NOTE: Each face of the polythene sheet is identical; there is NOT a right or wrong side when choosing which face goes on the inside or outside of the structure.

Polythene Fixing

We strongly advise referring to the original Polytunnel Suppliers’ construction guide when installing your polythene. The methods described herein may differ from those of the original manufacturer. Full and comprehensive First Tunnels guides can be downloaded here - www.Polytunnels.co.uk

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QR Codes (Quick Response)

Construction videos at your finger tips..

Using the latest QR code* technology we have updated all our construction guides to give you instant access to all our construction videos.

No typing, no searching for the right video, just a simple scan (1) of the code with your smart phone and you’ll be instantly connected to that construction video (2). Perfect for when you’re outdoors and could do with the reassurance of seeing what you’ve got to do next.

**Try this one, and watch to see the tools you’ll need to construct.**

* If you haven’t got a smart phone, simply type the address shown underneath the QR code into your web browser to watch the video.

* QR software is a widely available FREE app. Wifi or internet connection required.
First Tunnels strongly recommend the use of Anti Hot Spot Tape. The slippery surface allows the cover to glide over the frame preventing abrasion and snagging of the cover during construction.

**NOTE:** Make sure the hoops are dry and clean before application. It is very important that this operation is done immediately prior to fixing the cover.

This self adhesive foam tape prolongs the life of your polythene cover by protecting the polythene against heat build up from the metal hoops and abrasion during extreme weather.

First Tunnels would **not construct** a polytunnel without using anti hot spot tape. The tape should be placed over the top of each hoop (**dia. 1a**), where the polythene comes into contact with the metal.

On the two ends hoops the tape should **not be** fixed directly on the top or on the side but at an angle (**dia. 1b**). Small strips can be cut to cover any brackets that may come in contact with the polythene (**dia. 1c**).

Do not ‘wrap’ this tape around the tubes or along the polytunnel ridge section.

**NOTE:** Only fit this tape in dry conditions otherwise the adhesive will not stick to the steel tubing.
2. Polytunnel Covering Trench Version

TIP
Choose a day with little or no wind to put on the cover. A hot day is desirable as this softens the plastic and makes it more pliable.

TIP
Make sure you leave the soil outside the polytunnel framework as trying to refill the trench with the soil on the inside of your polytunnel can prove a little difficult!

NOTE: If you have found that digging is too difficult due to hard or stony ground? Please call 01282 601253 about an upgrade to Base rails.

Digging a Trench for your polythene cover.
Digging needs to start 10cm away from the foundation tubes and the edge should be as straight and tidy as possible as your cover will locate against this side (dia. 2a & 2b). It is important that the trench is 30cm wide and to a minimum depth of 40cm as the weight of the eventual back-fill keeps your polytunnel anchored to the ground. Economical digging now, could prove to be a very costly mistake later.

Preparing Door Frame
The cover of your polytunnel is trapped in a rebate with a timber batten onto the end door frame. To create this rebate, we recommend timber battens (19mm x 38mm) which are nailed around the outside of the door frame down each door post and across the door top. If the door frame timber used is not wide enough to fit two battens adjacent each other, then adjust the batten widths accordingly. Cut the door top batten to length and nail in position first, making sure a nail is positioned each side of the door lintel and door post. Joint nails should be positioned where they will not hit the nails plates or ‘P’ clips (dia. 2c). Butt the battens for the door post up to the door top batten and nail in place.

NOTE: The framework shown is for illustrative purposes only. It may differ from the framework of your model.
NOTE: The framework shown is for illustrative purposes only. It may differ from the framework of your model.

Fitting the polythene
Ideally this requires 2 people.
Check the ground for sharp objects, stones, sticks, etc which may damage the polythene cover. Choose a calm day and roll the cover out along the side of the polytunnel loosening any folds held together with static. Pull the cover over the framework from the side (one person at each end should be able to do this) (dia. 2d). Make sure the cover is central along both the length and the width of the polytunnel (dia. 2e).

NOTE: Each face of the polythene sheet is identical; there is NOT a right or wrong side when choosing which face goes on the inside or outside of the structure.

The cover should reach approximately halfway down the door frames (dia. 2f). Don’t expect the polythene to reach the ground at the ends.
Using the battens, nail approximately 15cm of the batten either side of centre onto the door frame lintel trapping the cover under the batten previously placed on the door frame (dia. 2g). Do not nail the entire length of the batten to the frame at this stage.

Pull the cover tight along its length (dia. 2h). With another batten cut to length nail into position trapping the polythene in the rebate created on the door frame.

**TIP**
When nailing battens in position, nails should be approximately 10cm apart and each nail offset right and left of centre to prevent the batten from splitting. Start and finish nailing no less than 6cm from the end of each batten.

**NOTE:** To stop the trench around your polytunnel becoming waterlogged, prick the polythene at the bottom of the trench with a garden fork.

On one side of the polytunnel where the polythene cover is now lining the trench, lightly tension the cover and refill the trench. Start at the centre and work your way out to the ends, making sure that the cover is free from ripples and creases. Repeat at the opposite side, but this time tensioning tightly, again making sure that there are no creases or ripples (dia. 2i).

To get the best possible tension, the polythene should be held in one hand and pressed into the trench with one foot (dia. 2j).
Having completed both sides, pull the cover around each corner and cut the polythene which is going to be buried in the trench, at 45° to the polytunnel frame (dia. 2k).

Pull the top door batten slightly away from the door frame (too much force may snap the batten) and start to pleat away from the centre (the pleating effect starts at the centre and begins to dissipate as you reach the straight side of the polytunnel). If you gather too much or too little it will look odd so try and do a dry run (dia. 2l). Nail the remainder of the door top batten into the door frame trapping the cover securely.

Repeat the procedure with the door post battens starting at the top and working down the post while pulling tight and pleating the polythene evenly (dia. 2m).

Finally, back-fill the end trenches and trim off the excess polythene. The polythene is now fitted.
3. Polytunnel Covering for Timber Base Rails

**NOTE:** The framework shown is for illustrative purposes only. It may differ from the framework of your particular model.

Prepare the door frame and position the polythene cover using exactly the method as 2c - 2h but instead of using the trenching method, the cover will be attached to base rails.

**Fixing the polythene cover onto the Timber Base Rail**

The cover is placed over the rebate batten on the base rails and trapped with a further batten (19mm x 38mm) placed directly underneath (dia. 3h). Using nails spaced at 10cm apart this will trap the cover in place (dia. 3i).

Starting at the centre on one side and working to either end, fix the cover into the rebate. The other side of the polytunnel has yet to be fixed so simply pull enough to rid the cover from any creases and ripples (dia. 3j).

Once one side of the polytunnel cover has been fixed, repeat on the other side using the same method. As the cover has been fixed on the other side, more force can be applied to achieve a tight cover.
Having completed both sides, pull the cover around each corner and cut the polythene at 45° angle to the polytunnel frame (dia. 3k).

**Fixing the end panel**

Pull the top door batten slightly away from the door frame (too much force may snap the batten) and start to pleat away from the centre, (the pleating effect starts at the centre and begins to dissipate as you reach the straight side of the polytunnel). If you gather too much or too little it will look odd so try and do a dry run (dia. 3l). Nail the remainder of the door top batten into the door frame trapping the cover securely.

Repeat the procedure with the door post battens starting at the top and working down the post while pulling tight and pleating the polythene evenly (dia. 3m).

Fix the cover to the corner timber base rails using the method as described earlier in this section.

When covering is complete, loosen the base rail clamps, push the base rail down and re-tighten the clamps to tension the cover (dia. 3n).

Trim off any excess polythene.
**Fitting the polythene cover onto the Aluminium Base Rails**

Prior to fitting the polythene cover, make sure your existing plastic U & T profile is undamaged. Replacement parts can be purchased from First Tunnels.

The exact same principle can be followed as per the covering instructions for Timber Base Rails. Instead of fixing the polythene between timber, the polythene cover is fixed into an aluminium extrusion using plastic U & T profile as per details below.

**NOTE:** It is essential that the cover goes into the aluminium profile before any plastic infill is inserted.

When using aluminium rails the polythene cover fixes into the slot on the outside of the rail and is held in place with two plastic in-fills (dia. 4o).

The polythene must sit into the slot first and then the ‘U’ plastic profile should be gently pressed into the slot in the base rail using a large flat screwdriver, this will trap the cover in place. (dia. 4p).

Finally, the ‘T’ plastic profile should be tapped into the ‘U’ profile using a soft hammer or similar (dia. 4q).

Now follow the instructions provided for the Timber Base Rail version regarding fitting the polythene around the ends and finally trimming off excess polythene.

If you are experiencing problems with your polytunnel construction, our construction team are available to answer your questions and help in whatever way they can. Simply call 01282 601253 on week days between 9am-5pm...PLUS weekend cover on 07801 601253, between 9am-5pm.
5. Polythene Information Sheet

Introduction

Polythene is a flexible membrane, which is used to create a micro-climate in which plants grow better than they would if they were unprotected. Polytunnels not only allow you to grow crops which are from a more temperate climate, but also to grow crops earlier in the year, and later in the year, so lengthening the growing season.

Modern polythene films are extruded and are made up from 3 layers with different filters in each layer. This is one of the reasons they are incredibly strong and can often be stretched more than 500% before they break.

We are committed to providing the highest standard of product and service to our customers. We will continue to invest in the latest technology and use materials best suited to meet the needs of the grower.

Our Quality Policy is to aim to deliver defect free products and services that conform, every time, to the requirements agreed with our customers.

Guarantee

The polythene sheet supplied is guarantee for 5 years except for Super Therm which is guaranteed for 7 years against breaking down through exposure to sunlight.

However, if it is correctly applied to the structure, it is not uncommon to get 7 or even 10 years out of a cover. In the unlikely event that you have been supplied a defective cover we will give you another cover completely free if it fails in the first year. The only manufacturing defect however where this is likely to happen is where the fold splits. However you are not covered if the fold splits and the cover is not tight.

In the event of the premature failure, the following discounts will be given on the purchase of a replacement film

<table>
<thead>
<tr>
<th>Failure in ...</th>
<th>Super Therm</th>
<th>Everything Else</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st year</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>2nd year</td>
<td>85%</td>
<td>80%</td>
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<tr>
<td>3rd year</td>
<td>70%</td>
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<td>5th year</td>
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</tr>
<tr>
<td>6th year</td>
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<td>NA</td>
</tr>
<tr>
<td>7th year</td>
<td>10%</td>
<td>NA</td>
</tr>
</tbody>
</table>

To register a claim, contact the polythene supplier from whom the film as purchased and have the following information available:

- Type of polythene (ie, Clear, Thermal or White)
- Date polythene was purchased
- Date polythene was installed
- Size of polythene sheet (width and length)
- Date when problem was noticed
- Invoice number
- Description of the problem
- You will also be required to provide a written letter and photograph(s) of the fault.

Recommendations & Conditions

The way in which polytunnel films are handled, installed and looked after, can greatly influence the lifetime of the film and its effectiveness in use. The following gives recommendations of use, and factors, which will limit the life of the polytunnel film and the extent of our guarantee.

Prior to fitting the polytunnel film, it should be stored away from heat and light – preferably indoors, in the original wrapping. If outside, cover the polythene with an opaque heat reflecting tarpaulin. Film should be used within 12 months of purchase.

Heaters must be placed so that hot air is directed away from the film.

The metal structure must be insulated from the film with good quality anti-hot spot tape. The lifetime of anti-hot spot tape is not likely to be more than ten years, so new tape will be needed for the second or third cladding. Old tape may have breaks in the foam or in the polyester facing, and this should certainly be replaced.

Avoid excessive use of pesticides, herbicides, fungicides, fertilisers, etc. Avoid chemicals coming into direct contact with the film, or example by spray drift. Agrochemicals can interact with the UV stabilising systems and deactivate them with the risk of premature failure. Chemicals containing sulphur or chlorine have been found to be the most harmful in this respect. Ensure that structures are free from corrosion, as this will adversely affect the life of the film. Iron contamination from rusted structures acts as a photo-degradation promoter. In the event of failure, evidence of high levels of sulphur, chlorine or iron will invalidate the guarantee.

It is regretted that it is not possible to give compensation for consequential claims.

Polythene Care

A cleaning agent called Algon is ideal for cleaning covers.

Repairing holes in the tunnel can be done with repair tape

Both are available from First Tunnels.
HELPING HANDS

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Try this one!
And meet the construction team
www.polytunnels.co.uk/construction team

* QR software is a widely available FREE app.
Wifi or internet connection required.

Share your gardening pictures and videos, post hints, tips and experiences. PLUS... find out more about our online gardening community.