



ROVERO
HORTIHOUSE

**PATENTED SOLUTIONS
FOR THE FUTURE**

With three patents, plus the high-quality film, the HortiHouse is a unique greenhouse designed with the grower's interests in mind.

SAFE & COMPLETE

The HortiHouse is the safest to build wide-span greenhouse. In addition, many convenient options are integrated into the construction.

A large, modern greenhouse structure made of metal frames and transparent film, situated in a mountainous landscape. The structure is long and rectangular, with a complex internal framework. The surrounding area is green and hilly, with a clear blue sky.

the
Smart
way
to grow



Rovero *HortiHouse* Greenhouse

THE NEW BENCHMARK IN WIDE-SPAN GREENHOUSES

The Rovero HortiHouse wide-span polytunnel is a unique greenhouse incorporating multiple innovations. It excels in light transmission and performance, ease of maintenance, and efficient use of space. Furthermore, its construction requires less labor and time compared to traditional wide-span structures. The result is an exceptionally cost-effective greenhouse that redefines and establishes the wide-span category.

The HortiHouse wide-span greenhouse has been developed to meet the need for a more efficient and safer construction and maintenance of this greenhouse type. Smart innovations make both the construction and maintenance of the greenhouse and elevated installations more efficient and safer. This is beneficial for working conditions and the budget. **The main advantages are:**

- ✓ More efficient, cost-effective, and safer construction and maintenance
- ✓ Larger bay spacing of 5 m instead of 4.5 meters thanks to a robust gutter
- ✓ Film attachment on the inside of the greenhouse and roof vents with a lower risk of leaks
- ✓ Standard two-sided continuous ridge ventilation
- ✓ Various integrated features in the base for options such as screens and mesh
- ✓ Very strong, high-quality anti-condensation film with >91% light transmission
- ✓ Approximately 50% lower CO₂ emissions compared to a glass greenhouse

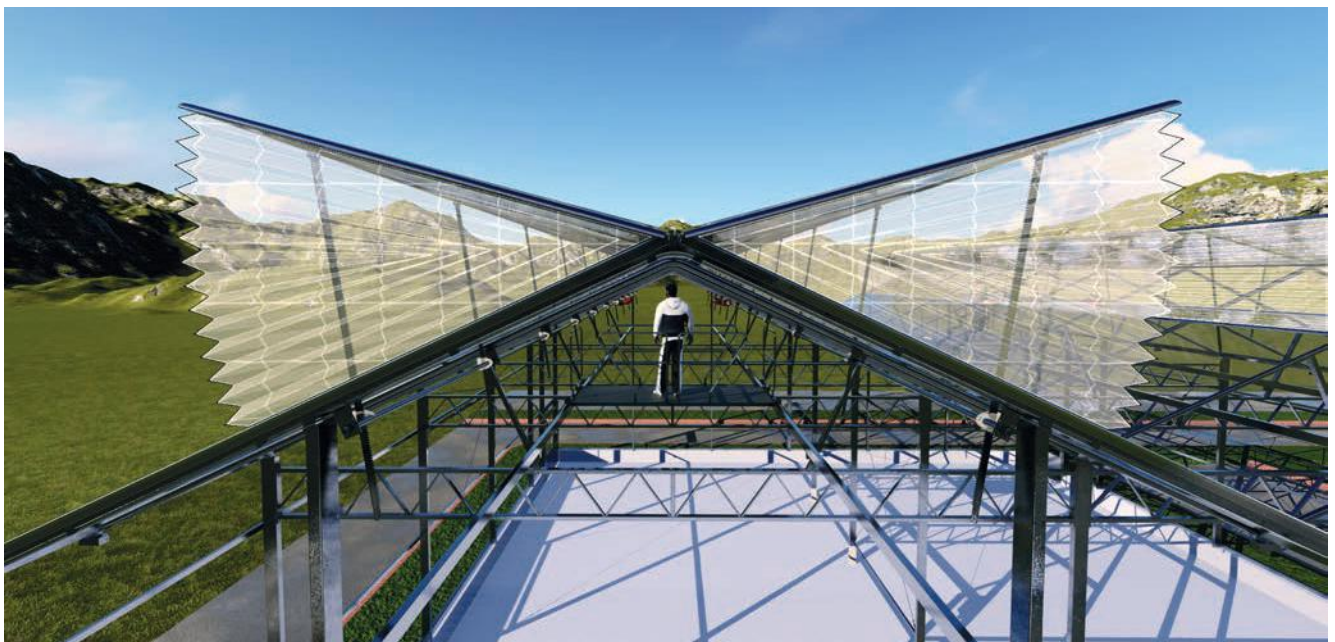
On a flying carpet through the ridge

The large spans and corresponding ridge height of wide-span greenhouses present additional challenges and risks during construction and maintenance work at heights. Measures to address these issues can slow down construction pace and increase costs. Nothing can be done about it. Or can it?

Rovero offers a solution that is as simple as it is effective. In many greenhouse complexes, harvest carts and scissor-lift work platforms travel over parallel heating pipes, which act as rails

in the work paths. This principle can also be applied at gutter height directly beneath the ridge by allowing a work platform to travel over two sturdy structural beams.

One crucial adjustment was still needed: the rack-and-pinion mechanisms of the double-sided continuous ridge ventilation had to leave enough space in the ridge to allow unimpeded passage of the crew-carrying platform. Thanks to a newly designed air mechanism, this requirement has been met.



Wide-span greenhouses, Venlo greenhouses, and other greenhouse types

High- and medium-tech horticulture are dominated by two types of greenhouses, essentially decades old: Venlo greenhouses and wide-span greenhouses. In comparison to Venlo greenhouses, with their traditional bay widths of 3.20 to 4.80 meters, a wide-span

greenhouse allows for much larger spans with bay widths of (usually) 9.60 or 12.80 meters. This results in a structure (legs) that intercepts less light and provides a larger freely cultivatable floor area, offering more space for continuous cultivation and floor-level mechanization. The introduction of truss beams made it possible to achieve larger spans in Venlo greenhouses as well. However, a significant advantage of

the wide-span greenhouse persisted: with an equal gutter height, a wide-span greenhouse has a much higher ridge height, resulting in a larger greenhouse volume. A larger greenhouse volume makes it easier to create a stable, favorable growth climate. Most polytunnels (usually hoop houses) are also based on the dimensions of Venlo greenhouses and wide-span greenhouses.

Efficient and Safer Construction

The mobile work platform at height proves its value throughout the entire lifespan of the greenhouse. This starts during construction and the installation of the double-sided ridge ventilation, followed by the pulling and securing of the film cover. Virtually all tasks that take place in the ridge space can be safely, comfortably, and efficiently carried out from the platform. This also applies to maintenance and installation work occurring at later stages.

Super smart film installation

Another feature that makes the Rovero HortiHouse unique is its method of film installation. Normally, three steps are required to cover the deck of a wide-span greenhouse with film: one for the

film strip over the one- or two-sided ridge ventilation and two for the remaining surfaces.

Thanks to Rovero's unique, patented attachment method to various profiles, the cover film for the HortiHouse wide-span greenhouse can be pulled in a single operation over the entire structure. This should be done with partially opened roof vents. Once the film is pulled through the ridge profile and in place, the roof vents are slightly closed, and the sides of the film strip are attached to the gutters. The remaining work is carried out from the mobile work platform under the deck; safer and much more comfortable. The film for the window opening is now cut. Both sides are then pulled inside, tensioned correctly, and attached to the underside of the window and deck profiles.

THIS EFFICIENT PROCESS not only saves a considerable amount of time but also introduces a new phenomenon: attaching the film to the underside of the window profiles. In traditional wide-span greenhouses, the film is always attached from and on the outside of the deck

surfaces on both sides. This process consumes a significant amount of time and money. This can also lead to (minor) leakage during periods of precipitation. Attachment on the inside of window and deck profiles significantly reduces this risk of leakage.

Three crucial patents

The unique concept of the HortiHouse wide-span greenhouse ensures efficient, safe, and comfortable work, resulting in a surprisingly low total cost of ownership. This is largely due to three clever, patented inventions: the mobile work platform at height and the special ridge and window profiles. Combined with the traditionally durable construction and the very high-quality film, the end result is a wide-span greenhouse that sets a new benchmark



High-quality film

For surprisingly low annual costs, the user gets a greenhouse that also distinguishes itself in the strength and light transmission of the applied film types. Options include highly transparent and diffuse 8-layer UV-resistant anti-condensation film. The highly transparent film has a light transmission of more than 91% PAR and is comparable to low-iron horticultural glass. Information about available films and their specifications is provided upon request.

During the greenhouse's lifespan, the film will likely be replaced once or twice. Thanks to Rovero's thoughtful design and the safe,

mobile work platform, this process can also happen faster and more cost-effectively.

Additional options

Rovero aims to fulfill specific additional requests as best as possible. This includes options such as (white) powder coating of the structure to bring even more natural daylight into the crop. The structure is also prepared for installations such as screens and insect mesh. If you have other preferences regarding the construction, please let us know as early as possible so that we can incorporate them into the design.

Super strong film makes cultivation easier!

THE UNIQUE ADVANTAGES OF THE HORTIHOUSE EVO AC® FILM

Superior anti-drip performance

Traditional anti-drip films contain additives that migrate to their surface and gradually deplete within 1-2 years, causing the film to be covered with droplets that reduce light and damage plants. For growers, this means reduced yield, lower crop quality, and an increase in pesticide use. In many cases, farmers replace their films before the useful life is exhausted, solely due to problems caused by droplets.

EVO AC® films are equipped with a non-migrating anti-drip system that lasts much longer, providing a decisive advantage in moisture management and enabling the use of the film for more years.

No mist

A serious issue with traditional anti-drip films is the formation of mist inside the greenhouse, usually at sunrise and sunset. Mist reduces light and causes moisture to settle on the plants, creating conditions favorable for fungal diseases. Many farmers actually avoid using anti-drip films out of fear of mist.

EVO AC® films do not cause mist.

More light

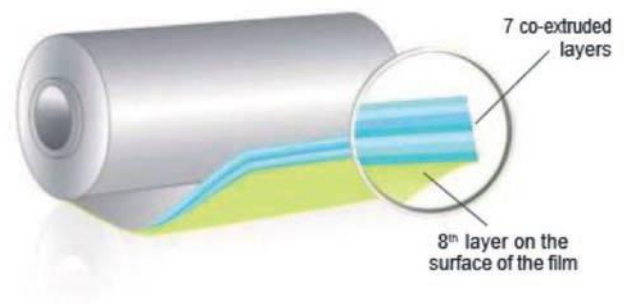
Due to their special composition, EVO AC® films allow more light into the greenhouse. This becomes even clearer when the light level is low.

Works perfectly at very low temperatures

In extremely cold climates, when the temperature drops below -10°C (14°F), many traditional anti-drip films quickly lose their effectiveness as the anti-drip molecules crystallize inside the film and lose their mobility. EVO AC® films perform excellently at very low temperatures, resulting in a crystal-clear, drip-free appearance, as demonstrated by our experience in Scandinavia, Canada, and northern China.

Effective at lower slopes

EVO AC® films are effective at lower roof pitch angles than traditional anti-drip films, which require a slope of 30° to perform well.



Traditional film EVO AC® film



Traditional film EVO AC® film



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Traditional film EVO AC® film

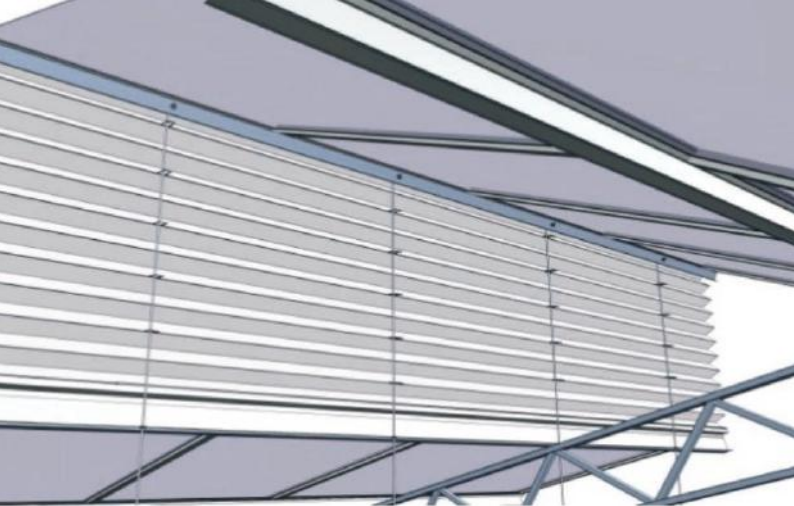
Discover the Revolution in Greenhouse Ventilation: The *'HortiHouse Insect Mesh.'*

ADVANCED PROTECTION, OPTIMAL GROWTH

At Rovero, we proudly introduce our latest innovative product: HortiHouse Insect screens. This advanced system ensures superior air circulation in your greenhouse while keeping unwanted guests out. The unique design provides exceptional ventilation capabilities for a healthier greenhouse climate and optimal growth of your crops in wide-span or polytunnel greenhouses.

**No other mesh system offers the same ventilation benefits,
minimal light interception, and a similar lifespan!**





A pin, together with the mesh hooks, ensures that the insect mesh cannot fall inwards or outwards.

Key system and product features to achieve this are:

Double-Sided Ventilation

Our side vents are larger than ever, with an impressive depth of 2.15 meters and an opening of 1.70 meters on both sides, creating an additional ventilation exchange area. An optimal balance has been developed between the air movement and the number of slats, making the HortiHouse Screen ideal for greenhouses where ventilation is crucial.

Accordion Design

The accordion shape provides more exchange surface, enhancing ventilation capacity when the screen is open. This efficient folding system also ensures a very compact mesh package when the system is closed, minimizing light interception and allowing optimal use of sunlight.

Integrated Ventilation System

With our aluminum cover profiles and cleverly designed rubber seals, installation is a breeze. The integrated ventilation system consists of aluminum cover profiles where the rubber can be easily clicked in. This not only assembles quickly and easily, but the smart shape of the rubber also ensures optimal closure. Since the mesh slats are perfectly concealed in the profiles, the system is hardly visible.

CUSTOMIZED MESH TYPES

Choose from various mesh openings to keep specific insects out. Upon request, we can produce any desired mesh opening. Some common mesh openings include:

- 0.8*0.8mm
- 0.6*0.6mm
- 0.4*0.7mm
- 0.15*0.35mm

UV-Resistant & Durable

We use high-quality sealing rubber and a UV-resistant and dimensionally stable type of mesh. The built-in UV stabilizer and the use of durable materials ensure a long lifespan. And perhaps most importantly, the constant mesh opening keeps unwanted insects out!

Easy Installation

HortiHouse mesh systems always come with a customized comprehensive installation manual. Additionally, we offer the option of having the system installed in the greenhouse by experienced and certified technicians. These professional installers have extensive experience with the product and years of experience.

“Insect screen is one effective measure to keep harmful insects out of the greenhouse.”

Easy to clean

For optimal ventilation and light penetration, Rovero provides high-quality mesh material that is also resistant to dirt. However, over time, some contamination may occur, caused by factors such as construction dust, leaves, pollen, etc. Dirty mesh can reduce ventilation and partially limit light penetration. By cleaning the mesh in a timely manner, you can fully enjoy the benefits of the HortiHouse Mesh System.

Insect mesh can be easily cleaned. The mesh is made of strong material and can be effectively cleaned following clear guidelines. Only water is necessary for cleaning, and no biological or chemical agents are required.

Reliable Partners

The HortiHouse Insect Screen has been developed in collaboration with Holland Gaas, ensuring a top-quality product.

Choose the HortiHouse Insect Screen for a healthier, more productive greenhouse environment. Contact us for more information or a customized quote. Your crops deserve the best protection and optimal growth conditions. Choose HortiHouse, choose quality.

ABOUT ROVERO

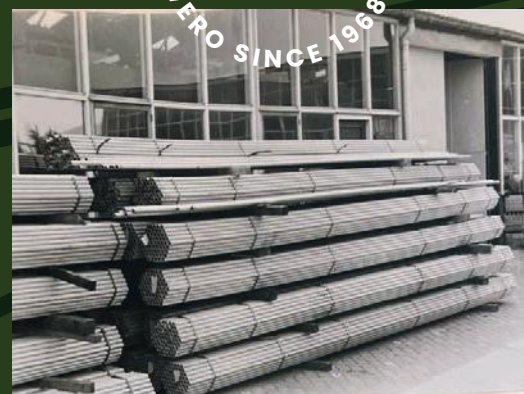
ROVERO SINCE 1968
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Rovero
greenhouses:
the smart
way to
grow!

THE STORY BEHIND ROVERO

55 years of innovation and *sustainable quality*

ROVERO SINCE 1968
ROVERO SINCE 1968



SINCE 1968, ROVERO HAS BEEN DEVELOPING AND CONSTRUCTING high-quality polytunnels, poly tunnels, and shade structures for growers and green professionals. The focus on quality and innovation has resulted in a broad product portfolio characterized by long lifespan, reliable performance, and high efficiency for users. This has earned us a reputation both domestically and internationally, and we take pride in that.

Pushing Boundaries Together

Rovero continues to build towards a flourishing, sustainable future. We do this with a dedicated team and with customers and premium partners (dealers and suppliers) who align with our values. Together, we push boundaries and shape the future of sustainable and efficient cultivation.

Responsible Growth

Respect for each other, for others, and for our environment is embedded in our corporate culture. Employees have the opportunity to continually develop through courses and training, resulting in very low turnover, which is beneficial for the continuity of our operations. Rovero aims to achieve its growth

ambitions in a socially responsible manner. Demonstrable efforts are made towards sustainability and reducing our environmental footprint. Since 2022, Rovero has been the first greenhouse builder to be part of the Horti Footprint Chain Program.

Building a Better World

Finally, Rovero advocates for social cohesion and integrity. At the local level, we sponsor various associations and cultural institutions. Additionally, a significant portion of the annual dividend is contributed to the Verburg Charity Foundation, which engages in both large and small-scale projects for rural development and entrepreneurship in developing countries.

Screen Installations

Screen installations have become indispensable in modern agriculture. Saving energy and shading sunlight have become crucial. These two properties can be summarized in the phrase: optimal climate control.

PDI and Rovero

Peter Dekker Installations and Rovero have been working closely together for many years. The HortiHouse screen is the result of this collaboration. Rovero is proud to offer these high-quality screen installations integrated into our quotes for the HortiHouse. With 40 years of experience, PDI specializes in supplying and installing thoughtful and reliable screen installations, recognized and found worldwide.

The curtain slides off
rafter to rafter.

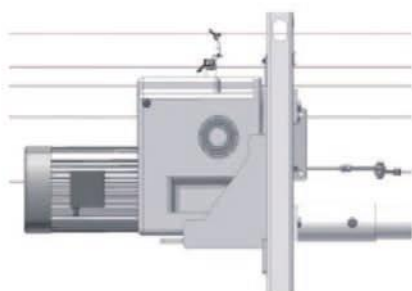
Single or double screen installations

In the HortiHouse, both single and double screen installations can be effortlessly mounted. Double screen installations are gaining popularity. Managing the climate is a crucial aspect in the greenhouse. With a double screen installation, energy savings significantly increase, and it becomes possible to achieve a better climate in the summer. For the HortiHouse, we offer two options for horizontal screening. Additionally, we provide standard three different types of fabric. Of course, other fabric types are also available. If you need a specific type of fabric, we would be pleased to hear from you.

System

Screen installations can be divided into two systems. First, there is the pull wire system. This system is chosen when the last percentage of light is crucial. With PDI's spring blocks, the screen installation ensures that it always closes properly, and the fabric package can be folded to a minimum. In the case of a pull wire screen, our HortiHouse is equipped with extra sturdy end walls.

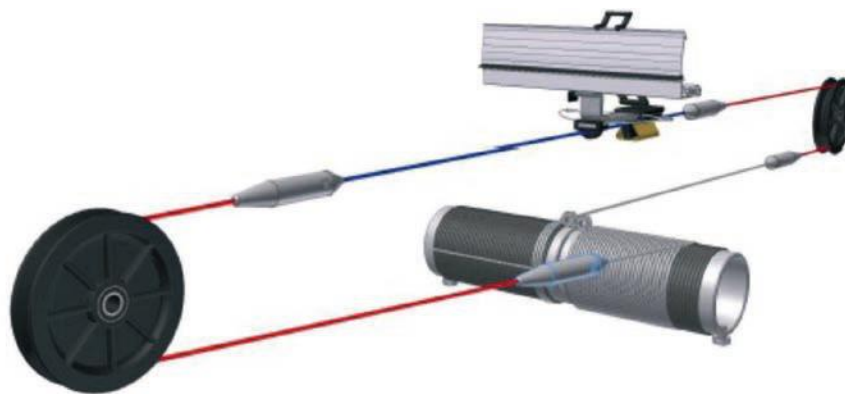
The second system is the push-pull system. This system moves through toothed tracks and tubes. PDI has also developed spring blocks for this system. The forces on the end walls are much lower with this system, allowing us to make the end walls lighter.



Screen Profiles

The PDI profile is designed to combine strength and light gain into one profile. The fabric is secured to the aluminum PDI profile using a UV-resistant plastic fabric clip. At the top and bottom of the profile, a plastic wire guide is applied to each wire. These guides are made of high-quality UV-resistant plastic to minimize wear on the polyester threads. Each pull wire or push rod is connected to the profile using a spring block. This spring

block absorbs all movements of the slats (possible expansion and contraction of the greenhouse), ensuring a guaranteed closure of the profile and optimal package formation. The profile is equipped with a narrow rubber sealing strip that ensures an energy-tight seal. The PDI profile is available in three widths, depending on the chosen application.



Fabrics

For the HortiHouse, we offer fabrics from Svenson. We typically work with three types of fabric: Energy Screen (Luxous 1147 FR), Sunscreen (Harmony 5747 FR), and Blackout (Obscura 10070 FR WB + BW).



Both strength and light gain
combined into one profile.







“It’s all about
climate control.”