



INSTALLATION INSTRUCTIONS FOR ROOF LIGHTS



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INSTALLATION TYPES

Installation types depend on roof type*:

1. 1. Multilayered - trapezoidal metal sheet, thermal insulation - mineral wool, hydroinsulation

1.1. Construction elements

- Supporting construction
- Flashing
- Roof lights (smoke flap/natural day light/natural ventilation)
- Waterproofing

1.2. Installation steps

- Supporting construction- Stabilizes the roof opening and transfers the load to the roof structure.

Installation:

- In sequence with the installation of the roof package - scheme 1 and 2
- In sequence with the installation of the roof structure - scheme 3.

schemes for Supporting construction*:

Scheme №1

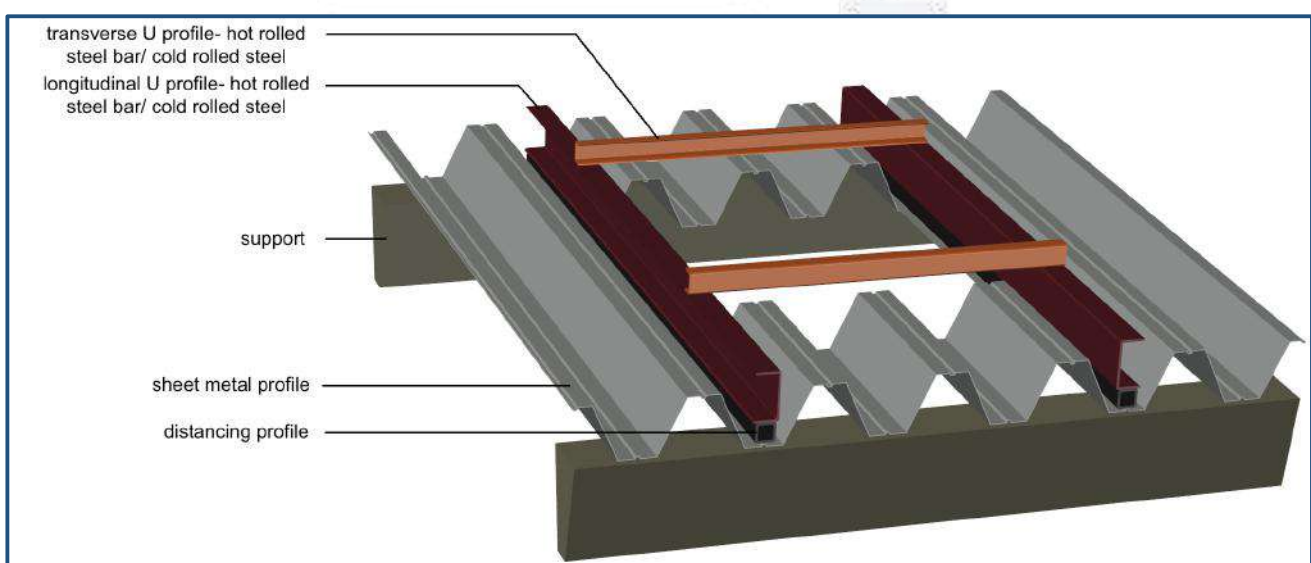


Fig.1.2.1 Scheme for reinforcement - above, installation after the trapezoidal sheet

Scheme №2

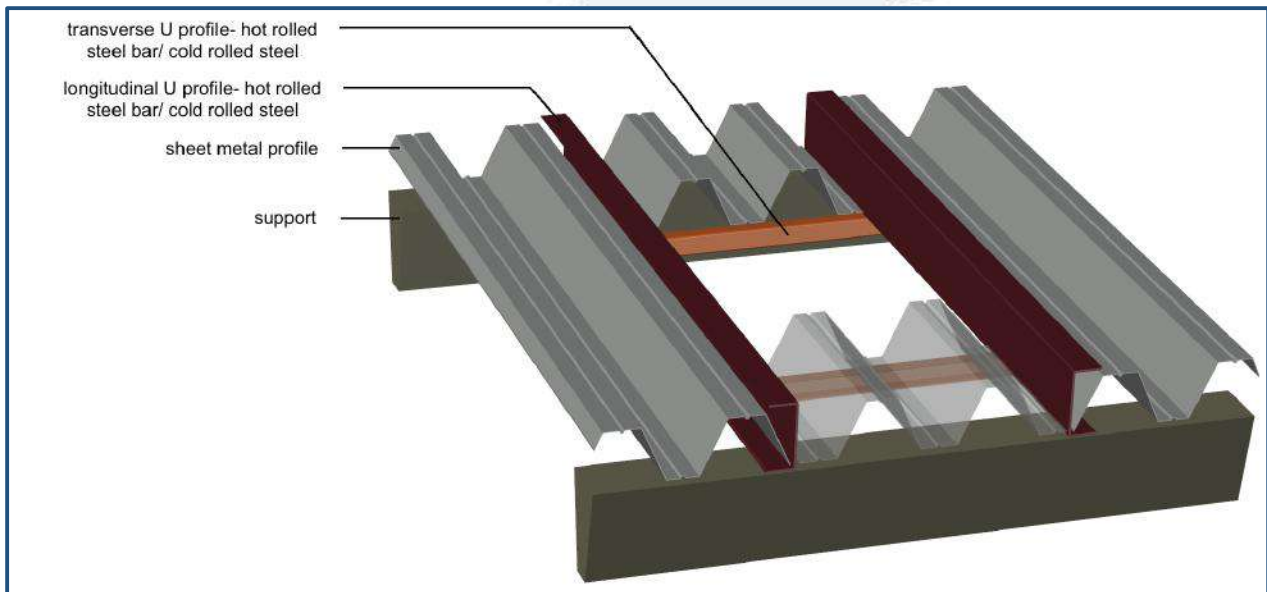


Fig.1.2.2 Scheme for reinforcement - above, installation before the trapezoidal sheet

Scheme №3

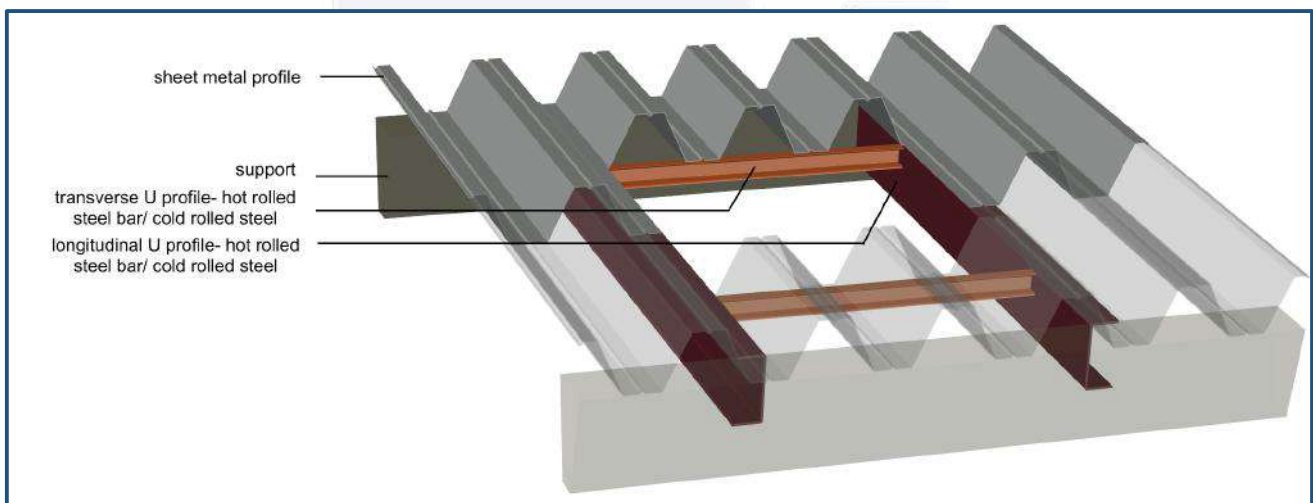


Fig.1.2.3 Scheme for reinforcement - lower

👉 Flashing -hiding the roof opening.



- Roof lights (smoke flap / natural day light / natural ventilation) - Positioned above the prepared opening with already fitted flashing and / or an ADD element and centered symmetrically. It is fixed through the lower horizontal flange of the base with fixings (see page 8).

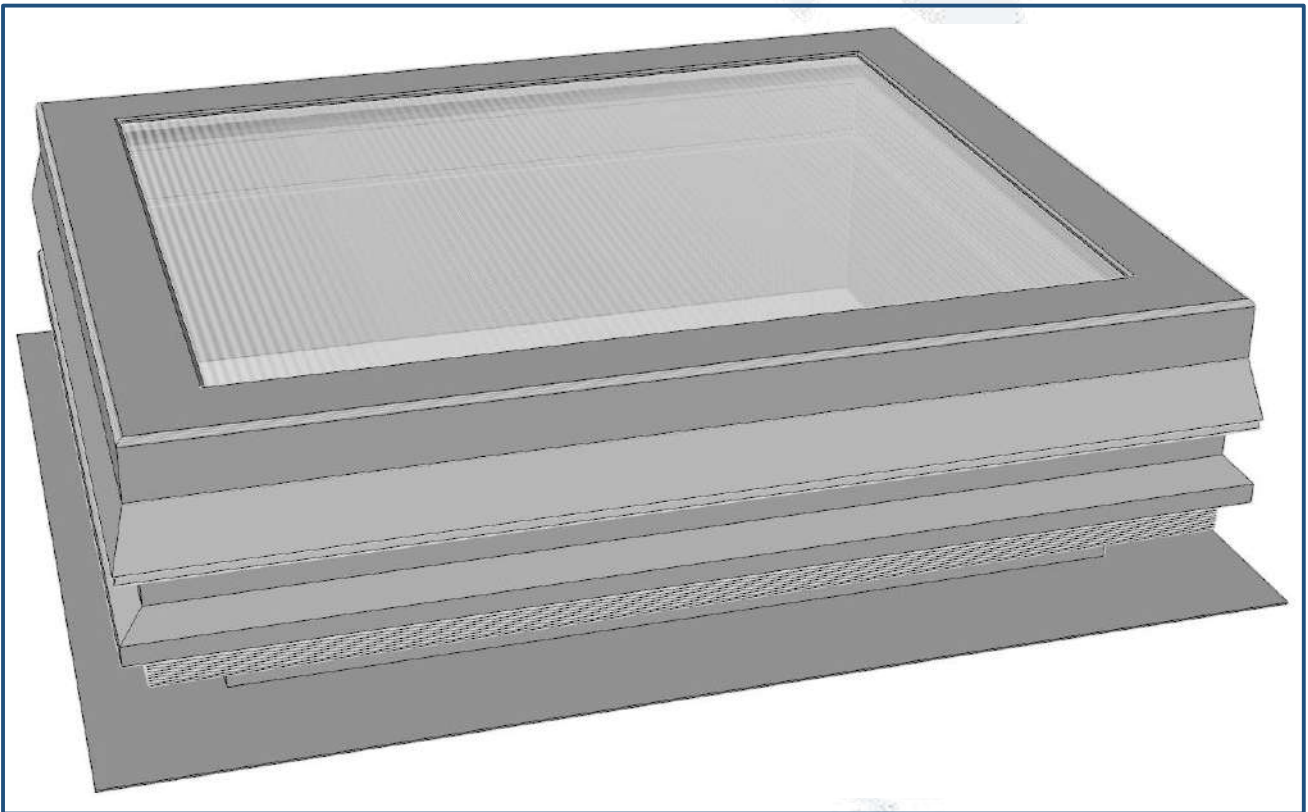


Fig.1.2.4 General appearance of the roof lights (smoke flap/natural day light/natural ventilation)

Important:

- !** Check that the opening size corresponds to the size of roof light. In the event that the opening size is larger than 10 mm on each side installation is not permitted!
- !** Check for instances of deviation in the level of the base. Mounting is not permitted in situations where one side of the base has a deviation in level of more than 5mm!
- Hydroinsulation- The hydroinsulation membrane itself is turned on the upstand of the roof light / hydroinsulation joining element and is mechanically or chemically bonded (adhesion), following the instructions of the membrane manufacturer and recommended methods.

Hydroinsulation joining elements:
on a straight basis

on a sloped basis

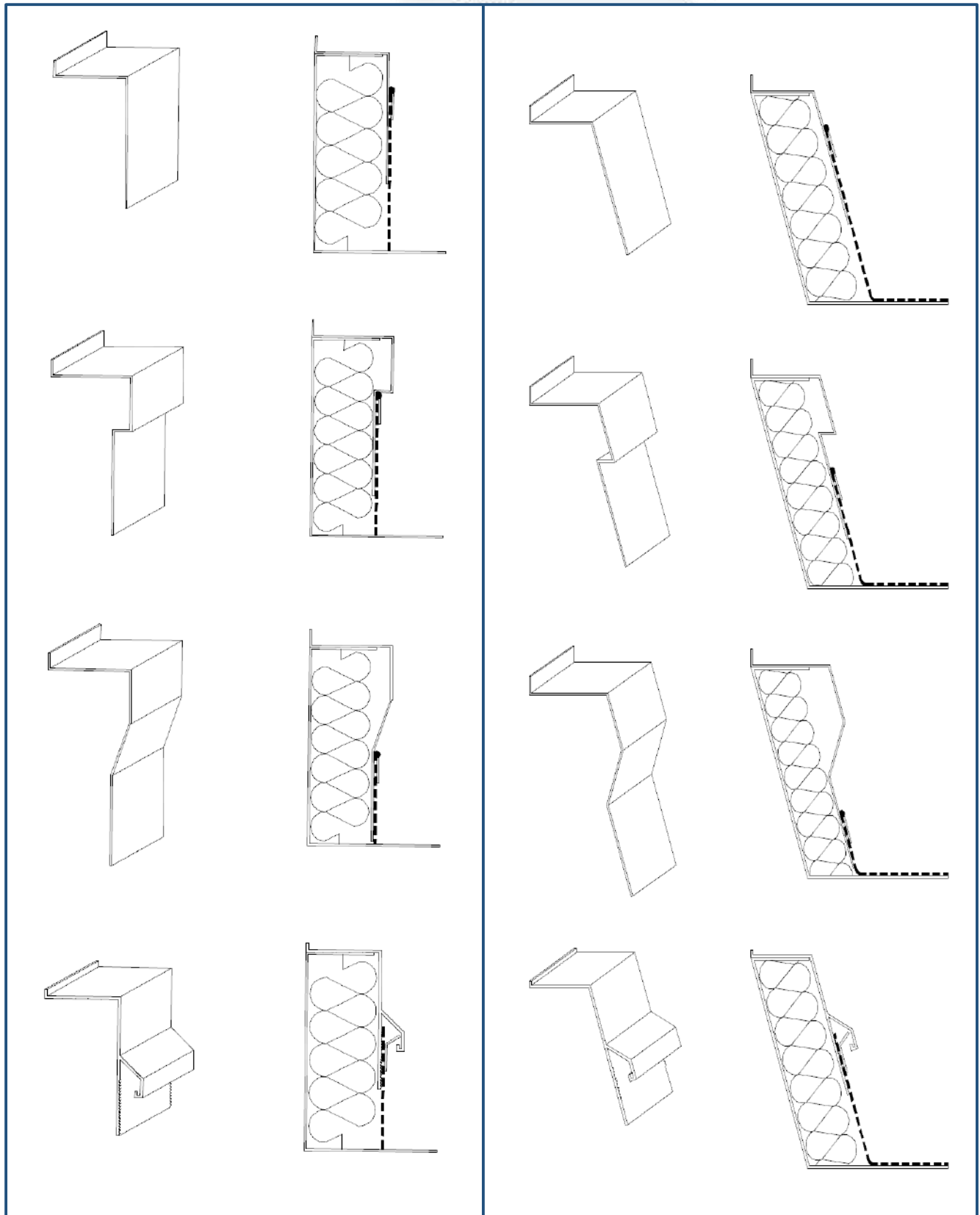


Fig.1.2.5 Straight and sloped hydroinsulation joints

1.3. Installation schemes

Scheme №1

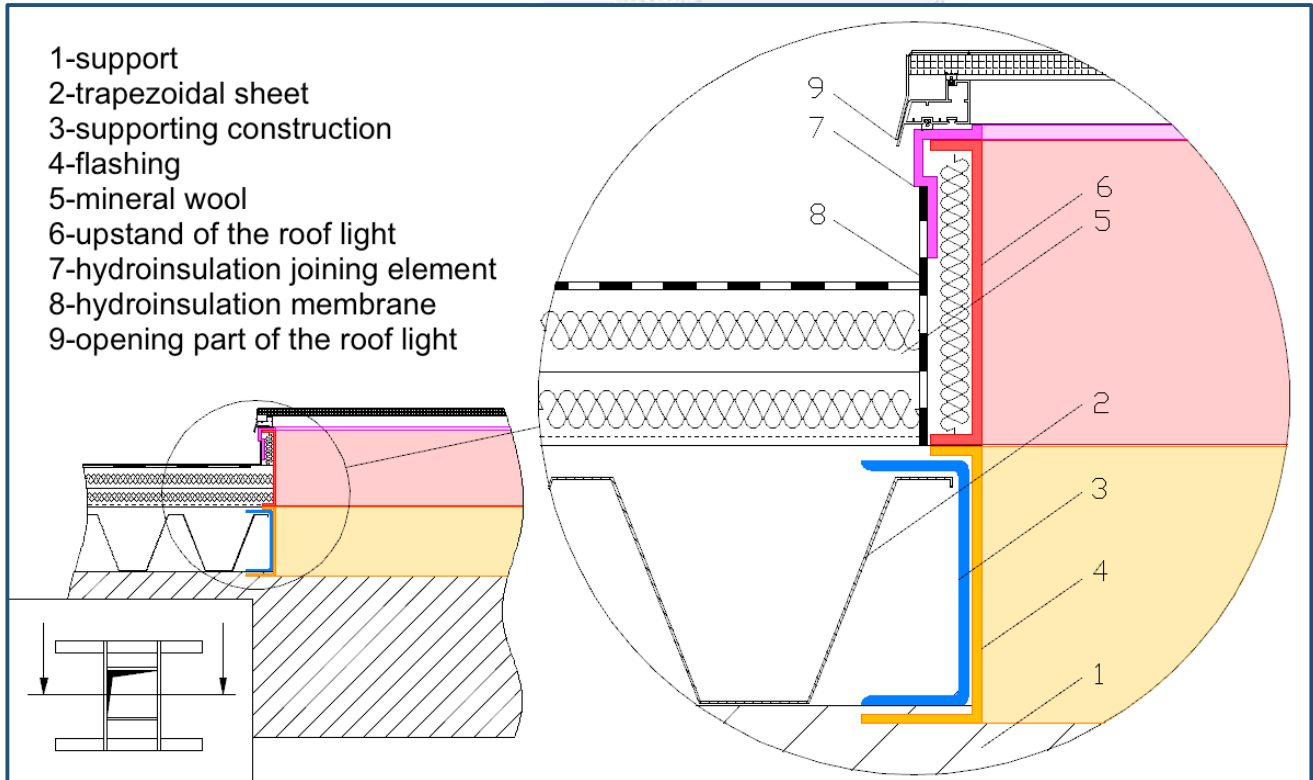


Fig.1.3.1 Installation scheme no. 1 - multilayer roof type

Scheme №2

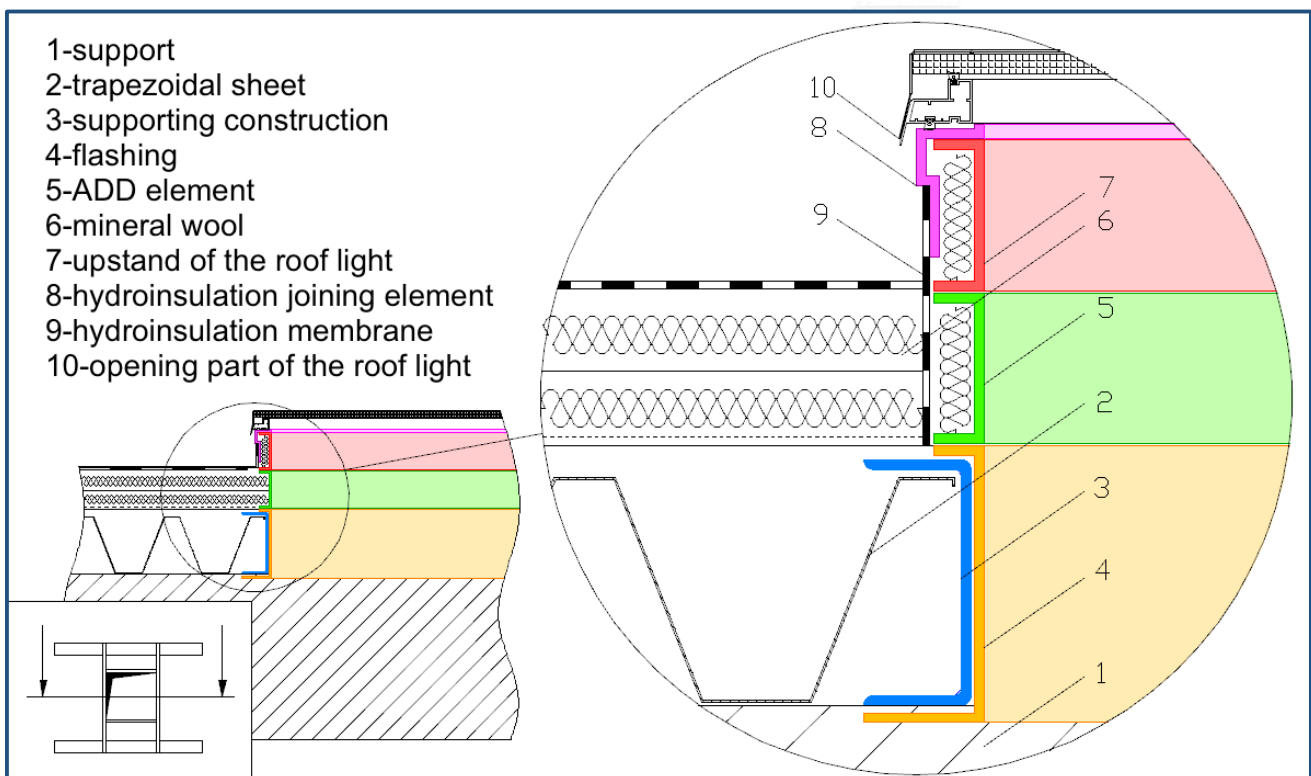


Fig.1.3.2. Installation scheme no 2 - multilayer roof type

Scheme №3

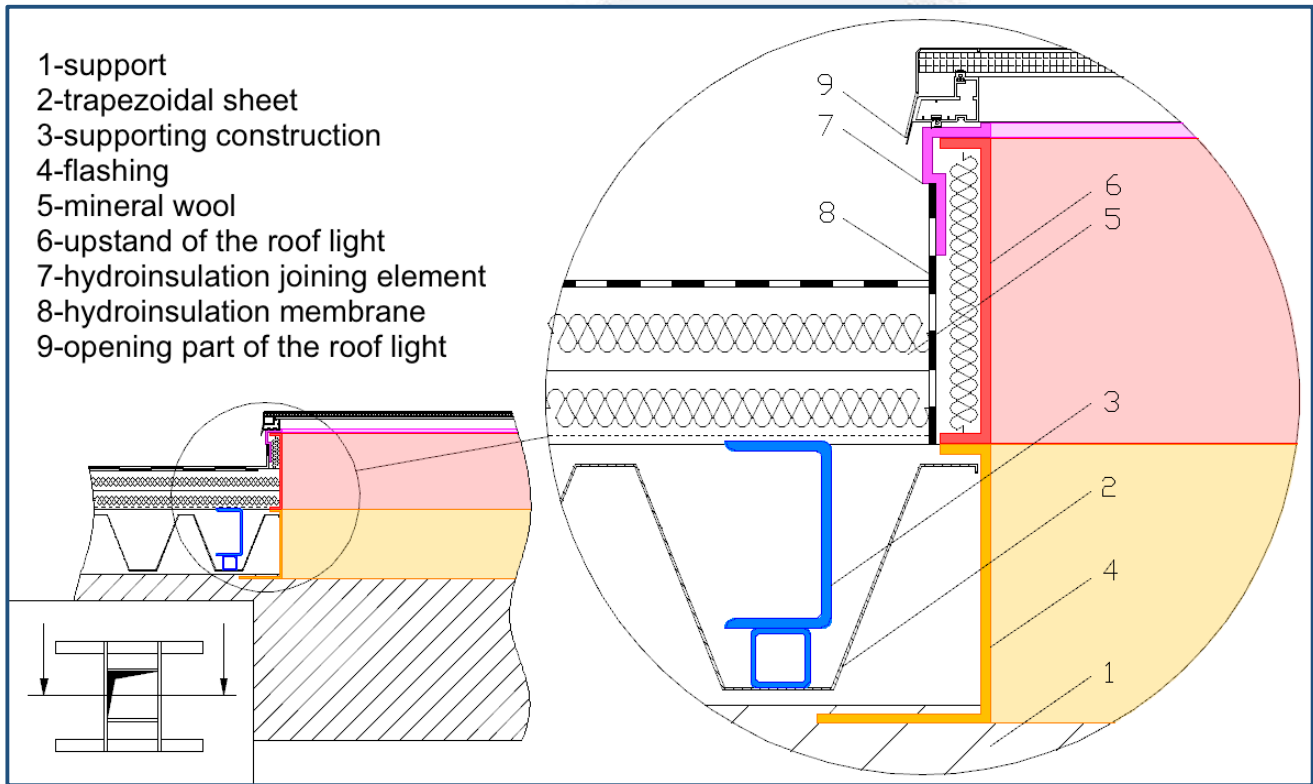


Fig.1.3.3 Installation scheme no.3- multilayer roof type

Scheme №4*

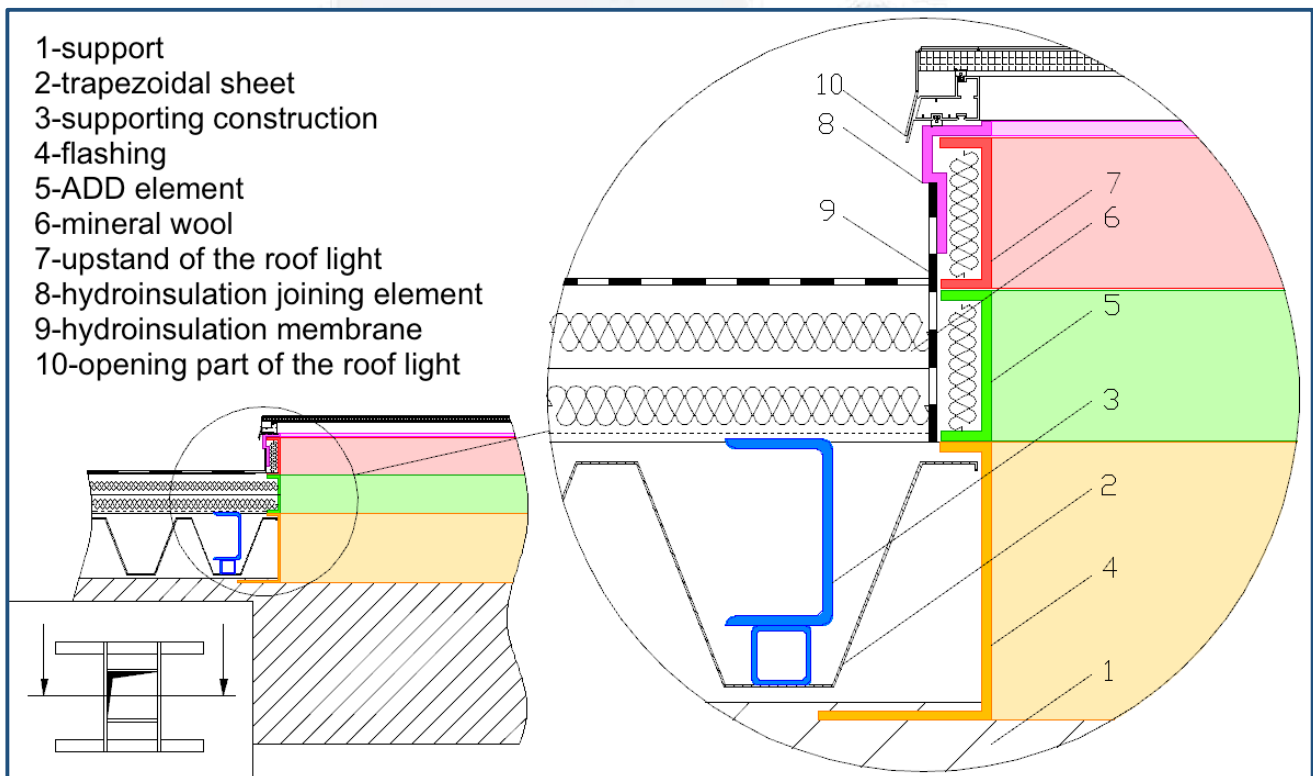


Fig.1.3.4 Installation scheme no.4- multilayer roof type

1.4. Fixing elements

Table 1 Fixings in case of installation on multilayer roof

Multilayer roof		
<i>Fixing elements</i>	<i>Reinforced concrete</i>	<i>Steel</i>
I Fixing the support construction to the roof structure		
Segment anchor M10x100mm or Self-drilling concrete screw 11x80mm	for 4 pcs. longitudinal bar; for 2 pcs. transverse bar	
Self-drilling screw 6,3x50mm		for 4 pcs. longitudinal bar; for 2 pcs. transverse bar
II Attaching the roof light to supporting construction/flashing/ADD element		
Self- drilling screw 6,3x50mm; 19mm nail with washer and charge (for electric charge drill) or 19mm nail (for gas gun)	for 1 pc. flange 0.3m long; for 1 pc. transverse flange 0.3m long. Note: not less than 3 pcs. per side	

NOTE: For more information [here](#)



2. 2. Reinforced concrete roof/base

2.1. Construction elements

- Reinforced concrete roof/base
- Roof lights (smoke flap/natural day light/natural ventilation)
- Hydroinsulation membrane

2.2. Installation schemes

- Reinforced concrete roof/base - depending on the roof type and the selected mounting detail, the use of an ADD element may be used in overcoming the height of the roof cover.
- Roof lights (smoke flap/natural day light/natural ventilation) - see page 4
- Waterproofing - see p.4 and p.5

2.3. Installation scheme

Scheme №1

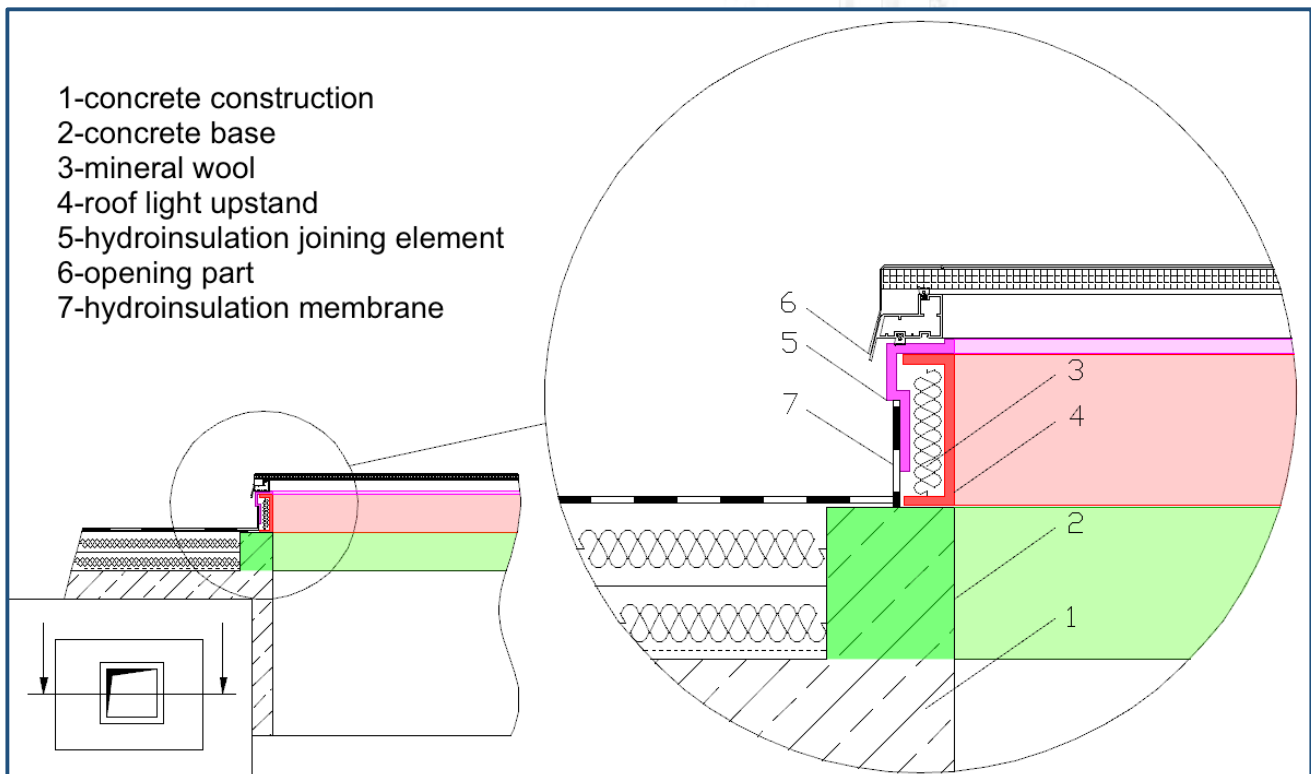


Fig.2.3.1 Installation scheme №1 - reinforced concrete roof / base

Scheme №2

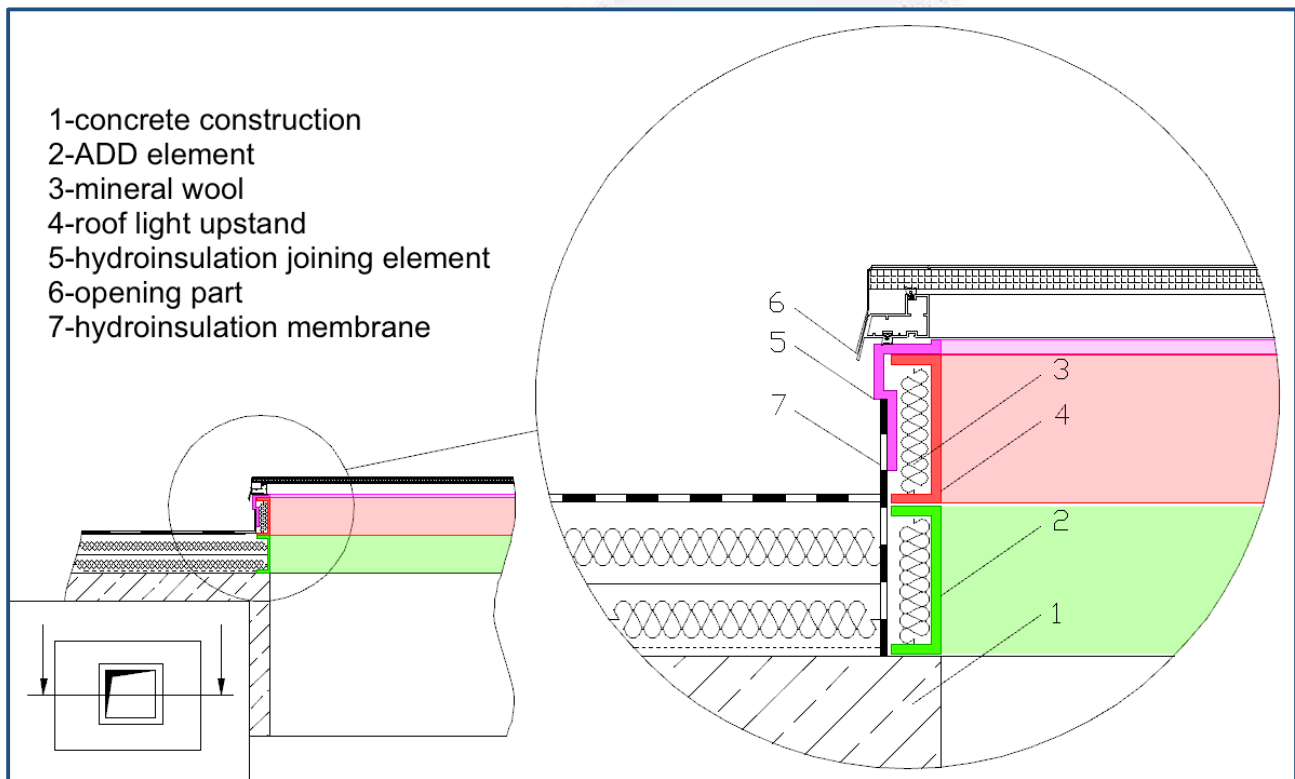


Fig.2.3.2 Installation scheme №2 - reinforced concrete roof / base

Scheme №3

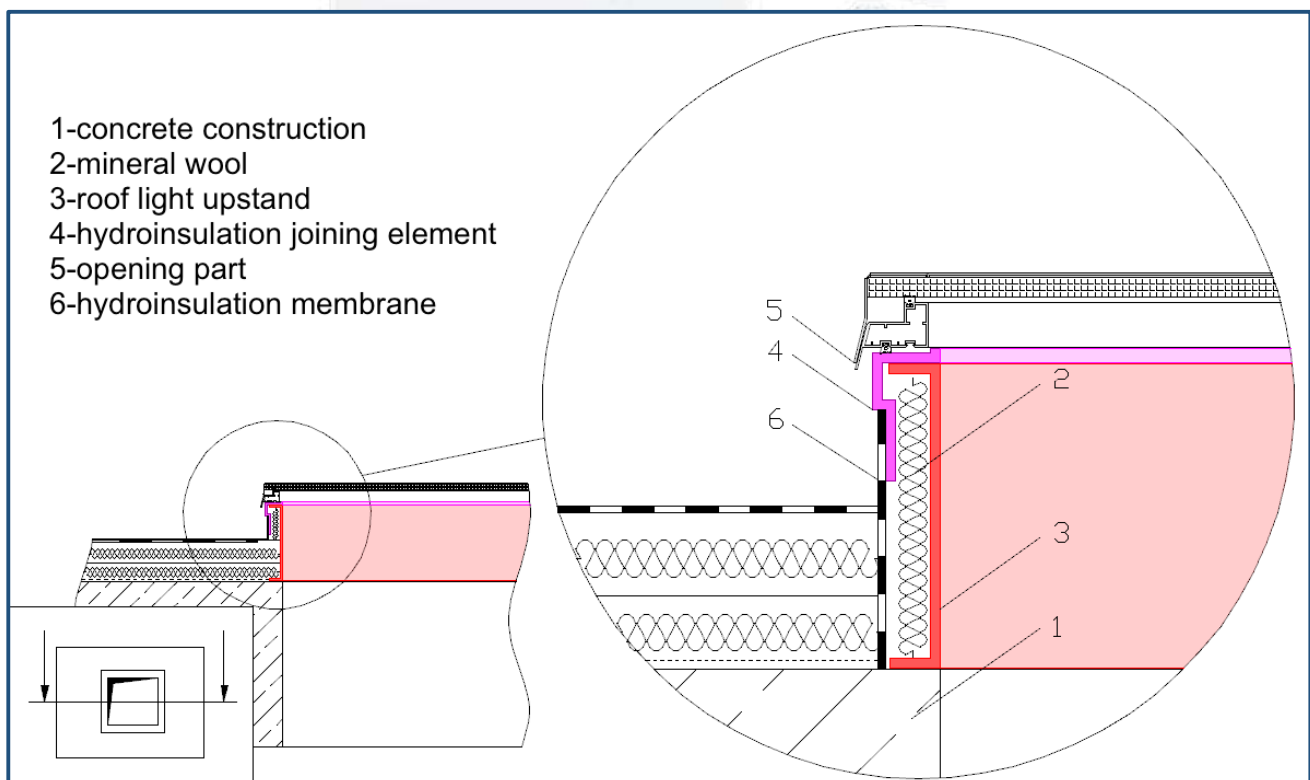


Fig.2.3.3 Installation scheme №3 - reinforced concrete roof/ base

Scheme №4

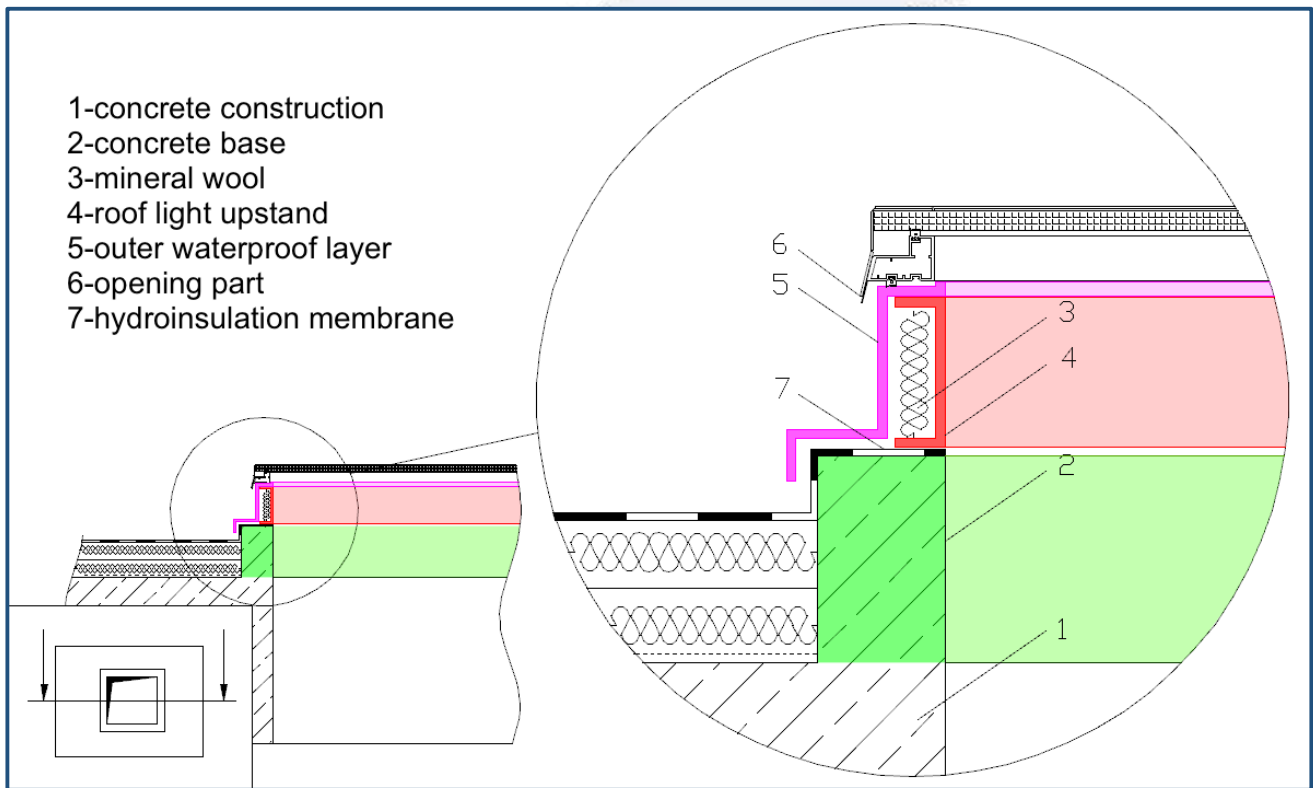


Fig.2.3.4 Installation scheme №4 - reinforced concrete roof/ base

2.4. Fixing elements

Table 2 Fixings in case of installation on reinforced concrete base

Reinforced concrete/base		
<i>Fixing elements</i>	<i>Reinforced concrete roof</i>	<i>Reinforced concrete base</i>
I Fixing the roof light/ADD elements to reinforced concrete/base*		
segment anchor M10x100mm or self - drilling concrete screw 11x80mm	for 1 pc. flange 0.3m long; for 1 pc transverse flange 0.3m long. Note: not less than 3 pcs. per side	
*II Attaching roof light to ADD elements		
self-drilling screws 6,3x50mm	for 1 pc. flange 0.3m long; for 1 pc transverse flange 0.3m long. Note: not less than 3 pcs. per side	

NOTE: For more information [here](#)

3. Sandwich panel - metal sheet, insulation, profile sheet

3.1. Elements for construction

- Sandwich panel
- Flashing
- Roof lights (smoke flap/natural day light/natural ventilation)

3.2. Stages of installation

- Sandwich panel - used as part of the roof cover where roof inclination is more than 7%. It consists of: an inner wall - Al or other sheet metal; insulating layer - mineral wool, polyurethane, EPS, etc.; an outer wall - Al or other type of sheet metal.
- Flashing- see page 3
- Roof lights (smoke flap/natural day light/natural ventilation) - see page 4

3.3. Installation schemes

Scheme №1*

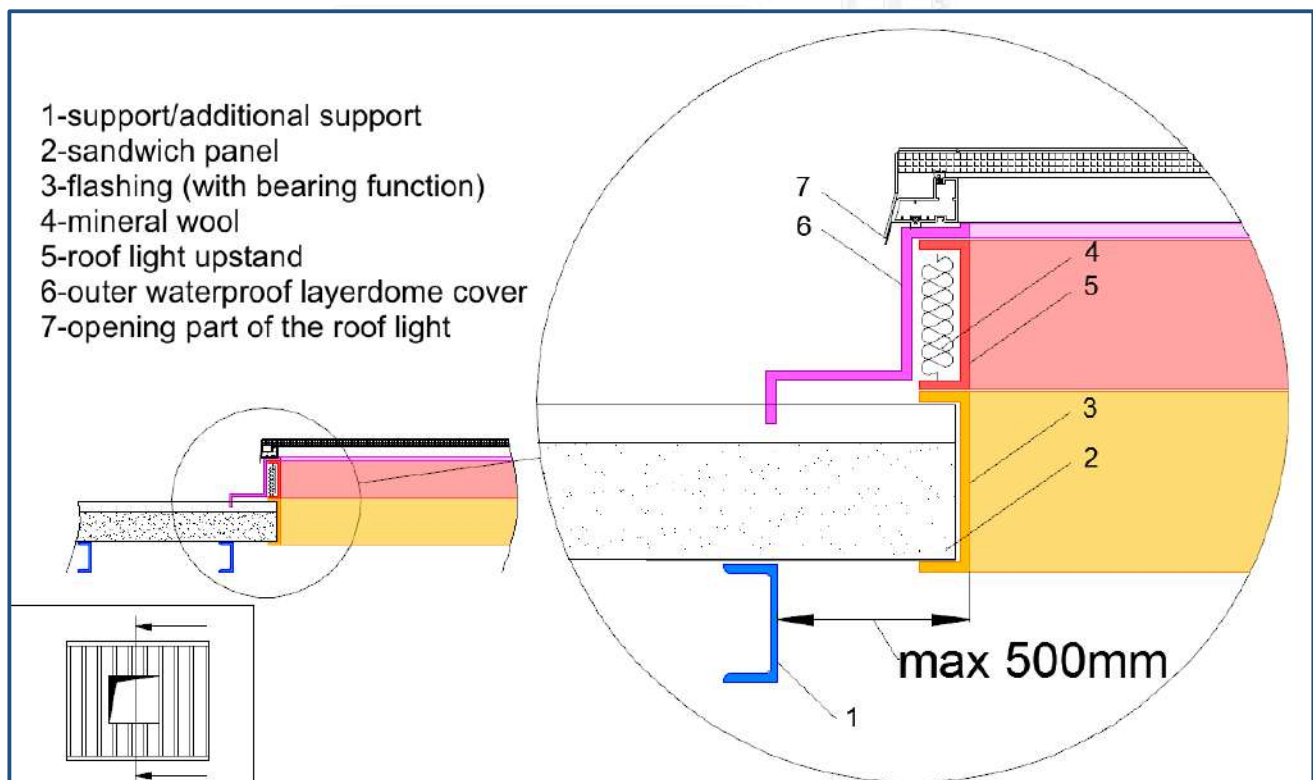


Fig.3.3.1 Installation scheme №1 - sandwich panel

* This detail is possible when the distance between the support and the closer opening side is up to 500 mm. In case that this distance is bigger, it is necessary to build-up additional supporting construction.

Scheme №2

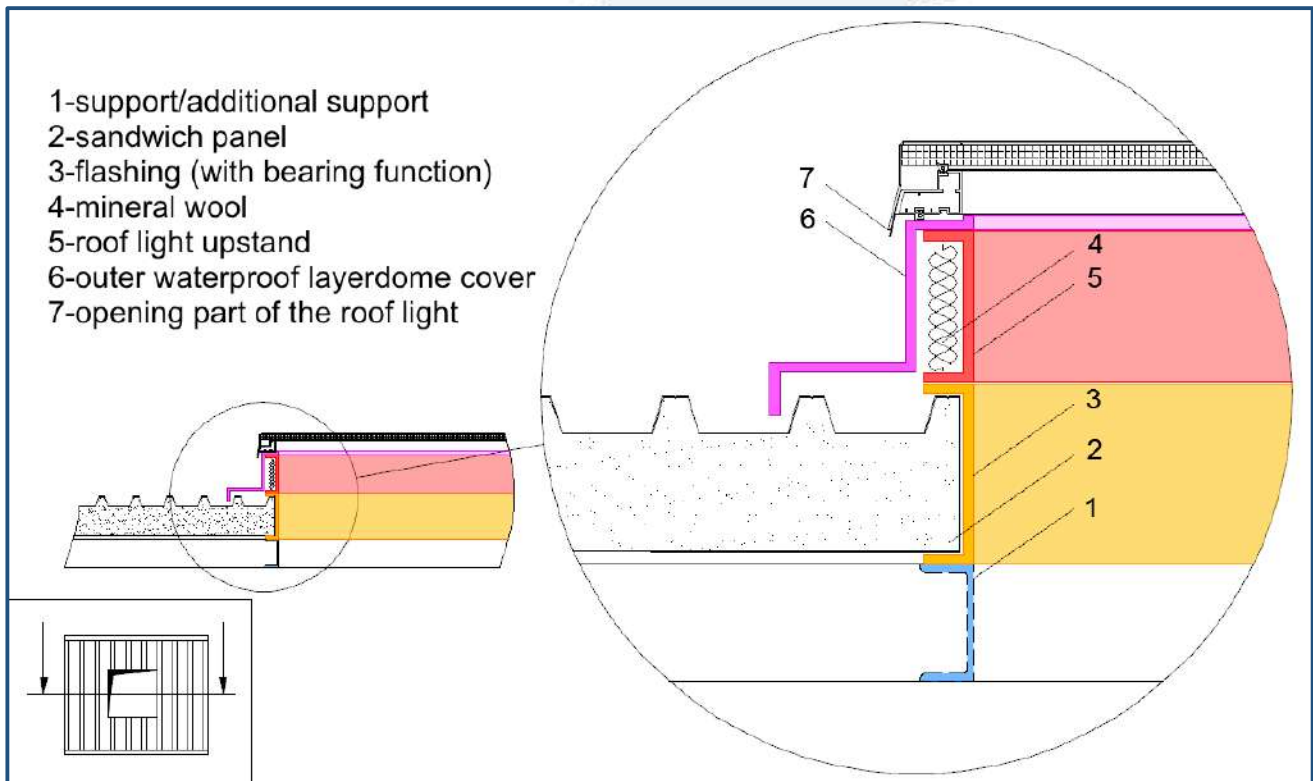


Fig.3.3.2 Installation scheme №2 - sandwich panel

3.4. Fixing elements

Table 3 Fasteners for sandwich panel

Sandwich panel roof	
Fixing elements	Sandwich panel roof
I Fixing the roof light/flashing to the sandwich panel*	
Self-drilling screw 6,3x32mm	for 1 pc. on a 0.3m longitudinal side of the upstand; for 1 pc. on a 0.3m transverse side of the upstand. Note: not less than 3 pcs. per side
*II Fixing the roof light to a roof structure / supporting construction	
self-drilling screws 6,3x100mm	for 1 pc. on a 0.3m longitudinal side of the upstand; for 1 pc. on a 0.3m transverse side of the upstand. Note: not less than 3 pcs. per side

NOTE: For more information [here](#)

4. Tiled roof -supporting construction, underlay slats, tiles

4.1. Construction elements

- Tiled roof (reinforced concrete / wooden supporting structure)
- Roof lights (smoke flap/natural day light/natural ventilation)

4.2. Stages of installation

- Tiled roof
- Roof lights (smoke flap/natural day light/natural ventilation) - see page 4

4.3. Installation schemes

Scheme №1*

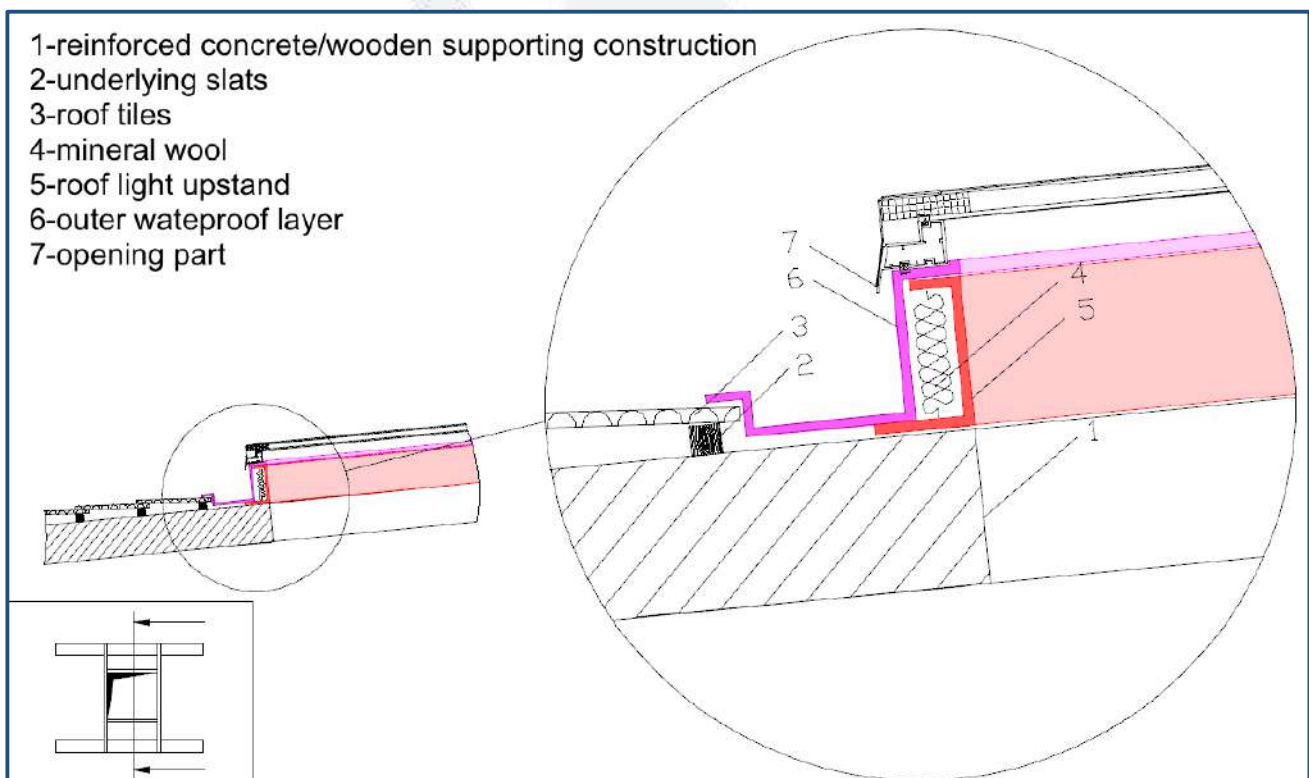


Fig.4.3.1 Installation scheme №1 - tiled roof

Additional reinforcement may be used, depending on the type of roofing structure (reinforced concrete / wooden) and on the selected mounting part.

Scheme №2

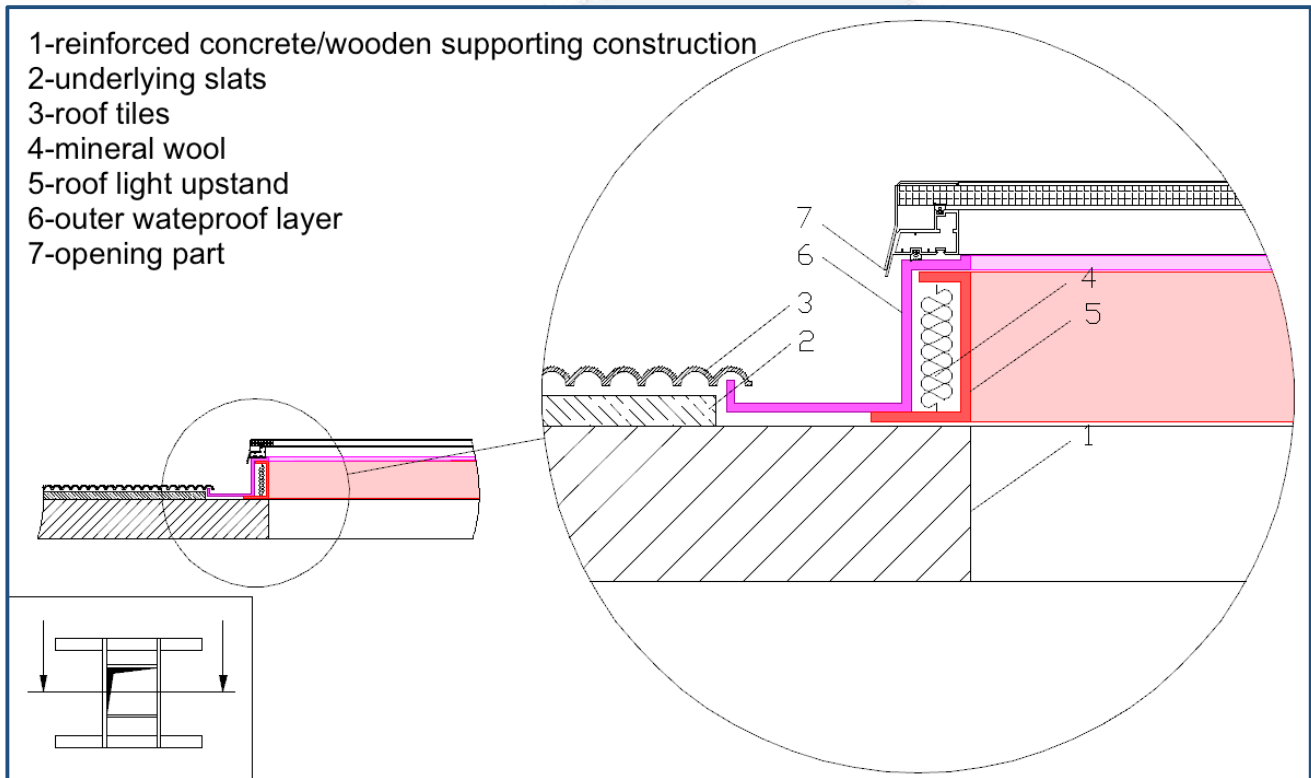


Fig.4.3.2 Installation scheme №2 - tiled roof

4.4. Fixing elements

Table 4 3 Fasteners for a tiled roof

Tiled roof		
Fixing elements	Reinforced concrete structure	Wooden construction
I Attaching a roof light to a reinforced concrete load bearing structure		
Segment anchor M10x100mm or Self-drilling concrete screw 11x80mm	for 1 pc. on a 0.3m longitudinal side of the upstand; for 1 pc. on a 0.3m transverse side of the upstand. Note: not less than 3 pcs. per side	
II Attaching a dome to a wooden supporting structure		
Self-drilling screw 6,3x100mm	for 1 pc. on a 0.3m longitudinal side of the upstand; for 1 pc. on a 0.3m transverse side of the upstand. Note: not less than 3 pcs. per side	

NOTE: For more information [here](#)

5. Safety instructions

To safely execute the assembly process, we recommend:

- Take all necessary precautions to safely secure loads when lifting onto the roof. Use appropriate and secure equipment and certified fasteners with a holding capacity of at least 50%
- The necessary safety equipment should be provided for all roof mounting activities
- All power tools used must be in good working state and used in accordance with the manufacturer's instructions
- It is obligatory to comply with all National Health and Safety in the Workplace legislation

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