rovero

ROLL-AIR
GREENHOUSE

the Smart way to *grow*

OUR GREENHOUSE DESIGN PROVIDES THE BEST IN GROWING ENVIRONMENTS:

- Sealed environment with a fully covered Rollair roof in less than 1 minute.
- Uncover the Rollair roof in less than 1 minute - providing an outdoor growing environment.
- Protect outdoor crops from seasonal risks, while maintaining outdoor grow conditions.

ROVERO'S PATENTED ROLL-AIR GREENHOUSE IS DESIGNED AND MANUFACTURED BY ROVERO.

Roll-air freestanding and *gutter-connected retractable* open-roof greenhouses

Roof Cover Film

The protective and high light transparent 'Covering' on Rovero's roof uses a Reinforced Poly. This consists of two types of film. For the rolling system of the retractable roof, uses a unique Rovero-reinforced Poly. It is incredibly strong and has an exceptionally high light transmission (PAR) at 83% for Poly roofs. The side walls are covered with the super-strong EVA film, which is eight layers thick. This film is designed using an anti-condensation/ anti-drip layer and is 100% energy-neutral produced.

Doors

We provide the Roll-Air with optional extra-large doors. Doors are available in various sizes.

Gutters and Drainage

The Roll-Air greenhouse is equipped with Rovero aluminum gutters as standard. These have a very high drainage capacity (85% more than average) and are engineered to meet snow loads of up to 25 Lbs. Per Square Foot / 100 kilograms per square meter with options for heavier loads. Rainwater can be collected and harvested for storage and used for irrigation water. This gutter has a low CO2 footprint and a long service life. Steel gutters can be used upon request, for example, when frequent gutter heating is necessary due to heavy snow loads.

Rovero recommends a slope to both sides. Therefore, each gutter line is equipped with drainage troughs on all gutter ends.

Superstructure

The superstructure frame consists of a gothic-shaped truss arches. The truss widths and spacing depend on the chosen model and snow/wind loads.

Superstructure Protection

At the ridge, the arches are connected with an aluminum ridge profile to protect the rolled-up film from rain and wind. Additional support arches are also installed on the roof to protect the film from high winds.

Roof Ventilation

The patented drive system consists of an electric motor (230 - 400 V - 3 phases – 60 Hz for North America and 50 Hz for Europe) with chain drive, is self-locking, and is mounted on the truss with a stabilizing bracket. Driven with a chain drive, this Roll-Air drive is self-locking, and is mounted on the truss with a stabilizing bracket.. This ensures that the film is tensioned correctly in all seasons. Two motors are connected to an additional control box (relay box) with thermal protection, mounted in the middle under the ridge.

Side and End Walls

The upper gable ends of the end walls are covered with the transparent Rovero Reinforced Poly, which is also used on the roof. For this purpose, an aluminum film locking clamp profile is mounted on both end arches and end trusses. Polycarbonate can also be used on sides and ends and are optional.

ROVERO REINFORCED POLY

Specially designed for the Roll-Air

TWO MOTORS PER SECTION

Allows you to open half sections as well

JUMBO DOORS

Available in different sizes

“This Rollair greenhouse makes the investment quickly profitable.”

Want to know more? Scan the QR code

GO TO WEBSITE

Facade Ventilation

SIDE AND ENDWALL VENTILATION USING ROVERO MOTORIZED ROLL UP CURTAINS OR RIGID COVERED RACK AND PINION VENTS. CURTAINS AND VENTS HAVE SEVERAL KNEE WALL OPTIONS FOR APPLICATION BELOW AND ABOVE OUR ROLL UP CURTAINS OR RIGID COVERED VENTS.

1. Wever 4 (photo on the left)
2. Wever Twin (photo on the right)

We offer two types of facade ventilation for the Roll-Air:

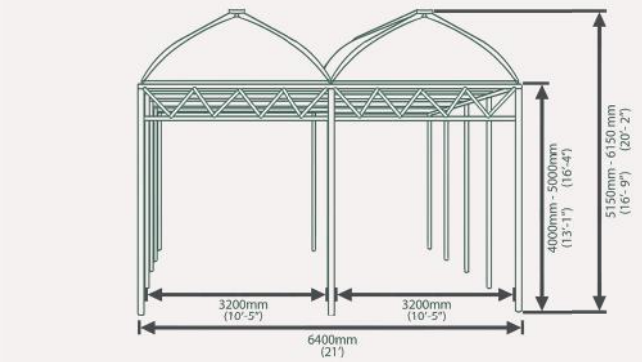
The Rovero Roll-Air features a fully open roof. To enable ventilation, intermediate columns with security tubes are installed, along which the film rolls up. Ventilation at the corners and near the motors is finished with cover plates. This way, maximum ventilation is achieved.

The Wever 4
With the Wever 4, both the lower and upper parts of the greenhouse remain closed. Approximately 65% of the facade can be opened. Ventilation intentionally starts a bit higher from the ground, improving plant protection. The reinforced film is attached to a hoisting belt and is pulled down through an aluminum lifting tube. A fall tube in the film ensures that it stays taut.

The Wever Twin
With the Wever Twin, the entire facade rolls up from the ground, creating an open passage to the greenhouse.

Rovero's *retractable reinforced* poly roof greenhouse dimensions

640 ROLL AIR



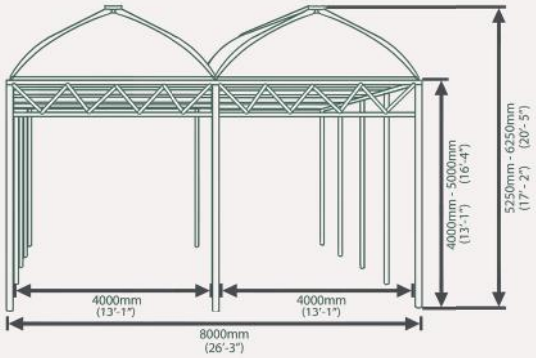
6,40 mtr.
(21')

± 5,15 - 6,15 mtr.
(16'- 9") (20'- 2")

4,50 mtr.
(14'-8")

up to 81 mtr. (265'8")
with one motor

800 ROLL AIR



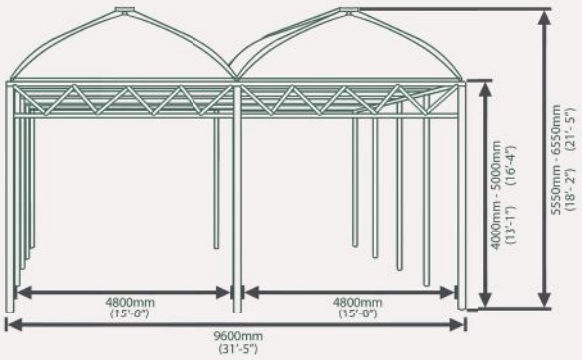
8,00 mtr.
(26'-3")

± 5,25 - 6,25 mtr.
(17'- 2") (20'- 5")

4,50 mtr.
(14'-8")

up to 81 mtr. (265'8")
with one motor

960 ROLL AIR



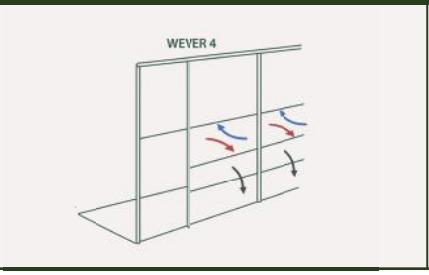
9,60 mtr.
(31'-5")

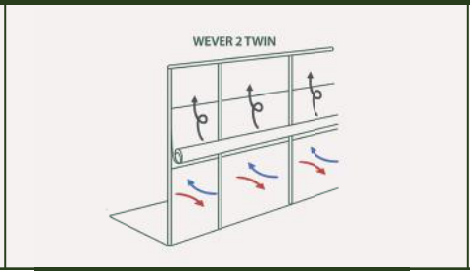
± 5,55 - 6,55 mtr.
(18'- 2") (21'- 5")

4,50 mtr.
(14'-8")

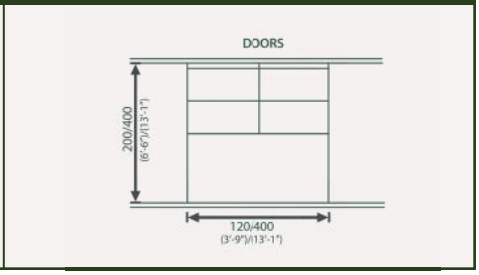
up to 81 mtr. (265'8")
with one motor

ROLL UP CURTAINS

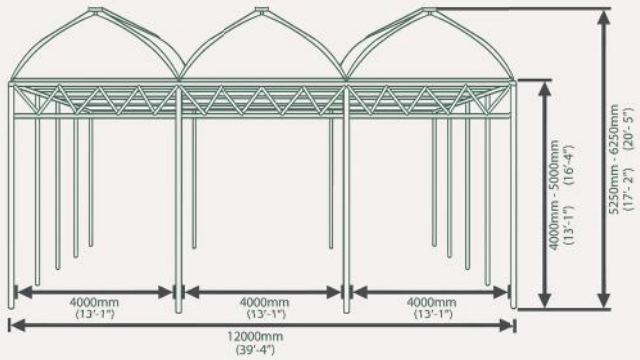


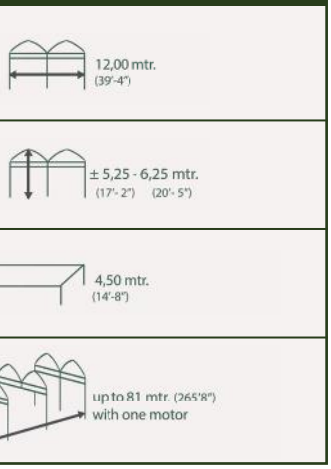


JUMBO DOOR

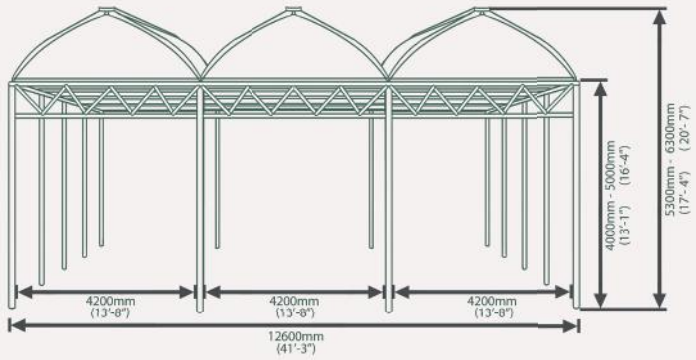


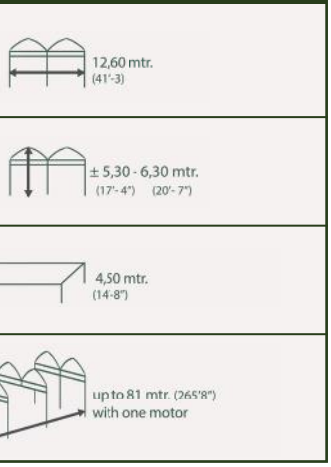
1200 ROLL AIR





1260 ROLL AIR





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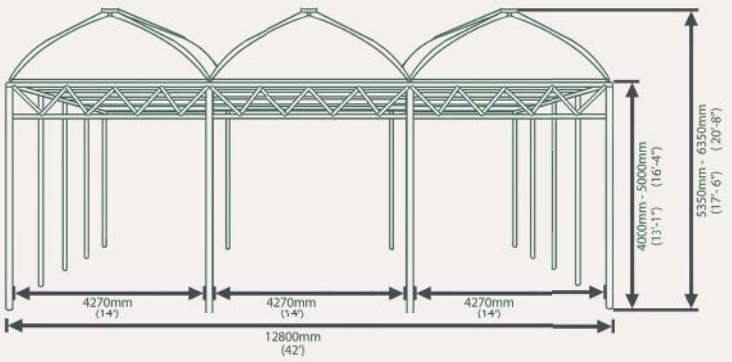
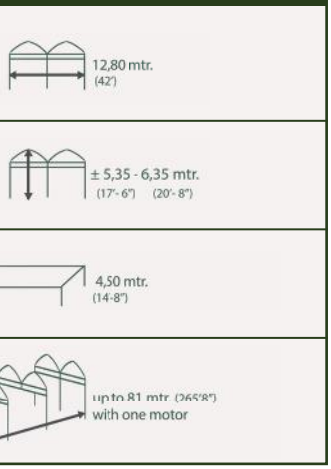




The proven retractable roof that offers high light roof covering that can fully open or close in *less than 1 Minute.*

“Rovero greenhouses use very high-quality reinforced films that combine strength and long life with very high light transmission.”

Retractable greenhouses are ideal for hardening crops in the open air without the need for relocation and providing protection when necessary. The proven retractable roof structure provides maximum air circulation and light. With Roll-Air structures growers are using less growth regulators and with the automated control system plants can be protected from inclement weather conditions.

The Roll-Air greenhouse provides a unique structure meeting the needs of growers that require a sealed grow environment and outdoor growing environment for their plants. Thanks to Rollair’s quality design, robust materials, and high light film you now have a solution!

When the roof is fully opened, the crops are in a full open-air outdoor environment. When the optional side ventilation is utilized, more airflow can be created. There is a lot of ingenuity in this unique, high-quality retractable roof structure concept. The Roll-Air greenhouse is sturdy and durable. Plants can grow undisturbed until it’s time to harden them off outdoors. Even then, they don’t need to be moved. One press of a button or use your environmental controller and in less than one minute is all it takes to roll up the cover film tightly from the gutter to under the protective ridge plate. This way, the plants are effectively outside until it’s time to close the cover again. Now you have a way to protect the crops from frost, strong winds, or hail.

The ability to switch between outdoor and protected growing conditions adds significant value to this ultimate convertible greenhouse. Numerous other features make this value even greater. Compared to other retractable open-sky systems, the unique rolling mechanism of the Roll-Air has fewer limitations in terms of shading, light loss, and sensitivity to wind.

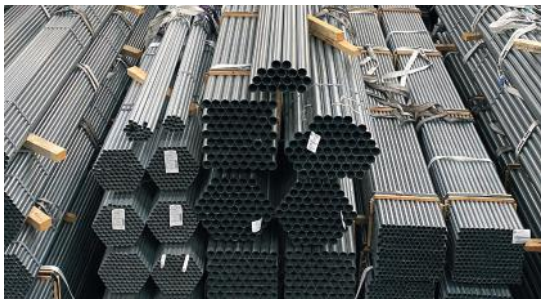
Less Plant Relocation

The fact that plants no longer need to be relocated for hardening saves labor and maximizes space utilization. Moreover, plants are protected against weather conditions that can negatively impact growth rate and product quality.

Strong, High-Quality Films

The Rovero greenhouses use very high-quality Poly films that combine strength and long life with very high light transmission. This ensures that crops continue to grow well in lower-light situations increasing your plants value.

For Rovero’s reinforced Poly roof greenhouse, Rovero recommends the top Poly films from its range: the super-strong EVA film for the side walls and the unparalleled Rovero Reinforced Poly for the greenhouse roof, which, despite its strength, has very high light transmission (PAR > 83%).



“The Rovero proven retractable poly greenhouse offers the *protected outdoor climate* we were looking for.”

Plant Select (B) Boosts Growth Ambitions with 2 hectares off the Rovero retractable roof greenhouse.

PLANT SELECT, BASED IN RIJKEVORSEL, BELGIUM, is a global supplier of in-vitro plant material and licensing programs. It is a significant European horticultural company known for its innovation, specialization, and sustainable cultivation practices, particularly in crops like Fargesia, Hydrangea, and ornamental grasses. In 2020, they acquired a Rovero Roll-Air retractable greenhouse, and Production Manager Joren De Wachter is highly satisfied with the Rollair structure.

When you think of bamboo, you think of Plant Select. In Fargesia, a non-invasive bamboo species, the Belgian company is the global market leader. However, their activities go beyond this, including in-vitro multiplication and propagation for their own use and third parties, as well as the cultivation (both indoors and outdoors) of final products for customers in Europe. After years of growth, they seized the opportunity in 2020 to expand the protected growing space at their main location with a new Rollair greenhouse of over 2 hectares.

Desiring Greater Outdoor Influence

“We already had 4 hectares of Venlo greenhouses for growing plants,” says Production Manager Joren De Wachter. “For the expansion, we were looking for a slightly different greenhouse type. Venlo greenhouses offer many advantages and can retain heat well, but they can be challenging to cool when you want less heat. That’s why we started thinking about a Poly film Roll-air greenhouse. In terms of climate, it can be between fully enclosed and in less than 1 minute fully opened.”

Retractable roof greenhouse

During exploratory discussions with Rovero, it became clear that the Roll-Air retractable roof greenhouse best met their requirements. De Wachter explains, “Greenhouses with fully open roofs have existed for a while, especially in glass versions. However, the large roof panels are simply vents and these tall vent panels can reduce the amount of natural wind at the plant level and sometimes make it less effective at cooling the growing space. Rovero had a unique solution with a roll-up retractable roof that we hadn’t seen anywhere before.”

The new normal...

A retractable Roll-Air greenhouse of over 2 hectares was no challenge for Rovero. The concept had already proven itself with clients all over the world. Rovero presented a detailed proposal for the Roll-Air greenhouse. In the fall of 2020, Plant Select put the greenhouse into operation.

Protected Outdoor Climate

“The Hydrangeas and ornamental grasses start as plugs and are then placed in final pots, where they remain in the greenhouse for 6 to 12 months, depending on the growing duration and customer preferences,” explains the Production Manager. “We are extremely pleased with it. The Roll-Air greenhouse offers the protected outdoor climate we were looking for. The cover rolls up tightly and compactly in less than one minute, there is minimal shading, and the outdoor conditions have free rein as long as we want. It’s a robust, highly flexible growing space that perfectly suits our needs. It’s great that Rovero was able to provide this for us.”