

As reliable, innovative and independent greenhouse horticulture partner, we really understand our sector: cultivating crops and efficient handling of products in the most effective, sustainable and controlled way. This results in continuity, quality and diversity of crops and a high crop yield.

At Alcomij, we want to help you and your customers achieve this. That is why we have been developing and producing smart horticulture solutions and solutions in cultivation logistics 1969. Our long and extensive experience

has enabled us to develop a sound market insight, allowing us to work meticulously and diligently to supply the most appropriate and complete systems to you and your customers. More specifically, we develop and produce in-house and customised steel greenhouse constructions and smart aluminium greenhouse roof, gable and heating systems and customised solutions in cultivation logistics.

As company, we operate in a modern and sound way, grasping all opportunities as soon as these arise. Our

own R&D and production departments are driven by quality and innovation. We work continuously on improvements to our product range. Modernising our own steel and aluminium production facilities has ensured that our production capacity is a perfect match for current market demand.

At Alcomij we do what we promise and work together to build long-term relationships. We are your reliable horticulture partner. We operate globally from the heart of Dutch horticulture.





Aluminium greenhouse roof systems

At Alcomij we offer the widest range of greenhouse roof systems in the sector. All our greenhouse roofs are 3D engineered, calculated and produced inhouse using the very latest equipment and machines. Our R&D department works continuously to improve our roof systems.

All greenhouse roofs are customised, which means that contact with the customer is vital. We support you and your customer every step of the way in selecting the most comprehensive and

optimal system. To ensure that your new greenhouse roof system meets all local applicable standards and loads, we used a MathCad program called 'Glazenstad', developed by TNO.

At Alcomij we supply the following types of customised greenhouse roof systems:

- Venlo
- Solar
- Widespan
- Cabrio
- Semi-closed

#### Venlo greenhouse roof system

The Venlo greenhouse roof system is the most frequently used system in greenhouse horticulture for conditioned cultivation. The system offers high light transmission and is suitable for roofing in glass and polycarbonate as well as solar and insulating panels.

#### **Ventilation windows**

The Venlo roof systems are available with a variety of ventilation windows in all conceivable sizes. From standard framed ventilation windows with and without integrated insect netting,

equipped if necessary with double-sided continuous venting, to tempered glass ventilation windows for minimum light interception. With the exception of the tempered glass version, all ventilation windows are equipped with a stable frame that we can supply as separate parts for export.

### Easy to install

The Venlo roof is a slide system that is quick and easy to install. Our extensive profile package provides a standard solution for most greenhouses. The roof is storm-safe and is fitted using

torque resistant joints. The roof systems can be supplied with both steel and aluminium gutters, which drain rain and condensation water separately, enabling the water to be reused easily. As well as cost advantages for the grower, this also has less impact on the environment.

The advantages of the Venlo greenhouse:

- Minimum light interception
- · High condensation drainage capacity
- All roof bars are secured against sideways movement
- Wide product package
- Customised
- Meets the latest greenhouse construction standards
- Suitable for large surfaces
- Venlo roof systems are available with ex works fitted PVC or rubber to protect the glass



Venlo greenhouse roof system with double-sided continuous venting windows and integrated insect netting



## Solar greenhouse roof system

Alcomij has the in-house expertise required for the customised development and production of customer-specific solutions. If you or your customer aim for more sustainable cultivation, the Venlo Solar is an excellent option. The use of solar panels means that solar power is converted into sustainable electricity. This makes an ideal combination of energy generation and crop production.

## High residual value

All our Venlo Solar systems have a high ventilation capacity to cool the solar panels. Alcomij offers roof systems for use with laminated solar panels (without frame) as well as solar panels with frame. Alcomij roof systems are manufactured from aluminium, making them 100% recyclable with a high residual value.

# Widespan greenhouse roof system

At Alcomij we aim to provide solutions for every type of greenhouse. The Widespan roof system was developed to bridge large areas with few columns. This creates an efficient and economic cultivation area in the greenhouse, which is extremely suitable for garden centres. The open space enables easy integration of internal transport.

### Less impact on the environment

Like the Venlo greenhouse roof system, the Widespan's aluminium gutters drain rain and condensation water separately, enabling the water to be reused easily. As well as cost advantages for the grower, this has less impact on the environment. The flat shape of the capping also prevents pollution of the roof and the double-sided continuous ventilation helps to create a balanced climate.

The system is suitable for roofing in glass and polycarbonate as well as solar and insulating panels.

## The advantages of the Widespan roof:

- Large bridging possibilities
- Storm and snow-proof
  Screen system can be integrated easily in the roof purlins
- Suitable for 4 mm glass and 16 mm polycarbonate plates (SDP)
- Meets all applicable standards for greenhouse construction
- High ventilation capacity

## Cabrio greenhouse roof system

Alcomij developed the Cabrio greenhouse roof system for the tree and plant sector. The entire greenhouse roof can be ventilated, offering maximum ventilation capacity. With the Cabrio system you can combine greenhouse cultivation with outside conditions.

## More UV light

The ventilation windows hinge in the gutter and can be fully opened, enabling more UV light to reach the plant. The Cabrio greenhouse roof system protects the crop in extreme weather conditions.

The system is suitable for roofing in glass.





# Semi-closed greenhouse

At Alcomij we develop and produce smart and sustainable cultivation solutions. The semi-closed greenhouse is a good example of this. It was developed especially for specific environmental conditions requiring improved climate control in the greenhouse. But also for situations involving energy-efficient cultivation combined with optimum production.

The local climate conditions and your customer's specific crop requirements form a good basis to make the

correct selection of components and dimensions. After all, one location may require more cooling at certain times which means that cooling with conditioned outside air is a solution. And elsewhere, high humidity may require a controlled flow of dry air.

#### Conditioned air flow

The semi-closed greenhouse can thus be cooled using conditioned outside air. This air will then enter the greenhouse in a controlled way via corridors fitted to the outermost edge of the gable and wall. The corridor is used as a chamber

in which various types of air (dry, humid, hot, cold etc.) are mixed together before flowing into the greenhouse.

To further optimise these air flows, we offer well-integrated solutions using different ventilation principles, including sliding and swing windows. In short, the semi-closed greenhouse system offers you and your customer a system that is suitable in all climate conditions.

The advantages of the semi-closed greenhouse roof:

- Improved climate control
- Lower energy consumption
- Lower CO2 emissions
- Less use of pesticides
- More sustainable production with higher yields of high quality
- More efficient air flow close to the plant

