

SPECIFICATION TEXT – SUNSPAN SYSTEM

27.31.30 – ROOF-INTEGRATED PV SYSTEMS FOR PITCHED ROOFS

0. Description

Supply and installation of a roof-integrated PV system, type Sunspan System, in which solar panels are applied as a fully integrated roof covering.

The system consists of a supporting structure of aluminium profiles with integrated sealing, suitable for installation on purlins. The assembly forms a roof solution with a high level of water resistance, controlled rainwater drainage and light-transmitting properties.

The system includes all necessary components for a complete, functional and structurally safe roof covering.

1. Materials

1.1 General

The system consists of:

- aluminium profiles (roof members)
- sealing profiles and rubber gaskets
- ridge elements
- cover caps
- gutter components
- fasteners
- solar panels (supplied separately)

1.2 Aluminium profiles

- material: aluminium
- function: structural support and connection between panels
- installation: directly on purlins
- properties: corrosion-resistant and low-maintenance

1.3 Sealing

- material: high-quality elastomers (EPDM or equivalent)
- application: horizontal and vertical sealing between panels
- function: primary sealing with integrated secondary drainage

1.4 Solar panels

- type: standard PV panels
- application: roof covering
- orientation: landscape and portrait possible
- dimensions (indicative):



Panel size Power
1762 × 1134 × 30 mm ± 460 Wp

Alternative panel sizes possible in accordance with system design and supplier specifications.

2. Execution

2.1 General

Installation in accordance with the system supplier's guidelines.

2.2 Structure

- Installation of aluminium profiles on purlins
- Purlin spacing in accordance with project requirements and structural calculations
- Suitable for large continuous roof surfaces

2.3 Solar panels

- Installed as a continuous roof covering
- Landscape or portrait orientation
- Connection via profiles and sealing components
- Water-resistant sealing in both horizontal and vertical directions

2.4 Roof type

- Suitable for mono-pitch and gable roofs
- Applied in combination with ridge and gutter detailing

2.5 Drainage

- Controlled drainage via gutter components
- Integrated secondary drainage system

3. Requirements and performance

3.1 General

The system shall comply with applicable building regulations.

3.2 Structural safety

- Design based on:
 - NEN-EN 1990 to 1999 (Eurocodes)
- Loads in accordance with:
 - NEN-EN 1991 (wind and snow loads)
- The system is engineered based on the highest wind load conditions in the Netherlands.



- For application outside the Netherlands or under different load conditions, a project-specific structural verification by a locally qualified structural engineer is required.

3.3 Application limits

- Based on Dutch wind region I
- Landscape orientation: up to approx. 10 m building height
- Portrait orientation: up to approx. 30 m building height
- Deviations possible based on project-specific calculations

3.4 Water resistance

- Roof constructed with a high level of water resistance
- Sealing through integrated profiles and gaskets
- Secondary drainage provided

3.5 Light transmission

- Depends on panel type and backsheet
- Transparent and semi-transparent panels possible

3.6 Durability

- Corrosion-resistant and low-maintenance materials
- Suitable for long-term outdoor use

3.7 Use

- Non-insulated roof solution
- Not suitable for heated or thermally insulated spaces

4. Application

Suitable for:

- warehouses
- sheds
- carports
- parking canopies
- greenhouses
- storage structures



5. Measurement and payment

5.1 Unit

- m² of roof area fitted with Sunspan system

5.2 Included

- supply and installation of complete system
- aluminium profiles and sealing components
- ridge, cover and gutter elements
- fasteners
- integrated drainage system

5.3 Excluded

- solar panels
- electrical installation and inverters
- main supporting structure (rafters/purlins)
- additional building works outside the system