



TWINWALL POLYCARBONATE INSTALLATION INSTRUCTIONS

Please read all instructions before commencing

TOOLS REQUIRED

Sledge hammer, Claw hammer, Drills (3mm & 4mm), Spanners x 2 (8mm), Roller & spreader – as supplied, Short ladder, Tape measure, Spirit level, Riveter (for 4.8m + models).
Minimum 2 people required for ease of installation.

FOUNDATION

150mm x 50mm tanalised timber or (A);
100mm x 300mm concrete nib with timber top (B)

Note: Ensure the base is square and level. This is critical for correctly fitting the polycarbonate sheeting. Base measurements are as per over-leaf.

MAIN FRAME

Place aluminium 'Z' rails along both sides of foundation. *Do not fix to foundation at this time.* (B)

Stand rear end-wall section in position - the 'Z' section slots in at the bottom corners. (C)
Have someone temporarily support the end-wall for you while fitting one 16mm purlin tube and attaching this on the angle to your base. This will hold the end-wall up – ensure it is relatively plumb.

Place the central arches in position and secure them to the 'Z' rails using the small tek screws. (D)
Fit remaining purlins to arches & end-wall using the 25mm tek screws. (E)

Stand front-wall in position and secure to purlins. You can now raise the 1st purlin and attach it to the arches and front-wall – the unit should now be freestanding. Attach both end walls to the foundation using the 40mm tek screws and to the 'Z' rail using the 12mm screws (F)
Now you can attach the 'Z' rail to the base using the 40mm tek screws. Do not leave the frame without the polycarbonate sheets it for any extended period of time

SHEETS

Remove protective plastic from both sides of sheet. Note this polycarbonate is UV protected on *both* sides. Slide the first sheet down from the top of the unit in the grooves of the arches. **(G)**

Have someone help align & pull the sheet from underneath, taking extra care to not jam your hand on the purlins or base rail. It is not necessary to lube the arches. If the sheets are too tight to fit, carefully release the 2 tek screws holding the leading arch in place. Take care as it may release the sheet. Screw these back in once the sheet is fitted.

Work fully down one side **(H)** then repeat on the other side. You will need to lean over the already installed sheets in order to fit the 2nd side, but it is possible to gently lean on the arches if necessary. Ensure all sheets are fully seated in the groove in the base rail.

Place the vent rails on top of the sheets/arches and attach *one* end of each rail at the front of the unit using the 25mm teks. **(I)** Note the holes go towards the peak of the unit.



Using the supplied spreader, work the sheet into the groove until you can line up the hole on the next arch. **(J)** It is likely you will need to go past the arch to correctly seat the rail on the polycarbonate sheet.

Once both vent rails are fully screwed in place it is necessary to seal the top & bottom of the sheets with the PVC wedge. Access can be gained between the vent rails to seal the top edge. Push the wedge in using the supplied roller, ensuring the longest edge is against the polycarbonate sheeting. You may wish to use some soapy water to aid with this.

ROOF VENT(S)

4.8, 6.0, 7.2 & 8.4m models only

Measure and fit the small fixed panel to the frame so it will allow for the multi-vent system to be weather-tight when closed. Use the supplied rivets & attach it to the top of the vent rail. **(K)**

All models

Lift the roof vent into position, allowing the handles to swing down freely - note one handle is longer to allow for opening and closing of the vents. It is recommended these are placed towards the rear of the unit to allow for head clearance where necessary. Allow for +/- 10mm of over-hang at the front & rear of the unit.

Slot the vent brackets onto the vent rail and swing the handles up to ascertain the position for the brackets. Fit the stainless bolt and nut to help keep the bracket in place. Using the 3mm drill, drill through the hole in the bracket and attach using 12mm tek screws. Check the vent(s) raise and lower properly and tighten the bolts sufficiently to stop the vent from blowing open and closed in the wind. This can be adjusted later, if necessary.

BASE SIZES

All Morrifield Twinwall Polycarbonate greenhouses measure 2,400mm wide.

Actual length measurements are as follows:

2.5m = 2,470 mm

3.6m = 3,695 mm

4.8m = 4,920 mm

6.0m = 6,145 mm

7.2m = 7,370 mm

8.4m = 8,595 mm

9.6m = 9,820 mm

ALL MEASUREMENTS ARE EXTERNAL

A) CONCRETE NIB WITH TIMBER TOP



B) TIMBER BASE WITH 'Z' RAIL IN POSITION



(C) END-WALL SLOTTED TO 'Z' RAILS



(D) ATTACHING ARCHES



(E) ATTACHING PURLINS TO END-WALLS



(F) ATTACHING END-WALLS TO BASE



(F) ATTACHING END-WALLS TO 'Z' RAIL



(G) FITTING SHEETS



(H) FITTING SHEETS



(I) FITTING VENT RAILS



(J) USING SPREADER BAR



(K) FITTING FIXED PANEL



(L) FITTING VENT BRACKETS



YEARLY MAINTENANCE FOR YOUR MORRIFIELD GREENHOUSE

- Clean the sheeting using a soft bristle brush & warm, soapy water. Dishwashing liquid is fine
- Check, tighten & replace any loose or damaged fixings (door wheels, vent bolts etc)
- Check & replace any loose or damaged rubber wedge, if necessary

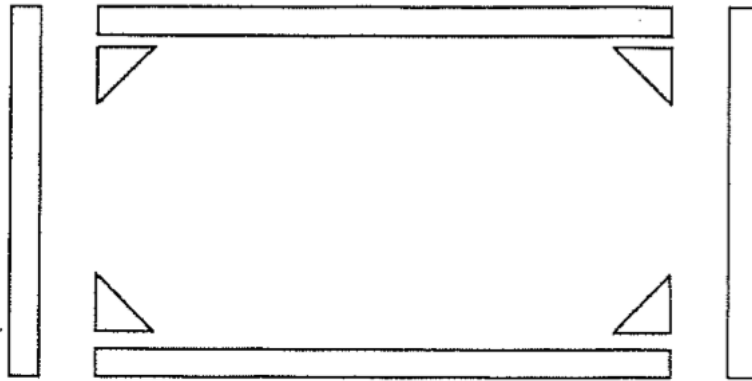
ALL PARTS ARE MADE AND SUPPLIED BY US.

WE CAN PROVIDE YOU WITH ANY REPLACEMENTS YOU MAY REQUIRE.

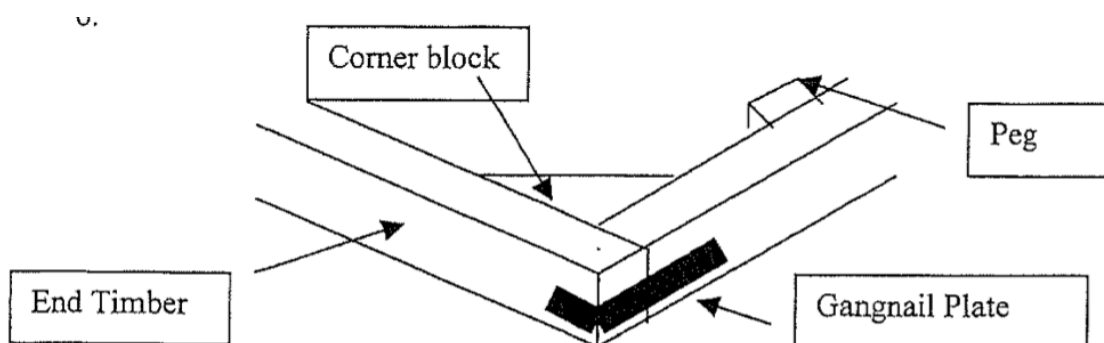
MORRIFIELD POLYCARBONATE TIMBER BASE

INSTALLATION INSTRUCTIONS

1. Select a good, sunny location & face the door away from prevailing wind.
2. Lay out timbers as shown.



3. Drive 3 x 100mm nails through each corner & into the end of the side timbers.
4. Nail gang-plates around the outside of each corner.
5. Use 4 x 75mm nails to nail in diagonal corner block to help square frame. *It is still necessary to measure and ensure the base is square and level.*
6. Drive pegs on inside of frame until they are flush with the top of the timber and then attach using 75mm nails. *Ensure the base is still square and level.*



Twinwall Components

<u>PACKAGING</u>	<u>2.5</u>	<u>3.6</u>	<u>4.8</u>	<u>6</u>	<u>7.2</u>	<u>8.4</u>	<u>9.6</u>
Front End- Doors	1	1	1	1	2	2	2
Back End- Plain	1	1	1	1	/	/	/
Arches	1	2	3	4	5	6	7
Top Vent Rail	2	2	2	2	2	2	2
Purlins	4	4	4	4	4	4	4
Base Rail ('Z' shape)	2	2	2	2	2	2	2
Top Vent(s)	1	1	2*	2*	2*	3*	3*
Sheeting	4	6	8	10	12	14	16

*Requires centre panel(s) for vent and 4x5-3 rivets

<u>FIXINGS</u>	<u>2.5</u>	<u>3.6</u>	<u>4.8</u>	<u>6</u>	<u>7.2</u>	<u>8.4</u>	<u>9.6</u>
PVC Wedge	9.6m	14.4m	19.2m	24m	28.8m	33.6m	40m
Small Metal Tek	10	14	18	22	28	32	38
weight in grams		59g	66g	77g	88g	110	140
25mm Tek	18	24	30	36	42	48	56
weight in grams		167g	191g	237g	271g	330g	350g
40mm Tek	14	16	18	20	22	24	28
weight in grams		150g	163g	170g	187g	225g	247g
Roof Vent Brackets	4	6	8	10	12	14	16
20mm Bolt w/Nyloc	4	6	8	10	12	14	16
Rivets to attach centre vent cap	/	/	4	4	4	8	8
Rivets to join top rail	/	/	/	/	/	12	12
10mm Screws	4	4	4	4	8	8	8
Door Handles	2	2	2	2	4	4	4
Nails for timber base	139g	141g	169g	180g	180g	200g	200g

*Doors in back end requires 2 extra handles & 10mm screws