



INSTALLATION MANUAL

Skylight profile

SPR-SKY

THE POWER OF ROOFS



Introduction

SPR-SKY Skylight profile

SPR-SKY



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The SPR-SKY skylight constitutes a unique solution combining high levels of mechanical, aesthetic, and thermal properties. The view and cross-section of the skylight are presented in Figure 1. The combination of resin-glass composite fitted to match the shape of the roofing material together with polycarbonate constitutes the perfect solution allowing for a warm illumination of roofs made of sandwich panels. The resin-glass composite used in SPR-SKY skylights is made from two layers of resin, where the outer layer is made on the basis of a gelcoat that is resistant to external conditions and especially to UV radiation.



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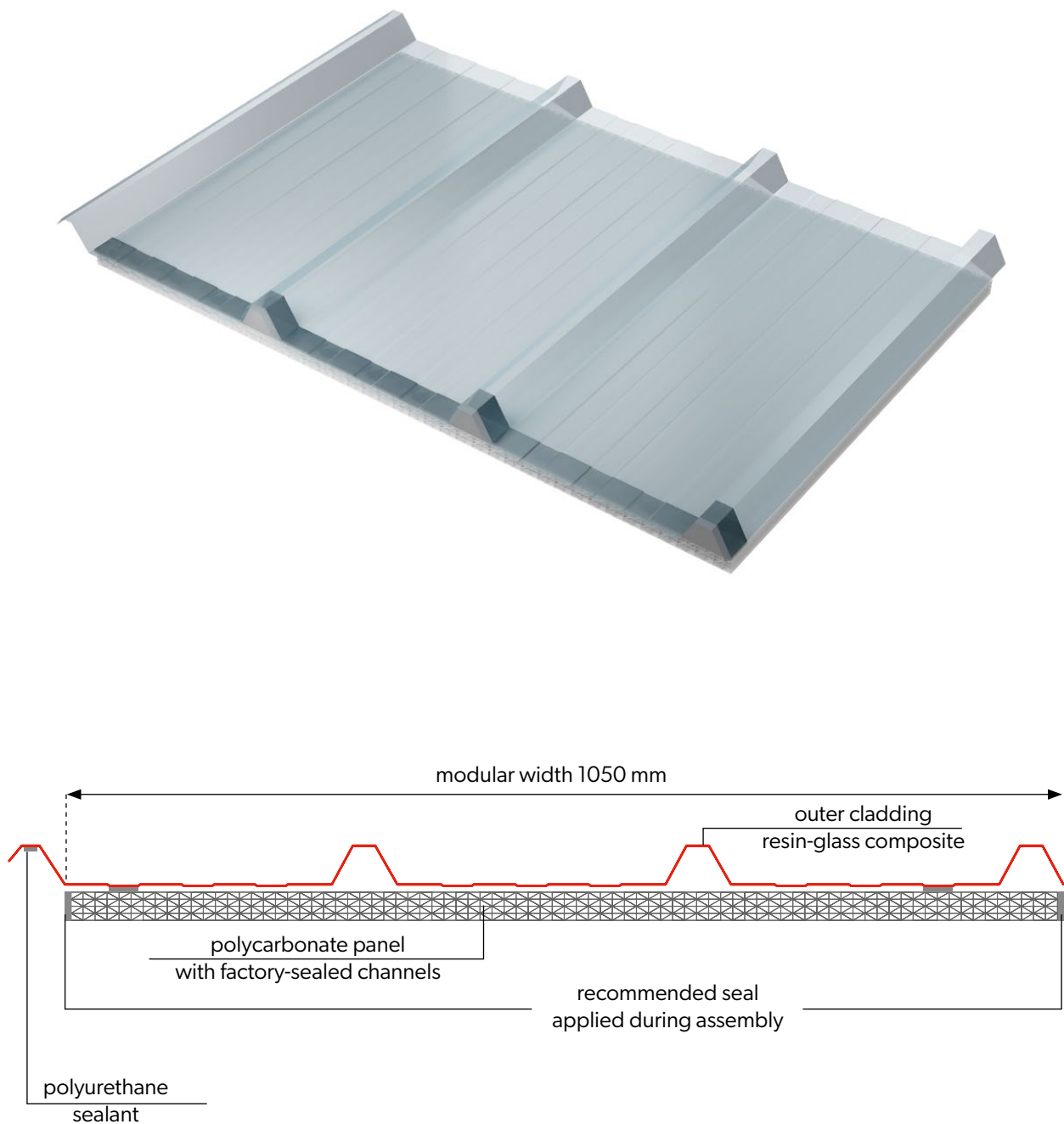
1. Technical information
2. SPR-SKY skylight installation



THIS MANUAL IS FOR INFORMATIONAL PURPOSES ONLY AND DOES NOT RELEASE CONTRACTORS FROM THEIR RESPONSIBILITY TO FOLLOW THE RULES AND STANDARDS OF THEIR TRADE.

Technical information

fig. 1



Construction of the SPR-SKY skylight.

Technical specifications

Parameters	Value
Material	Resin-glass composite combined with 25 mm or 32 mm polycarbonate
Modular width	1050 mm
Length of opening	7.0 m (maximum cladding length 7.2 m) It is allowed to combine skylights at length directly on site
Recommended minimum roof pitch	10% (at 20 cm overlap)
Maximum support spacing	1,5 m
Thickness	Polycarbonate 25 mm - 30 mm + hump height Polycarbonate 32 mm - 35 mm + hump height
Weight	5,9 kg ± 5%
Acceptable dimensional deviations in length, width, and thickness of skylight elements	± 5%
Heat penetration coefficient	U = 1.5 W/m²K with 25 mm polycarbonate U = 1.1 W/m²K with 32 mm polycarbonate
Light penetration	50% ± 5%

Using the SPR-SKY skylight

Using the SPR-SKY skylight constitutes an effective solution for providing daylight into a building. It can replace electrical lighting already at a roof coverage of between 7 and 15%. The chambered structure of the skylight limits an excessive increase of temperature caused by solar radiation as well as minimizes the loss of heat from inside the building.

Skylights can be used in industrial buildings with so-called sloping roofs, i.e. roofs with an angle of inclination greater than 10% in the form of performing a warm sandwich panel covering.

The SPR-SKY skylight can be installed as a spot skylight or a covering light strip from ridge to eave, at the centre of the roof, by the ridge, from the centre of the roof to the eave. The SPR-SKY skylights connect to the sandwich panels via side joints (at the humps) and end joints (overlapping). However, the thickness of the skylight cladding is 3-4 times greater than the thickness of the outer panel cladding. This means that at the overlap joints between the skylight cladding and the panel, they do not adhere perfectly and therefore, particular attention must be paid to sealing these joints during design and installation. It should also be borne in mind that skylights are not as durable as the adjacent cladding made of sandwich panels, and that is why the assembly must be carried out in accordance with construction regulations and the rules of the art in order to ensure durability and tightness.

2. SPR-SKY SKYLIGHT INSTALLATION

It is not recommended to install the skylights in a series, there should always be a roofing element between the skylights.

Examples of skylight arrangements on the roof slope are shown in the following drawings:

fig. 2 - perspective view

fig. 3 - in plan view

fig. 2

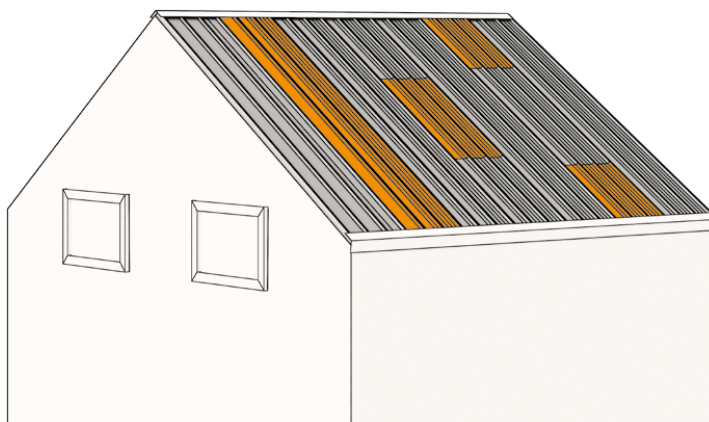


fig. 3

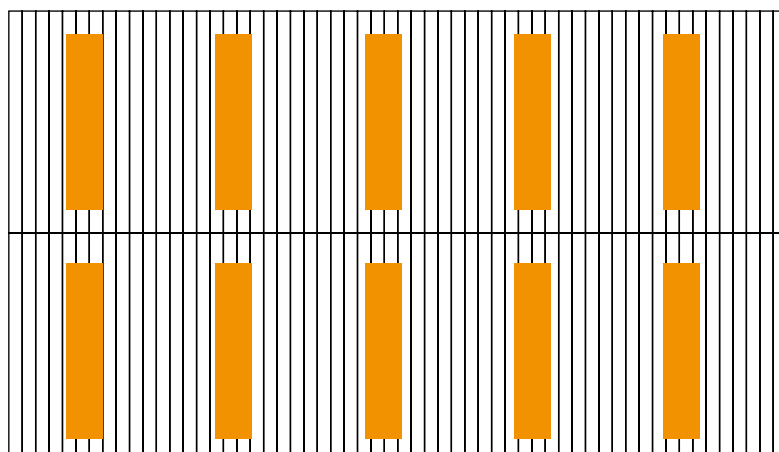
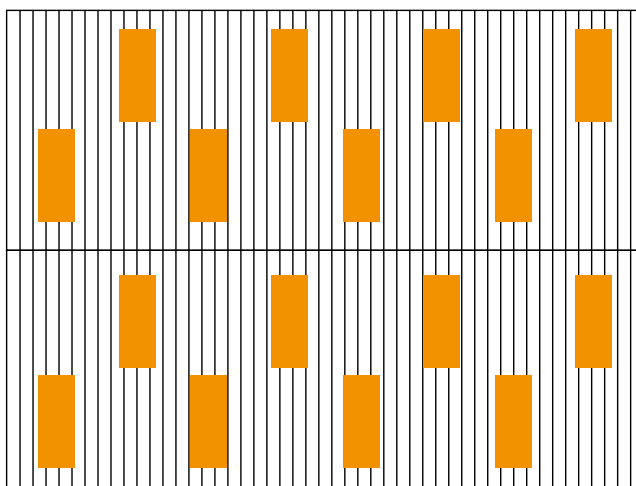
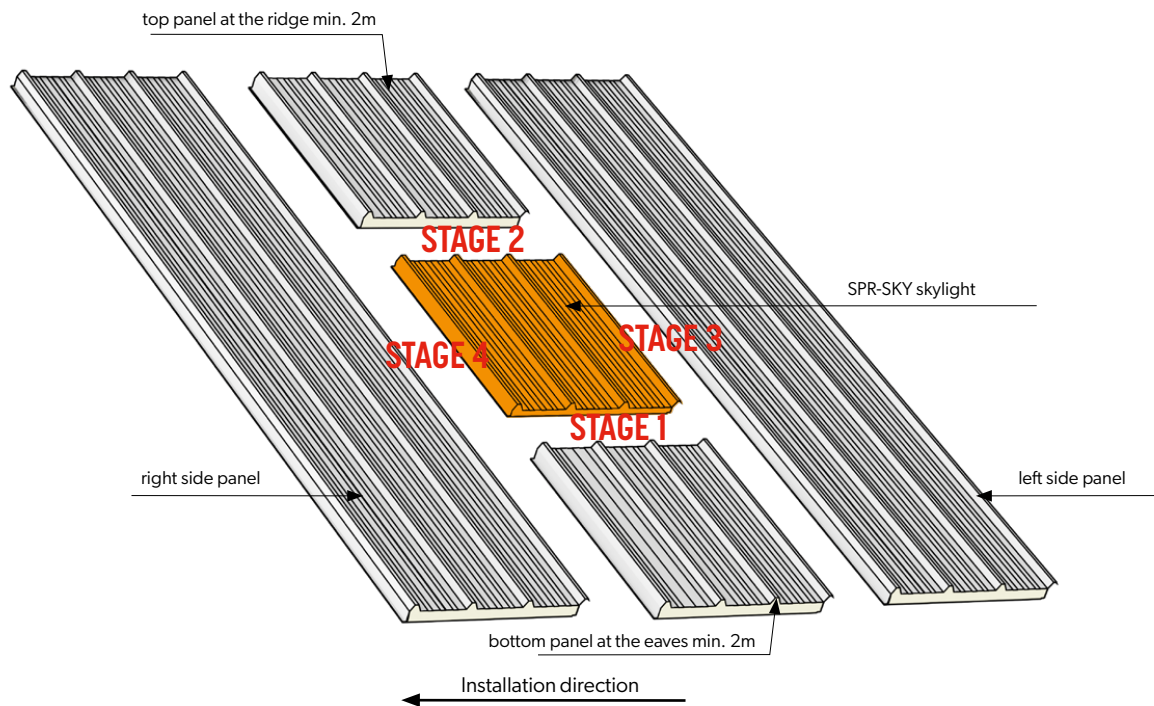
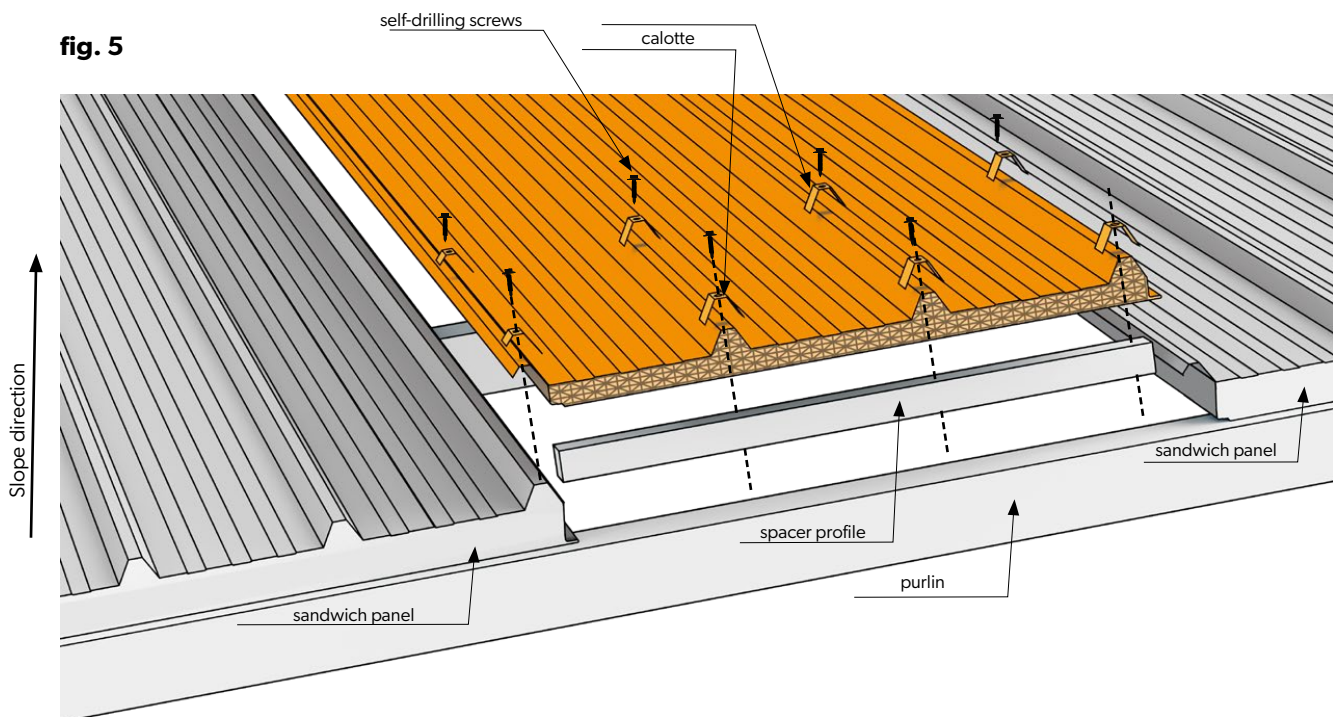


fig. 4



Steps in the SPR-SKY skylight installation.

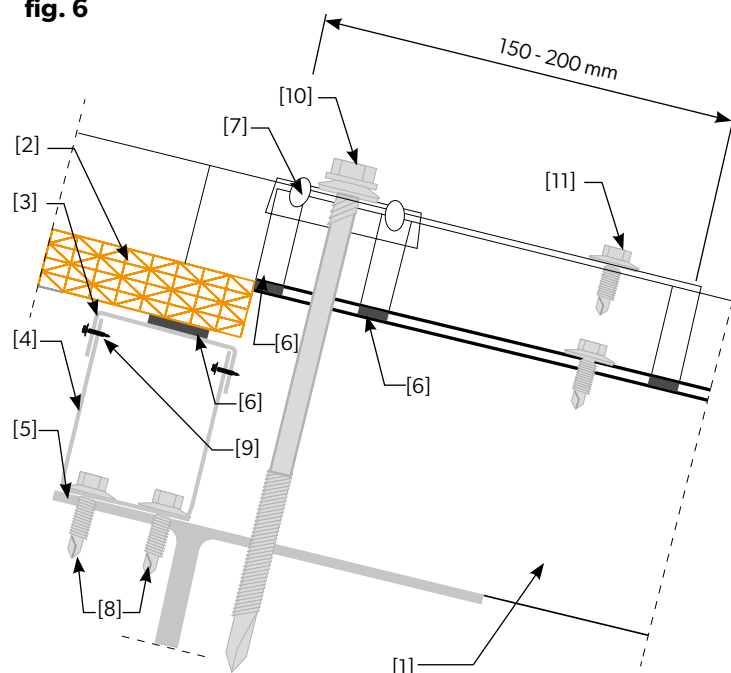
fig. 5



Fixing the SPR-SKY skylight to the structure.

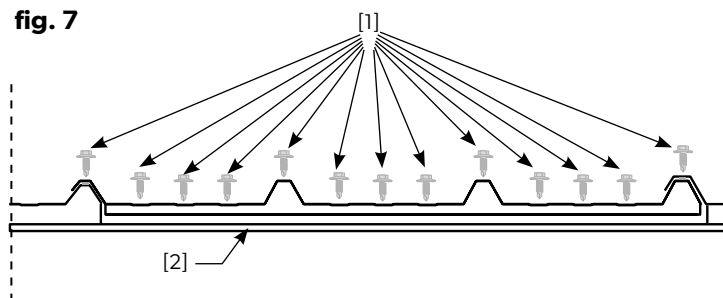
1. Roof sandwich panel
2. SPR-SKY skylight
3. Top spacer profile
4. Bottom spacer profile
5. Substructure
6. Polyurethane sealant
7. Calotte
8. Spacer profile fixing to the structure
9. Fastening screws for top and bottom spacer profile
10. Self-drilling screw for sandwich panel assembly (on each crease)
11. Screw fixing the skylight overlap to the sandwich panel (on and between creases).

fig. 6



Connection along the length of the SPR-SKY skylight to the roof panel (eaves side).

fig. 7

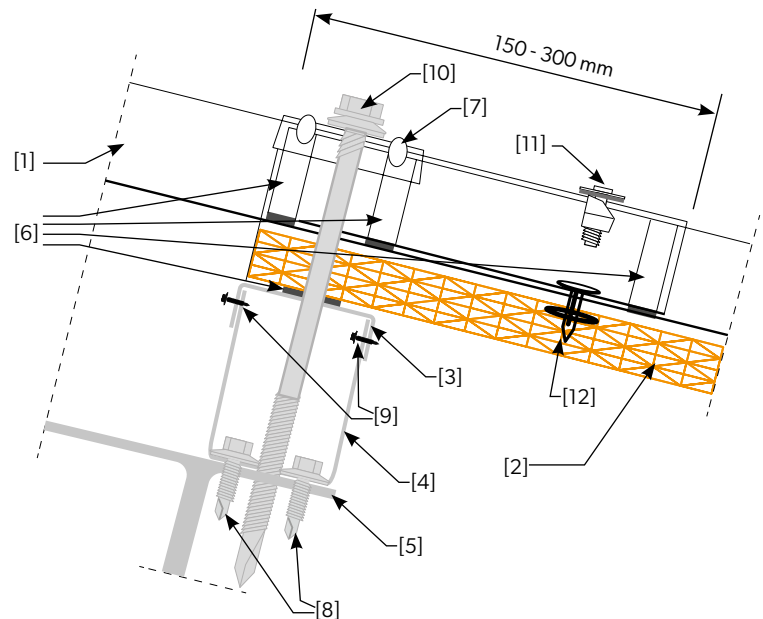


Overlap stapling of the SPR-SKY skylight with the roof panel cladding on the eaves side - cross-section.

1. Self-drilling screws 4.8 x 20 (on the crease and between the folds)
2. Purlin

1. Roof sandwich panel
2. SPR-SKY skylight
3. Top spacer profile
4. Bottom spacer profile
5. Substructure
6. Polyurethane sealant
7. Calotte
8. Spacer profile fixing to the structure
9. Fastening screws for top and bottom spacer profile
10. Self-drilling screw for sandwich panel assembly (on each crease)
11. Plastic-to-sheet fastener (on each crease)
12. Rivet (between creases).

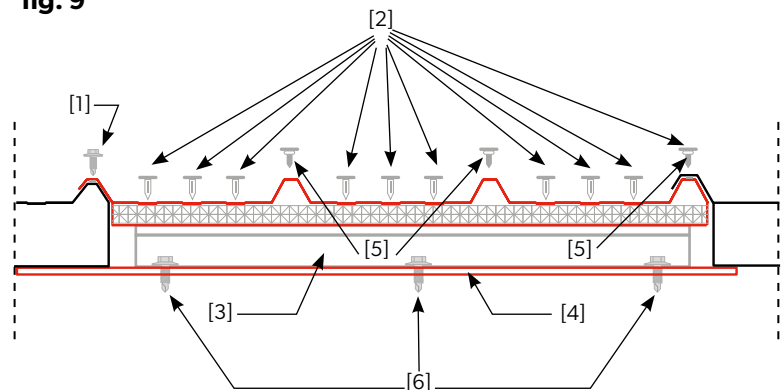
fig. 8



Lengthwise connection of the roofing panel to the SPR-SKY skylight (ridge side).

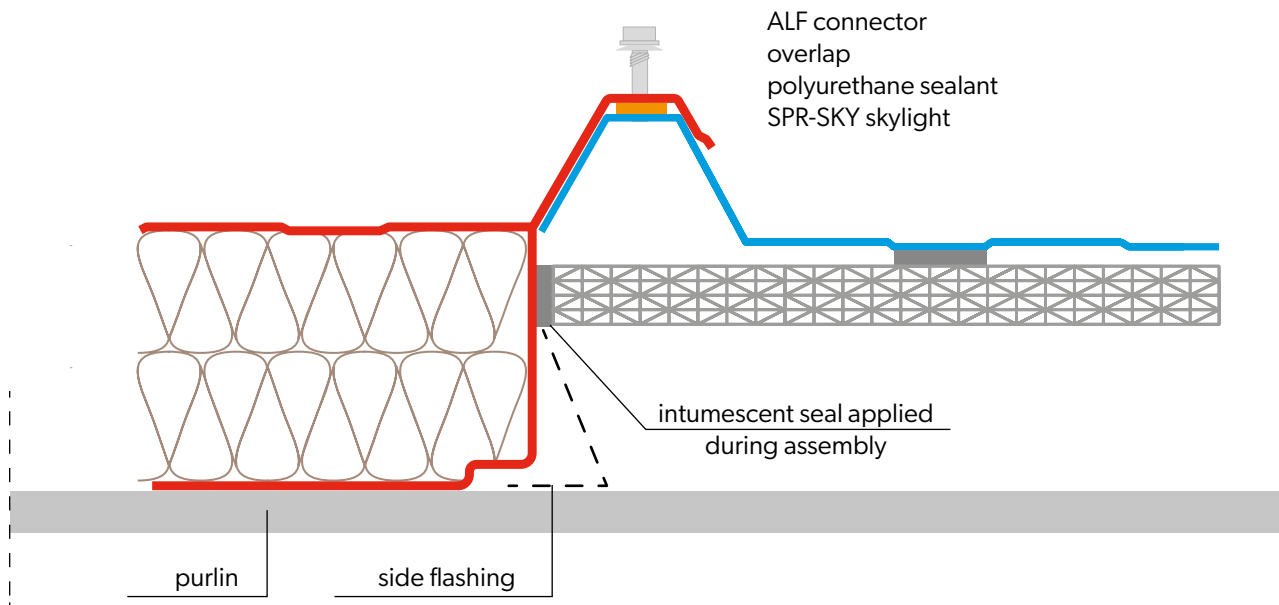
1. Self-drilling screws 4.8 x 20 every 300 mm
2. Rivet between creases
3. Spacer profile
4. Purlin
5. Plastic-to-sheet fastener
6. Screw fastening the spacer profile to the purlin

fig. 9



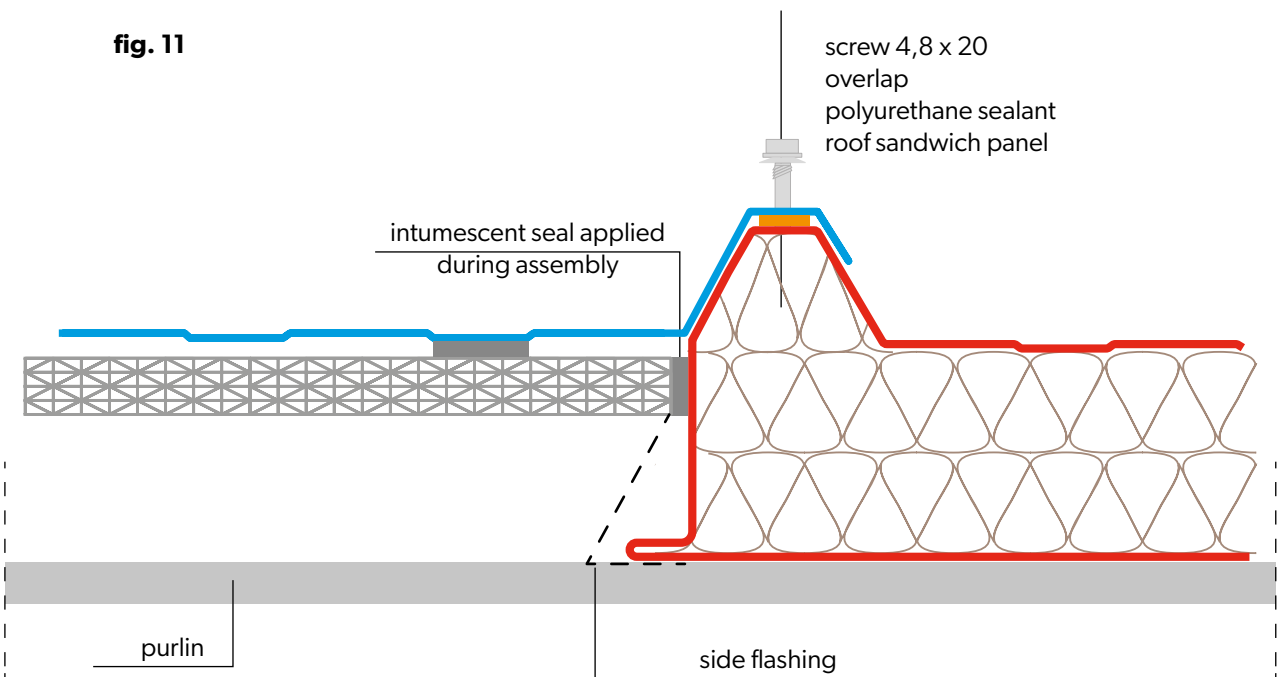
Stapling the overlap of the SPR-SKY skylight to the roof panel cladding on the ridge side - cross-section.

fig. 10



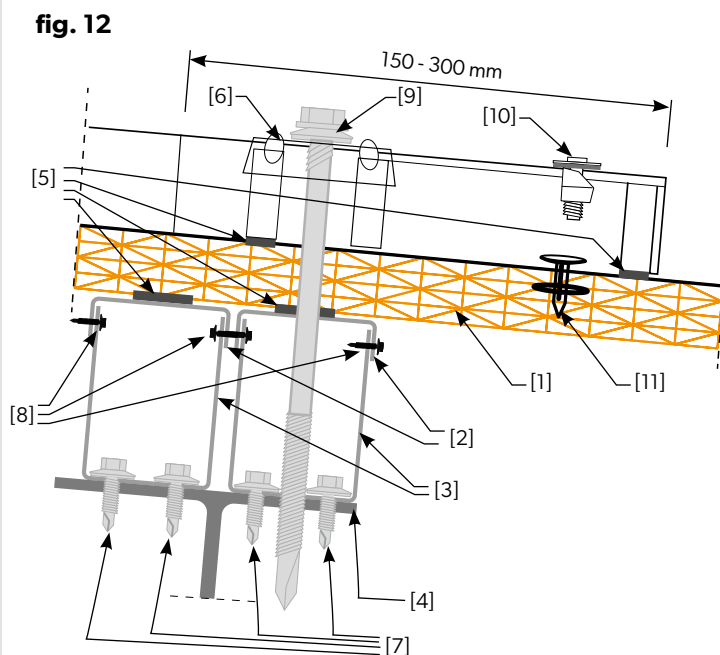
Side connection of the roof panel with SPR-SKY skylight along the lock.

fig. 11



Side connection of the SPR-SKY skylight to roof panel along the lock.

1. SPR-SKY roof skylight
2. Top spacer profile
3. Bottom spacer profile
4. Substructure
5. Polyurethane sealant
6. Calotte
7. Spacer profile fixing to the structure
8. Fastening screws for top and bottom spacer profile
9. Self-drilling screw for sandwich panel assembly (on each crease)
10. Plastic-to-sheet fastener (on each crease)
11. Rivet (between crease



Lengthwise SPR-SKY skylight connection.



Modular roofing tiles
MODULAR SERIES



Compact roofing tiles
COMPACT SERIES



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CLASSIC SERIES



Retro roof tiles
RETRO SERIES



Roof panels
PANEL SERIES



INTEGRATED
PV PANELS



Steel roof gutter system
INGURI



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SHEETS**



**FLAT METAL
SHEETS**



FLASHINGS



ACCESORIES



**Roof Sandwich
PANELS**



**Wall Sandwich
PANELS**



Facade cladding
SKRIN, LINEA, SINUS



Wall cassette &
PROSYSTEM



Uncoiling and slitting
SERVICES



Flat sheets and cutting
SERVICES



**PERFORATION
of sheets**

