



Phormium
Growth driven. Future proof.



FIRST GREENHOUSE SCREEN ON THE MARKET WITH AN 8-YEAR WARRANTY (*)

Phormium screens are very strong. Unlike all other traditional knitted screens, most Phormium screens (**) are woven. The advantages are great:

- ◆ The strongest and **highest quality yarns**, such as HDPE, are used. The Phormium factory in Lokeren has state-of-the-art production facilities and produces most of the yarns entirely in-house.
- ◆ The unique woven technology provides yarns in both directions of the screen. This creates a **robust, durable structure** that guarantees many years of efficient use.
- ◆ This results in a longer lifetime and a much **lower cost of ownership** (up to more than 30%(!) lower, see case study below).
- ◆ Backed by a unique **8 year warranty**.
- ◆ The long life of the woven Phormium screens means that they are the most **sustainable & environmentally friendly** choice. The choice for a Phormium screen thus contributes to the reduction of the use of fossil-fuel based materials.



The Phormium factory in Lokeren (BE) is part of the world famous weaving industry in Flanders. Phormium has translated the advanced high-tech knowledge of weaving into superior screen solutions. As the only woven screen manufacturer in the world, Phormium is fully vertically integrated: from yarn extrusion, weaving beam production, weaving & knitting to tailor-made finishing, Phormium has all the know-how under one roof!

Phormium has become a leading global player in the segment of screens for horticultural greenhouses for more than 30 years. Growers all over the world, with greenhouses in the most diverse climate zones, experience in practice that the woven Phormium screens are unbeatable in terms of useful lifetime.

Based on that experience, Phormium extends the warranty on all woven screens to **8 years**. Of course, the real lifespan of the woven Phormium screens is even higher. Depending on the specific circumstances, the screens can last up to twice the warranty period.

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(*) 8 year warranty on physical integrity, under normal conditions of use.

(**) Phormium also produces a knitted screen: PhormiTex Crystal (& Crystal V as gable screen) is the most transparent energy screen on the market, with a high number of yarns for humidity transport. When not in use, the bundle of Crystal is minimal to ensure maximum light penetration in the greenhouse. The warranty on Phormitex Crystal is 5 years.

TESTIMONIALS

Lider Gida, Turkey

Erdem Çelik, General Manager of Lider Gida, Turkey:

"We have been using Phormium woven screens for many years in our tomato greenhouses. We choose Phormium because, in addition to excellent shading and energy-saving properties, they also have an incomparably long lifetime. It ensures that we can save significantly on the replacement costs of the screen, the labor costs and the associated organization. In other words, the cost of ownership is a lot lower compared to knitted screens.

Lider Gida (Trabzon, TR) is one of the largest producers of quality tomatoes in Turkey with 37ha of greenhouses."



Sanfiero Orchids, The Netherlands

Lennart Stolze, General Manager of Sanfiero Orchids, The Netherlands:

"We were looking for an energy screen which was strong and durable so it would last for years and that's how we ended up at Phormium. More than 13 years ago, PhormiTex Bright was installed in the first part of the greenhouse and we are still happy with it. Therefore, it was logical that last year, when we renovated the other part of the greenhouse, we preferred working with the Belgian manufacturer Phormium again."





1 SCREEN TYPE
 ◆ Closed shading screen
 ◆ Shading: 50%
 ◆ Diffuse light transmission

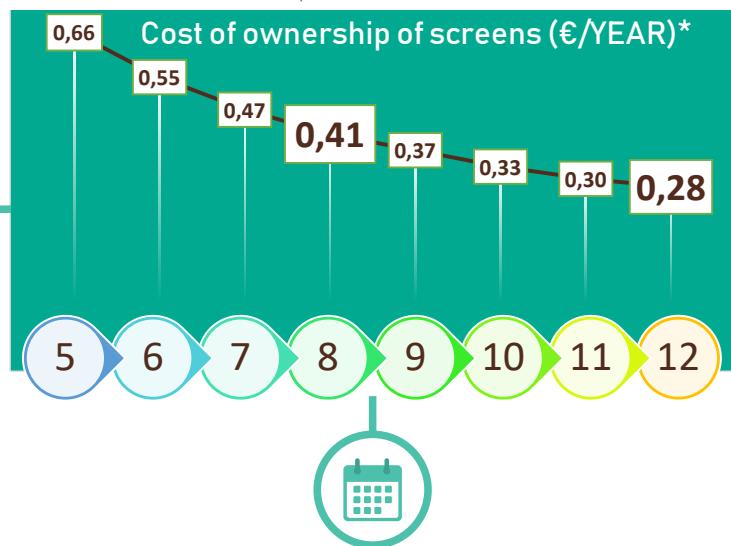
2 PLACE OF INSTALLATION
 The Netherlands

3 CULTIVATION
 Bedding plants

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◆ The cost of ownership of the traditional knitted screen with a lifespan of 8 years was 0.41€/m²/YR
 ◆ The cost of ownership of the Phormium woven screen with a lifespan of 12 years was only 0.28€/m²/YR

*Amounts include screen, replacement cost of labour, waste costs,...



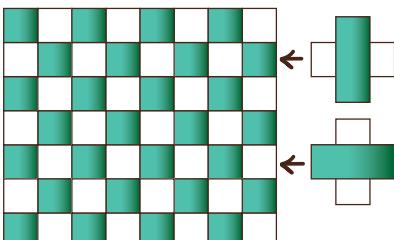
The study shows that the cost of a woven screen is no less than 31.7% (!) lower. This adds up to a benefit of 16.570€ (!) per hectare over the 12-year lifespan.



DID YOU KNOW THAT WOVEN SCREENS ARE UP TO **3X STRONGER** THAN THE TRADITIONAL KNITTED SCREENS...?

Fact 1: Tensile Strength-test on the full screen

EN ISO 10319



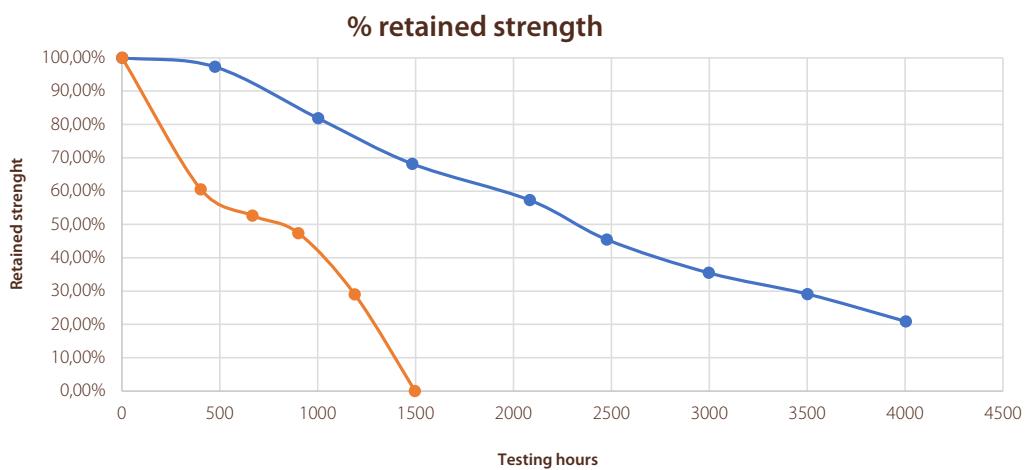
Length direction: Clima+ 55: **15,50 kN/m**
<-> knitted alternative: **4,5kN/m**

Cross direction: Clima+ 55: **9,07 kN/m**
<-> knitted alternative: **3,49kN/m**

Fact 2: UV-stability of the individual yarns

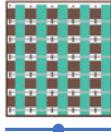
QUV-test standard: EN 13206:2017+A1:2020

The graph below shows how much strength is retained after a certain amount of testing hours in the QUV (artificial weathering device) relative to the strength at the beginning.



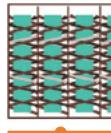
QUV test standard: EN 13206:2017+A1:2020

Acrylic yarn
Clima+ 55



For the acrylic yarn used in the Phormium woven screens, it takes **more than 2.500 hrs** in the QUV weathering device to reach **50%** of its original tensile strength.

PET yarn
knitted
alternative



The alternative PET yarn used in knitted screens reaches **50%** of its original tensile strength after **less than 1000hrs** (!).



The use of extremely durable and UV resistant yarns, in combination with the unique Phormium weaving technique, makes woven Phormium screens up to **3X** (!) stronger than their knitted alternatives. This explains their longer lifespan, guaranteed by the unique 8 year warranty.

