

Installation and Maintenance Instructions

READ IN FULL BEFORE STARTING

SAFETY

We recommend that the following minimum precautions are taken:

- Wear appropriate safety clothing including a safety helmet
- Eye and hand protection should be worn at all times during the build process
- Secure the site from pedestrian and vehicular access, where applicable, by the use of high visibility tape, barriers, cones, safety lamps, etc.
- If you use a power supply, ensure that it is secure and in a safe dry location
- Ensure that there are no underground services that may be affected
- When working at height a suitable platform should be used
- A MINIMUM OF TWO PERSONNEL ARE REQUIRED

IMPORTANT INFORMATION

The 'Badby Shelter' is a fully clad shelter of freestanding design for ground fixing by bolting onto a suitable concrete surface. The roof curves from front to back.

PETG ROOF SHEETS

The PETG Sheets should neither be stored outside nor be exposed to great variations of weather and/or temperature for a long period of time prior to fitting.

The PETG Sheets are supplied with a Polyethylene film on both sides that protects against dirt, mechanical load and scratches.

The protective film has a restricted life-time and weathering and temperature resistance are limited.

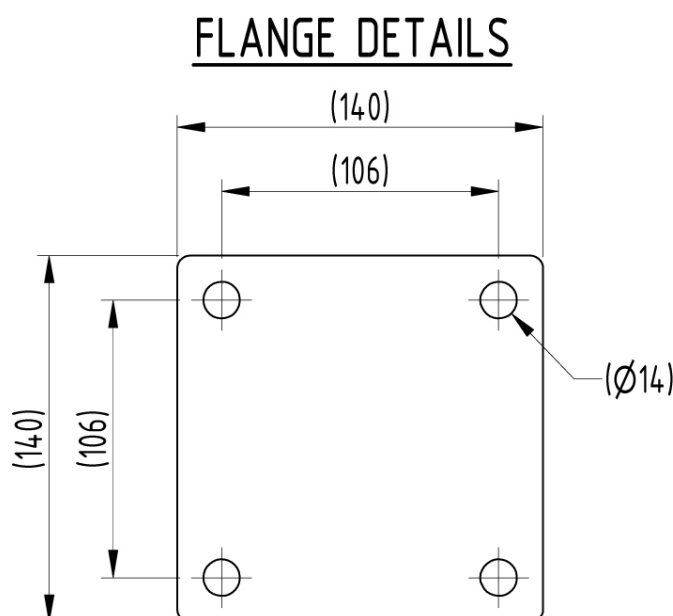
Ensure that the protective film is removed prior to fitting.

When using the Self-Drilling Screws, swarf is created between the PETG Sheets and the steel frame work. This swarf SHOULD BE REMOVED before final fixing.



Foundation Details

Flanged Side Frames – We recommend that concrete foundation blocks should be laid a minimum of 300mm x 300mm x 300mm at each leg position.



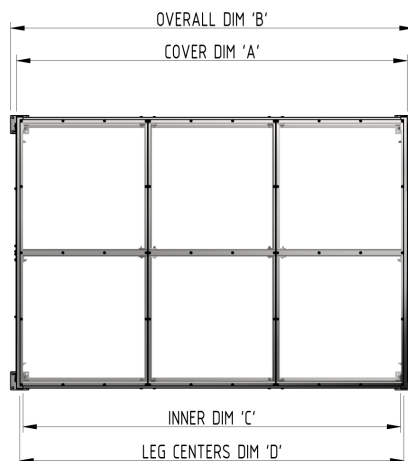
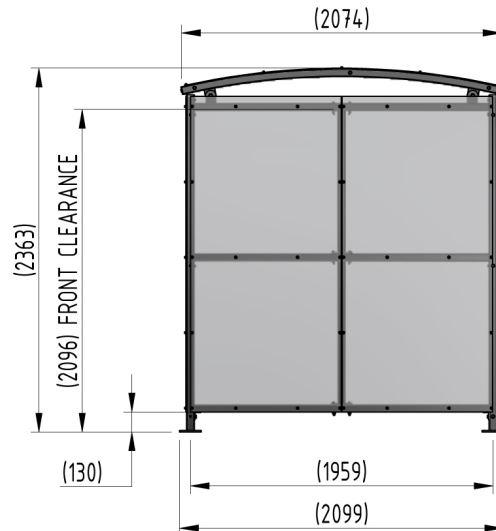
Tools Required

- Suitable Spanners or Sockets
- A low-torque power tool with 8mm Hex socket bit suitable for Self-Drilling screws
- Clamps (for fixing of PETG sheets)

Maintenance

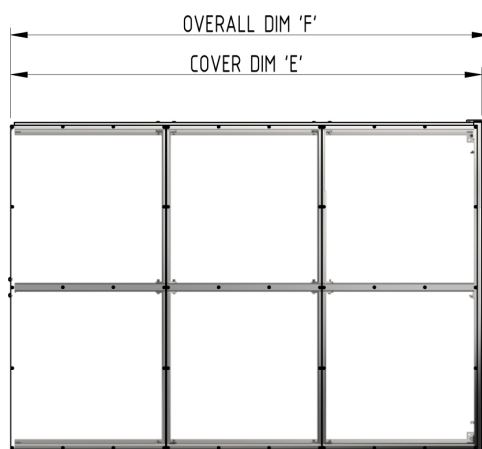
- Occasionally clean all surfaces with soap and water
- Check all fixing bolts and other visible fixings are tight and have not worked loose. Replace any missing fixings
- Check that the foundations remain firm

Dimension Details



MAIN BAY

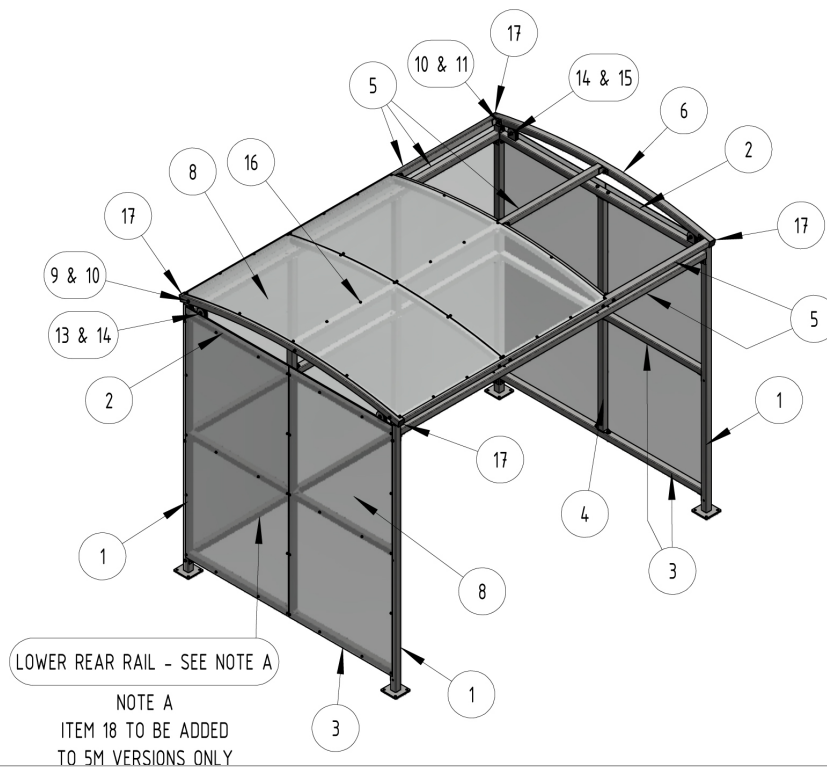
Main Bay Table				
Shelter Size	Cover DIM 'A'	Overall DIM 'B'	Inner DIM 'C'	Leg Centers DIM 'D'
5M	4950 mm	5040 mm	4850 mm	4900 mm
4M	3970 mm	4060 mm	3870 mm	3920 mm
3M	2990 mm	3080 mm	2890 mm	2940 mm
2M	2010 mm	2100 mm	1910 mm	1960 mm
1M	1030 mm	1120 mm	930 mm	980 mm



EXTENSION

Extension Table		
Shelter Size	Cover DIM 'E'	Overall DIM 'F'
5M	4923 mm	4968 mm
4M	3943 mm	3988 mm
3M	2963 mm	3008 mm
2M	1983 mm	2028 mm
1M	1003 mm	1048 mm

Construction Detail / Parts List

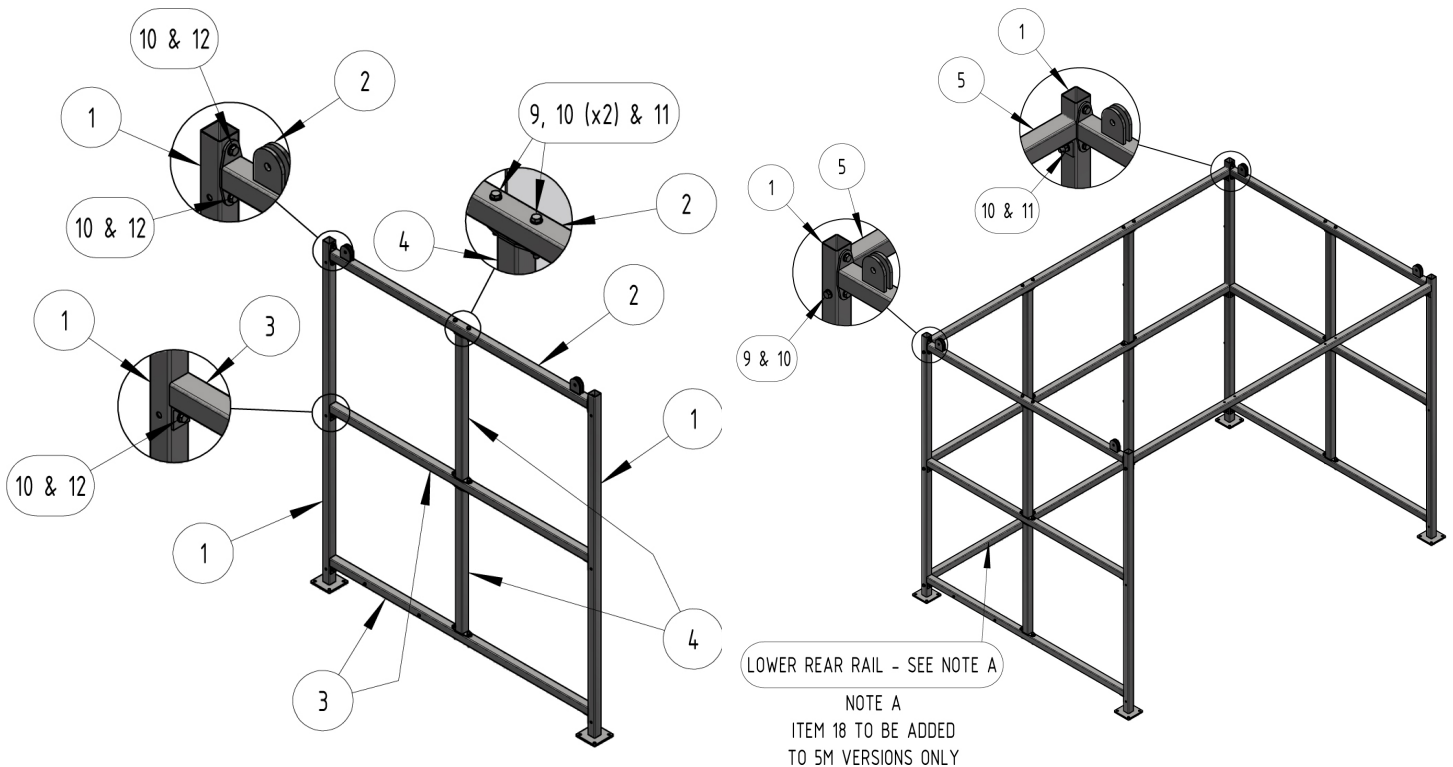


Badby - Quantities											
Item #	Description	1M	1M EXT	2M	2M EXT	3M	3M EXT	4M	4M EXT	5M	5M EXT
1	CLAD SHELTER LEG	4	2	4	2	4	2	4	2	4	2
2	2MW ROOF SUPPORT	2	1	2	1	2	1	2	1	2	1
3	2M LONG RAIL	4	0	4	0	4	0	4	0	4	0
4	FLAT ROOF SPACER	4	0	6	2	8	4	10	6	12	8
5	ROOF LONG RAIL	7	7	7	7	7	7	7	7	7	7
6	CURVED ROOF SIDE ARC	2	1	2	1	2	1	2	1	2	1
7	CURVED ROOF SPACER	0	0	2	2	4	4	6	6	8	8
8	ROOF / SIDE SHEET (PETG or GALV)	6	2	8	4	10	6	12	8	14	10
9	M10 X 80 BOLT	26	7	38	19	50	31	62	43	76	57
10	M10 WASHER	68	18	92	42	116	66	140	90	168	118
11	M10 NUT	26	7	38	19	50	31	62	43	76	57
12	M10 X 25 BOLT	16	4	16	4	16	4	16	4	16	4
13	M12 X 60 BOLT	4	2	4	2	4	2	4	2	4	2
14	M12 WASHER	8	4	8	4	8	4	8	4	8	4
15	M12 NUT	4	2	4	2	4	2	4	2	4	2
16	TEK-SCREW (PETG)	96	32	128	64	160	96	192	128	224	160
16	TEK-SCREW (GALV)	86	32	108	54	130	76	152	98	174	120
17	BLACK SQUARE INSERT	4	2	4	2	4	2	4	2	4	2
18	5M LOWER LONG RAIL SUPPORT FOOT	0	0	0	0	0	0	0	0	1	1

Installation Instructions Note: Part numbers are shown in []

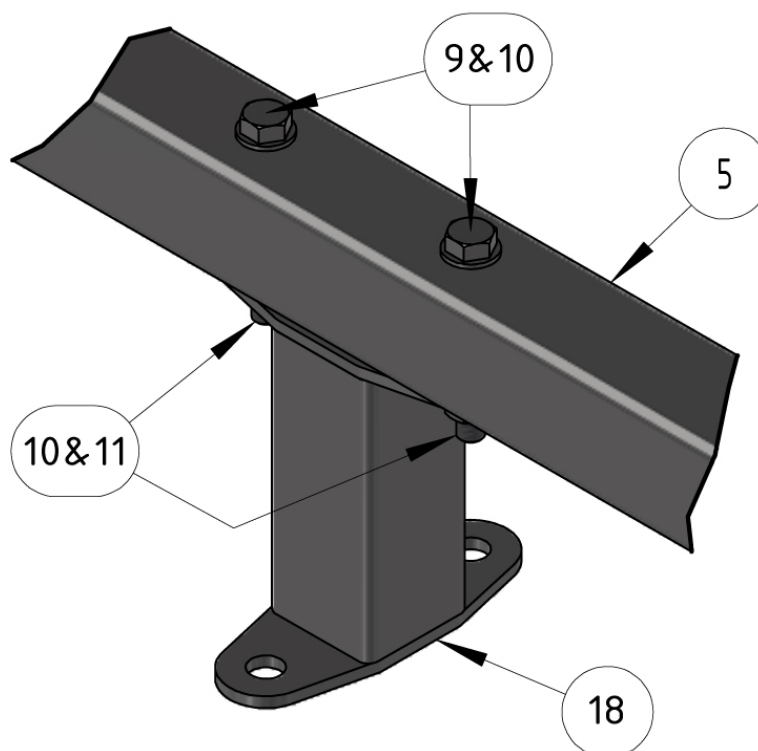
1. Prepare the ground following the foundation details above.
2. Start the construction of the shelter using the Construction Detail above and Frame Construction Detail below, using the M10 x 25 Bolts [12] and M10 Washers [10] connect the 2MW Roof Support [2] to the Legs [1] as shown below. Then using the M10 x 80 Bolts [9], M10 Washers [10] and M10 Nuts [11] connect the Flat Roof Spacers [4] and 2M Long Rails [3] as shown below. Repeat this build for the second side frame.
3. Continue the build of the frame by connecting the two side frame together using the Roof Long Rails [5], M10 x 80 Bolts [9], M10 Washers [10] and M10 Nuts [11]. Then using the M10 x 80 Bolts [9], M10 Washers [10] and M10 Nuts [11] connect the Flat Roof Spacers [4] between the Roof Long Rails [5] as shown below.

IMPORTANT – See Note about Lower Long Rail in 5M versions



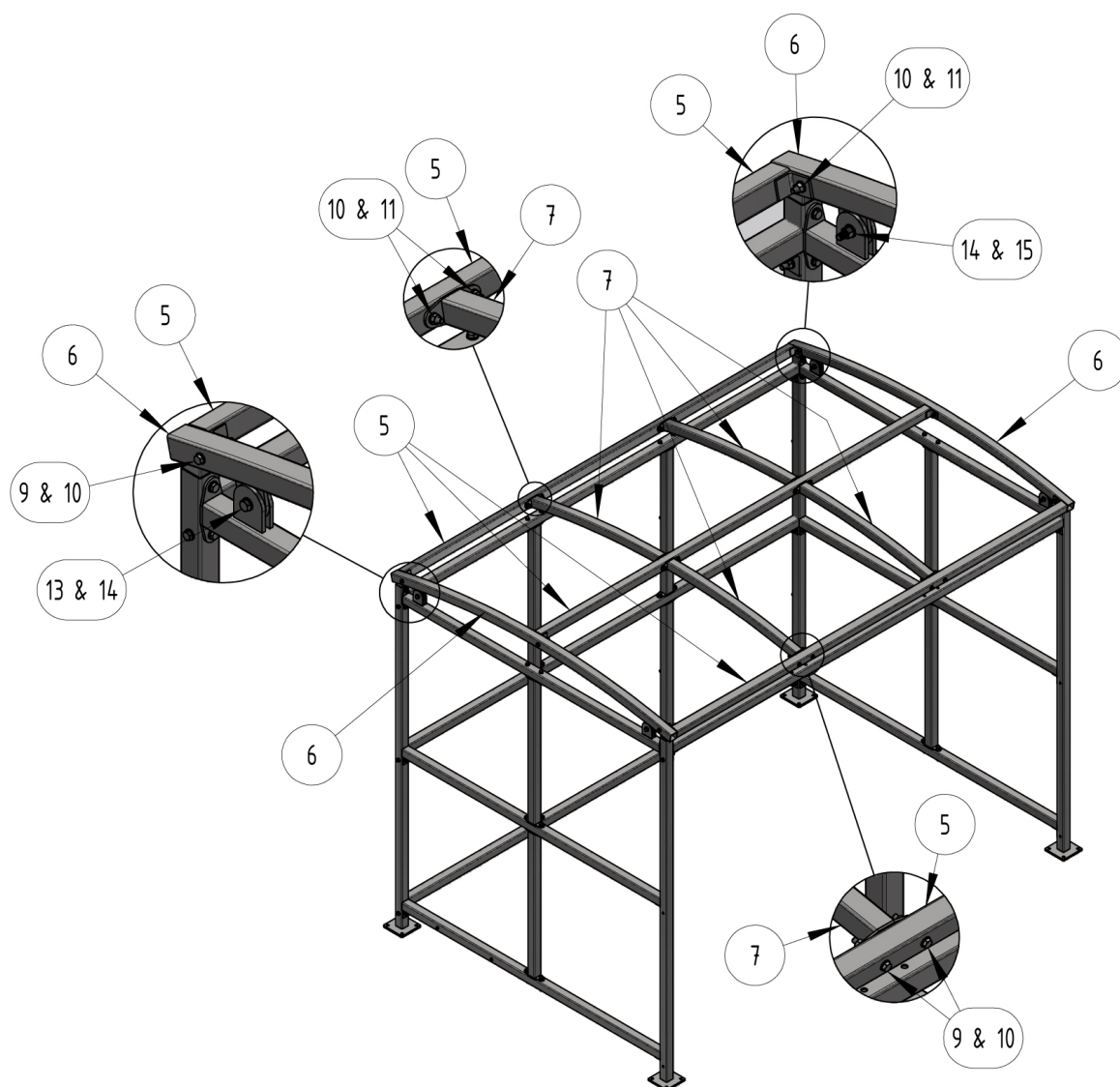
4. Once the frame has been constructed (including any extensions). Extensions are added by repeating the process building a side frame and attaching the Roof Long Rails [5] and Flat roof Spacers [4] as detailed above. Square up the frame and tighten all the fixings. Secure the Legs [1] to the concrete base using suitable fixings.

5. 5M SHELTERS ONLY – attach the 5M Lower Long Rail Support Foot [18] to the LOWER Long Rail [5] using M10 x 80 Bolts [9], M10 Washers [10] and M10 Nuts [11]



ONLY CONTINUE from this point once the entire frame assembly has been completed, including any extensions

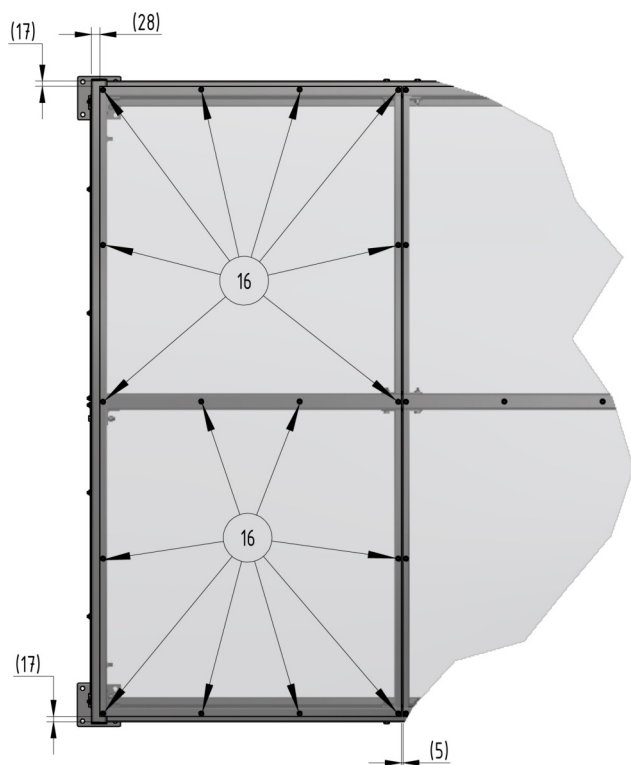
6. Start the construction of the roof by attaching the Curved Roof Side Arc [6] to the 2MW Roof Support [2] using M12 x 60 bolts [13], M12 Washers [14] and M12 Nuts [15]
7. Continue the roof build by loosely attaching the Roof Long Rails [5] between the Curved Roof Side Arcs [6] using M10 x 80 bolts [9], M10 Washers [10] and M10 Nuts [11]
8. Connect the Curved Roof Spacers [7] between the Roof Long Rails [5] using M10 x 80 bolts [9], M10 Washers [10] and M10 Nuts [11]
9. Square up the roof frame assembly and tighten the fixings.



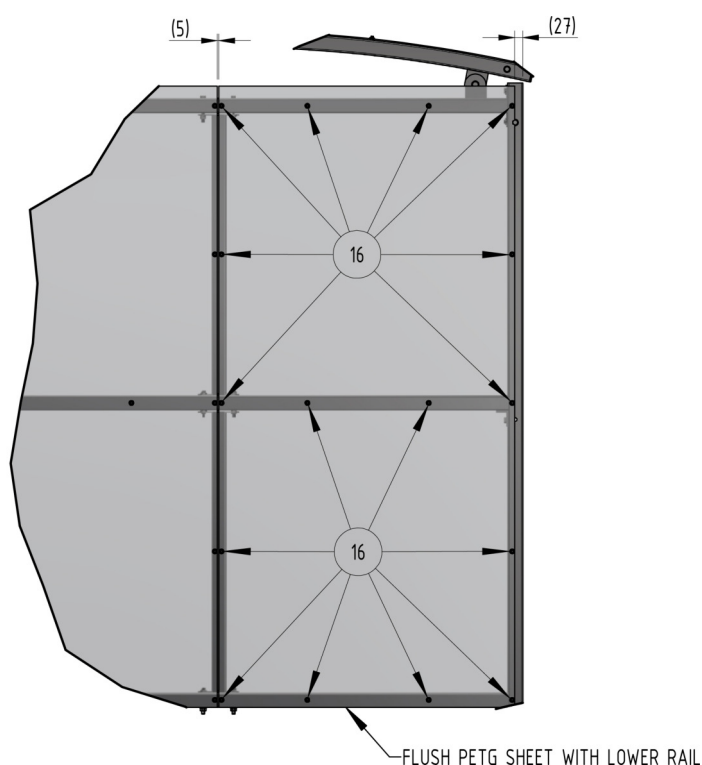
10. PETG ROOF SHEETS

- a. Starting from either side of the shelter
 - b. **Position the first PETG Roof Sheet [8] on the roof as shown below and ensure that tension is maintained on the sheet by using clamps (do not allow the sheet to sag).**
 - c. Attach the first PETG Roof Sheet [8] to the roof using sixteen Self-drilling screws (25mm) [16] (4 top / 4 middle / 4 bottom / 2 sides – as shown below), Spacing information is shown below.
 - d. Repeat steps b & c for all further roof sheets ensuring that they are spaced evenly over the entire roof.
11. Attach the Side PETG sheets [8] using the clamps to ensure tension is maintained on the sheet, then using twelve Self-drilling screws (25mm) [17] (3 on each side – as shown below), Spacing information is shown below.

IMPORTANT NOTE: When using the Self-Drilling Screws [17], swarf is created between the PETG Sheets and the steel frame work. This swarf SHOULD BE REMOVED before final fixing.



Roof Sheet Fixing Detail



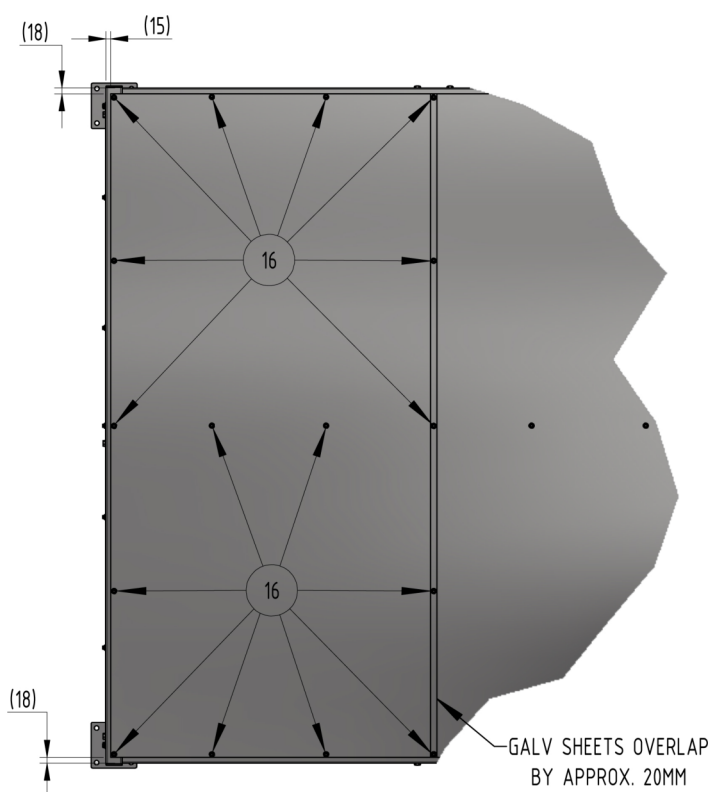
Side Sheet Fixing Detail

1. GALV ROOF SHEETS

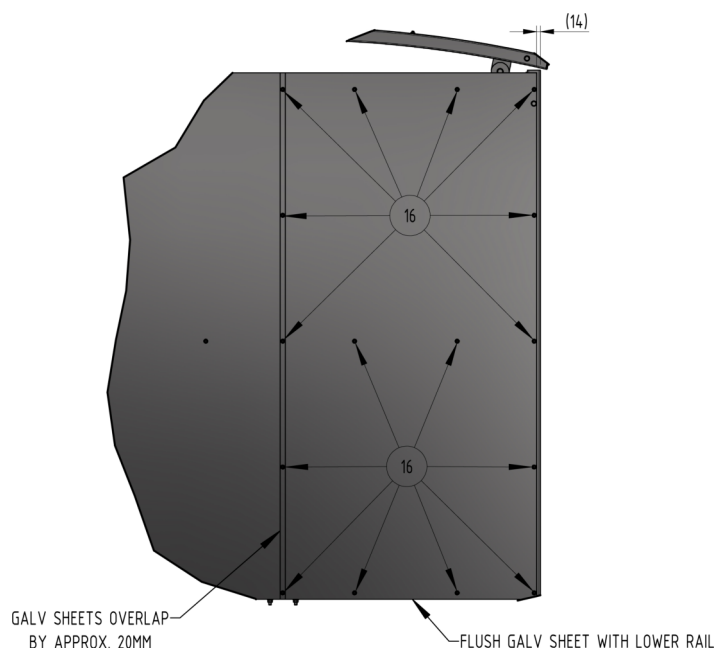
- Starting from either side of the shelter
- Position the first GALV Roof Sheet [8] on the roof as shown below and ensure that tension is maintained on the sheet by using clamps (do not allow the sheet to sag).**
- Attach the first GALV Roof Sheet [8] to the roof using sixteen Self-drilling screws (25mm) [16] (4 top / 4 middle / 4 bottom / 2 sides – as shown below), Spacing information is shown below.
- Repeat steps b & c for all further roof sheets ensuring that they are spaced evenly over the entire roof. These roof sheets overlap each other by approximately 20mm. If fitted correctly and the frame is square you should have the same gap at each end.

- Attach the Side PETG sheets [8] using the clamps to ensure tension is maintained on the sheet**, then using sixteen Self-drilling screws (25mm) [16] (4 top / 4 middle / 4 bottom / 2 sides – as shown below), Spacing information is shown below.

IMPORTANT NOTE: When using the Self-Drilling Screws [17], swarf is created between the GALV Sheets and the steel frame work. This swarf **SHOULD BE REMOVED** before final fixing.

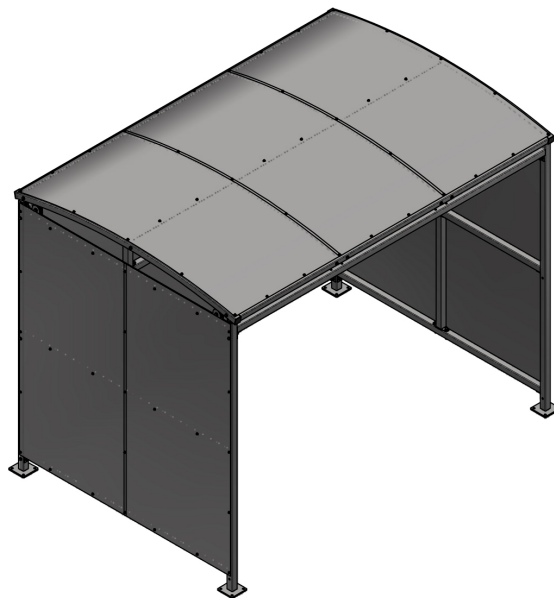
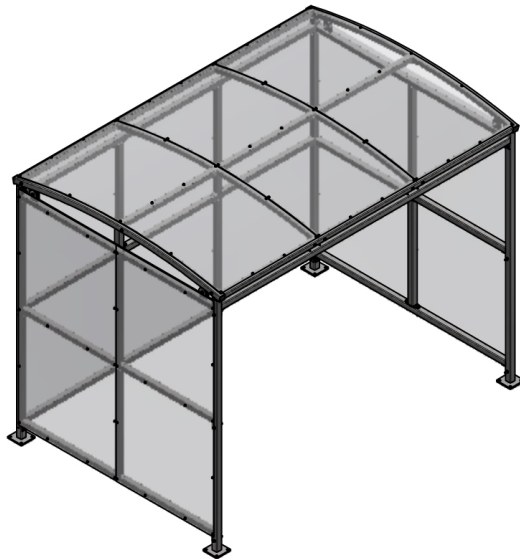


Roof Sheet Fixing Detail



Side Sheet Fixing Detail

3. To finish the shelter fit the Black Square Inserts [17] into the ends of the Curved Roof Side Arc's [6]



YOUR SHELTER IS NOW COMPLETE