EASY-BUILD INSTRUCTIONS

Watch the instruction video online...
Introduction

Thank you for purchasing your EASY-BUILD polytunnel. Before you begin to build, we strongly recommend you read the instructions thoroughly.

Take time to check all the parts are present and make sure you have the correct tools to build your polytunnel. It is advisable to leave adequate working space around your polytunnel for maintenance, operations and re-covering.

Safety

Always wear gloves when constructing as there may be sharp edges.

Always use the correct tool for the job.

Consider other people around the site of your new polytunnel, particularly children and animals.

Take care when using sharp tools.

Wear safety glasses when attaching ‘W-Wire’ and ensure that any other persons in close proximity do the same.

Keep your work area tidy and organised. A tidy work area is a safe work area.

Tie back any loose hair and wear suitable clothing and shoes.

Take care when lifting heavy items of your kit.

When using ladders ensure they are on firm level ground.

It may be advisable to position step ladders on a large sheet of plywood if the ground is soft.

Tools Required

![Wire Cutters](wire-cutters.png)

![Spirit Level](spirit-level.png)

![Stanley Knife](stanley-knife.png)

![Ladders](ladders.png)

![Spade](spade.png)

![4mm Allen Key](4mm-allen-key.png)

![Tape Measure](tape-measure.png)

![Drill with tex screw bit](drill-with-tex-screw-bit.png)

![String](string.png)

13mm Spanner x 2

10mm Spanner or socket

(bit supplied)

(bit supplied)
Frame Fitting Packs

Every step of the Easy Build polytunnel has been put into easy stages. Each of those stages has been put in to fittings packs.

As you read through the instructions we will refer to these packs.

When using the packs you may find you do not need all the parts, bolts nuts etc. at that stage, we recommend that you keep any unused parts in the correct bag for use later.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>EBP 01</td>
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<td>Side Base Rail Pack</td>
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<td>Corner Base Rail Pack</td>
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<td>EBP 04</td>
<td>Door Frame Pack</td>
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<tr>
<td>EBP 05</td>
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<td>EBP 06</td>
<td>Door Frame Bracket Pack</td>
</tr>
<tr>
<td>EBP 07</td>
<td>End Strut Pack</td>
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<td>End Hoop Pack</td>
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<td>EBP 09</td>
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<td>Main End Hoop Pack</td>
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<td>EBP 11</td>
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<td>Double Door Fittings Pack</td>
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<td>EBP 17</td>
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<td>EBP 18</td>
<td>Side Vent Pack</td>
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<tr>
<td>EBP 19</td>
<td>Side Vent Additional Hoop Pack</td>
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Construct your polytunnel in this sequence:

Foundations
Side Base Rail
Hoops
Ridge
Corner Stabilisers
Door Frames
End Base Rails
Anti-Hotspot Tape
Polythene Cover
Doors

Watch the instruction video online...

www.northernpolytunnels.co.uk/videos
3:4:5 Triangle Method: Position the first two foundation tubes the correct distance apart e.g. 10ft apart for a 10ft wide polytunnel. These are marked 'A' and 'B' in the above diagram. Secure a tight string-line between the two foundation tubes and mark the 120cm (or 4ft/8ft) position, labelled 'D' in the diagram. A small cable tie or wire twist is ideal for this as it can be moved if required. Connect a second length of string to the foundation tubes marked 'B' and 'C'. At this stage 'C' is not secured in to position. Ensure the string-line is tight and mark the 90cm point (or 3ft/6ft), labelled 'E'. Now measure the distance between 'D' and 'E'; this should be 150cm (or 5ft/10ft). If not, then reposition foundation tube 'C' (with the tensioned string-line still attached) by moving it either to the right or the left until the distance between 'D' and 'E' is correct. Foundation tube 'F' should now be pushed in to the ground, if positioned the correct distance from 'A' and 'C' it should be in the correct position.

Once you’re happy that your corner foundations tubes are square and in the correct position you can screw them all in to the required depth. As a final check, measure diagonally from corner to corner, these two measurements should be the same. If not then repeat the 3:4:5 triangle method until they are.

Once the four corner foundation tubes are in place the intermediate foundation tubes can then be positioned. These should be spaced at 5ft (1.52m) or 6ft (1.83m) along the length, depending upon the hoop spacing option you have chosen.

We recommend that the foundations are set out accurately, this will ensure the polytunnel is constructed to satisfaction.
Foundations - Foundation Tubes

Screw Anchors

Avoid only on ground with a high stone/rubble content, peat soils, or loose ground which has been recently disturbed or deep cultivated.

Push each of the screw anchors in to the ground, just enough so they will stay in position. Once you have squared the polytunnel and positioned all the screw anchors (see page 4), they can then all be screwed in to the correct depth. This is achieved by simply inserting the ‘T’ bar through the holes at the top of the screw anchors and turning clockwise (as you would a corkscrew) until the required depth is achieved. Approx. 40-45cm remaining above ground. Even if some of the screw anchors hit large stones - forcing you to dig them out - you can still secure the screw anchors in place using concrete or quick setting postmix if required.

Ground Anchor Plates

For each foundation tube dig a 35cm wide x 45cm deep hole. Fix the steel plate approx. 5cm from the base of the ground tube using the two clamps to secure it (one on each side of the plate). Place the assembled ground anchor firmly in to the bottom of the hole and back fill with the excavated material, ensuring it is tamped down well. If done correctly all the soil should be comfortably used. This is better carried out when the ground conditions are not too wet, otherwise you may find the holes fill with water and the backfill becomes muddy.

Base Plates

Used when fixing your polytunnel to a concrete base (or similar). Position the base plates using the 3:4:5 triangle method as shown on page 4. Mark the position of the holes, then using a 10mm masonry bit drill two 80-100mm deep holes per foundation tube in to the concrete base. Drop the sleeve anchors bolts (supplied) through the base plates and hammer in to the holes. Tighten the nuts with a 13mm spanner or socket until secure.

Concreting method: For each foundation tube dig a 35cm wide x 45cm deep hole. Fill the hole to the required depth with concrete or quick setting postmix. Position each foundation tube in the concrete leaving 40-45cm above the finished ground level. Ensure the clamp has been securely fastened to the base of the foundation tube. This will prevent the foundation tube from pulling out after the concrete has set. The exact position of the clamp is not crucial so long as it is somewhere in the bottom half of the concrete foundation, the nearer the bottom the better. It may be desirable not to fill the hole completely, but to leave a space at the top to back fill with soil. This will hide the concrete and allow you to cultivate up to the edges of your polytunnel.

Driven in to the ground: Foundation tubes are simply knocked in the ground, leaving 35-45cm protruding (depending upon the ground conditions). This method is NOT recommended, and only used where the polytunnel cover is trenched in to the ground. All of our polytunnels come with a base rail, so this method is not employed.
Base Rail - Sides

<table>
<thead>
<tr>
<th>Parts / Packs</th>
<th>Corner Base Rail Bracket (EBP03), Side Base Rail Bracket (EBP02), Aluminium Base Rail (5ft or 6ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tools</td>
<td>13mm Spanner / Socket</td>
</tr>
</tbody>
</table>

Step One

Lay out the base rails and fittings along each side of the polytunnel in the correct order.

Place a Corner Base Rail Pack (EBP03) by each corner foundation tube, and a Side Base Rail Pack (EBP02) at each inner foundation tube.

These fittings will require assembling as shown on the individual pack instructions.

Slide the relevant base rail section (5ft or 6ft lengths) into the first corner joiner (image 1).

Next, slide the base rails into the intermediate base rail joiners (image 2). The base rails should meet approximately in the center of these joiners. Once all of the intermediate base rail joiners are attached to the base rail you can attach the last corner base rail fitting (image 3).

Step Two

Lift the assembled base rail onto the foundation tubes and lower to ground level (image 4).

Your base rail should be on the outside of the polytunnel and as close to the ground as possible, even if this means it’s not level. This will prevent draughts. Alternatively, you can maintain a straight and level base rail and fill any gaps beneath it with earth etc.

Note:

You won’t attach the base rail across the ends of your polytunnel until you’ve secured your door frames later in the construction process.
These fittings will be used later in the construction process, but it’s important that you place them on the relevant foundation tubes now, and in the correct order.

**Intermediate Foundation Tubes**

From the Inner Hoop Pack (EBP05) and the end hoop pack (EBP08) place a hoop tensioning collar on each of the foundation tubes (image 1).

**Corner Foundation Tubes**

From End Strut Packs (EBP07) place a keyhole clamp (image 2) on to each of the corner foundation tubes. These will simply rest on the hoop collars.

Finally, from Door Frame Bracket Pack (EBP06) place the door frame connectors (image 3) on to each of the corner foundation tubes. These will loosely sit on the keyhole clamps with the bend pointing inwards (images 4 and 5).

**Note:**

At this stage you will only need the fittings from the packs, keep any unused bolts, nuts etc. in the pack and in a safe place.
**Hoops and Ridge**

<table>
<thead>
<tr>
<th>Parts / Packs</th>
<th>End Hoop Pack (EBP08), Inner Hoop Pack (EBP05), Hoops, Ridge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tools</td>
<td>13mm Spanner / Socket</td>
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</tbody>
</table>

Note: If adding additional ridges refer to page 14 before you continue.

**Lay out the hoops and fittings (image 1).**

**Step One (image 2)**

Our hoops are supplied in two pieces, one half having a swaged end with the other being plain. This allows the two halves to slot together. Before doing this place the cross-over clamps (found in packs EBP08 & EBP05) on the plain half of the hoop approx. 2cm from the join. Hand tighten to hold in position with the bottom ring hanging downwards.

**Step Two (image 3)**

Now lift up each of the hoops and sleeve them over the foundation tubes. This is easier to achieve with two people as the hoops are springy and will require flexing inwards before they sleeve over the foundation tubes. Once the hoops are in position on the foundation tubes the cross over clamps should be positioned top center. Make sure that the bolt head faces inwards on the end hoops otherwise they may damage the polythene cover later.

**Step Three (image 4)**

Once all the hoops are in position, the ridge tube sections can be slotted in to place. Start at one end with a double plain ended section, followed with the swaged sections. Slot these together through the cross-over clamps, ensuring the plain ends protrude approx. 2cm through the fittings. When you later tighten the bolt on to the ridge it should slightly distort the tube forcing it to grip the swaged end of the proceeding ridge section. You may need to temporarily slacken the hand-tightened bolts of the cross-over clamps to align the ridge sections. Make sure the ridge is positioned on the underside of the hoops, as this prevent the ridge tube rubbing against the polythene after installation.

**Step Four**

Now position and tighten the top collars on the cross-over clamps effectively locking the hoops to the ridge. Again, the plain half of the hoop will squash against the swaged end of the other half of the hoop preventing them from pulling apart. Make sure the ridge tube is flush with the collar on the end hoops and insert the plastic ridge plugs (image 5).
There are four corner diagonal struts, one for each corner. One end fastens half way up the end hoop, with the opposite end fastening to the bottom of the next hoop in (attaching to the base rail bracket).

Step One (image 1) Before attaching the corner diagonal struts, the end hoops should be raised approx. 10cm up on each of the corner foundation tubes. This is done by lifting the hoops and holding them in place using the hoop collars. You’re effectively raising the hoop collars 10cm above the base rail and locking them in place by tightening the bolts. Ensure the bolt heads are pointing inwards to prevent them from damaging the polythene later. This is also a good time to roughly position the door frame brackets so that they are close to hand when fitting the door frames. Leave the intermediate hoops at ground level for now, as they will be lifted after the polythene cover is fitted to apply extra tension to it. The end hoops can’t be raised once the door frames are in place, so raising them now will ensure your polytunnel has a straight ridge after the polythene has been tensioned at the end.

Step Two (images 2 & 3) Firstly, unscrew the nut on the side base rail connector of the second hoop from the end, (for a 10ft or 12ft long polytunnel this will be the middle hoop). It will be the right hand nut for the right hand struts, and the left hand nut for the left hand struts (as seen from the inside). Connect the corner diagonal strut and replace the nut.

Step Three (image 4) Raise the opposite end of the diagonal strut to a point where it just meets the end hoop. This will be at a 45 degree angle (approx.). Slide the keyhole clamp (that you positioned on page 7 ref: EBP07) up the end hoop to a position where it meets the diagonal strut. Using the bolt and nut provided attached the strut to the keyhole clamp, making sure the bolt head is on the outside. This will prevent the threaded end of the bolt sticking outwards and damaging the cover. Repeat this on all four corners, but don’t tighten the nuts just yet.

Note (image 5) Attach the strut to the outside of the key-hole clamp. It doesn’t matter which side of the clamp, but most people usually choose the inside. Do not sandwich it within the clamp as this may prevent the clamp from fully closing, thus preventing the clamp having a secure grip on the hoop.

Step Four Using a spirit level ensure the end hoop is vertically straight, and then tighten the nuts. Repeat this with each diagonal strut.
Door Frames

<table>
<thead>
<tr>
<th>Parts / Packs</th>
<th>Door Uprights, Door Lintel, Door Strut, Door Frame Pack (EBP04)</th>
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<tbody>
<tr>
<td>Tools</td>
<td>13mm Spanner, String, Spade and Spirit Level</td>
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**Step One (image 1)**
Lay the three aluminium box sections on the floor in a ‘H’ formation, with the outside face facing down. The shorter piece (door frame lintel) should be positioned approx. 30cm in from the end.

**TOP OF DOOR FRAME:** Slide four bolts into the rear grooves of the short section (two at each end), and two further bolts in to the top of each of the longer sections.

Place the door frame bracket in position and hand tighten the nuts. Do this for both brackets.

**BOTTOM OF DOOR FRAME:** Slide two bolts up from the bottom of each door upright (two on either side). The lower two bolts will be used in the next step, the other two will be used later to attach the end base rail.

Use the lower two bolts to fix the door frame stabiliser bar. This wants to be positioned approx. 45cm up from the bottom. Again, don’t over tighten the nuts at this stage as they will be re-positioned later.

**Step Two**
Slide the end base rail sections in to corner base rail fittings (image 2). Tie a string line between the two end hoops at ground level (image 3). Using the string line across the hoop you can ensure your door posts and base rails will be in-line.
Step Three
Take your constructed door frame to the polytunnel and position in the center of the hoop using the end base rails as a guide. Using a spade mark out where you need to dig (image 4).

Step Four
Dig a hole approx. 30cm x 30cm square and 30cm deep for each door post (image 5).

Step Five
Slide a bolt down from the top of each door post, then slide the door post bracket (from pack EBP06) in to position and fasten hand tight with the nuts provided (image 6).

Using a spirit level ensure the door frame is vertically straight and double check measurement at the base, the base rails should meet the door posts evenly. Back fill the holes securing the base in position, and then tighten the top nuts.

Step Six (image 7)
To position the door lintel to the correct height (approx. 2mtr above ground level), loosen the nuts and raise or lower to the desired height and re-tighten the nuts. Make sure the height is not higher than the finished height of the door or PVC ventilation panel.

Step Seven
Reposition the door frame stabiliser bar at ground level (or just below) and tighten the nuts (image 8). You may wish to press the stabiliser bar slightly in to the ground to prevent tripping over it. Your door frame is now complete.
### End Base Rails

<table>
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<tr>
<td>Tools</td>
<td>13mm Spanner</td>
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</table>

**Step One (image 1)**

Assemble fittings as shown.

**Step Two (image 2)**

Slide the assembled base rail fitting on to the base rail (at the door end).

**Step Three (image 3 and 4)**

Attach the base rail fitting to the door bottom of the door frame. Use the spare bolt which was positioned on the door frame (above the stabilizer bar) during the door frame assembly. The base rail should sit at ground level if the tunnel is erected on a level site. You may need to lower the door frame stabilizer bar to achieve this.

Repeat this process for the other end base rails at both ends of your polytunnel.

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**IMAGE 1**

**IMAGE 2**

**IMAGE 3**

**IMAGE 4**

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Optional Extras - Brace Bars (Crop Bars)

<table>
<thead>
<tr>
<th>Parts / Packs</th>
<th>Crop Bar Fittings Pack (EBP17), Crop Bars, Crop Bar Hangers (12ft and 14ft wide tunnels)</th>
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<tbody>
<tr>
<td>Tools</td>
<td>13mm Spanner / Socket</td>
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</table>

**Fitting Brace Bars (Widthways Crop Bars)**

Each horizontal bar comes with two keyhole clamps and two nuts & bolts. The clamps are simply prized open and clipped over the inner hoops (NOT the end hoops). Once on, squeeze the clamp back together as much as possible. Then pass the bolt through both sides of the clamp and continue through the hole in the flatten end of the crop bar. Now attached the nut, but don’t over tighten as the final position has yet to be decided. Don’t sandwich the flattened end of the crop bar between the two sides of the clamp, attach it in the same way as shown for the corner diagonal struts (images 2 and 3). Repeat this process on the other side of the hoop. Once the crop bar is attached at both ends you can decide on the final position, you may want to use a spirit level for this, then tighten both nuts & bolts. Do the same on all the inner hoops. Brace bars aren’t required for the end hoops as the aluminium end frames serve the same purpose.

For 8ft (2.4m) and 10ft (3.1m) wide polytunnels the crop bar assembly is now complete (image 1). For the larger 12ft (3.7m) and 14ft (4.3m) wide polytunnels we supply additional brace bar hangers for extra support (see image 4). To attach these the process is similar to horizontal bars. Position two keyhole clamps on to each of the inner hoops, one at each side of the central ridge tube (image 4). Using the nuts and bolts provided attach the hangers in the same way as you did the brace bars. Don’t fully tighten and leave these hanging down for the moment. Attached two more keyhole clamps to the horizontal brace bar and position these where the hangers meet. Attached the hangers using the nuts and bolts supplied, and once you’re happy with the position you can tighten all the nuts and bolts.

**I Didn’t Order Brace Bars...**

You would normally install the brace bars when you’ve assembled the main framework, before the anti-hot spot tape and cover is fitted. However, our brace bars can be fitted retrospectively if you decide to add them at a later date. You may need to attach the clamps at the bottom of the hoop where there is a gap between polythene and the hoop, then slide them up. It is advisable to lower the hoops on the foundation tube when doing this, and if possible apply a small piece of anti-hot spot tape over the clamps where they make contact with the polythene.
Optional Extras - Additional Ridge Tubes

Fitting Additional Ridge Tubes

These are installed in the same way as the central ridge tube, and at the same time. Ensure you position all the ‘hoop to ridge’ collars on the hoops before you slot the two halves of the hoops together. As with the central ridge ensure you face the bolts inwards on the end hoops to prevent the bolts heads damaging the polythene. You can position the additional ridge tubes wherever is the most convenient for you to support your climbing plants.

I didn’t Order Extra Ridges...

If you haven’t purchased additional ridge tubes with your polytunnel and decide you want to fit some after it’s constructed, we can supply special retrospective ‘cross-over’ clamps that will enable you to do so (phone for details).
Optional Extras - Side Vent

<table>
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<th>Parts / Packs</th>
<th>Side Vent Pack (EBP18), Side Vent Additional Hoop Pack (EBP19)</th>
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</thead>
<tbody>
<tr>
<td>Tools</td>
<td>13mm Spanner</td>
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</tbody>
</table>

**Step 1**: Once your polytunnel framework has been constructed you should attach the aluminium side rail in a similar way as you attached the base rail. This is normally positioned approx. 80-100cm above ground level, below the point where the hoops start to curve. The side rail is attached to each of the intermediate (inner) hoops using the brackets provided (see image 1). The side rail is attached to the two end hoops using the ‘P’ clip fixings (see image 2). Ensure the side rail is straight and that the distance from the base rail remains fairly constant along the length of the polytunnel. This will ensure the roll-down screen sits neatly when in the down position. If your tunnel is on a slight slope then you can allow a slight fall on the side rail, but you will need to make an allowance for this when attaching the roll down screen later.

**Step 2**: You can now install the main polythene cover on your polytunnel. Follow the main polytunnel instructions for this (only secure to the base rail at this stage) and tension the cover accordingly.

Whilst attaching the main cover to the base rail you should also attach the bottom edge of each of the net panels to the base rail (leave the excess net on the inside of the polytunnel see image 3).

Simply sandwich the net between the polythene and the base rail when clipping the polythene in to place.

Each net panel is attached centrally between each of the hoops. Each of the net panels will have two parallel straight edges and two rough (cut) edges. The rough edges are the top and bottom with the neat straight edges being the sides. This will ensure a neat finish when fully fixed in to position. (See image 4)

**Step 3**: Now you cut the ventilation holes in the polytunnel cover in the space between the side rail and the base rail. These should be circular holes approx. 50cm in diameter, and positioned centrally between each of the hoops. The top of the hole should be approx. 10cm below the side rail with the bottom of the hole being no less than 25cm above ground level (see images 3 & 4). On 3.7m (12ft) wide and 4.3m (14ft) wide polytunnels you may find the bottom of the hole is higher than 25cm off the ground, especially if the side rail is positioned a little higher. If this is the case you can make the ventilation hole a little larger if you want the extra ventilation.

To do this you can make a circular cardboard template 50cm in diameter, place it in the desired position against the polythene and cut around it with a sharp knife. Alternatively you can draw a circle on the polythene using a marker pen (or similar) tied to a 25cm length of string, creating a type of compass. Then simply cut out the circle of polythene. Make sure you don’t leave any slits around the edge of the circles as they may tear over time. Repeat this process in between each of the hoops.

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Optional Extras - Side Vent

Step 4: Pull the net panels up behind the side rail, between the side rail and the polythene, allowing the surplus material to drape over the side rail and hang down on the inside (see image 5). When pulled taught, the net panels should hold themselves in position.

Step 5: Roll out the side screen polythene along the outside of the polytunnel and trim the length to match the length of the polytunnel. Don’t worry if you cut it a few centimetres short.

Slot together the lengths of tube and attach the handle, then using the self-drilling screw provided, drill through both tubes on the sleeved joint to hold the handle in place. Alternatively you can drill a small hole and use a self-tapping screw.

Lay the tube assembly on the polythene along the lower edge and wrap the polythene around it once. Clip the plastic clamps on to the tube to secure the polythene in place. These should be positioned evenly allowing two clips for each space between each of the hoops. Hold the upper edge of the polythene screen against the side rail so that the tube is sitting horizontal on the ground in line with base rail. An extra pair of hands may be useful at this stage. The side screen polythene should then be clipped in to the side rail using the Wiggle-Wire (see image 6). This will trap all three materials(at the same time) - the polythene screen, the main polythene cover and the net panels. The side screen should now be in position. You should wind it up and down several times to make sure you’re happy with its operation and make sure it goes up and down evenly and level. The Wiggle-Wire can un-clipped and re-attached if you need to reposition the polythene screen. Once you are happy with the side vent screen you can trim off any excess net on the inside and trim off the excess polythene on the outside to leave a neat finish.

Step 6: To prevent the screen blowing around in the wind you need to attach the nylon webbing. These are normally positioned as close to each of the hoops as possible, including the first and last hoops. Simply attach the Wiggle-Wire spring hooks in place on the base rail and side rail and attach the strips of webbing. Tie one end of the webbing to one of the hooks on the top clip and run the webbing down and through both hooks on the bottom clip, and back up to the second hook on the top clip. Pull tight and tie off (see image 7). Repeat this process on all the clips. Finally, any left-over anti-hot spot tape can be applied to the lower part of the first hoop, over the main polythene cover, to give a little extra protection to the cover from any abrasion from the handle (see image 8). Your side vent screen is now completed.

Note:

The handle on the tube slides in and out. You need to slide it out to free the handle in order to operate the screen, and push it back in afterwards so that it holds against the hoop to prevent the screen inadvertently rolling down. Your screen can be partially or fully opened giving you the level of ventilation you require.
Polytunnel Cover

<table>
<thead>
<tr>
<th>Parts / Packs</th>
<th>Polytunnel Cover, Anti-Hotspot Tape</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tools</td>
<td>Stanley Knife, Wire Cutters</td>
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</tbody>
</table>

Anti-Hotspot Tape

The end hoop packs contain 30mm wide anti-hot spot tape whereas the inner hoop packs include 20mm anti-hot spot tape. The wider tape is used on the end hoops as the polythene cover will have greater contact with the end hoops, due to the polythene being pulled over the ends. The 30mm tape should be positioned accordingly, half on the top edge of the hoops and half on the outside face of the hoop.

Applying the anti-hot spot tape over the whole hoop, from base rail to base rail (or just above), so that any part of the hoop where the polythene comes in to contact with it has the foam barrier tape between them (image 1). This prevents any heat build-up in the steel work being transferred to the polythene cover, and also reduces the likelihood the hoops rubbing against the polythene. You may want to put a little extra anti-hot spot tape over any fittings, bolts or sharp edge that may damage the polythene (image 2).

Fitting The Polythene Cover

**Step One**

**NOTE:** Don’t attempt to cover the polytunnel if windy. However, if there is a slight breeze then use this to your advantage and pull the cover over the tunnel in to the wind.

Unroll the polythene sheet along one side of your polytunnel (preferable on the downwind side if there is a slight breeze), then pull the polythene cover over the polytunnel frame (image 3), allowing it to unfold as you do. Make sure there are equal amounts of polythene, both to the ends and to the sides. Because our polythene has an anti-condensation additive on the underside it is important to fit your cover the correct way up. If you stand inside the polytunnel you will see the words “THIS SIDE INSIDE” printed on the polythene (image 4). If you can read this then you’ve installed it correctly, if not, remove and replace.

**Step Two**

Secure the cover at one end by pushing the polythene in to the groove (‘C’ channel) of the door lintel, then use the ‘W’ wire to secure it in to place (image 5). The ‘W’ wire is quite whippy so we recommend that eye protection is worn.

**Step Three**

Fasten the polythene in to the door lintel at the other end, pulling the polythene as tightly as possibly (image 6).

Watch the instruction video online...

[www.northernpolytunnels.co.uk/videos](http://www.northernpolytunnels.co.uk/videos)
Step Four
You can now start securing the polythene to the side base rails using the ‘W’ wire, working from the middle outwards (image 7). Don’t pull the cover too tight. If you can see a seam in the polythene use it as a ruler, and keep the seam straight.

Now fix the polythene to the other side, again starting from the centre and working outwards, but this time pulling the cover tight.

Step Five
Using a sharp knife, cut the spare polythene from the corner outwards at a 135° angle to the base rails (approx.). This will allow the cover to be folded around the end of the polytunnel (image 8).

Now you can attach the polythene to the end base rails across to the door post. Make sure you pull the polythene both downwards and in the direction of the door frame whilst attaching the ‘W’ wire (image 9).

Once both sides are complete you can work your way down each of the door posts, starting from the top. Take note of the direction which you’re pulling the polythene, as you move. At the top of the doorframe you will mostly be pulling the polythene downwards, but as you progress down the doorframe you will gradually change direction and begin to pull the polythene mostly across. You will need to pleat the polythene in order to trap it all. Try and make sure the pleats are facing downwards as not to hold rain water. This will reduce the build-up of green algae in the pleats. If not happy with the results you can release the ‘W’ wire and redo accordingly. Once two thirds down the doorframe you will be pulling across only (image 10).

Step Six
Once you’re happy with the finished look, apply a second length of ‘W’ wire down each of the door posts and across the door lintel. This will give extra hold to the polythene on the ends, where it will most likely take the brunt of the wind. Try and stagger the ‘W’ wire with the first length to give extra grip on the polythene. Once this has been completed you can trim off the excess polythene, both around the door frames and along the sides with a sharp knife or pair of scissors. Take care not to cut the main cover. Any left over ‘W’ wire can be used on the sides to double up for extra security.

Step Seven
Tensioning The Cover:
From the inside of the tunnel, lift each hoop upwards, one side at a time. Slide the locking collar up to the bottom of the hoop and tighten the bolt (image 11). Repeat this on every inner foundation tube. This unique polythene tensioning system allows the cover to be tensioned drum-skin tight.
Step 1

Layout the aluminium frame on the floor and position the correct fittings by each connection. When attaching the top brackets (the brackets which support the rollers) (1) make sure you attach the long bolt which is used to connect the rollers first, as this may be difficult after the brackets are fitted. The rollers can be attached later.

You now need to decide which way your door will be sliding, as one of the base corner brackets is supplied with 3 longer bolts to attach the drop-bolt door fastener later (2). The drop-bolt door fastener is positioned on the left hand side of the door if it’s to slide open to the right, or on the right hand side if the door will slide open to the left.

One of the brackets which attaches the mid rail has a longer bolt. The door knob will screw on to this later, and should be positioned on the same side as the drop-bolt door fastener. See the close-up image on the exploded diagram (3).
Step 2

Once the frame has been assembled place the door polythene over the door with the outside of the door facing upwards.

Secure the polythene to one end of the door using the ‘W’ wire (image 1), just as you did with the base rails on the polytunnel. Start at one side and work across. It doesn’t matter if you attached the polythene to the top or bottom of the door.

Once attached, you can then fix the polythene to the opposite end of the door pulling the polythene tight whilst doing so (image 2).

Attach the polythene to the sides of the door, starting at the centre and working outwards, switching from one side to the other to ensure the polythene is fitted evenly. Pull the polythene tight as you go. Repeat on the opposite end of the door (image 3).

Trim away any excess polythene (image 4).

Attach the polythene to the central aluminium section, starting at one side and working across. This will give the polythene a little extra tension (image 5).

If you’re netting the top half of the door you will have only attached the polythene to the bottom half of the door at this stage. You would repeat the same process using netting on the top half of the door using a second length of ‘W’ wire to clip the netting in to the mid rail. The aluminium ‘C’ rail which the doors and base rails are manufactured from will accommodate up to three consecutive runs of ‘W’ wire, so doubling up is not a problem. By attaching the netting after the polythene you will be able to unclip the net (without having to unclip the polythene) and replace it with a piece of polythene at a later time if required. However, if you feel proficient then you can lay both the polythene and the netting on the door together and attached at the same time as if your attaching a single piece of polythene.
Step 3 Once the door is clad you can attached the drop-bolt fastener (image 1), the door rollers (see page 15), and the door knob (image 2).

This process is repeated for double sliding doors. The double door pack however includes two steel tubes. These can be driven or concreted in to the ground where the two doors meet in the centre of the door opening. These allow the drop-bolt fasteners to drop in them in order to secure the doors when in the closed position.
Step 4 - Attaching the door guides

Attach the small bracket and one of the large door guide brackets to the door guide rail (image 1).

**Note:** The small bracket will attach to the right hand side of the door guide rail for doors that will slide open to the right, and vice versa if sliding to the left.

If you have an 8ft (2.4m) wide polytunnel you will have to drill an extra hole in the door guide rail for the small bracket, approx. 13cm in from the existing hole. This is because the door track extends beyond the width of your polytunnel. Call our sales team if in doubt.

One of the larger brackets will attach to the opposite end of the guide rail, which is later fixed to the door post.

**Note:** The larger brackets are handed (one is right hand the other left hand), so depending which way the door slides the appropriate bracket will be required. Even though it makes little difference which one is attached to the door guide rail, it does make the door operation easier if the door closes into the correct bracket on the facing door post, as the wider opening will assist the door in to the closed position.

Once the brackets are attached to the door guide rail it can be attached to the polytunnel frame. The small bracket hooks under the base rail and is tex screwed in position to the inside of the base rail (image 2).

The larger bracket is tex screwed to the door post (image 3). Use tex screw bit provided (below).

On the adjacent door post the other large bracket is fitted (image 4). If required, the heights of the brackets can be slightly adjusted after the door has been hung.
Step 5: Hanging The Door

Slide the door track through the door rollers so that the door is attached to the door track (image 1).

Position against the door opening of the polytunnel with the door in the closed position. Once you’re happy with the height of the door and the door clearance at ground level you can fix the door tracking (with the door still in situ) to the door frame at one side (image 2). Only use one tex screw for now.

Using a spirit level make sure the door tracking is level and then attach it to the other door post (image 3), again, only use one tex screw for now.

The door tracking should be flush with the outside edge of one door post (as seen in image 3) with the rest of the track protruding beyond the opposite door post by a full door width. Once you’re happy with the door’s movement and the clearance with the door guide rail you can double up the tex screws (both sides) on the door tracking (image 4). This will give it extra support. Further slight adjustments can be made by adjusting the distance the door rollers are threaded on to the door top.

Finally, drill two more tex screws in to the door tracking, one at each end to act as door stops to prevent the door running of the ends of the tracking. The exact distance in from the ends will depend on the position of the door track but will be approx. 15cm in from the ends (image 5).

Double sliding doors
The principle is the same, only the door tracking is positioned centrally above the door opening, with an equal amount of tracking protruding at each side of the door posts. Ensuring both doors slide evenly and smoothly along each door guide rail is a little trickier if the ground is not level. You may be required to make some adjustments to the door tracking and the door guide rail to ensure smooth operation and to make sure the guide rail holds the door in place when the doors are open. Sometimes you have to accept that the doors cannot be exactly level in order to achieve smooth operation. If the doors don’t shut tight when closed, leaving a small gap at the top or bottom, then you will need to adjust the rollers by screwing or unscrewing them until the doors close together perfectly. Two steel tubes are provided for the drop bolts to drop in to when closed. These can either be simply knocked in to the ground, or where required they can be concreted in position with a small amount of concrete, and left flush with the ground level.
Doors - PVC Panel

<table>
<thead>
<tr>
<th>Parts / Packs</th>
<th>PVC Panel, Wiggle Wire</th>
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</thead>
<tbody>
<tr>
<td>Tools</td>
<td>Wire Cutters, Stanley Knife</td>
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If you’re only fitting one access door and have chosen a ventilation panel for the opposite end, then clip this in to position along the top edge first using the ‘W’ wire (image 1). You can redo this if you’re not totally happy with the position, making sure you’ve got the length correct.

**Note:** Make sure you don’t leave a gap at the bottom to prevent drafts, also make sure it’s facing the correct way so that the vent is opened from the inside.

Then using the same method fasten both sides (images 2 & 3), working top to bottom, alternating from one side to the other to keep the panel central. Finally trim the edges (if required) using a sharp knife.

**Remember,** once trimmed off it is difficult to undo and fasten down again. If the end of the polytunnel with the PVC panel is out of site it may be worth leaving the excess material un-trimmed. This will enable you to unclip the sides of whole panel allowing periodical rear access, and then reattach it when required.

Finally, cut off any excess ‘W’ Wire using wire cutters (or similar).

Your Easy-Build polytunnel is now complete.

As part of our continuous improvement process we would appreciate any comments or feedback. You may receive an email questionnaire over the coming weeks. If you would like to give us any feedback or share your photos with us please feel free to drop us an email... info@npstructures.co.uk

Thank You