The Ultimate in Tunnel Greenhouses





Welcone

and Thank You for requesting our **Garden Tunnels brochure**

Haygrove are established soft fruit growers producing strawberries, raspberries and cherries, mainly organically, at their farm near Ledbury in Herefordshire. We are major suppliers to Marks & Spencer, Waitrose, Tesco and Sainsbury's and have received a number of national awards for the quality berries we produce.

In the early 1990's, exasperated by the lack of quality British soft fruit available due to our unpredictable weather, we developed the Haygrove Tunnel. 20 years on, Haygrove Tunnels are used worldwide by commercial growers requiring strong, quality, innovative crop protection.

The development of Haygrove Garden Tunnels began in 2009. Harnessing our experience in large scale greenhouse structures with our passion for growing, we aim to provide a quality product, competitively priced and incorporating features previously only available to commercial growers.

We hope you enjoy reading through our brochure and in particular our customer testimonials of which we are very proud.

If you would like to talk through any aspects of our Garden Tunnels please call us on our local rate number **0845 269 6395**.

"Commercial technology has reached the ordinary gardener, well done it's a great product!"

Anthony Day, Faversham



"I took a long time to decide which tunnel to buy & I'm sure I've got the best"

> Cindy Carlton, Bicester

Structure and Venting

Galvanised Steel

Structure

Galvanised steel is used throughout the Haygrove Tunnel frame, including doors, side vents and the base anchoring system. The grade of steel is specified as Z35, the structural steel grade used in the construction industry and not the mild steel grades often used to cheapen products. It is galvanised to the British Standard of 275grams/m² with a Haygrove Tunnel you are buying a strong, long lasting structure, giving excellent resistance to rust and strong wind conditions. No wood, No nails, No Nonsense!



No concrete base is required, the structure is built on a galvanised steel skid anchored with 800mm (2' 6") long anchoring posts. In each 2m tunnel section, four steel anchors are driven into the ground, each anchor being made from 18mmm galvanised reinforced steel bar.



Spring steel hoop clips ensure easy clipping of the plastic onto the steel frame.



The Garden Tunnel is built on a galvanised steel base, strong enough to be moved later if required. Thanks to 10 strong volunteers, this 4m x 8m tunnel is on the move across a customer's garden!

Tunnel Cover

Haygrove Garden Tunnels are covered with a unique, high quality, coated woven polythene cloth. With a breaking strength of 18kg per 1cm² it's strong enough to sit on!



The cover is UV treated to ensure we can quarantee it for five years against UV degredation. The material has 88% light transmission meaning it performs better than glass, with a light transmission of 65-85% depending on pane size and glasshouse structure. In addition the cover has the ability to diffuse or scatter light as it enters the tunnel. This means the tunnel is cooler in hot weather and plant scorch risk dramatically reduced, as light penetrates deeper into the plant's canopy. This is best demonstrated on bright sunny days when there is little shadowing in a Haygrove Tunnel.

SMART Venting System

Roll-up, roll-down ventilation designed across the complete length of each tunnel side. This means the structures can be completely sealed for earliness and frost protection but fully ventilated for summer production. The net below each vent protects against insects such as thrips and whitefly so you can fully vent a Haygrove Tunnel whilst still retaining a pest free growing environment. Allows the air in, keeping insects out!







"Excellent build and quality."

Mr & Mrs Williams

"We were battered yesterday on the west coast of Scotland with some of the highest winds I've felt here in 15 vears and my wee 3m x 4m Haygrove polytunnel stood up to all the mighty gusts. Inside it was an oasis of calm whilst trees were crashing down, ferries were cancelled and roads were closed. I'm delighted to report that the tunnel is as good as new.

Fiona Blakey, Oban, Argyll

Very impressed with the work rate of the construction team.
Polytunnel looks very good, it will be a most useful addition to the allotment."

Alison Duncan, Greenock

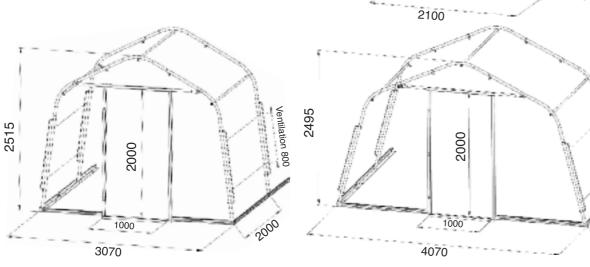
Function and Flexibility

Design

Haygrove Garden Tunnels are designed in modular steel sections, simply choose a 2m, 3m or 4m width and add 2m sections to the length you need.

The tunnel profile gives a height of over 2m (6'6") even at the sides to maximise growing space and prevent aching backs!

All tunnels have a 1m wide steel framed door, ideal for large wheelbarrow and wheelchair access.



2310





3 metre (9'8") Tunnel



4 metre (13'1") Tunnel



tailored to your requirements



Technical Specifications

Plastic

40mm (35mm for 2m wide tunnel) **Steel Frame** Steel Outer Diameter (OD) Steel Grade Extra Strong Structural Grade 275g per m² Galvanisation pre-galvanised steel **Anchor Specification** 800mm length x 14mm **Anchoring** diameter System Anchors 4 per 2m section Anchor base plates 18mm pre-galvanised steel

Trellising Kit Hanging Basket Points 5 per 2m section Trellis cross cables 2.8mm self tensioning steel cables

> Plastic Weight 172g per m² Light Transmission 88% Diffusion 45% Breaking Strength >18kg per cm² **UV** Stability 5 years warranty Venting net weight 80g per m²

> > Venting net mesh size 0.78 x 0.6mm Creates a pest free growing environment protecting against insects such as Tobacco Whitefly

> > > (Bemisia-tabaci), Aphids &

Thrips

Options Number of sections Doors

Potting Tables

Built in 2m modular sections Available at one or both ends

Trellising Kit Internal steel self tensioning

Available to hang in alternate 2m sections





"The Haygrove garden tunnel is strong & robust, Many thanks to the construction team for their help and guidance, a great team! Highly recommended."

R Lawerence

Construction

Ease and Service

The Haygrove Garden Tunnel is designed to be constructed easily by two people using only a 13mm spanner (included with your tunnel) and a mallet to secure the anchoring posts.





Construction Service

Although the Haygrove Garden Tunnel is designed to be straight forward to build, we appreciate some customers may prefer to purchase a constructed tunnel. To get a fixed fee quote for the Haygrove Construction Service, specific to your postcode call the office or look on our website. Construction is undertaken by two trained technicians, who deliver and build your garden tunnel within the same day. You don't have to provide any tools or labour although refreshments are always welcome!





Plastic Zip-Locking

The plastic is secured by zip-locking into a specifically designed channel in the steel frame, no burying into soil or nailing into wood. This ensures a tight fitting cover can be easily achieved and allows easy re-skinning when the plastic needs replacing.





"We are delighted with the Haygrove Garden Tunnel and the professional Construction team."

> Mr & Mrs Friel, Market Rasen



"An excellent job well done!"

Chris Mounta

Chris Mountain, Beamish



Accessories

Schools

"Fantastic product & service, staff most helpful, highly recommended"

"A helpful, courteous,

company, we are very satisfied."

Mr & Mrs Roberts,

"Completed with minimum hassle, very pleased with

Shrewsbury

Caroline Munro,

Malpas

flexible & obliging

end result"

lan Wilson, Sowerby Bridge

Haygrove price all their Garden Tunnels as complete units ready to use inclusive of VAT, UK mainland delivery and all unique features such as anchoring, venting etc. We do however have some additional accessories such as those shown below that can be ordered with the tunnel and fitted at a later date.



Trellis Cable

Self-tensioning steel rope cables are available to clip onto the tunnel frame for supporting climbing crops etc.



Potting Tables

Potting Tables fit into each 2m section and can be positioned at a height to suit you (sitting or standing). They are hinged to store flat against the tunnel side when not in use to free up valuable growing space underneath.



Additional Door

All Haygrove Garden Tunnels come with one 1m wide steel framed door. An additional door is available for customers that require a door at both tunnel ends, such as with this 20m long garden tunnel pictured above.



We are always updating our range of Garden Tunnel accessories, for more information please call our local rate number **0845 269 6395** or take a look on our web site **www.gardentunnels.co.uk**

A number of schools are working with Haygrove to create a fantastic outdoor classroom for pupils of all ages. The strong construction provides a low maintenance structure with stray footballs bouncing off the plastic cover without damage! The tall sided tunnel profile maximises working space with 1m wide doors providing good access for wheelbarrows, wheelchairs etc. During warmer weather a cooler environment is created by venting the tunnel and the light diffusing covers take away the uncomfortable glare often produced by other plastics. Not only is this a great way to introduce children to growing fruit, vegetables and flowers some schools are also selling on their produce, or using it in their canteen. For those able to claim back VAT don't forget all Haygrove prices are quoted inclusive of VAT so your organisation may well be able to benefit from this. As an additional help to all schools and charity fund raising projects, Haygrove will add a free potting table to each Garden Tunnel ordered, height adjustable for smaller growers!





Questions

Frequently Asked Questions

How tall are the Tunnels?

At the apex - all between 2.3m and 2.5m depending on the width.

At the sides - all 2m tall, which means you can work right to the edge of the tunnel without bending over.

What are the door options?

You have a choice to select a door for one end or both ends. All doors are made in steel and are 1m wide so large wheelbarrows, garden machinery, wheelchairs etc are easily accessible.

How long will the plastic last?

The plastic is guaranteed for 5 years against UV degradation, although our experience is that growers are using it for longer.

Do I need hot spot tape to protect the plastic from the hoops?

We recommend placing anti-hot spot tape over the section of the hoop where they are bolted together. This will prevent any undue wear on the plastic covers. The required amount of anti-hot spot tape is provided with the covers.

What happens if the polythene gets damaged?

The only real way that the polythene will tear is if someone cuts it with a knife or a very heavy objects falls on it. If you do get a tear we can supply a polythene repair kit.

Will the steel rust?

No, all the steel is galvanised including the anchors that are driven into the ground. The steel frame should last at least 15 to 20 years depending on how close you are to the sea.

How do you secure the plastic onto the steel frame?

At each end the plastic is secured onto the gable ends using sprung steel hoop clips. At the base the plastic is zip locked into a steel channel. These are both proven technologies used in the commercial greenhouse business.

How resistant is the Tunnel to snow?

The tunnels are built to withstand any normal snow storm that occurs in the UK. We do recommend that snow is brushed off the tunnel as a precaution to stop any further build up later.

How resistant is the Tunnel to wind?

Haygrove Tunnels are built to withstand gale force winds of 60 mph (90km). Following last winter a number of our customers who have our tunnels on exposed sites, have contacted us to say that their structures remained intact at speeds greater than this.

How is the structure anchored to the ground?

No concrete or foundation work is required. The structures are anchored using 800mm (2'6" long) reinforced galvanised steel bars that are driven into the ground. There are 4 anchors for every 2m tunnel section.

How much does a replacement cover cost?

The covers are about 20% of the cost of the tunnel.

What can I grow in my Tunnel?

Flowers, vegetables, fruit – pretty much anything. For many crops, such as strawberries it is possible to extend the growing season from 6-8 to 22-24 weeks.

Can I use heat?

Yes, the plastic will withstand heat. For the best results we would recommend a plastic baffle or false wall is dropped from one hoop inside the tunnel to create a confined space for more efficient heating.

How do I clean my Tunnel?

The plastic cover is best cleaned with water and a soft brush.

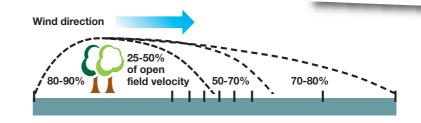
Heavier dirt can be removed using a mild washing-up liquid solution with a cloth or soft brush.

Good positioning of your Garden Tunnel makes a big difference to how it functions. Consider the following when deciding where to site your structure.

To maximise light availability, don't site your tunnel directly under trees and hedges. Apart from shading, leaves will get onto the plastic covers and allow mould and lichen to take hold. If possible avoid north facing slopes where light levels are worse. A sheltered site is good to protect tunnels from heavy winds. The diagram below illustrates the value of windbreaks to reduce the speed of wind and provide natural shelter for the Tunnel.

For example if the wind break is 3m (10ft) high then the wind speed will be only 25 to 50% of it's open field velocity up to 15m (50ft) from the wind break.

Wind behaves like water. This means that if the wind is forced through narrower areas it will dramatically pick up speed. Therefore it is important, where possible, to avoid building the structure directly in front of a gateway or gap in the hedge where the wind will be forced to accelerate.



A Haygrove Tunnel is much more forgiving than a glasshouse and will easily work on gently sloping land. However, ensure that any slope it consistent and not undulating by filling in any dips with soil.



Lincolnshire

Grower to Grower

Haygrove are first and foremost growers with an established track record of producing quality soft fruit and flowers.

Uniquely amongst tunnel suppliers, we can pass on to our customers first hand the benefits of our experience in growing under tunnels.



Tim Crossman has been involved in fresh produce and flower production for over 20 years and is experienced in growing to the highest standards expected by major UK suppliers. He is also a keen gardener with a Garden Tunnel just outside his back door! Tim is a regular contributor to the Allotment Society magazine where he advises on growing undercover.



Since graduating from Bath University, **Graham Moore** has worked on a variety of horticultural projects. He is one of the UK's leading agronomists specialising in organic production and is in demand as a speaker on organic fruit growing worldwide. Graham is the Head Agronomist at Haygrove and is key in the design and development of the Garden Tunnel. You can follow Graham's blog "The Fruit Doctor" on our website.



Rolly Whatton is the Product Development Manager at Haygrove, who combines his expert engineering skills with the needs of our growing and agronomy experts. For all gardeners, small holders and commercial growers, the development team ensure you have a first class product specifically designed for your needs.

Haygrove is committed to responsible farming, whilst maintaining high environmental standards and protecting our native wildlife, with almost half of our farm registered with The Soil Association for organic production. We work closely with independent groups such as FWAG (Farming and Wildlife Advising Group) and LEAF (Linking Environment and Farming) who audit our farming operation annually. The business is dedicated to

taking positive measures to improve our surroundings, such as:



- Water margin habitat development around farm lakes
- Responsible hedgerow management
- Planting meadow grass conservation areas to attract insects such as bumble bees

Across the farm Haygrove manages over 4,000 trees including an Oak Arboretum, with a 20 year environmental plan to plant many more native species.





Tunnel Tips

We have included some hints and tips to maximise your use of a Haygrove Garden Tunnel throughout the year. For more information take a look at the links for growing undercover off the home page of our website **www.gardentunnels.co.uk**

Spring

Spring temperatures can vary enormously with large day to night variations. Haygrove's unique venting system allows you

to regulate the temperature within the tunnel reducing peaks and troughs.

Combining this with insulation and heat during spring allows you to start early planting. As the woven plastic tunnel cover diffuses light, tender seedlings have protection from bright spring sun, allowing a strong plant to develop. Before you can be sure of frost free nights use the hanging basket points to start getting your summer bedding established.

Summer

Managing temperature and relative humidity is one of the biggest challenges facing the grower. This may seem remarkable in a British summer but we know that most crops turn off their metabolism when they get too hot and sweaty.

In warm weather plants cool down by transpiring through their leaves but when relative humidity increases, the

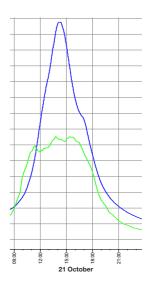
atmosphere's ability to absorb water is reduced and so plants start to 'shut down.' When the outside temperature is 18°C (average UK Summer) the inside of your tunnel can quickly exceed 25°C. This is why as experienced growers we designed tunnels to have full ventilation along both sides with a protective thrip net to ensure the fully vented structure remains insect proof. Experience will show that even when temperatures of 18°C are forecast growers should react early and open vents to ensure the tunnel keeps cool and your plants are fully productive.





Autumn

Alongside improved crop quality and consistency, the biggest advantage of growing in a protected environment is the ability to extend your growing season. The blue line on the graph shows the temperature achieved within a Haygrove Garden Tunnel, compared with that outside (green line) during a day in October. At 2pm the internal temperature was 6°C higher than that outside the tunnel and with insulation this heat can be easily retained to extend the mid-day peak. There are many improved varieties developed for autumn planting to allow cropping right through the winter months.



Winter

As daylight decreases don't forget to clean off your tunnel to maximise light availability to plants.

A Haygrove tunnel doesn't need specific cleaning products, a mild detergent solution and soft brush will do just fine. When temperatures are at their coldest its important to seal your tunnel, using the hoop clips to secure the side vents to the steel frame. In addition to insulation, for growers who need to maintain a constant heat for sensitive crops additional heating can be used. For those who don't need to heat the whole tunnel a 'room' can be made by attaching a plastic baffle curtain to the internal hoops on each 2m section. As well as winter growing your tunnel also provides a great storage area to overwinter pots containing

delicate plants.

Proven to be snow proof! One of a number of Haygrove Garden Tunnels surviving a harsh Finland winter

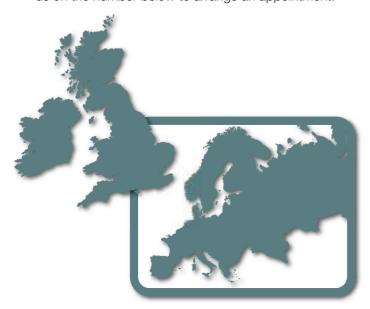


"Job well done, very pleased" Philip Dickinson, Caldicot "I've been straight in this morning to start planting my veg seeds, it's really cold outside but feels about 70° in the tunnel; I'd love to stay in here all day!" Mrs James, Carmarthen "My Haygrove Tunnel has regularly had 8ins of snow on it over the winter with no detrimental effect" Colin Mc Andrew,

Scottish Highlands

Visit a Haygrove Garden Tunnel Near You!

We have a large number of customers who are happy to show their Haygrove Garden Tunnel to prospective buyers. If you would like to visit a tunnel near you please contact us on the number below to arrange an appointment.



We welcome enquiries from overseas and have a number of Garden Tunnels established in Europe. For overseas enquiries please call +44(0)1531 635041



Haygrove Ltd
Redbank • Ledbury • Herefordshire HR8 2JL

Tel: 0845 269 6395
(charged at local rate)
www.gardentunnels.co.uk



Haygrove is pleased to support the Woodland Trust, the UK's leading Woodland Conservation Charity.