



8ft – 10ft Wide “Poly-Pitch” Assembly
Instructions

CONTENTS

<u>Section</u>	<u>Page</u>
1. FOUNDATION TUBES: Option A – Concreted Foundation Tubes	3
2. FOUNDATION TUBES: Option B – Ground Anchor Plates	5
3. TIMBER BASE RAILS (Along the sides)	6
4. STEEL FRAME ASSEMBLY & INSTALLATION	7
5. TIMBER END FRAME ASSEMBLY & INSTALLATION	10
6. TIMBER BASE RAIL (Across the ends)	11
7. TIMBER SIDE RAIL (OPTION)	12
8. ROLL UP CURTAIN (OPTION)	13
9. END PANELS & SIDE NETTING (INCLUDED WITH TIMBER SIDE RAIL OPTION)	15
10. FITTING THE ANTI HOT SPOT TAPE	16
11. FITTING THE POLYTHENE – POLYTHENE TO BASE RAIL	17
12. FITTING THE POLYTHENE – POLYTHENE TO SIDE RAIL	19
13. DOOR ASSEMBLY & INSTALLATION	21
PARTS LIST	23
POLYTUNNEL MAINTENANCE	26

Work Safely

When you tackle a job it is important to work safely. Please consider the following points when building your Polytunnel.

- Keep your work area tidy. A tidy site is a safe site.
- Use the correct tools for the job.
- Wear gloves where practical. Components may have sharp edges. Timber may have splinters.
- Take care when using tools such as hammer, spade, drill, knife, scissors.
- Consider other people, particularly children.

Tools Required

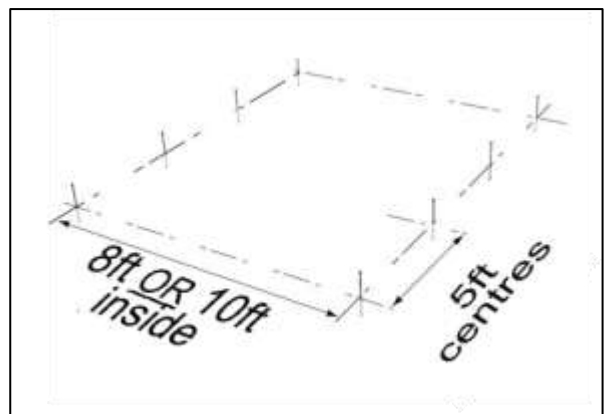
You will require a few tools to assemble your Polytunnel which are usually available in most households.

- Hammer
- Wood saw
- Spirit level
- Cordless drill
- 9mm drill bit
- String line
- Staple gun (optional) or stapler
- 13mm spanners or sockets
- Tape measure
- Scissors or craft knife

1. FOUNDATION TUBES: Option A – Concreted Foundation Tubes

- 1 Set two string lines to the width of the polytunnel (8ft OR 10ft apart). Ensure they are parallel.

Tip! It's best to put your polytunnel on a flat, level site. A fall lengthways is easy to accommodate. A fall sideways should be limited to about 6" over the width of the polytunnel.



- 2 Set another string line for the end of the polytunnel. Ensure the “end” string line is perpendicular to the “length” string lines.
- 3 Mark the ground at each foundation position, to the outside of the “length” string lines at 5ft centres until the full length is reached.
- 4 Temporarily remove the string lines so they don't get in the way whilst digging.
- 5 Dig a hole for each Foundation Tube, approximately 25cm square x 35cm deep.
- 6 Reinstate the string lines.
- 7 Fill the excavated holes with freshly-mixed concrete (or use post-mix, following the instructions on the bag).



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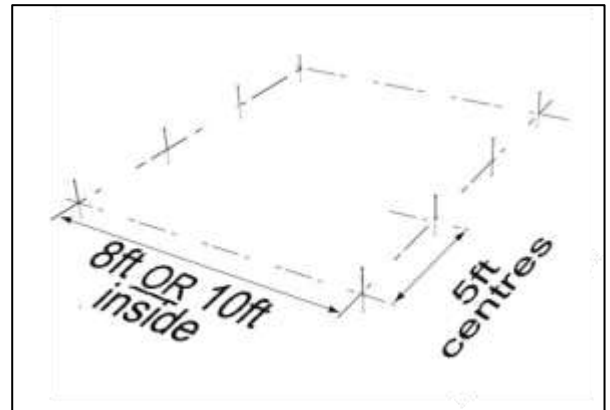
- 8 Insert a 6mm Concrete Tie Bar (steel rod) into the pre-punched hole in the foundation tube.
- 9 Push the Foundation Tubes into the wet concrete, to the outside of the string lines. Make sure the Foundation Tubes are vertical, touching the string line and spaced at 5ft centres. The Foundation Tubes should be protruding above ground by approximately 35cm.

Tip! Allow the concrete to set before you try to install the framework!

2. FOUNDATION TUBES: Option B – Ground Anchor Plates

- 1 Set two string lines to the width of the polytunnel (8ft OR 10ft apart). Ensure they are parallel.

Tip! It's best to put your polytunnel on a flat, level site. A fall lengthways is easy to accommodate. A fall sideways should be limited to about 10cm over the width of the polytunnel.



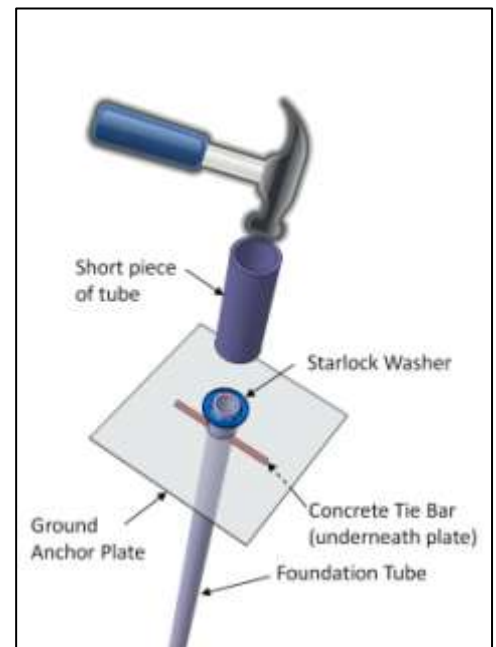
- 2 Set another string line for the end of the polytunnel. Ensure the “end” string line is perpendicular to the “length” string lines.
- 3 Mark the ground at each foundation position, to the outside of the “length” string lines at 5ft centres until the full length is reached.

- 4 Temporarily remove the string lines so they don't get in the way whilst digging.

- 5 Dig a hole for each Foundation Tube, approximately 25cm square x 35cm deep.

- 6 Slot the ground anchor plates onto the bottom end of the Foundation Tubes. And lock in place with the Starlock Washers. Starlock Washers are inserted using the short piece of tube.

- a. With the foundation tube upside-down, slot the 6mm Concrete Tie Bar (steel rod) into the pre-punched hole in the Foundation Tube.
- b. Slot the Ground Anchor Plate onto the bottom end of the Foundation Tube, to rest on the Concrete Tie Bar.
- c. Hold the short piece of tube over the starlock washer on the bottom end of the Foundation Tube and tap the short tube with a hammer until the washer is located on the Foundation Tube, right up to the Ground Anchor Plate.



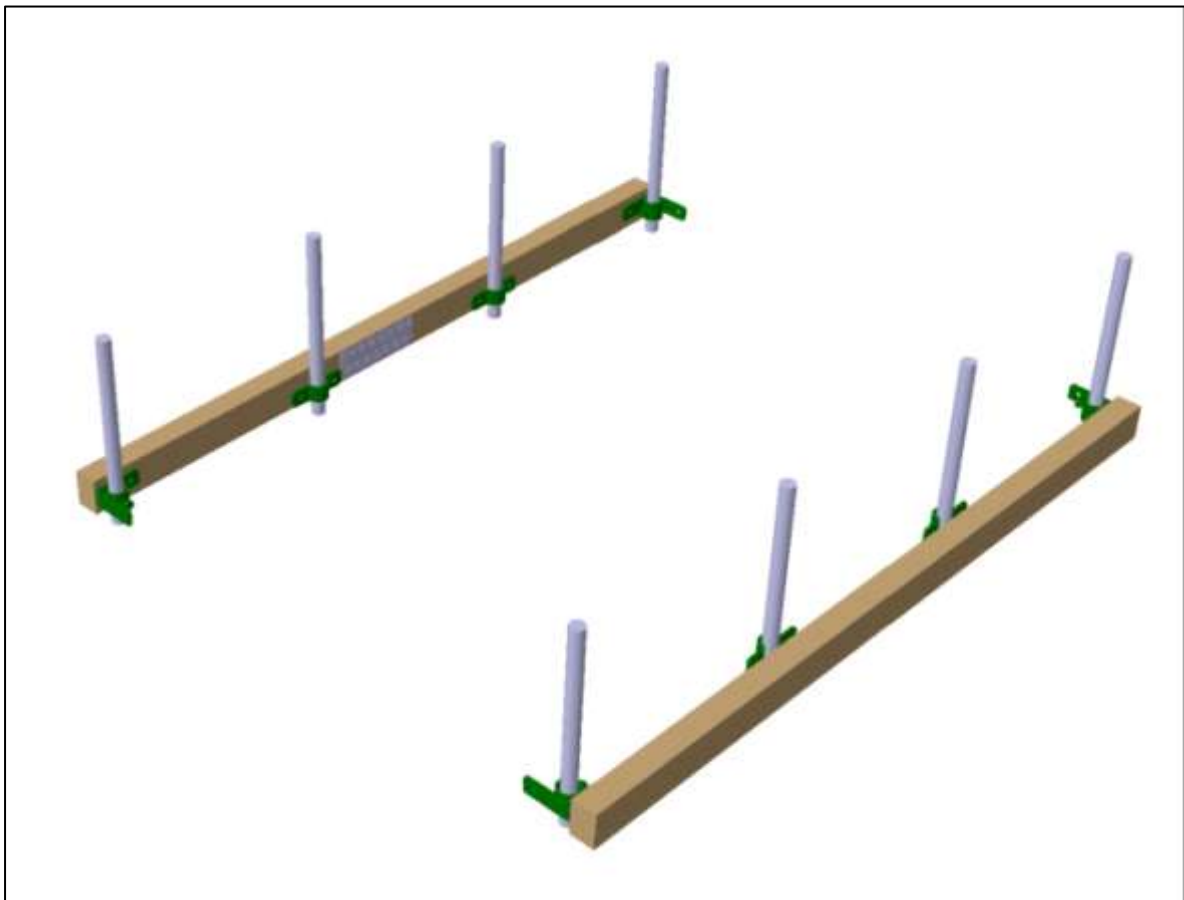
- 7 Reinstate the string lines.

- 8 Insert the Foundation Tube and anchor plate assembly into the excavated holes, to the outside of the string line. Make sure the Foundation Tubes are vertical, touching the string line and spaced at 5ft centres. The Foundation Tubes should be protruding above ground by approximately 35cm.

- 9 Backfill the excavated holes, checking that the Foundation Tubes are still in the correct position. Stamp on the soil to ensure the soil is well-compacted.

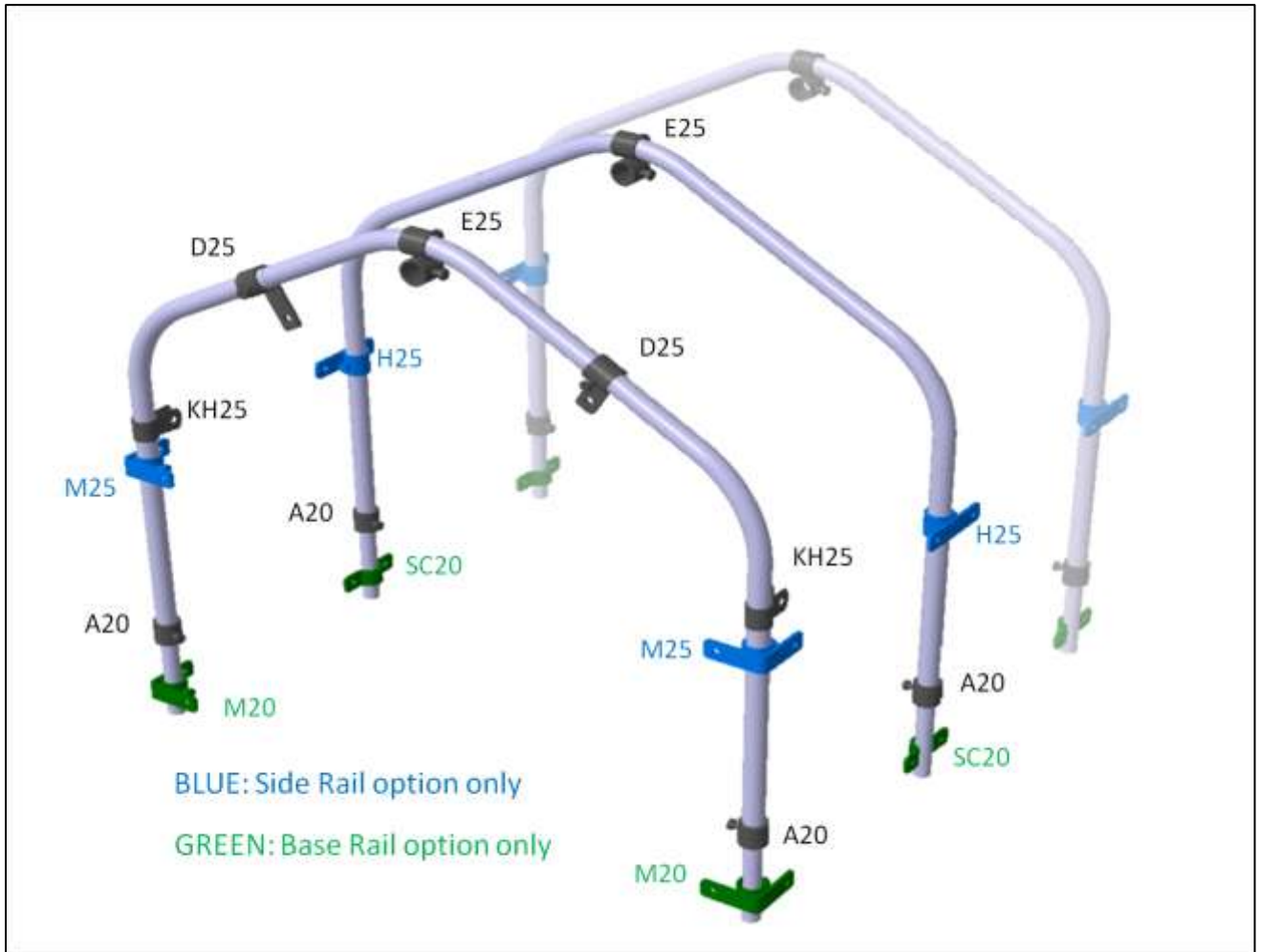
3. TIMBER BASE RAILS (Along the sides)

- 1 Lay the lengths of 38mm x 89mm timber along the side of the polytunnel, end-to-end. Join together with the timber joint plates and 30mm twist nails.
- 2 Position the joined timbers against the foundation tubes and flush with the M20 fitting at one end.
- 3 Drill a hole in the timber, through the hole in the M20 fitting. Bolt with an M8 x 50 coach bolt and nut.
- 4 Do the same, fixing to the M20 fitting at the other end of the polytunnel.
- 5 Fix the timber base rail to the inner foundation tubes with the SC20 fittings and M8 x 65 coach bolts.
- 6 Spy through from one end to make sure the base rail is straight and adjust if necessary.
- 7 Trim off the surplus timber flush with the outside face of the M20 fitting.
- 8 Fix the timber base rail to the foundation tubes on the other side of the polytunnel. Sight through from the side of the polytunnel to make sure both base rails are parallel and adjust if necessary.



4. STEEL FRAME ASSEMBLY & INSTALLATION

- 1 Assemble the hoops. Lay the components out on a flat surface with the fittings in the positions shown. Please note the orientation of the fittings.



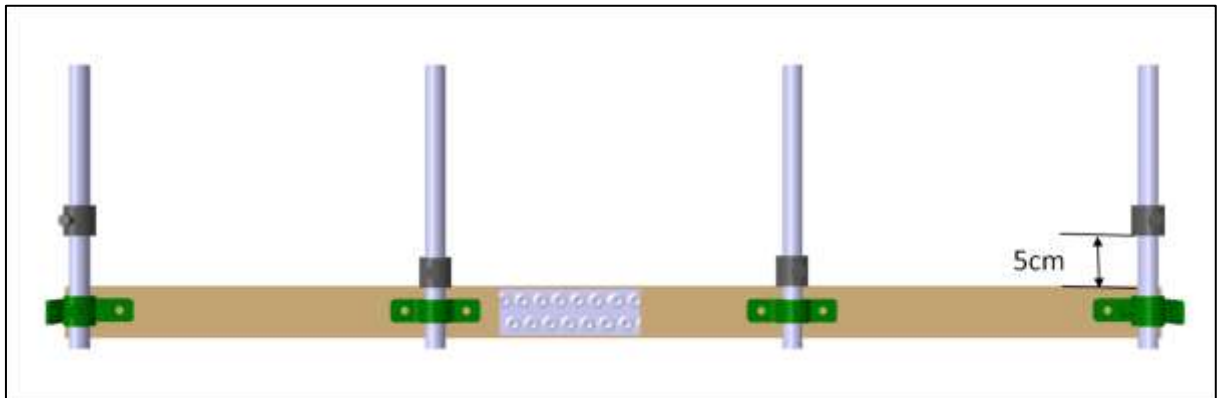
Tip! If you have ordered crop/tie bars, it's easier to put the KH25 fittings onto the inner hoops now.

- 2 Each arch is in 3 parts. Fix the hoop leg to the middle part-hoop with the self-drill screws, using a cordless drill.
- 3 The D25 fittings on the end arches go **BELOW** the self-drill screws, with the tab hanging to the **INSIDE** of the polytunnel.
- 4 (OPTION) If you have ordered the Side Rail Option:
 - a. Slide an **M25** fitting onto the leg of each end hoop.
 - b. Slide an **H25** fitting onto the leg of each inner hoop.
 Set the M25 fitting and the H25 fittings at approximately 90cm from the bottom of the hoop.

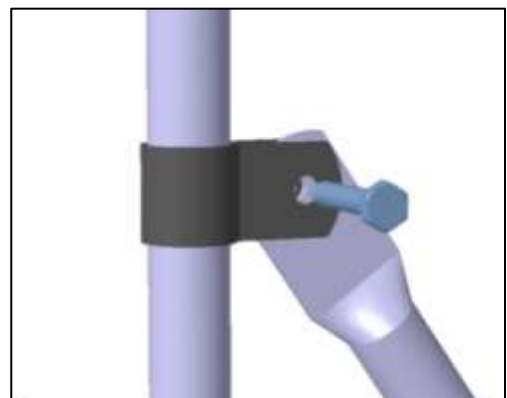
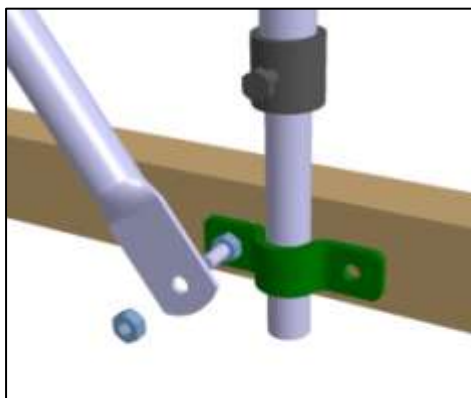
Robinson Polytunnels

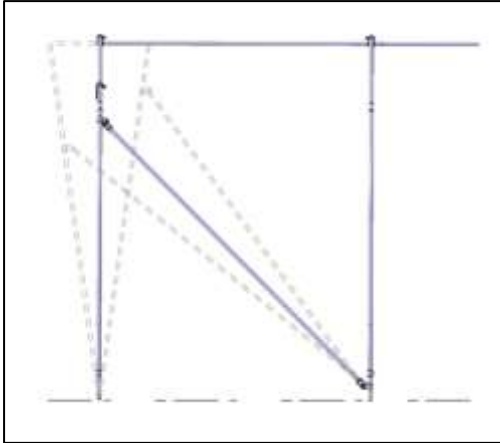
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- 5 The A20 fitting is slotted over each foundation tube for the hoop to rest on. Set the A20 fittings on the **end foundation tubes** so that they are level across the width of the ‘tunnel and approximately 5cm above top of the base rail. Set the A20 fittings on the **inner foundation tubes** resting on top of the base rail. (The end hoops are set higher than the inner hoops to allow for the inner hoops being “jacked up” when the polythene is tensioned later in the assembly process.)
- 6 NOTE: If the base rails on each side are not at the same height, the A20 fittings MUST STILL BE LEVEL ACROSS THE WIDTH. On the side where the base rail is low, set the A20 fittings higher above the base rail by the difference in heights.



- 7 Slot the assembled hoops onto the foundation tubes.
- 8 Slide the ridge tube into the E25 fittings (at the top of each hoop), starting with the plain-ended ridge tube. Set the end of the ridge tube flush with the E25 fitting and tighten the bolt to secure in place.
- 9 Slot a swaged ridge tube into the end of the previous ridge tube until you reach the end of the polytunnel. Trim off any excess with a hacksaw if necessary. Tighten the bolts in the E25 fittings to secure the ridge tubes in place.
- 10 Insert a plastic plug into each end of the ridge tube.
- 11 Fit the four corner diagonals. Fix the bottom end onto the M8 x 65 coach bolt (through the SC20 fitting) and secure with an additional M8 nut. Then fix the top end to the KH25 fitting on the end hoop with an M8 x 30 hex bolt and nylock nut. Make sure the bolt thread is pointing inwards (to avoid damaging the polythene).





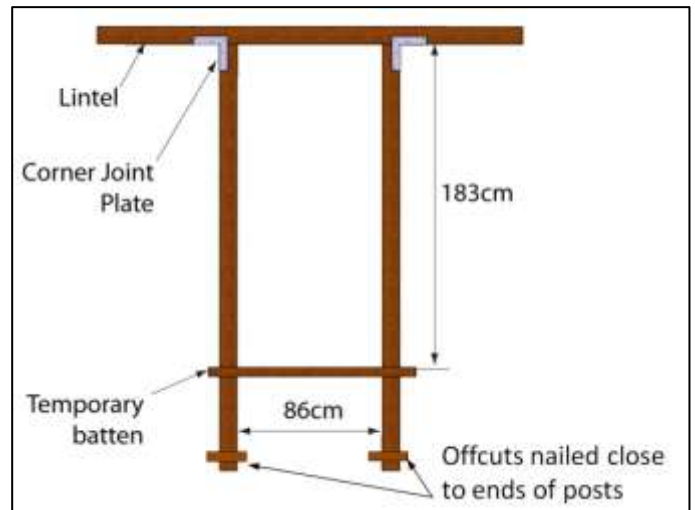
- 12 Set the end hoops so that they are vertical (looking from the side) by adjusting the position of the KH25 fittings on the end hoop.

5. TIMBER END FRAME ASSEMBLY & INSTALLATION

- 1 For each Timber End Frame you will need:
 - a. 3 pieces of timber at 89mm x 38mm x 2400mm long
 - b. 2 corner joint plates
 - c. 1 batten 38mm x 19mm x 1800mm long (temporary)
 - d. 18 twist nails 30mm long
 - e. 2 nails 125mm long

- 2 Lay the timber end frames out on a flat surface in the arrangement shown.

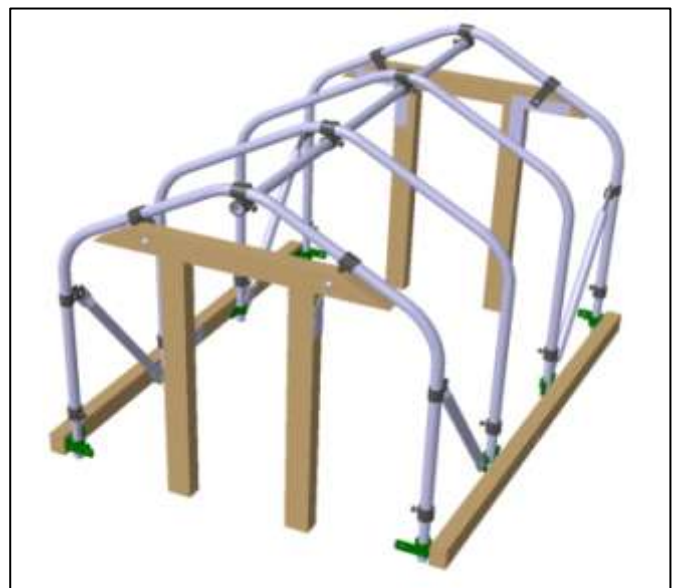
Tip! It's easier to make the frame of the door first and then build the End Frame around it, flat on the ground.



- 3 Use the 30mm twist nails to fix the corner joint plates (9 nails each) and then nail through the lintel into the top of the door post with the 125mm nails.

Tip! Pre-drill the lintel with a 5mm hole for the 125mm long nails.

- 4 Nail a temporary batten across the door posts at 183cm below the lintel. This will rest on the ground when you are installing the Timber End Frame and set the lintel to the correct height.
- 5 Nail a short offcut of timber close to the bottom end of each door post. (This will give the soil/concrete something to bond around in the excavated hole.)
- 6 Dig two holes for the door posts at each end of the polytunnel, approximately 55cm deep.
- 7 Slot the door posts into the excavated holes and set the end frame vertical in both directions.
- 8 Position the D25 fittings on the end hoop to accept the lintel. Mark the lintel for mitring and drilling to bolt to the D25 fittings.
- 9 Fix the Timber End Frame to the D25 fittings with M8 x 50 coach bolts and nuts.
- 10 Back-fill the excavated holes (or use concrete if preferred) and remove the temporary battens.



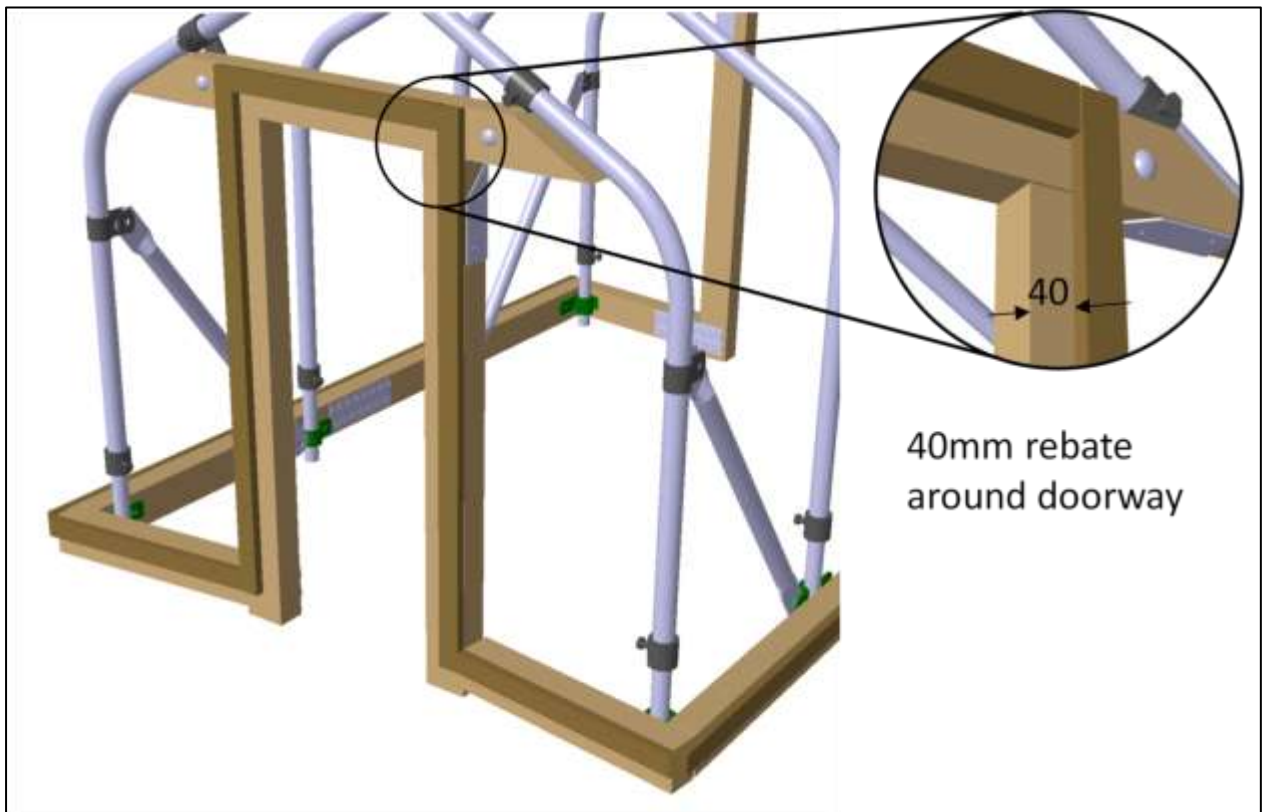
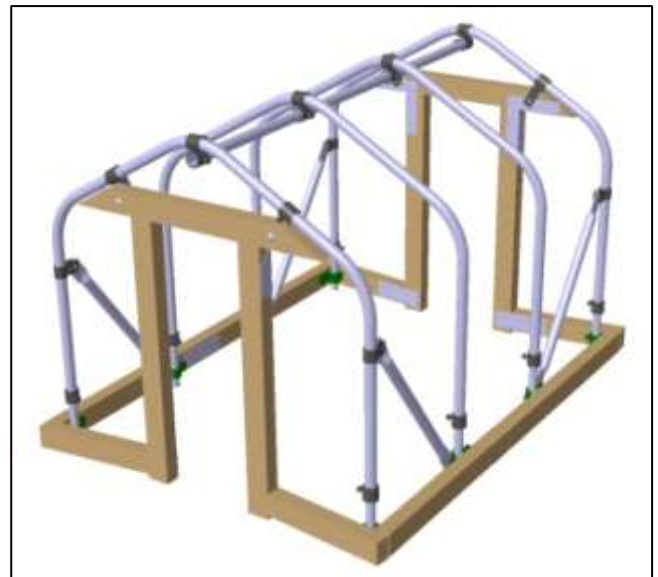
6. TIMBER BASE RAIL (Across the ends)

- 1 Place the end of the timber 89mm x 38mm x 240cm long up to the side of the door post. Mark the timber to the outside face of the timber base rail already fitted along the side of the polytunnel and cut to length.
- 2 Fix this timber to the door post with a timber joint plate and 30mm twist nails. Drill and bolt to the M20 fitting on the corner foundation tube. Hammer a 125mm long nail through the door post into the end of this timber.

Tip! Pre-drill the door post with a 5mm hole for the 125mm long nails.

Tip! Use the timber offcuts wherever they are long enough.

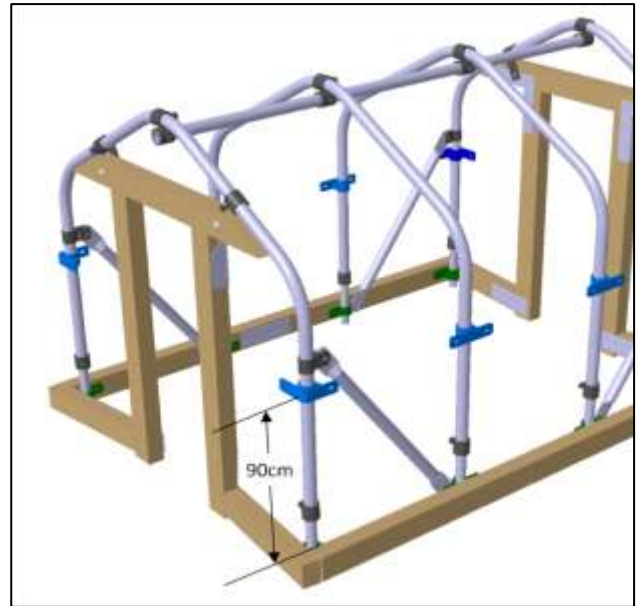
- 3 Repeat for all four corners.
- 4 If you are fixing the main cover to the base rail, create a rebate around the Timber End Frame and along the base rail for fixing the polythene. Use battens 38mm x 19mm and 50mm long nails at about 15cm apart.



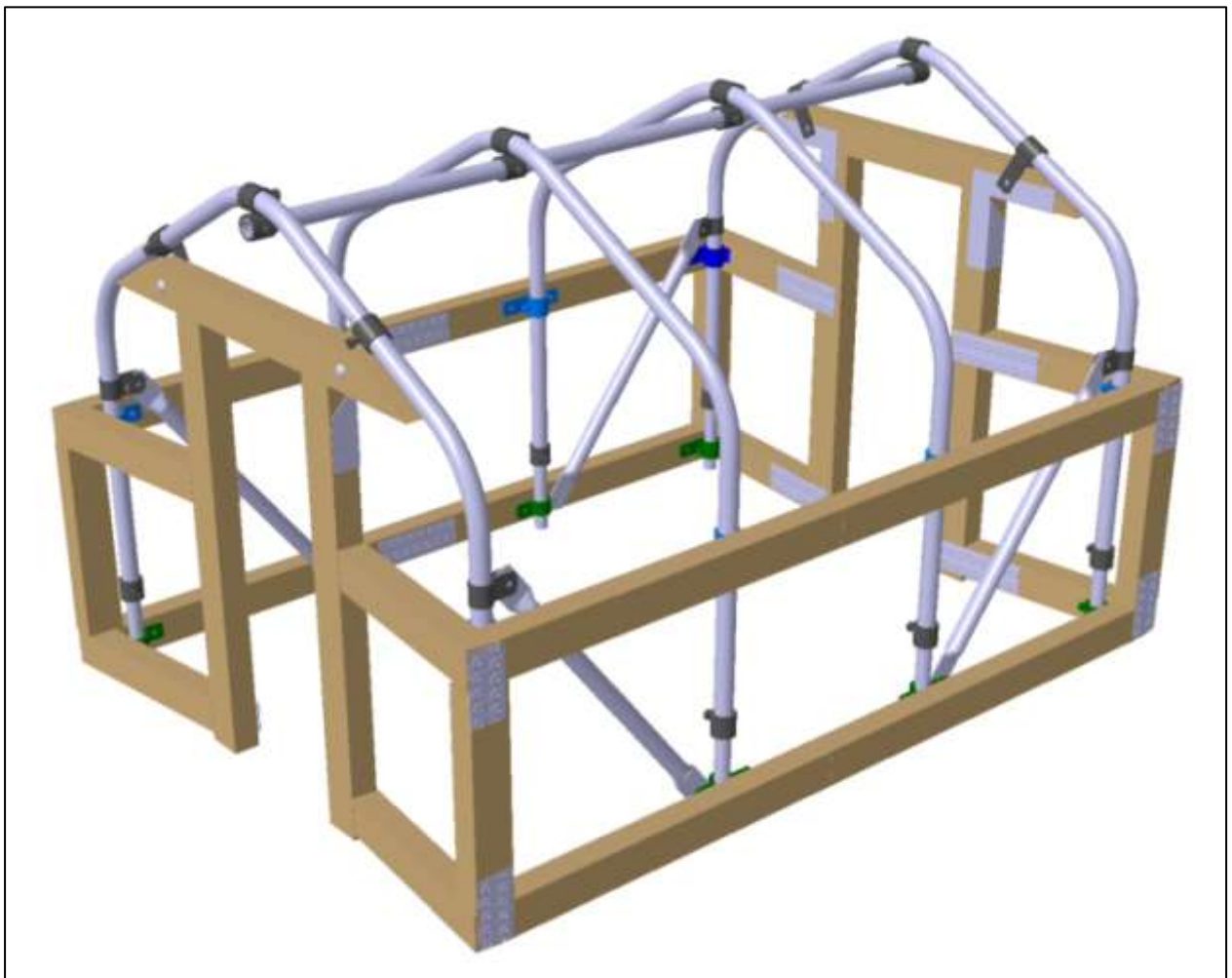
7. TIMBER SIDE RAIL (OPTION)

- 1 Set the M25 fittings and H25 fittings 90cm above the top of the Base Rail.
- 2 Fix the timber rails along the sides of the polytunnel, ensuring they are parallel with the base rail.
- 3 Continue around the corners, fixing to the posts in the same way as the Base Rail.

Tip! Use the timber offcuts wherever they are long enough.



- 4 For each corner, cut a piece of timber to fit between the base rail and the side rail.



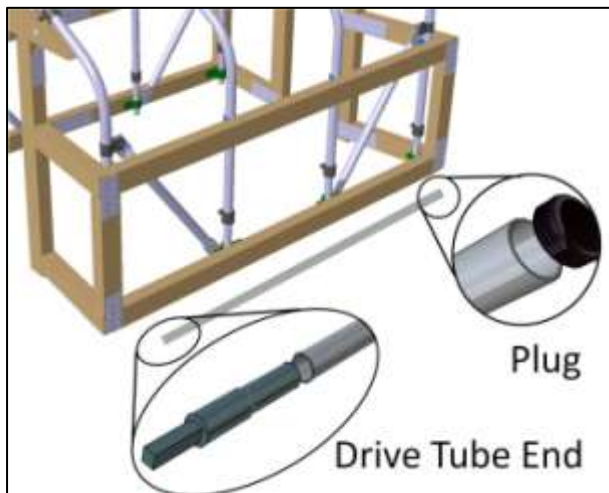
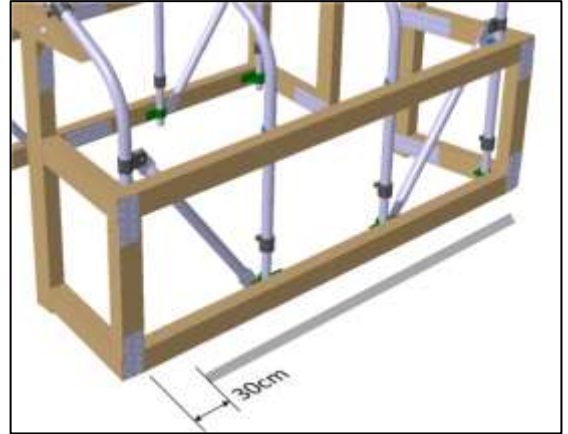
- 5 Fix this vertical timber between the base rail and the side rail with a timber joint plate at each end using 30mm long twist nails.

Tip! Pre-nail the timber joint plates onto the vertical timber before you put it in place. Everything is much more rigid whilst you are nailing.

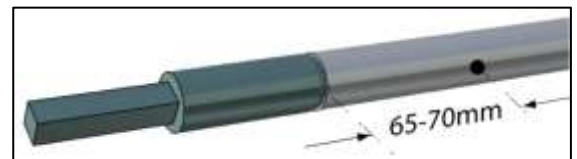
8. ROLL UP CURTAIN (OPTION)

- 1 Cut the 2m wide roll of polythene down the centre, to 1m wide. (This may have already been done for you).
- 2 Join the lengths of curtain tube together starting with the plain-ended piece. Fix the tubes together with a self-drill screw. Cut the last piece to length so that the overall length of the tube is 30cm shorter than the gap between the vertical corner timbers.

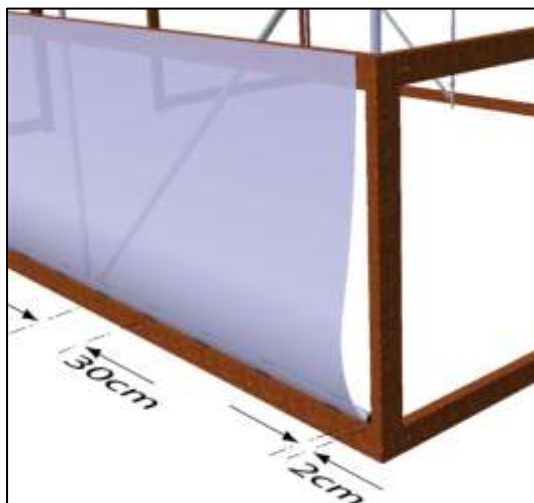
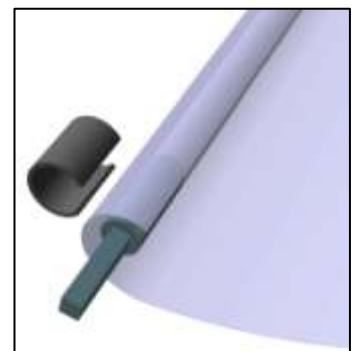
Tip! The curtain operates better if the gearbox is positioned at the “low” end of the ‘tunnel.



- 3 Slot the drive tube end into the curtain tube at the end where you want to operate the gearbox. Fix together with a self-drill screw, 65-70mm from the swage shoulder (to avoid drilling into the square shaft).



- 4 Slot a black PVC plug into the other end of the drive tube.
- 5 Roll out the 1m wide polythene along the side of the polytunnel and lay the drive tube on top, close to one edge.
- 6 With the Spring Clips, clip the polythene to the drive tube at approximately every 30cm, keeping the polythene as straight as possible.

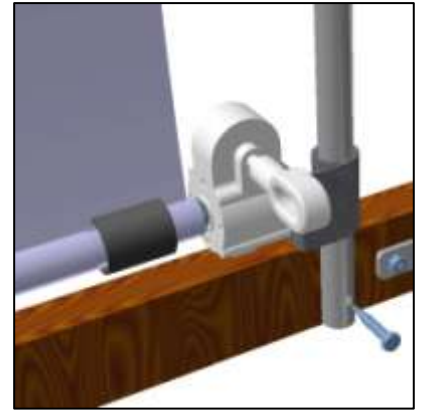


- 7 Rest the drive tube on top of the base rail with approximately 2cm gap between the end of the drive tube and the vertical corner timber. Staple the top edge of the polythene to the side rail, flush with the top edge. At each end of the drive tube, trim of the surplus polythene.

- 8 Take up the slack in the polythene by rolling the drive tube into the polythene. Slot the gearbox assembly onto the square shaft and slide the guide tube into tube on the gearbox bracket.
- 9 Hold the guide tube onto the inside faces of the base rail and side rail and fix it to the base rail with an M8 x 50 coach screw.



- 10 With the gearbox handle, wind the curtain up to the side rail. Fix the top end of the guide tube to the side rail with an M8 x 50 coach screw. Fit a PVC plug into the top end of the guide tube.

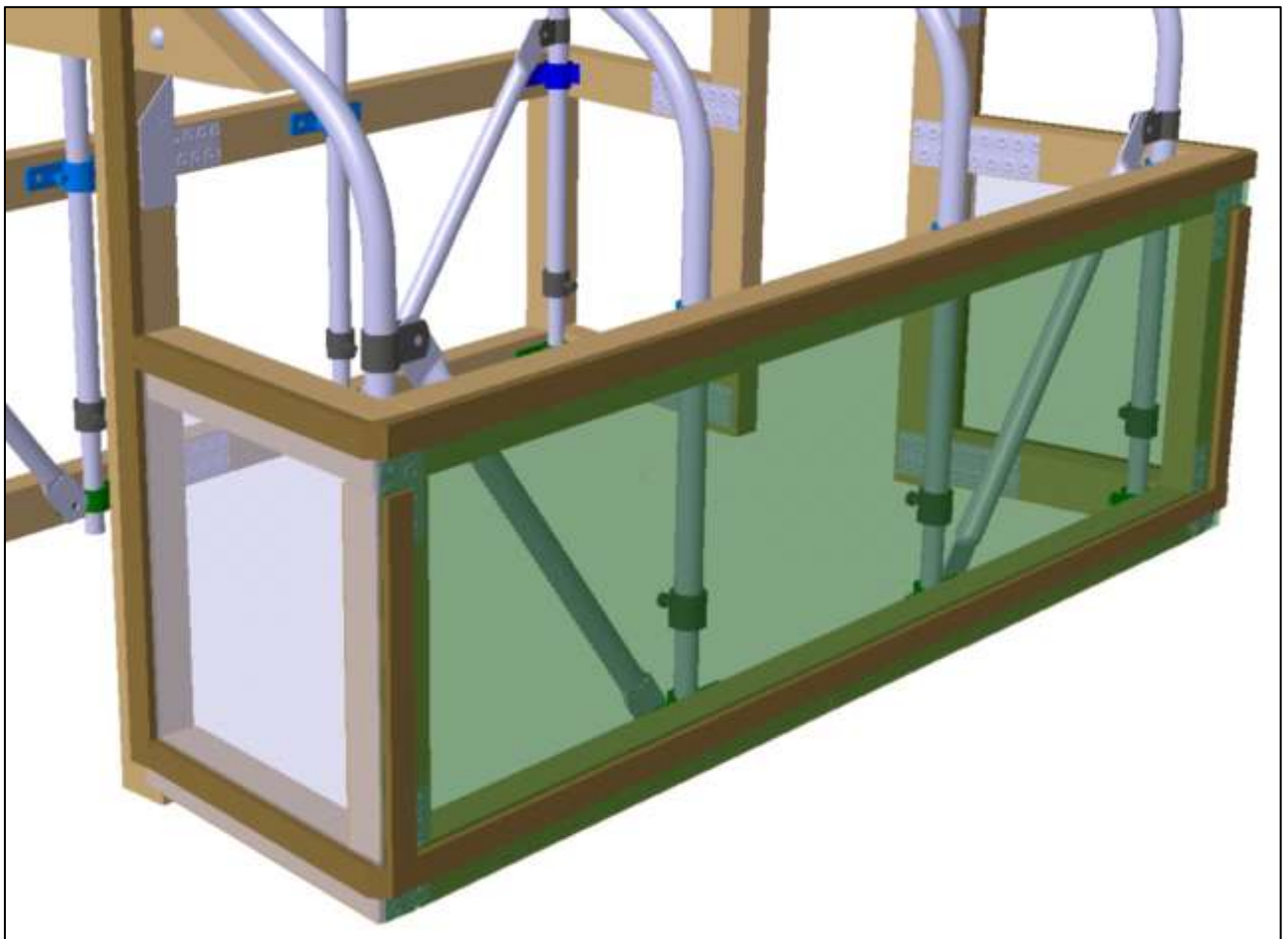
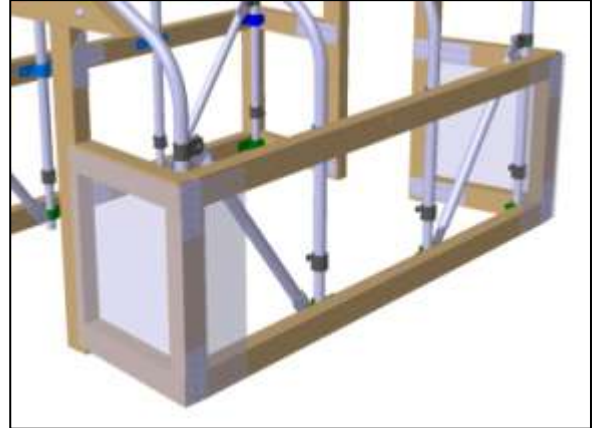


- 11 Check that the curtain rolls up parallel to the base rail and side rail and adjust the Spring Clips if necessary.
- 12 Cut a notch out of the base rail where the gearbox touches to allow the drive tube to rest directly on top of the base rail.



9. END PANELS & SIDE NETTING (INCLUDED WITH TIMBER SIDE RAIL OPTION)

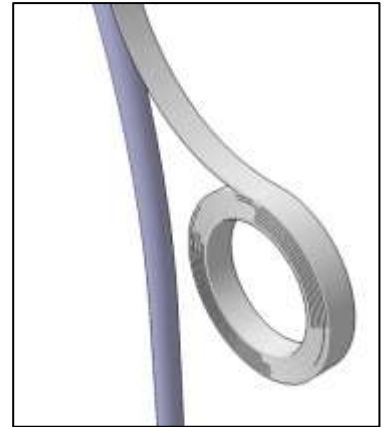
- 1 Cut a piece of polythene to fit over the panel at the side of the doorway and around the side of the polytunnel by approximately 40cm (approximately 1m x 1.5m).
- 2 Staple the polythene over the end frame, around the side of the polytunnel to overlap the curtain.
- 3 Unroll the net along the side of the polytunnel.
- 4 Staple the net to the side rail, flush with the top edge. Staple the net to the two vertical corner rails and to the base rail.
- 5 Batten over the net and end panels in the positions shown.



10. FITTING THE ANTI HOT SPOT TAPE

- 1 The Anti Hot Spot Tape is applied to the hoops of the polytunnel where the polythene would touch.
- 2 Starting just above the A20 fitting on the Foundation Tube, place the Anti Hot Spot Tape on the outside face of the hoop. On the inner hoops the tape should be central on the tube. On the end hoops the tape should be on the “corner” of the tube.

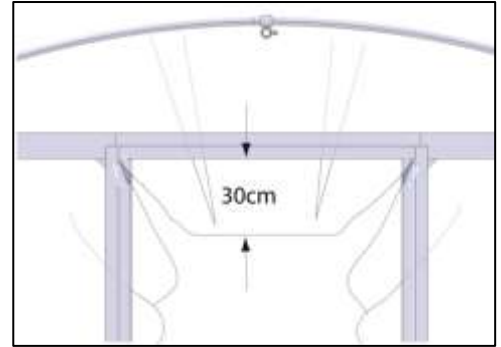
Tip! Don't fit the Anti Hot Spot Tape until you're ready to sheet – it may get damaged if the weather is wet and windy.



- 3 Tape over any sharp edges, bolt heads and metal faces that the polythene may come into contact with.

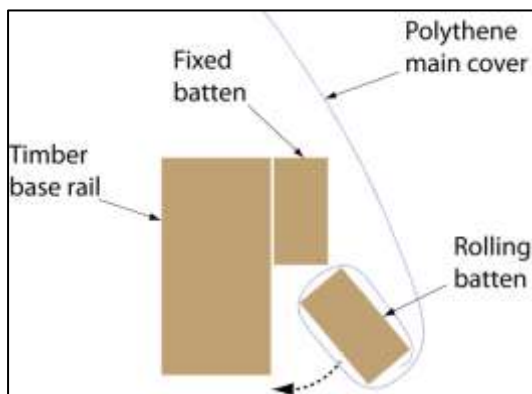
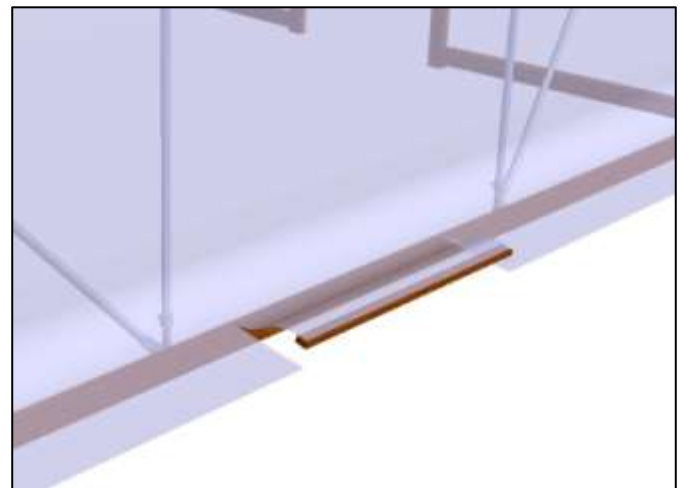
11. FITTING THE POLYTHENE – POLYTHENE TO BASE RAIL

- 1 Unroll and unfold the polythene and drape it over the polytunnel framework with an equal amount over each side and each end.
- 2 Carefully slice the polythene diagonally from the top corners of the doorway. Trim the bottom off the central flap so that it hangs approximately 30cm below the door lintel.
- 3 Cut a batten to fit in the rebate above each doorway (approximately 86cm long).



- 4 Place the batten underneath the flap of polythene and roll the batten into the polythene, up to the rebate. Nail the batten in place. Note, it is preferable to have a couple of small pleats in the flap of polythene.
- 5 Repeat at the other end, PULLING THE POLYTHENE AS TIGHT AS POSSIBLE.

- 6 Starting at the centre of one side, batten the polythene to the base rail. Hold the batten under the edge of the polythene and carefully cut the polythene in line with the ends of the batten to create a flap, up to the bottom edge of the base rail.



- 7 Roll the batten into the polythene up to the rebate and nail the batten to the base rail with 50mm long nails, at about 15cm apart.

- 8 Do the same at the opposite side of the polytunnel but try to tension the polythene by levering the edge of the batten against the rebate.
- 9 Continue towards each end of the polytunnel, alternating between each side.

10 Continue around the corners, pulling the polythene towards to doorway.

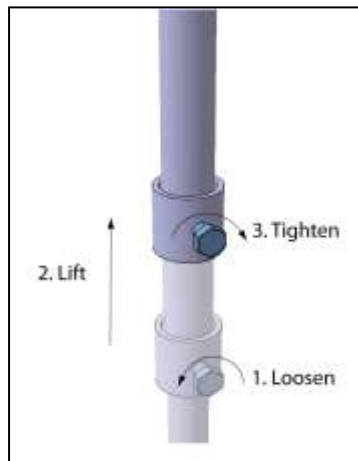
11 Now fix the polythene to the door posts. The polythene is pulled into the doorway and pleated. Trap the polythene behind the batten as you nail the batten into the rebate. Use approximately 20 nails 50mm long per batten.

Tip! Fold the pleats “downwards” so that they don’t collect rainwater. Lots of small pleats are better than a few big pleats.

Tip! Pre-nail the battens so they’re ready to fix the polythene quickly.



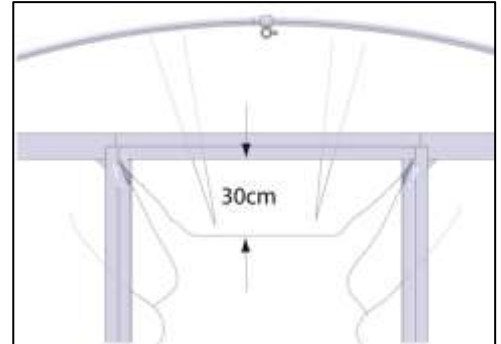
12 Trim off the surplus polythene in the doorway.



13 Raise the inner hoops to tension the polythene.

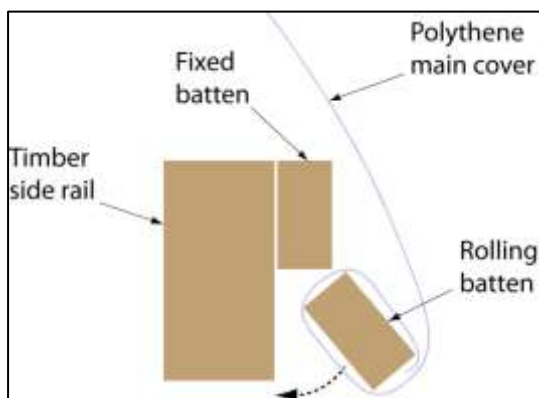
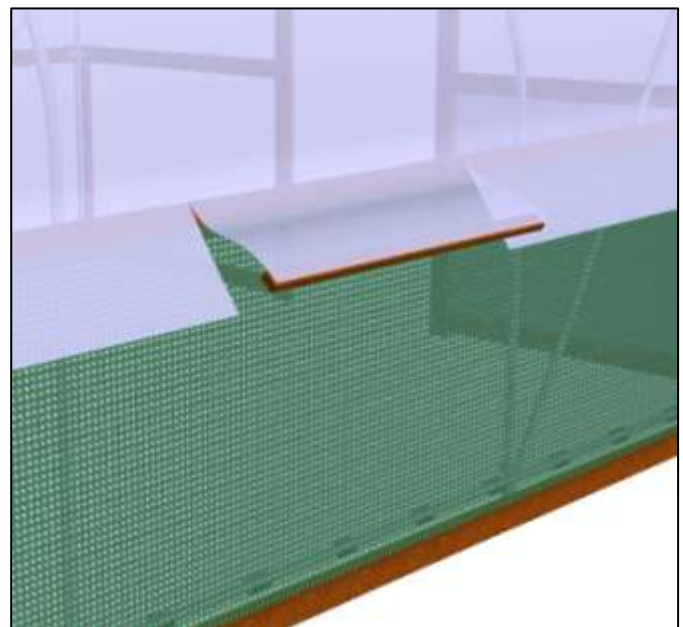
12. FITTING THE POLYTHENE – POLYTHENE TO SIDE RAIL

- 1 Unroll and unfold the polythene and drape it over the polytunnel framework with an equal amount over each side and each end.
- 2 Carefully slice the polythene diagonally from the top corners of the doorway. Trim the bottom off the central flap so that it hangs approximately 30cm below the door lintel.
- 3 Cut a batten to fit in the rebate above each doorway (approximately 86cm long).



- 4 Place the batten underneath the flap of polythene and roll the batten into the polythene, up to the rebate. Nail the batten in place. Note, it is preferable to have a couple of small pleats in the flap of polythene.
- 5 Repeat at the other end, **PULLING THE POLYTHENE AS TIGHT AS POSSIBLE.**

- 6 Starting at the centre of one side, batten the polythene to the side rail. Hold the batten under the edge of the polythene and carefully cut the polythene in line with the ends of the batten to create a flap, up to the bottom edge of the side rail.
- 7 Roll the batten into the polythene up to the rebate and nail the batten to the side rail with 50mm long nails, at about 15cm apart.



- 8 Do the same at the opposite side of the polytunnel but try to tension the polythene by levering the edge of the batten against the rebate.
- 9 Continue towards each end of the polytunnel, alternating between each side.

10 Continue around the corners, pulling the polythene towards to doorway.

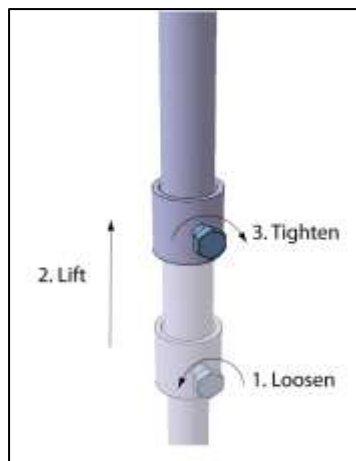
11 Now fix the polythene to the door posts. The polythene is pulled into the doorway and pleated. Trap the polythene behind the batten as you nail the batten into the rebate. Use 50mm long nails at about 10cm apart.

Tip! Fold the pleats “downwards” so that they don’t collect rainwater. Lots of small pleats are better than a few big pleats.

Tip! Pre-nail the battens so they’re ready to fix the polythene quickly.



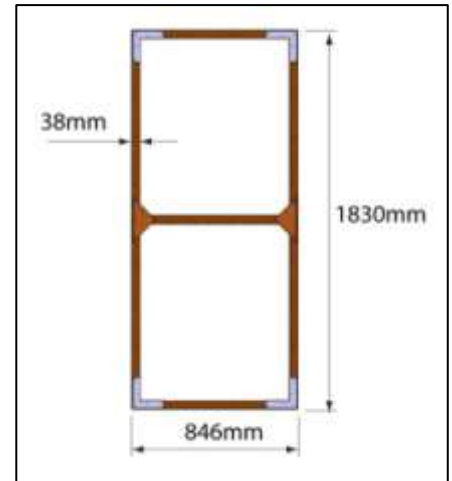
12 Trim off the surplus polythene in the doorway.



13 Raise the inner hoops to tension the polythene.

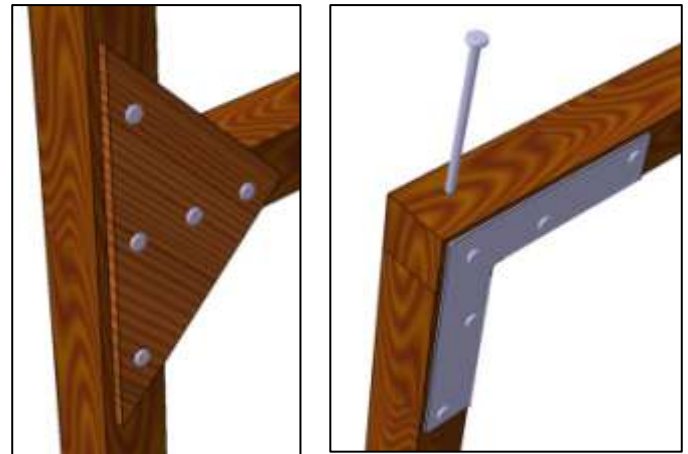
13. DOOR ASSEMBLY & INSTALLATION

- 1 For each door frame you will need:
 - a. 2 pieces of timber at 42mm x 38mm x 1830mm long (verticals)
 - b. 3 pieces of timber at 42mm x 38mm x 770mm long (horizontals)
 - c. 2 plywood triangles
 - d. 4 Corner Joint Plates
 - e. 36 twist nails 30mm long
 - f. 6 nails 75mm long



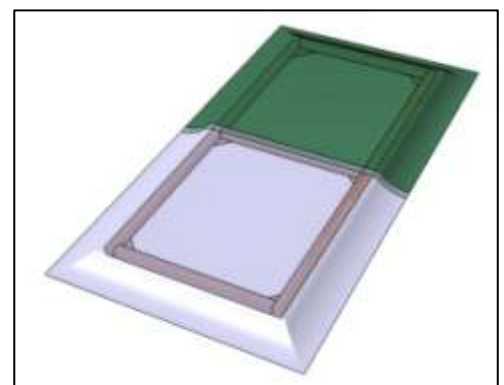
- 2 Lay the door frame out on a flat surface in the arrangement shown. Note, the visible face of the timber is 38mm wide (not 42mm).

- 3 Using the 30mm twist nails, nail the Corner Joint Plates over the corners of the door. Nail the 2 Plywood Triangles over the joints of the mid-rail to the verticals, 5 nails per triangle. Set the triangles approximately 5mm from the edge of the door.



- 4 Stand the door on its side and nail through the door verticals into the ends of the door horizontals with the 75mm nails.

- 5 For cladding each door you will need:
 - a. 3 battens at 38mm x 19mm x 846mm (cut to length)
 - b. 4 battens at 38mm x 19mm x 858mm (cut to length)
 - c. Piece of door polythene, 1m x 1m
 - d. Piece of door net, 1m x 1m
 - e. 63 nails 50mm long

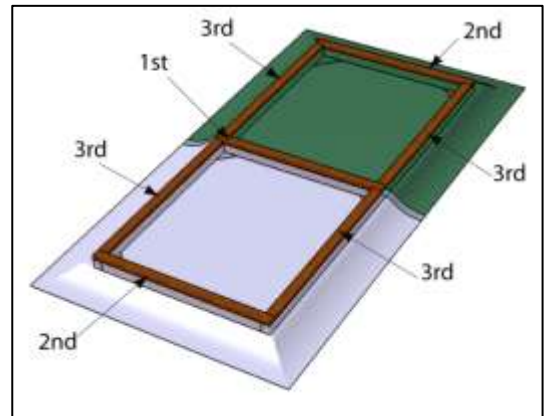


- 6 Lay the door on its inside face (plywood triangles down). Lay the polythene over the bottom half of the door and the net over the top half of the door. The polythene and net will overlap on the middle door horizontal by the thickness of the timber (38mm).

- 7 Hold the polythene and net in place with staples using a staple gun or stapler. Try to get the polythene and net tight when stapling to the door frame.

Tip! Pre-nail the battens before you clad the door to get the job done quicker!

- 8 Starting with the mid-rail, nail a batten over the polythene and net. Use 50mm long nails, 9 nails per batten. Next nail on the end battens and finally the side battens.



- 9 Trim off the surplus polythene and net.

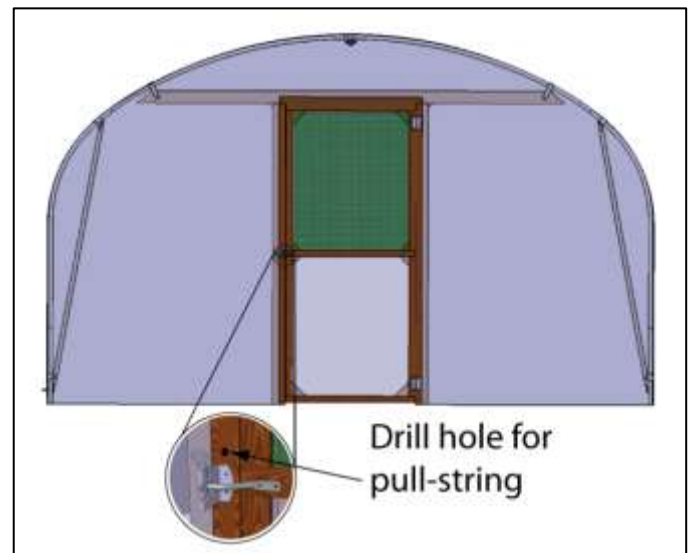
- 10 Screw the hinges onto the front face of the door, ensuring that the door is hinged on the side which you want.



- 11 Position the door with the end frame, resting on packing pieces to set the gap around the door. Screw the hinges to the door post.



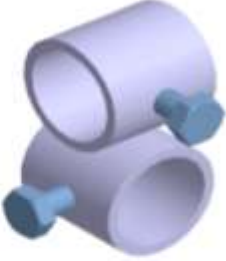

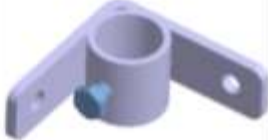






- 12 Screw the auto gate latch and latching bar to the door post and door vertical, respectively.

- 13 Drill a hole through the door post for the pull-string. The polyester cord (pull-string) is tied around the sneck of the gate latch, threaded through the hole and a loop tied on the end. This operates the latch from the inside of the Polytunnel.










If you are unsure about any part of the assembly procedure you can contact our office between 8:30am and 5:00pm, Monday to Friday on 01282 501252

PARTS LIST

		
<p>A 20 FITTING Hoop to ground tube</p>	<p>D 25 FITTING Lintel to end hoop</p>	<p>E 25 FITTING Ridge tube to hoop</p>
		
<p>KH 25 FITTING Corner diagonal to end hoop</p>	<p>SC 20 FITTING Base rail to inner ground tube</p>	<p>M 20 FITTING Base rail to corner ground tube</p>
		
<p>H 25 FITTING Side rail to mid hoop</p>	<p>M 25 FITTING Side rail to end hoop</p>	<p>TIMBER JOINT PLATE 50mm x 150mm Base rail/side rail to door post</p>
		
<p>POLY-PITCH MID HOOP</p>	<p>POLY-PITCH SIDE HOOP</p>	<p>GROUND TUBE Dia. 21 x 720mm Set into ground to support hoops</p>

PARTS LIST (continued)

		
<p>CORNER DIAGONAL LEFT/RIGHT At each corner of the structure</p>		
		
<p>RIDGE 5 FT PLAIN/SWAGED Ridge tubes to connect hoops together</p>	<p>38 x 19mm x 1.8m TANALISED TIMBER Battens to secure polythene/net.</p>	<p>6mm PLYWOOD TRIANGLE 150mm Over mid-joints on doors</p>
		
<p>38 x 42mm x 1.82m TANALISED TIMBER</p>	<p>38 x 42mm x 0.77m TANALISED TIMBER</p>	<p>38 x 89mm x 2.4m TANALISED TIMBER</p>

PARTS LIST (continued)



POLYTUNNEL MAINTENANCE

Your polytunnel should require very little maintenance during normal use.

1. “Moving” parts of your polytunnel are the most susceptible to damage from extreme weather conditions. These include items like doors and roll up curtains. To minimise the likelihood of damage, ensure that the doors and curtains are operating correctly and adjust where necessary.
2. Minor tears and damage to polythene can be repaired using Polythene Repair Tape. Before applying Repair Tape, make sure the polythene is clean and dry. Apply pressure from both sides of the polythene when applying the Repair Tape. If possible, apply the Repair Tape to both sides of the polythene. Always use sharp scissors when cutting the Repair Tape.
3. Major damage to the polythene cover will require a complete replacement polythene cover.
4. When replacing the polytunnel cover, check the Anti Hot Spot Tape for degradation and de-lamination of the friction-free surface. Replace the Anti Hot Spot if necessary or repair with Anti Hot Spot Repair Tape.
5. The polythene cover will perform better and is likely to last longer if it is clean. Cleaning the polythene can be done with soapy water and a sponge or soft brush. Cleaning should only be necessary once every year unless the polytunnel is sited below overhanging tree branches.
6. Any minor damage should be rectified as soon as it is apparent to avoid possible catastrophic failure of the polytunnel framework.