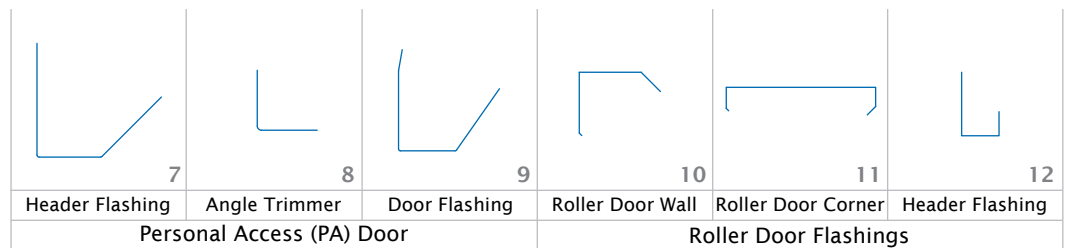
All flashings are to be fixed with 10x16 colour self drilling screws at maximum 600mm centres.

## Ridge and Barge Cap Installation

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



Similarly, fix the ridge cap to the roof sheets and top purlins with the 12x35 self drilling screws or M6x50 timber/steel screws at maximum 300mm centres.



## PA Angle Trimmer

When PA Door/s are installed over two sheets, one sheet will need to be trimmed to allow for the PA Door opening.

When cutting the second sheet, 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.

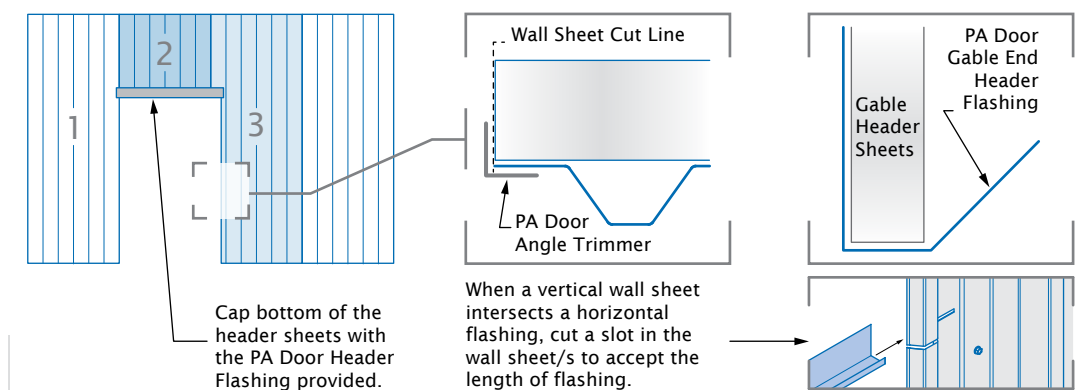
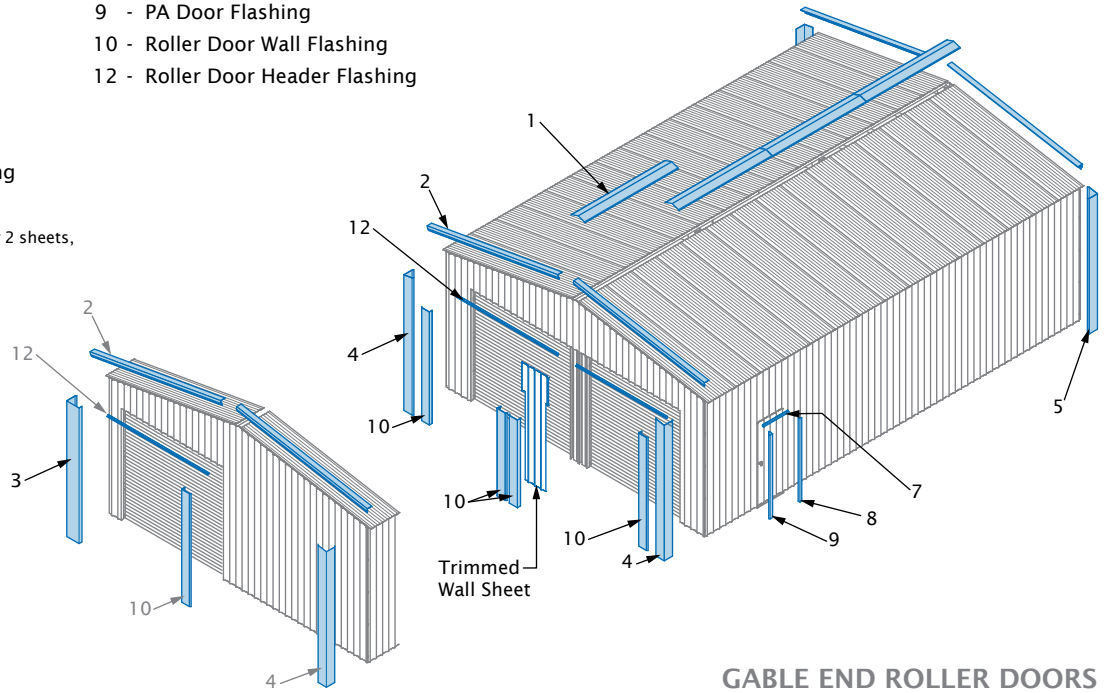


Figure 78

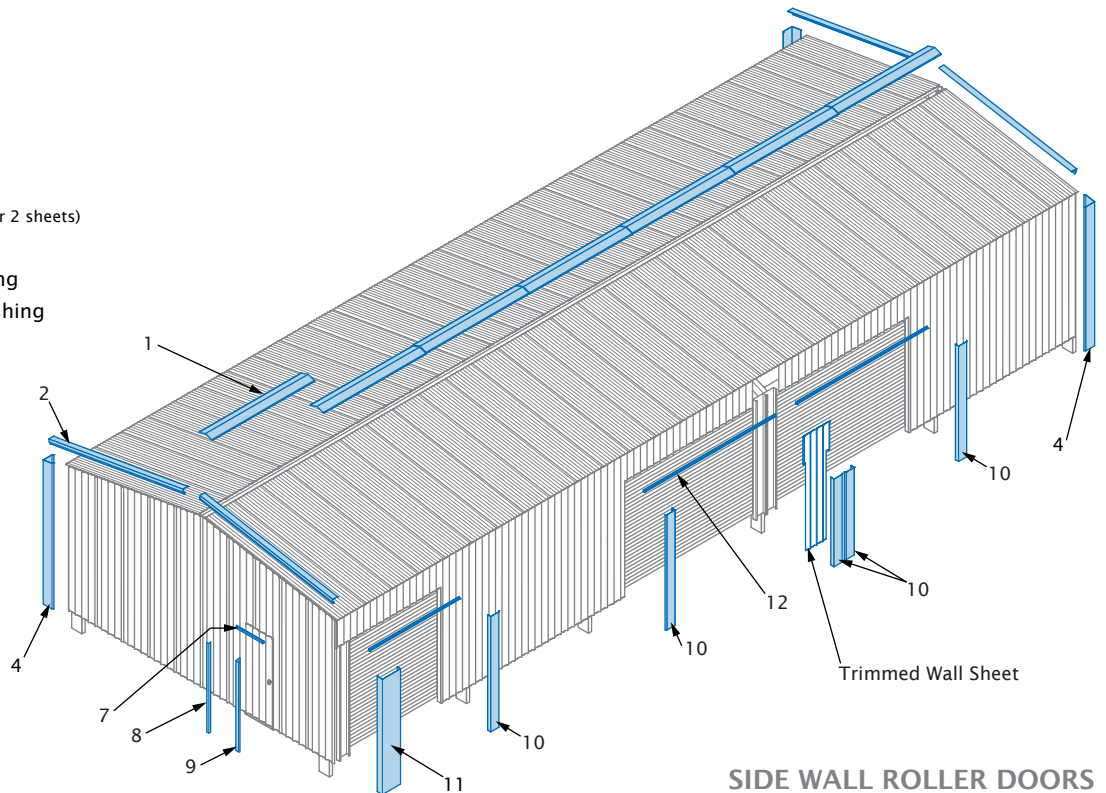
- 1 - Ridge Cap
- 2 - Barge Cap
- 3 - Front Corner
- 4 - Standard Corner
- 5 - PA Back Corner
- 7 - PA Door Header Flashing
- 8 - PA Angle Trimmer
- (required if PA door split over 2 sheets,  
or installed in the Gable End)
- 9 - PA Door Flashing
- 10 - Roller Door Wall Flashing
- 12 - Roller Door Header Flashing



**GABLE END ROLLER DOORS**

Figure 79

- 1 - Ridge Cap
- 2 - Barge Cap
- 4 - Standard Corner
- 7 - PA Door Header
- 8 - PA Angle Trimmer
- (required if PA door split over 2 sheets)
- 9 - PA Door Flashing
- 10 - Roller Door Wall Flashing
- 11 - Roller Door Corner Flashing
- 12 - Roller Door Header



**SIDE WALL ROLLER DOORS**

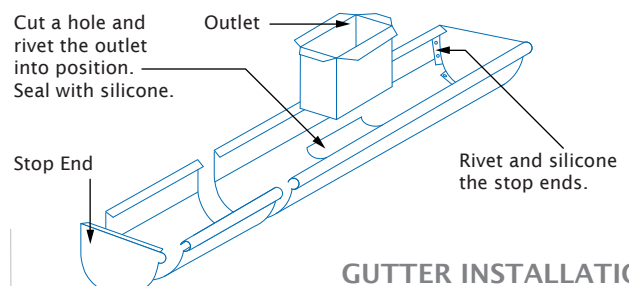
Figure 80

## GUTTER INSTALLATION

### Constructing the External 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  
(Figure 81). Seal with silicone.



**GUTTER INSTALLATION**

Figure 81

## QUEENSLAND

- ORMEAU Ph: (07) 3451 4444** 1 Mavis Crt  
 • **CRESTMEAD Ph: 3451 4411** 179 Magnesium Dve  
 • **TOOWOOMBA Ph: 4638 9322** 167 Herries St  
 • **VIRGINIA Ph: 3451 4411** 1/2043 Sandgate Rd  
 • **CABOOLTURE Ph: 5431 4100** 17 Concorde Pl  
 • **MAROOCHYDORE Ph: 5351 0100** 14 Pike St, Kunda Park  
 • **GOLD COAST Ph: 3451 4411** 108 Eastlake St, Carrara  
 • **CAPALABA Ph: 3451 4411** Cnr. Smith St & Redland Bay Rd  
 • **ARCHERFIELD Ph: 3451 4411** Cnr. Beaudesert & Granard Rd  
 • **REDBANK PLAINS Ph: 3451 4411** 326 Kruger Pde

## NEW SOUTH WALES

- HUNTINGWOOD Ph: (02) 8811 7200** 15 Liberty Rd  
 • **CAMPBELLTOWN Ph: 8811 7211** 22 Blaxland Rd  
 • **PENRITH Ph: 8811 7211** 125 Coreen Ave  
 • **THORNTON Ph: 4922 2777** 2 Hartley Dve  
 • **ORANGE Ph: 6362 2160** 5 Colliers Ave

## AUSTRALIAN CAPITAL TERRITORY

- FYSHWICK Ph: (02) 6280 5905** 25 Tennant St

## VICTORIA

- EPPING Ph: (03) 9409 9260** 17 Scanlon Dr  
 • **DEER PARK Ph: 9409 9260** 1027 Western Hwy  
 • **FERNTREE GULLY Ph: 9409 9260** 881 Burwood Hwy  
 • **DANDENONG Ph: 9409 9260** 14 Princes Hwy, Doveton

## SOUTH AUSTRALIA

- GEPPS CROSS Ph: (08) 8349 5559** 125 Cavan Rd  
 • **RICHMOND Ph: 8349 5559** 221 Marion Rd, Marleston  
 • **ST MARYS Ph: 8349 5559** 1197 South Rd  
 • **LONSDALE Ph: 8349 5559** Cnr. Dyson & O'Sullivan Beach Rd  
 • **ST AGNES Ph: 8349 5559** 129 Tolley Rd  
 • **GAWLER Ph: 8522 1132** 16 Main North Rd, Willaston  
 • **GOOLWA Ph: 8555 2825** 29 Hutchinson St  
 • **VICTOR HARBOR Ph: 8552 5164** 95 Victoria St  
 • **MURRAY BRIDGE Ph: 8531 9191** 15 Hindmarsh Rd  
 • **KADINA Ph: 8828 1555** 9 Kennett St  
 • **RIVERLAND Ph: 8582 4666** 53 Zante Rd, Berri  
 • **PORT AUGUSTA Ph: 8642 0300** 70 Victoria Pde  
 • **WHYALLA Ph: 8645 7344** 50 Ian St, Whyalla Norrie

## WESTERN AUSTRALIA

- CANNING VALE Ph: (08) 9455 5111** 183-189 Bannister Rd  
 • **MALAGA Ph: 9455 5111** Cnr. Marshall Rd & Energy St  
 • **BALCATTa Ph: 9455 5111** 140 Balcatta Rd  
 • **MANDURAH Ph: 9455 5111** 11 Fitzgerald Rd  
 • **BUNBURY Ph: 9791 4200** Cnr. Strickland St & Zaknic Pl  
 • **BUSSELTON Ph: 9752 3122** 18 Wright St  
 • **KALGOORLIE Ph: 9080 8080** 8 Federal Rd  
 • **BROOME Ph: 9191 3800** 26 Hunter St  
 • **KUNUNURRA Ph: 9169 1900** 2 Cocus Wy WA

## NORTHERN TERRITORY

- BERRIMAH Ph: (08) 8944 2300** 780 Stuart Hwy  
 • **ALICE SPRINGS Ph: 8950 9898** 6 Ghan Rd

## NEW ZEALAND

- CHRISTCHURCH Ph: (03) 338 9063** 55 Hands Rd  
 • **NAPIER Ph: (06) 843 6159** 65 Niven St, Onekawa

## External Gutter Brackets

Crest fix the gutter brackets to the wall sheets at approximately 1000mm centres with rivets (Figure 82). Allow for a slight fall towards the downpipe end so the water can flow freely.

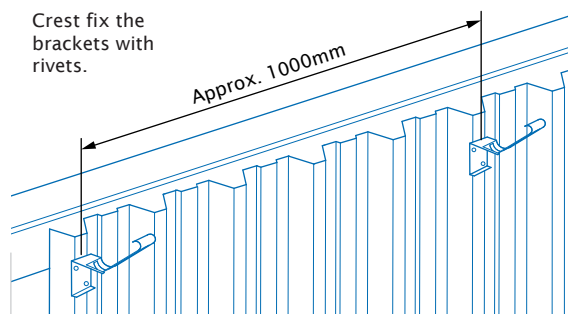


Figure 82

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

## Box Gutter

Drill a  $\varnothing 14$ mm hole through each eaves bracket and portal column 155mm down from the top of the portal column (Figure 83). Fix the lowered top wall girt to the portal columns with M12x30 flanged purlin bolts.

This girt will support the base of the box gutter.

Drill a  $\varnothing 14$ mm hole in each rafter 320mm down from the first purlin towards the eaves bracket (Figure 83). Fix the additional purlin to each rafter with M12x30 flanged purlin bolts.

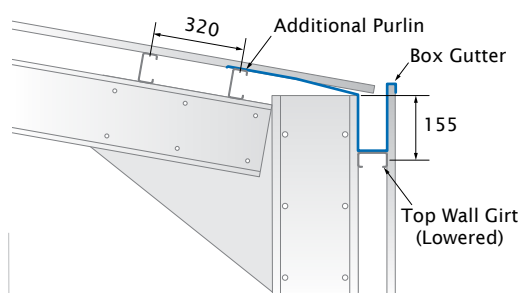


Figure 83

Depending on the preferred gable end for the downpipe, cut the hole for the downpipe outlet in one of the box gutter stop ends before fixing it to the box gutter using rivets and seal with silicone. Slide the box gutter into position onto the lowered top wall girt, ensuring the front of the box gutter caps the wall sheets (Figure 83). Fix the box gutter to the wall sheets with 10x16 self drilling screws, at the same spacing as the wall sheet to girt fixings.

Use the box gutter stop end with outlet hole as a template to mark and cut out a corresponding section of the gable wall sheet. Rivet the outlet into position and seal with silicone. The corner flashing will need to be notched to allow for the downpipe outlet. Fix the 90° downpipe elbow to the outlet with rivets and continue to assemble and install the downpipe as detailed in the "Downpipe" section below.

Install the roof sheets as per the "Roof Sheets" section of the "Wall and Roof Sheet Installation" section. Ensure the roof sheets are fixed to the additional purlin.

**Note:** The roof sheets supplied for the box gutter side of the Homeshed will be shorter than the roof sheets on the opposite side of the Homeshed.

For more information please refer to the box gutter installation guide available on the Stratco website.

## Downpipes

Slide the small end of one downpipe into the big end of the adjoining downpipe. Rivet the two downpipes together at the back then use a hacksaw to cut to the desired overall length. Fix the downpipe to the downpipe outlet using rivets, then use downpipe straps to fix the downpipe against the wall using 10x16 self drilling screws.

## 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.