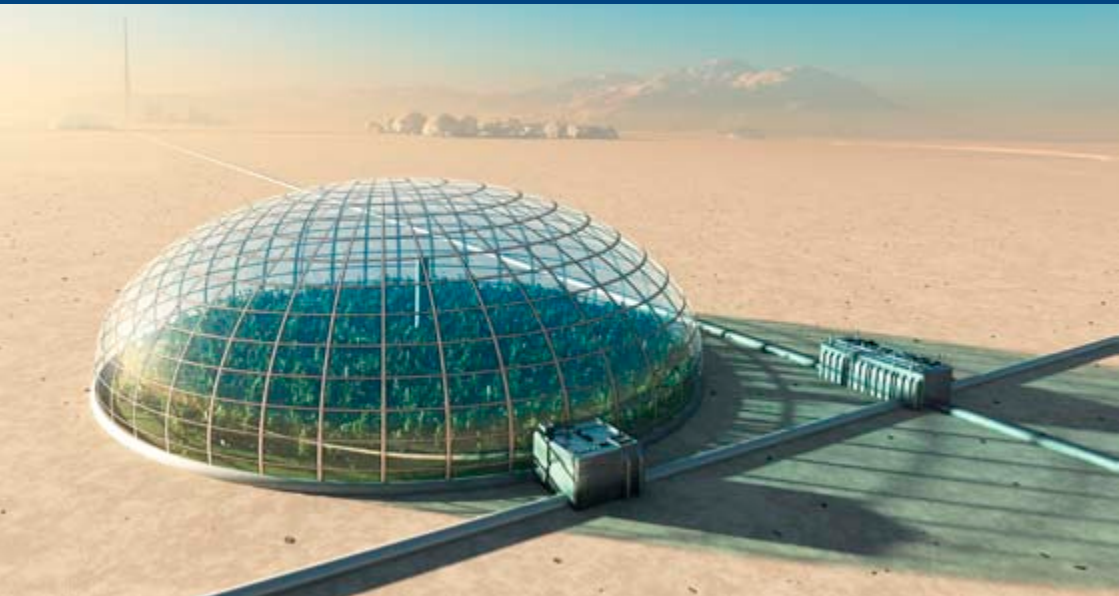




Pilkington  Botanical

Product range brochure



Pilkington **Botanical™** range

The Pilkington **Botanical™** range addresses an exciting growth market within the world of horticulture. It offers the tried, trusted and durable qualities of our Pilkington **Optiwhite™** glass with the outstanding and innovative Pilkington **HortiClean™** offering.

The result is a range that provides perfect solutions for greenhouses, conservatories and winter gardens. Benefits range from glass with anti-reflection properties that provide consistently high levels of light transmittance, as well as options to toughen, bend or laminate.

A reduced need for regular cleaning will have additional appeal and glass with increased haze to scatter light is another important feature that can be addressed.

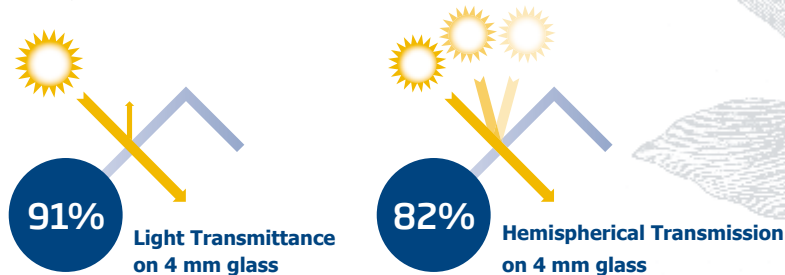
Not only does our Pilkington **Botanical™** range fulfil the current requirements for the horticultural market, but we are also constantly working to develop new products to introduce to this versatile range.

For plant and vegetable growers using large-production greenhouses, we have an unrivalled glass and coating range that will protect, enhance and facilitate better propagation and crop production.

Pilkington **Optifloat™** Clear

Pilkington **Optifloat™** Clear is an easy to maintain, extremely high-quality durable float glass that allows excellent light transmission.

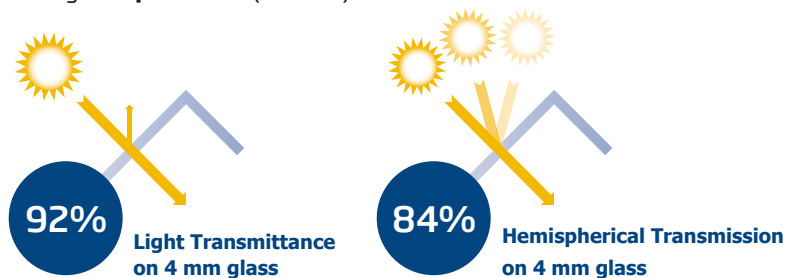
Pilkington **Optifloat™** Clear



Pilkington **Optiwhite™**

Pilkington **Optiwhite™** is a practically colourless, low-iron float glass that allows increased light transmission in the photosynthetically active range (PAR).

Pilkington **Optiwhite™** (low iron)

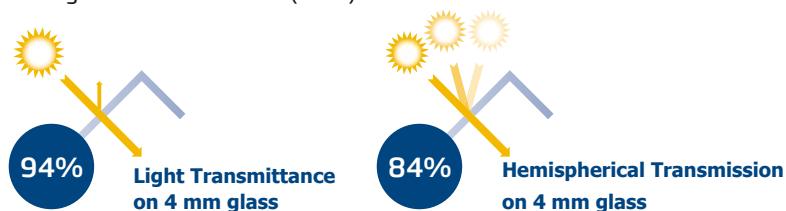


Available in thicknesses between 2 mm and 6 mm, its precisely controlled production process ensures the product's high quality and uniform properties. These special properties make this glass the perfect choice for this particular market.

Pilkington **HortiGrow™** 94

Pilkington **HortiGrow™** 94 is a single-sided anti-reflective coated float glass. The durable pyrolytic coating significantly enhances light transmission.

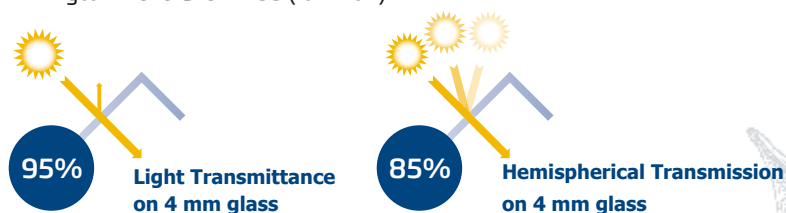
Pilkington **HortiGrow™** 94 (clear)



Pilkington **HortiGrow™** 95

Pilkington **HortiGrow™** 95 is an anti-reflective single-sided coated glass, which is designed to enhance light transmittance by combining a low-iron high transmittance glass with a durable pyrolytic coating resulting in very low light reflectance.

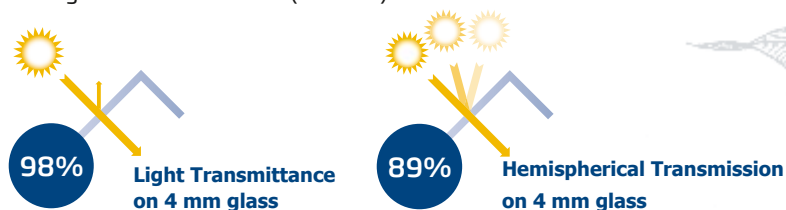
Pilkington **HortiGrow™** 95 (low iron)



Pilkington **HortiGrow™** 98

This robust and highly durable coated glass is ideal for projects where light transmission needs to be maximised. By applying this anti-reflective coating to both sides of our low-iron glass, light transmission can be enhanced to a market leading 98%.

Pilkington **HortiGrow™** 98 (low iron)



Pilkington **HortiClean™**

Pilkington **HortiClean™** provides a self-cleaning glass that offers the perfect “green” solution for glass roof structures, conservatories and winter gardens for maintaining a consistent light transmittance with a focus on safety, convenience and water conservation.

This product’s durable coating with photo-catalytic and hydrophilic properties lasts the lifetime of the glass, reducing the need for manual cleaning, saving water, eliminating the use of potentially harmful detergents, and increasing personal safety that might otherwise be compromised by working at heights.



Pilkington **Botanical™** product range

Offering outstanding durability for the lifetime of the glass, all of the above can be toughened, bent, and laminated, except for Pilkington **HortiGrow™** 98, which can only be toughened. They can also be combined with additional functionality to suit most glass-dependent horticultural project, maintaining or enhancing the light transmission and hemispherical transmission (a measure of the light transmission at all angles to better replicate the movement of the sun).

Technical data: products comparison

Product	PAR Light Transmission on 4 mm glass	Light Transmission on 4 mm glass	Hemispherical Transmission on 4 mm glass
Pilkington Optifloat™ Clear	90%	91%	82%
Pilkington Optiwhite™	91%	92%	84%
Pilkington HortiGrow™ 94*	94%	94%	84%
Pilkington HortiGrow™ 95**	95%	95%	85%
Pilkington HortiGrow™ 98**	97%	98%	89%

* Clear float substrate

** Low iron substrate

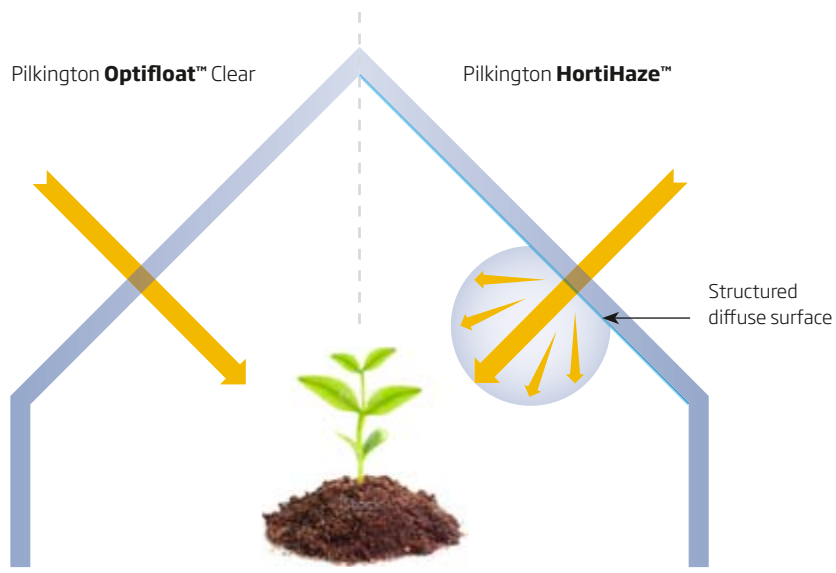


Pilkington **HortiHaze™**

Direct light can compromise the crops inside a greenhouse by causing overheating to the top canopy of leaves and creating shadowing effects on the leaves below. This can prevent uniform development.

Pilkington **HortiHaze™** disperses the light by using a structured surface to introduce haze and scatter. This means a more even distribution of light to the plant without compromising the amount of light entering through the glass.

Hortiscatter and **Haze** are both measurements of light scatter expressed as a percentage. While the haze tells you the percentage of light scattered by more than 2.5 degrees the Hortiscatter is a measure of how evenly the glass scatters light across all angles. Clear glass therefore has a hortiscatter of 0% and a material that scatters evenly over all angles would have a hortiscatter of 100%.



Product	Pilkington HortiHaze™
Light Transmission	89,4%
PAR Light Transmission	88,6%
Haze	47%
Hortiscatter	33%



If you have any specific requirements in terms of Haze or Hortiscatter please get in touch to discuss options further.
Email: botanical@pilkington.com





<https://botanical.pilkington.com/en/Products>

This publication provides only a general description of the products. Further, more detailed, information may be obtained from your local supplier of Pilkington products. It is the responsibility of the user to ensure that the use of these products is appropriate for any particular application and that such use complies with all relevant legislation, standards, codes of practice and other requirements. To the fullest extent permitted by applicable laws, Nippon Sheet Glass Co. Ltd. and its subsidiary companies disclaim all liability for any error in or omission from this publication and for all consequences of relying on it. Pilkington, 'Botanical', 'Optiwhite', 'HortiClean', 'Optifloat', 'HortiGrow' and 'HortiHaze' are trade marks of the Nippon Sheet Glass Co. Ltd.



CE marking confirms that a product complies with its relevant harmonised European Norm.

The CE marking label for each product, including declared values, can be found at www.pilkington.com/CE



Pilkington Group Limited

European Technical Centre

Hall Lane, Lathom Nr Ormskirk L40 5UF, United Kingdom

Telephone: 01744692000

botanical@pilkington.com

botanical.pilkington.com

May 2022