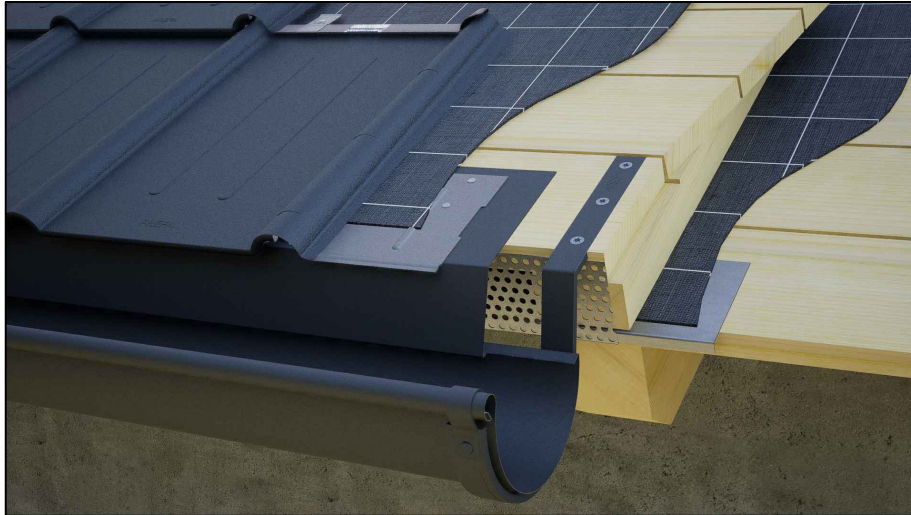




STARK WIE EIN STIER

ROOF TILE

CAD DETAILS



CONTENTS:

- 2 MINIMUM ROOF PITCH
- 3 snow guards – installation diagram P1
- 4 snow guards – installation diagram P2
- 5 snow guards – installation diagram P3
- 6 single-skin roof construction
- 7 double-skin roof construction on battens (skip sheathing)
- 8 double-skin roof construction
- 9 ridge construction — ridge vent
- 10 ridge construction — hip cap
- 11 mono-pitched roof construction
- 12 eaves construction with gutter
- 13 eaves construction with box gutter
- 14 eaves construction with upright gutter bracket
- 15 eaves construction with upright gutter bracket (variant 1)
- 16 eaves construction with upright gutter bracket (variant 2)
- 17 eaves construction with on-roof gutter
- 18 roof verge construction with verge flashing
- 19 roof verge construction with recess
- 20 roof verge construction with bargeboard
- 21 wall flashing
- 22 roof parapet flashing
- 23 lateral wall connection
- 24 valley construction with safety valley
- 25 valley construction with simple valley
- 26 valley construction with recessed valley
- 27 valley construction with recessed valley
- 28 frog-mouth vent cover
- 29 roof anchor hook
- 30 Roof window flashing on a roof pitch over 25°.
- 31 Roof window flashing with an insert wedge on a roof pitch over 25°.
- 32 Roof window flashing with wedge frames under 15°
- 33 Roof window flashing with wedge frames under 15°
- 34 mansard crease
- 35 construction of pitch transition
- 36 Vario (or Fix) solar bracket
- 37 pipe-style snow guard system
- 38 pipe-style snow guard system XL
- 39 mountain snow-guard bracket
- 40 roof anchor hook according on mounts
- 41 safety tread
- 42 walkway support
- 43 Sunny Spezial



STARK WIE EIN STIER

MINIMUM ROOF PITCH

CAD DETAILS

MINIMUM ROOF PITCH	3°	5°	7°	12°	14°	16°	17°	22°	25°
Prefalz	Observe the national guidelines (roof underlay, no valleys or penetrations, etc.). Sealant in longitudinal seams.								
* ROOF TILE					rafter length: up to 7 m				
						rafter length: 7–12 m			
							rafter length: > 12 m		
* R.16 ROOF TILE								up to 25°: to be installed on a separating layer	
* SHINGLE									
* SHINGLE DS.19								up to 25°: to be installed on a separating layer	
* RHOMBOID ROOF TILE 29 × 29									
* RHOMBOID ROOF TILE 44 × 44					rafter length: up to 7 m				
						rafter length: 7–12 m			
							rafter length: > 12 m		
* FX.12 ROOF PANEL								up to 25°: to be installed on a separating layer	

* In general, we recommend using suitable bitumen separating layers.

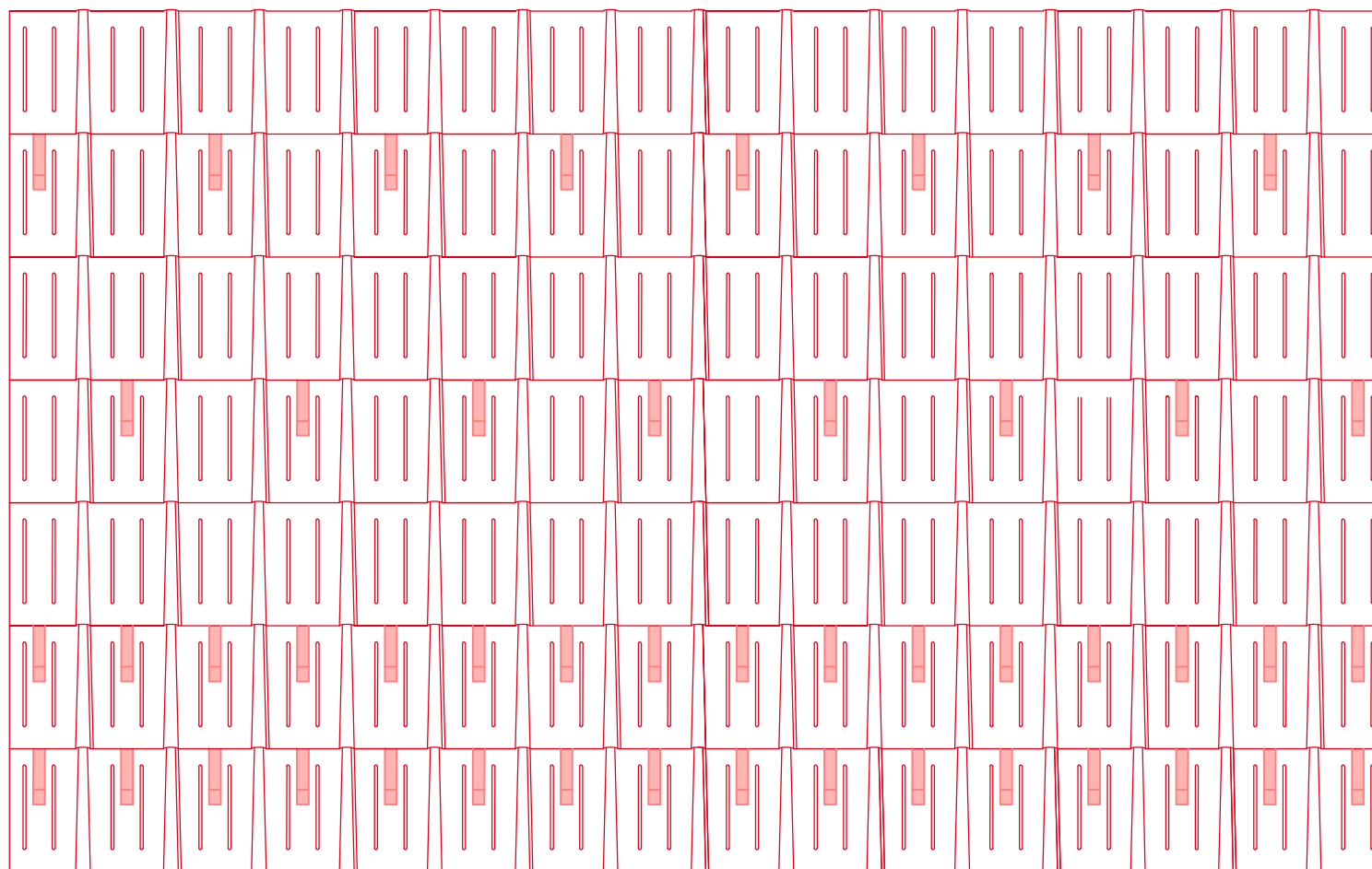
* In the case of snow loads greater than 3.25 kN/m² or in terrain categories 0, I or II, installation on fully boarded substrate with a separation layer is required.



STARK WIE EIN STIER

snow guards – installation diagram P1 ROOF TILE

CAD DETAILS



Installation diagram P1 (2 per m² — must be installed along the first two rows)

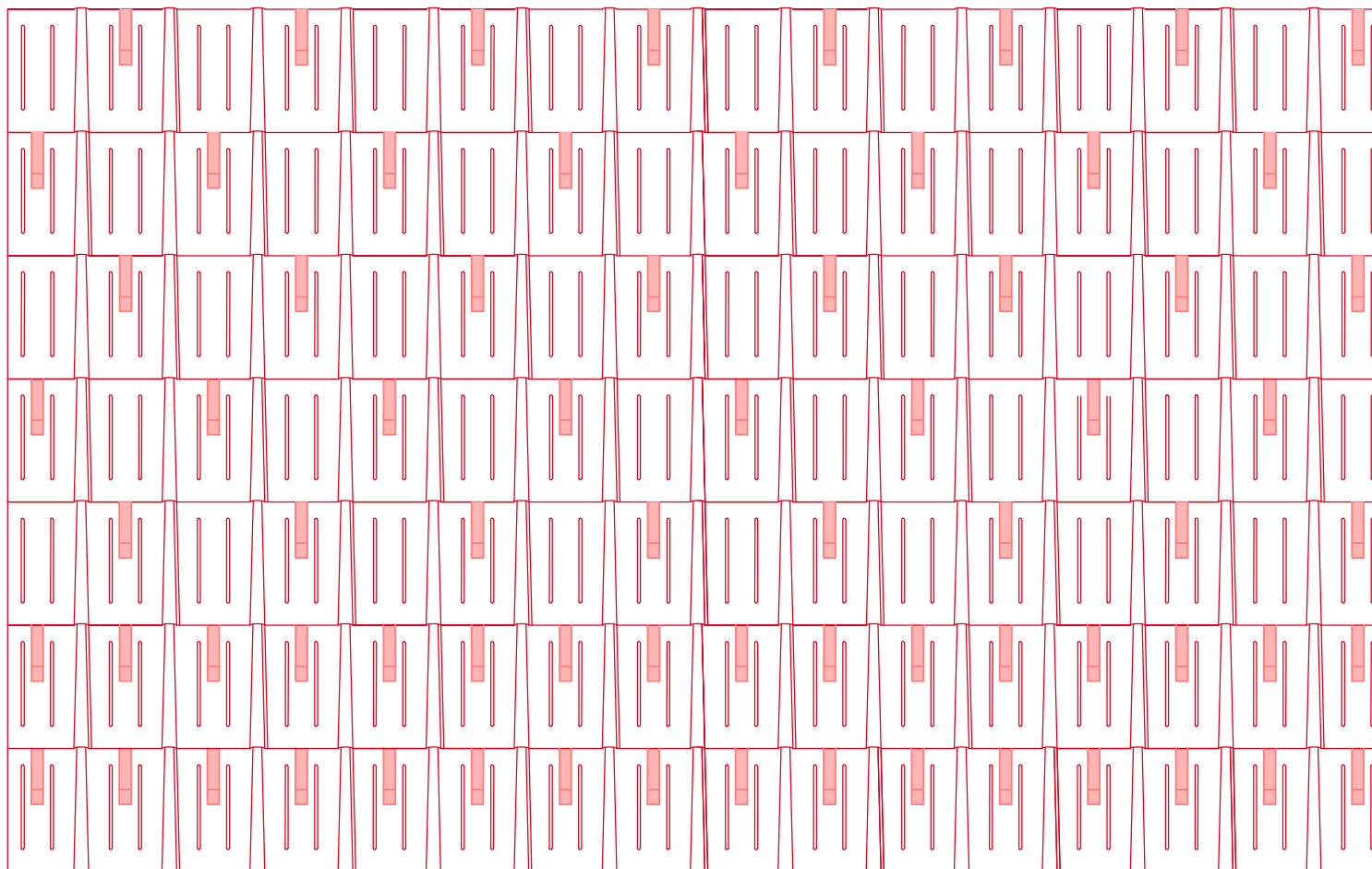
Basic principle: ÖNORM B 1991-1-3 and EN 1991-1-3



STARK WIE EIN STIER

snow guards – installation diagram P2 ROOF TILE

CAD DETAILS



installation diagram P2 (4 pc. per m²; must be installed along the first two rows)

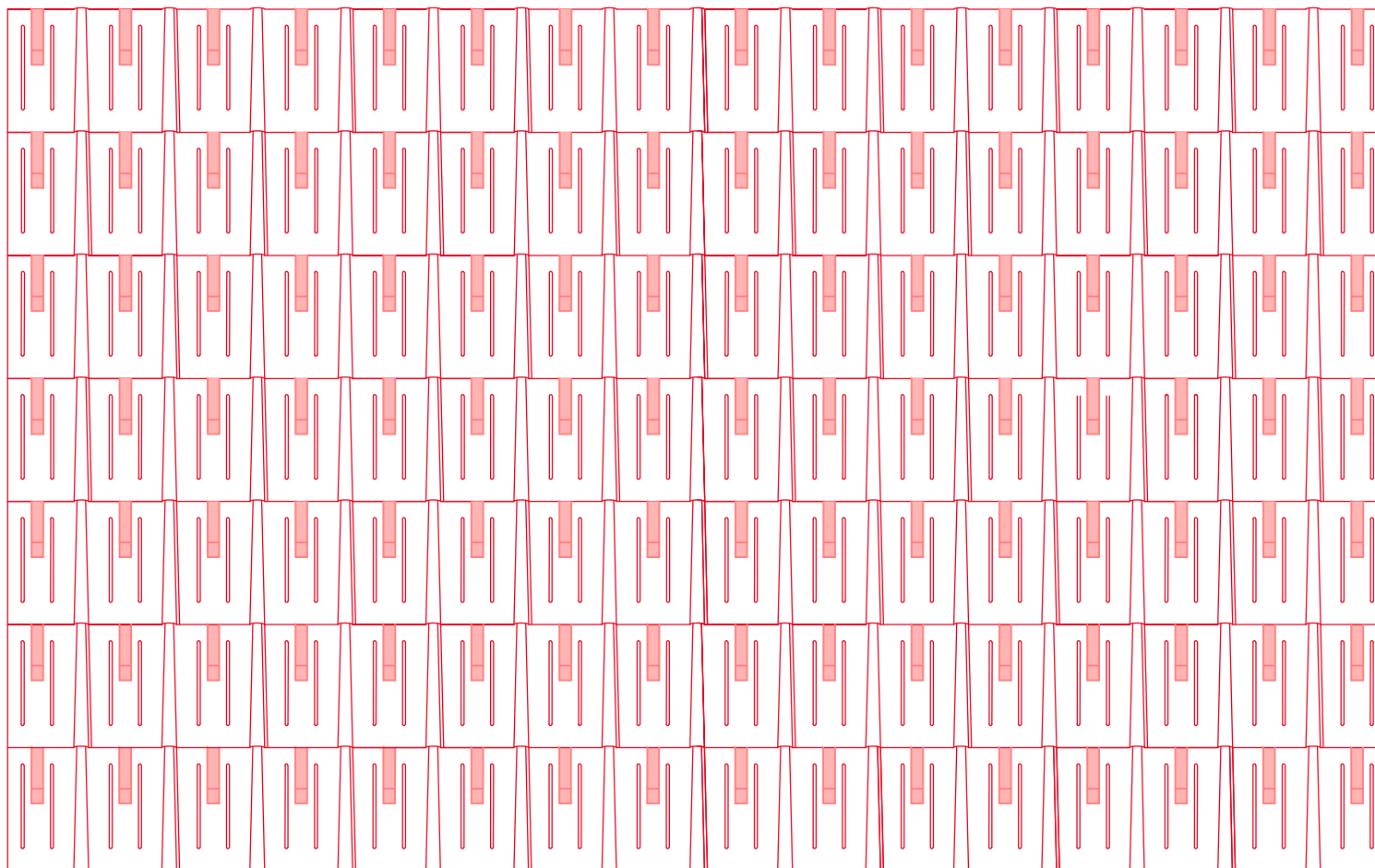
Basic principle: ÖNORM B 1991-1-3 and EN 1991-1-3



STARK WIE EIN STIER

snow guards – installation diagram P3 ROOF TILE

CAD DETAILS



installation diagram P3 (8 pc. per m²)

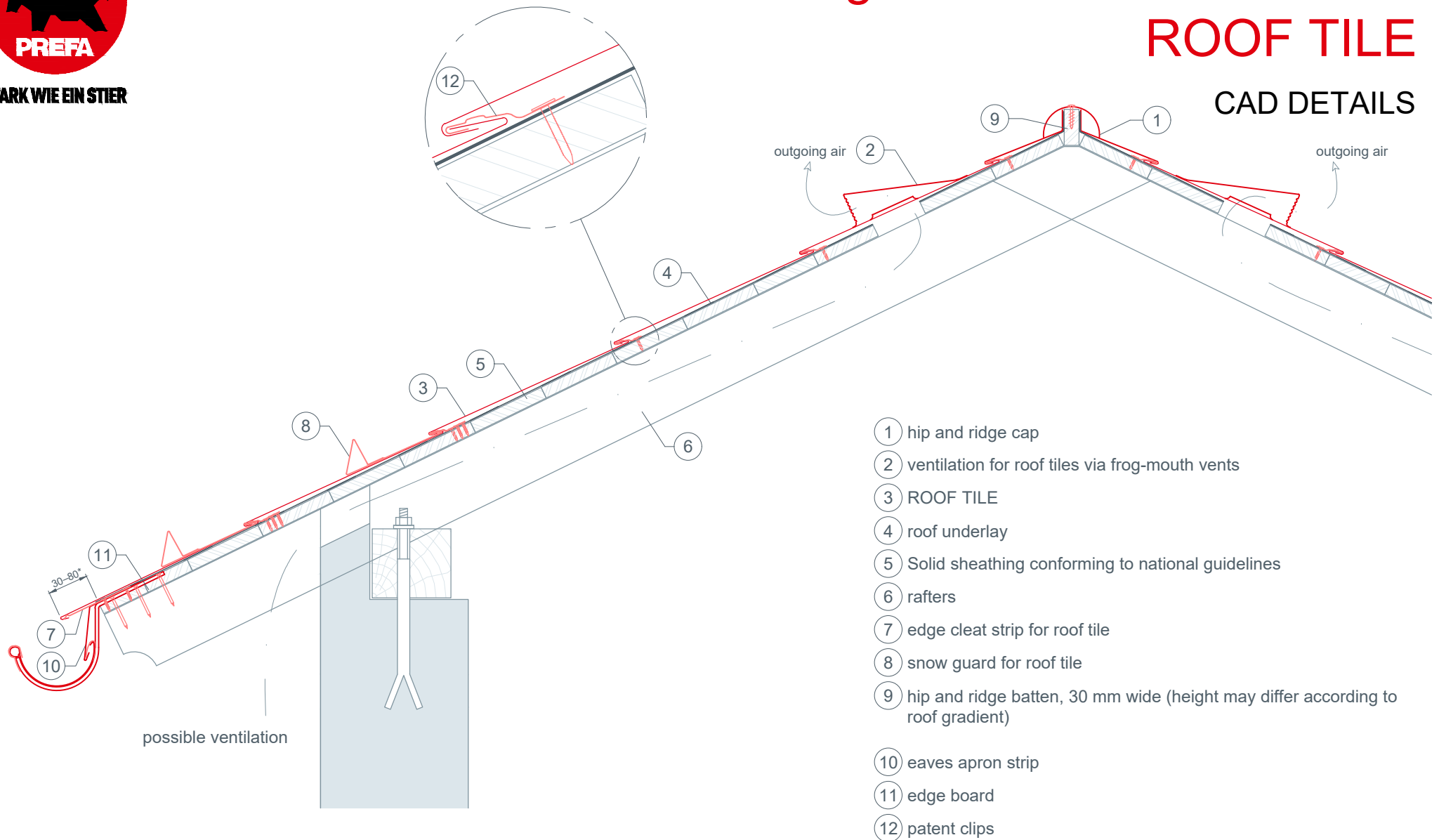
Basic principle: ÖNORM B 1991-1-3 and EN 1991-1-3



STARK WIE EIN STIER

single-skin roof construction ROOF TILE

CAD DETAILS



- ① hip and ridge cap
- ② ventilation for roof tiles via frog-mouth vents
- ③ ROOF TILE
- ④ roof underlay
- ⑤ Solid sheathing conforming to national guidelines
- ⑥ rafters
- ⑦ edge cleat strip for roof tile
- ⑧ snow guard for roof tile
- ⑨ hip and ridge batten, 30 mm wide (height may differ according to roof gradient)
- ⑩ eaves apron strip
- ⑪ edge board
- ⑫ patent clips

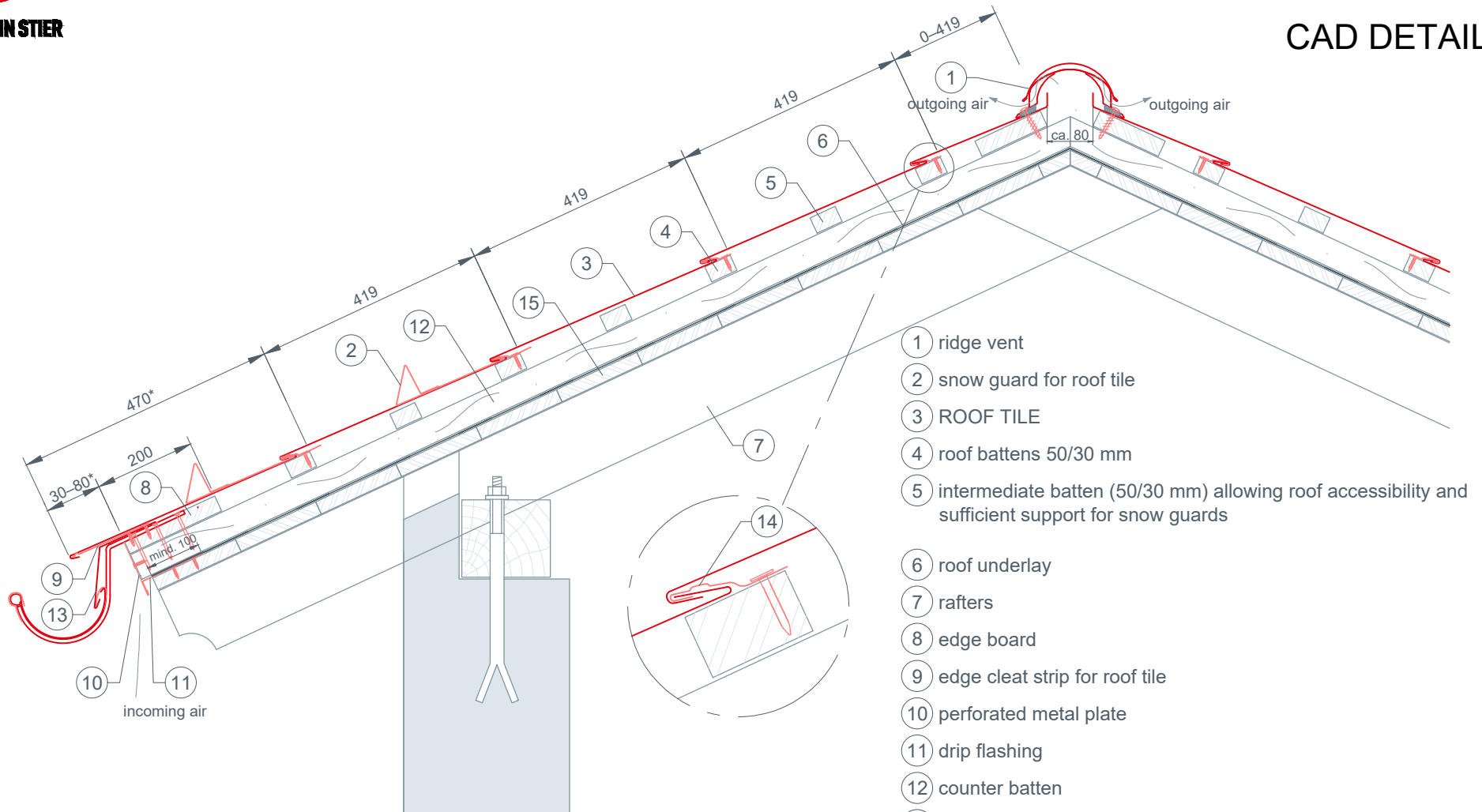
* The eaves projection must not exceed 80 mm.



STARK WIE EIN STIER

double-skin roof construction on battens (skip sheathing) ROOF TILE

CAD DETAILS



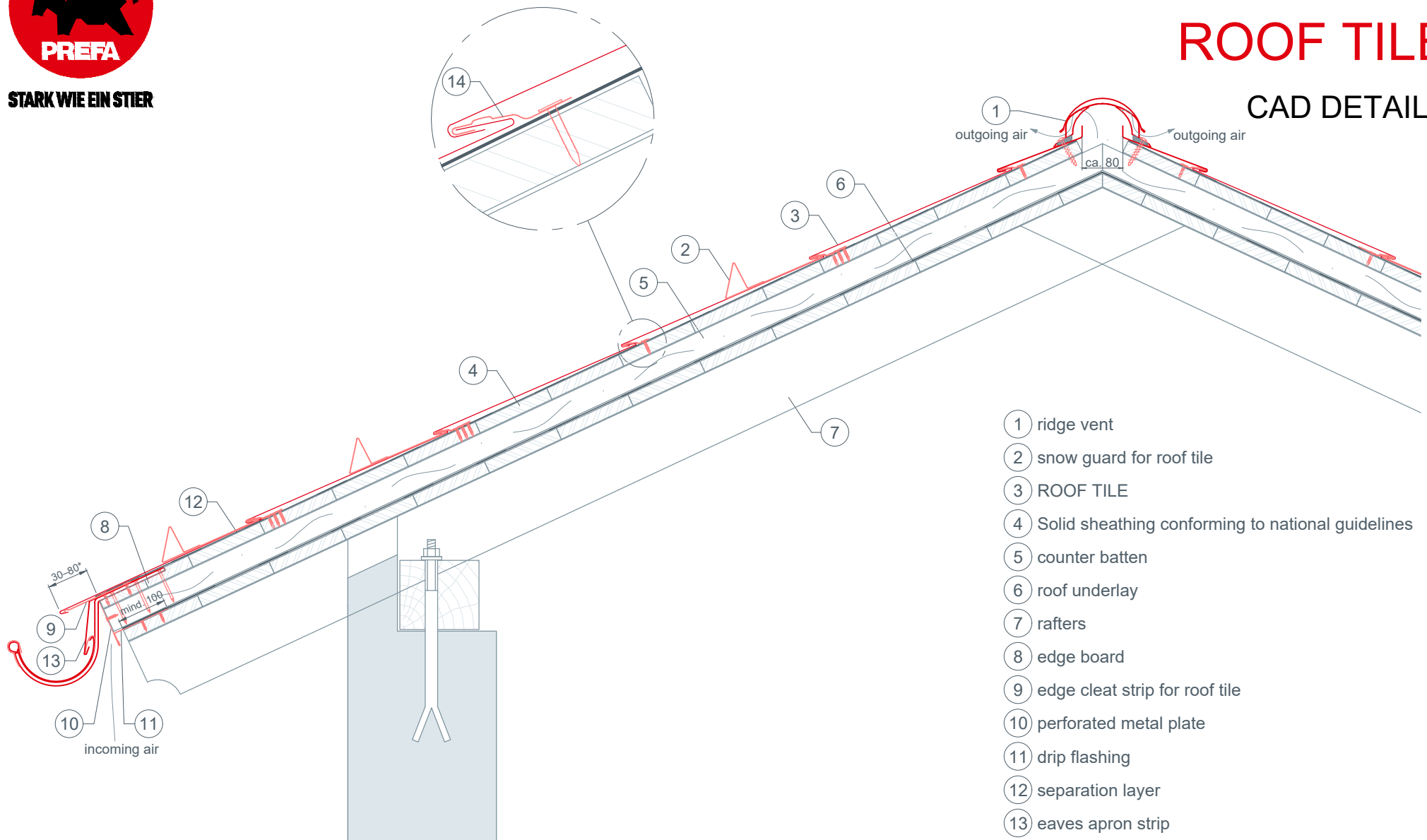
* The eaves projection must not exceed 80 mm.
For smaller dimensions (min. 30 mm), the total of 470 mm (80 mm + 390 mm) must remain unchanged.



STARK WIE EIN STIER

double-skin roof construction ROOF TILE

CAD DETAILS

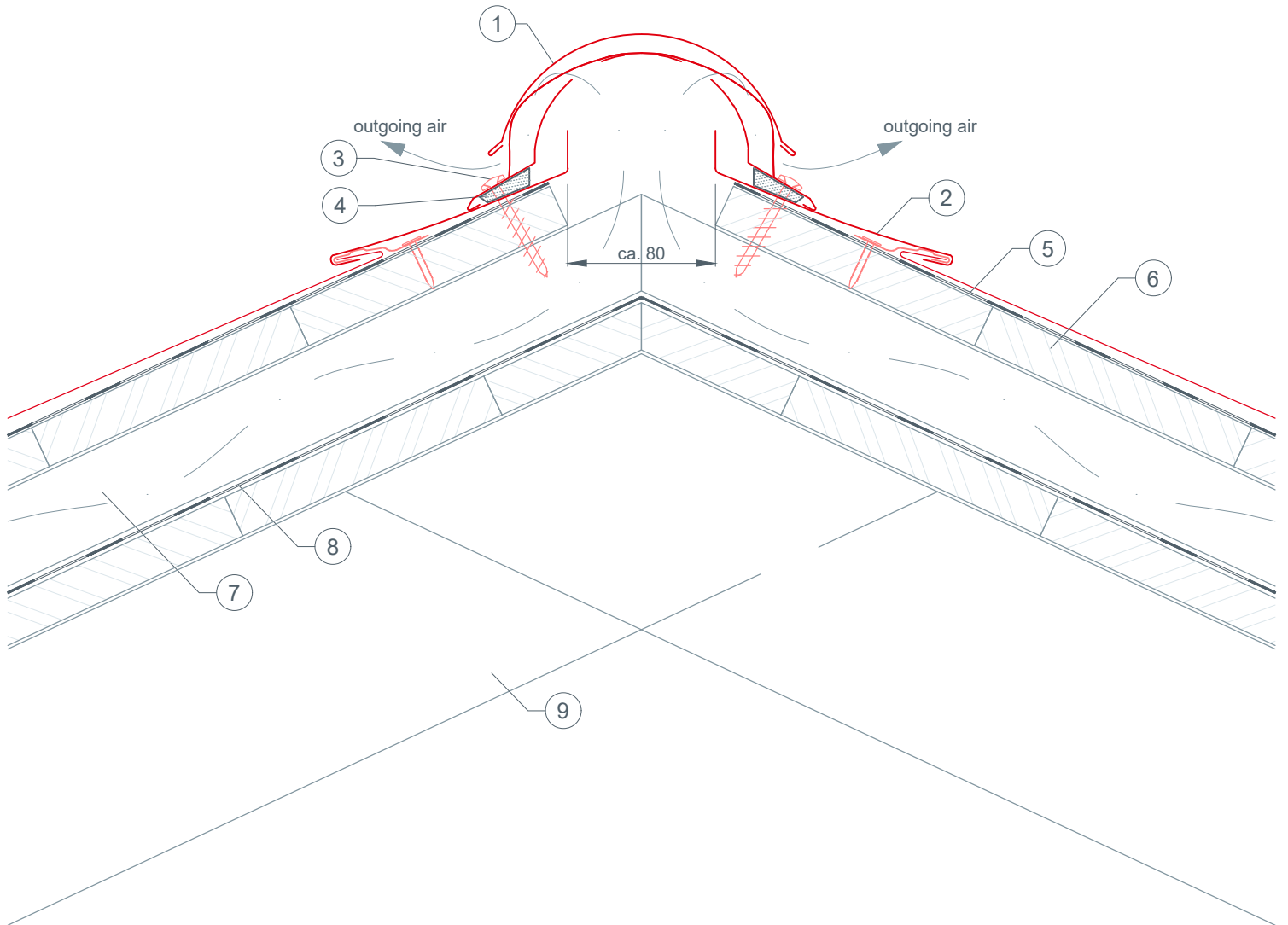


* The eaves projection must not exceed 80 mm.



STARK WIE EIN STIER

ridge construction — ridge vent ROOF TILE CAD DETAILS

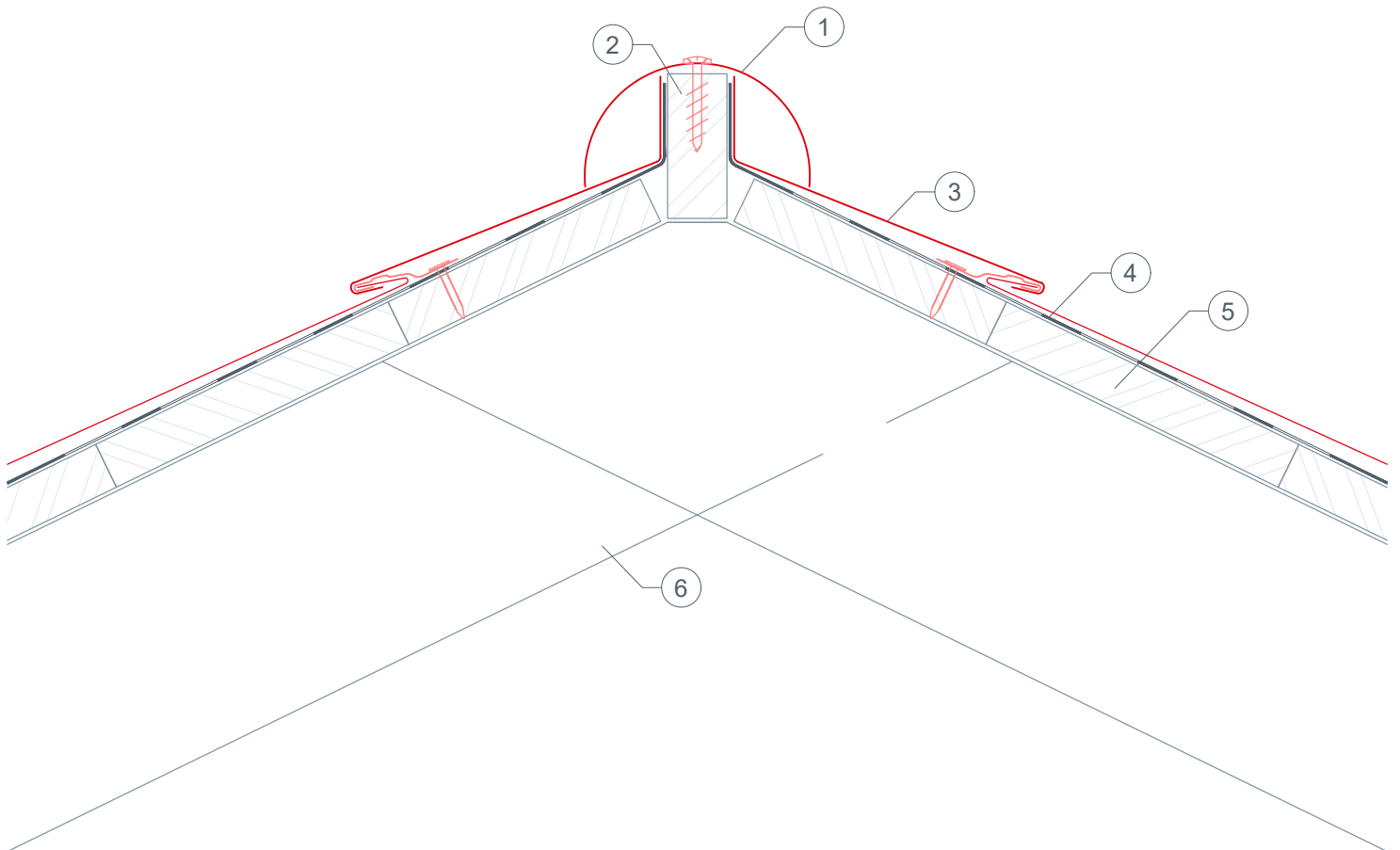


- ① ridge vent
- ② ROOF TILE
- ③ sealing screw
- ④ self-adhesive foam wedge
- ⑤ separation layer
- ⑥ Solid sheathing conforming to national guidelines
- ⑦ counter battens (ventilated channel)
- ⑧ roof underlay
- ⑨ rafters



STARK WIE EIN STIER

ridge construction — hip cap ROOF TILE CAD DETAILS



- ① hip and ridge cap
- ② hip and ridge batten, 30 mm wide (height may differ according to roof gradient)
- ③ ROOF TILE
- ④ separation layer
- ⑤ Solid sheathing conforming to national guidelines
- ⑥ rafters

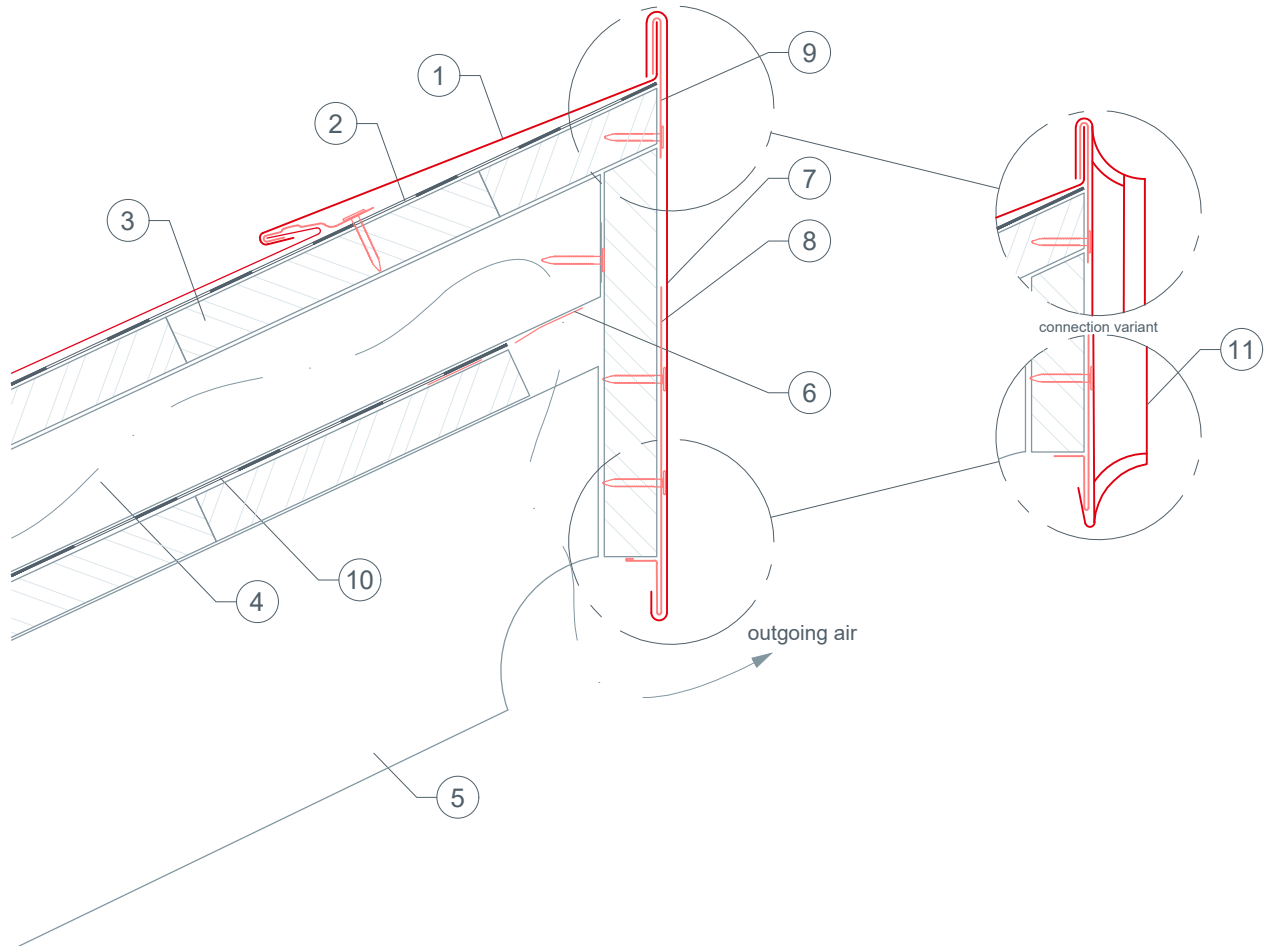


STARK WIE EIN STIER

mono-pitched roof construction

ROOF TILE

CAD DETAILS



- ① ROOF TILE
- ② separation layer
- ③ Solid sheathing conforming to national guidelines
- ④ counter battens (8/5 cm)
- ⑤ rafter
- ⑥ perforated metal plate
- ⑦ end of mono-pitched roof
- ⑧ edge cleat strip
- ⑨ fixing strip
- ⑩ roof underlay
- ⑪ mono-pitched-roof end (variant)

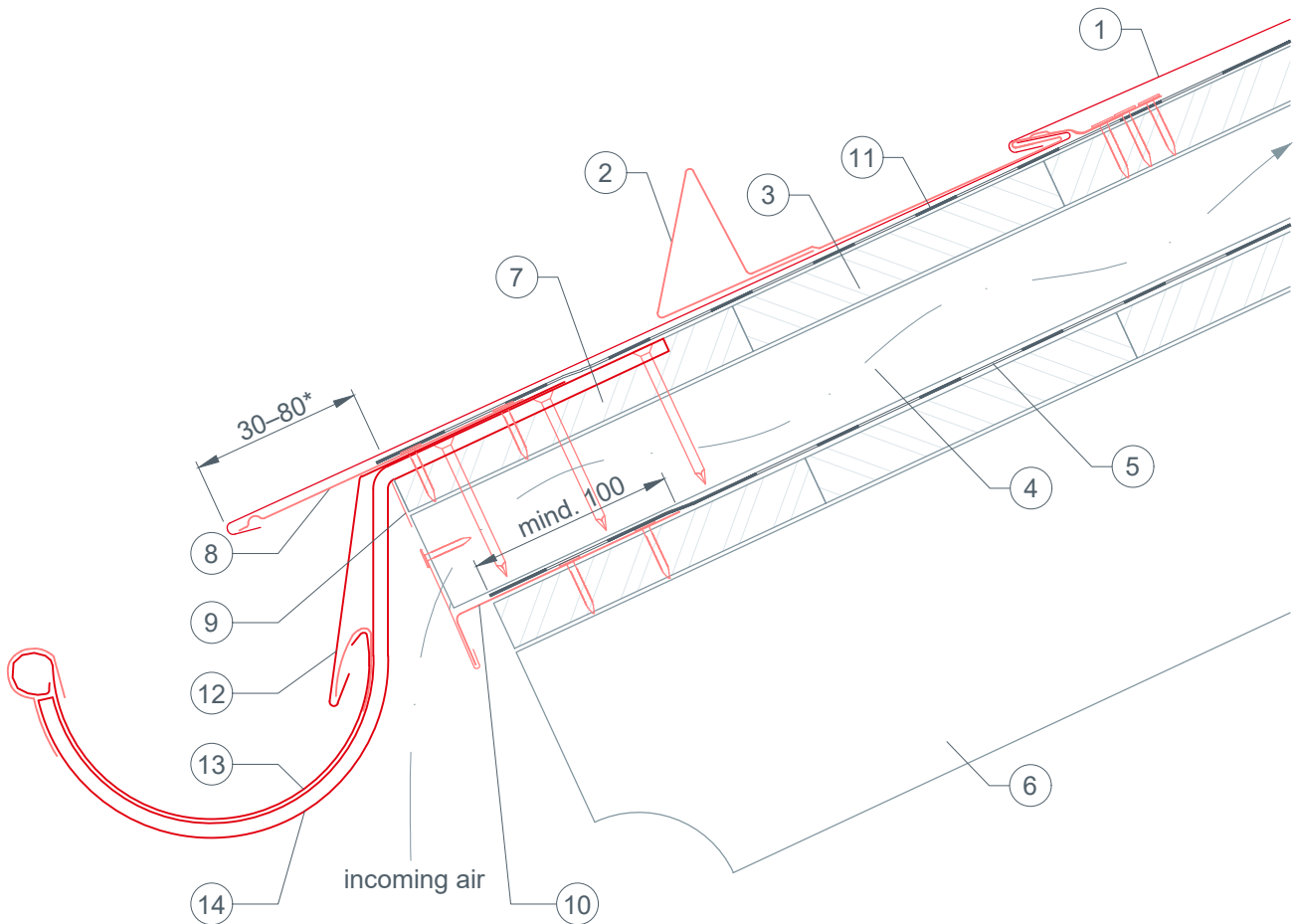


STARK WIE EIN STIER

eaves construction with gutter

ROOF TILE

CAD DETAILS



- ① ROOF TILE
- ② snow guard for roof tile
- ③ Solid sheathing conforming to national guidelines
- ④ counter batten
- ⑤ roof underlay
- ⑥ rafters
- ⑦ edge board
- ⑧ edge cleat strip for roof tile
- ⑨ perforated metal plate
- ⑩ underlayment eaves apron strip
- ⑪ separation layer
- ⑫ eaves apron strip
- ⑬ gutter
- ⑭ gutter bracket

* The eaves projection must not exceed 80 mm.

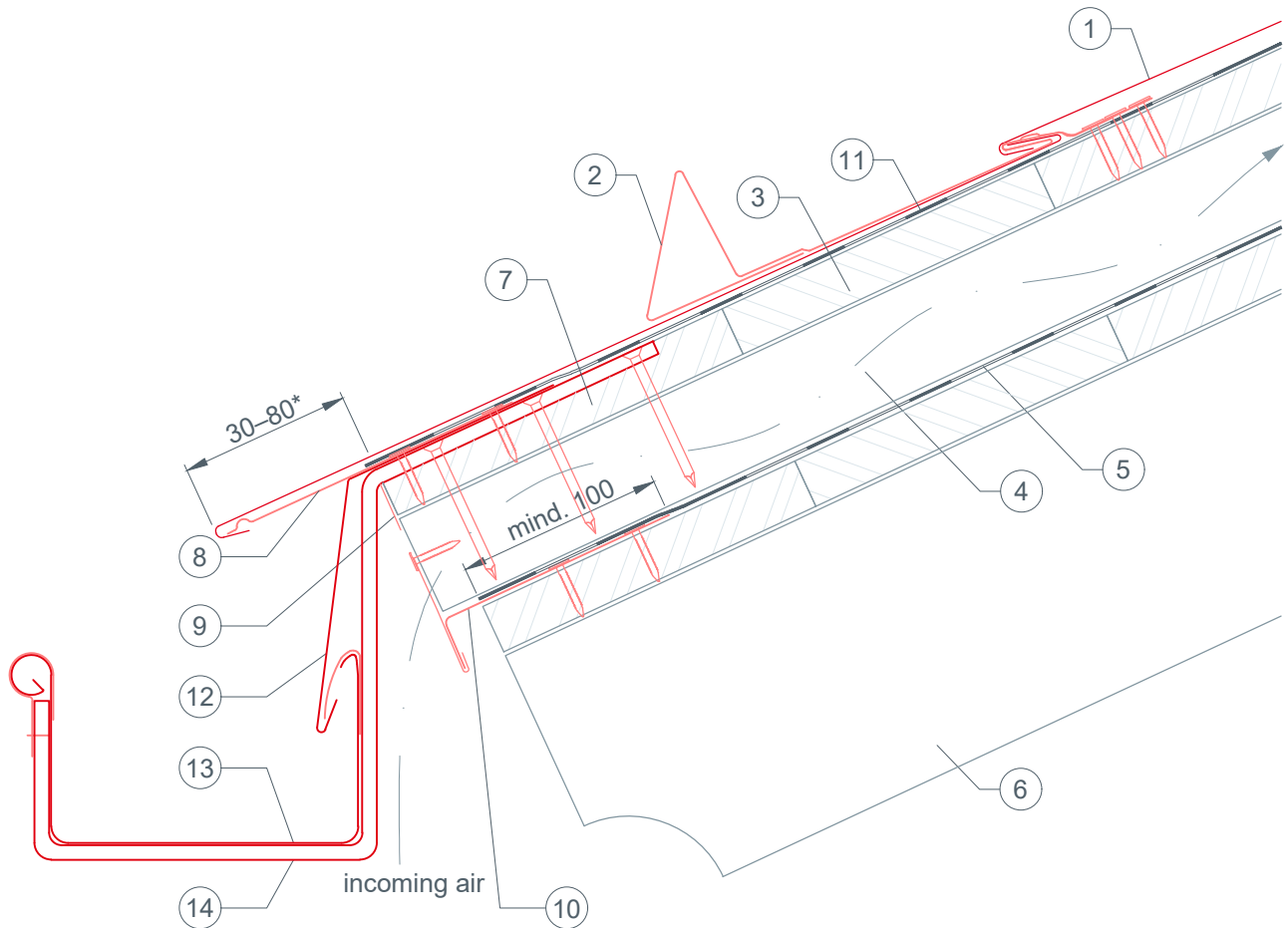


STARK WIE EIN STIER

eaves construction with box gutter

ROOF TILE

CAD DETAILS



- ① ROOF TILE
- ② snow guard for roof tile
- ③ Solid sheathing conforming to national guidelines
- ④ counter batten
- ⑤ roof underlay
- ⑥ rafters
- ⑦ edge board
- ⑧ edge cleat strip for roof tile
- ⑨ perforated metal plate
- ⑩ underlayment eaves apron strip
- ⑪ separation layer
- ⑫ eaves apron strip
- ⑬ aluminium box gutter
- ⑭ gutter bracket

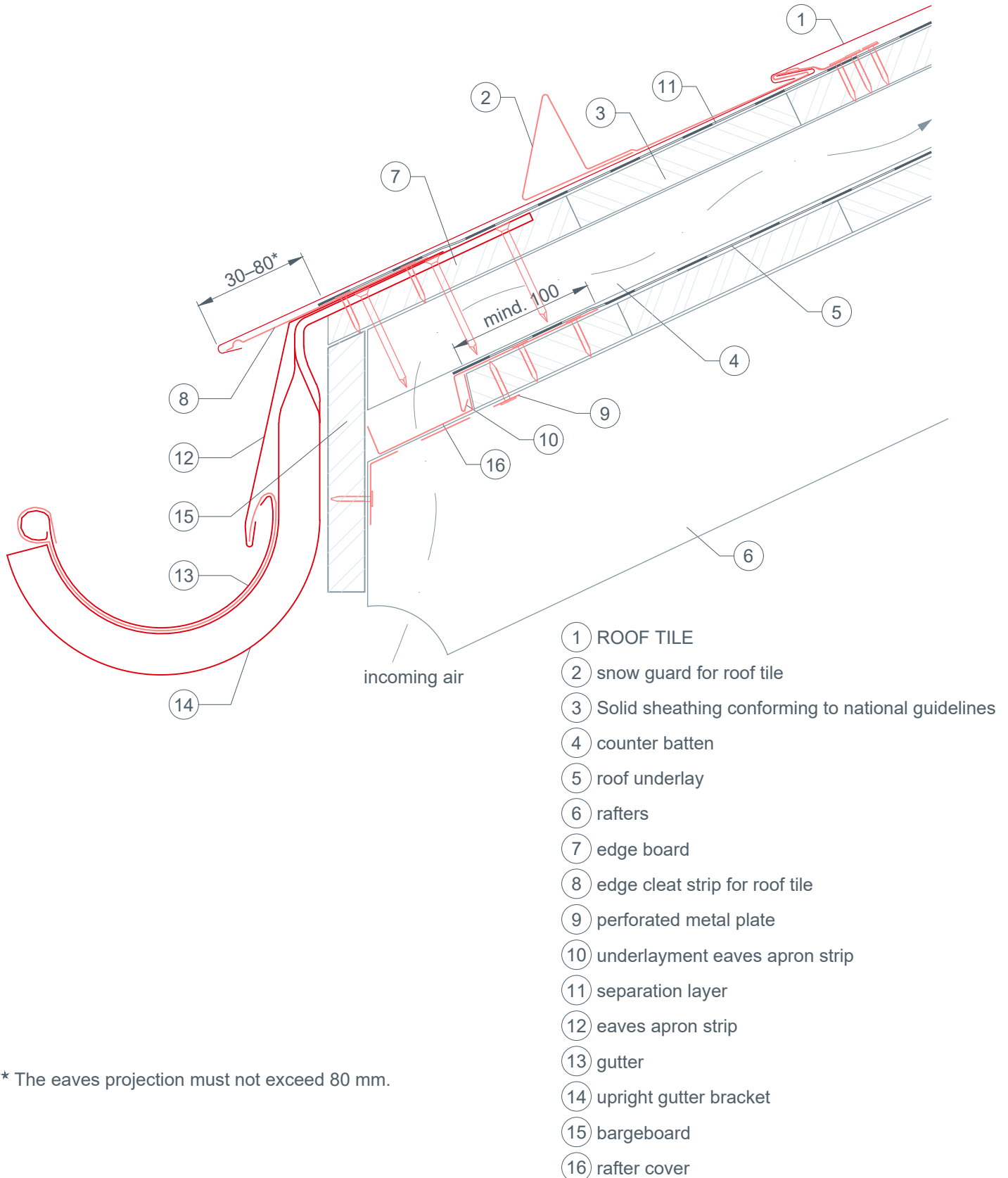
* The eaves projection must not exceed 80 mm.



STARK WIE EIN STIER

eaves construction with upright gutter bracket ROOF TILE

CAD DETAILS



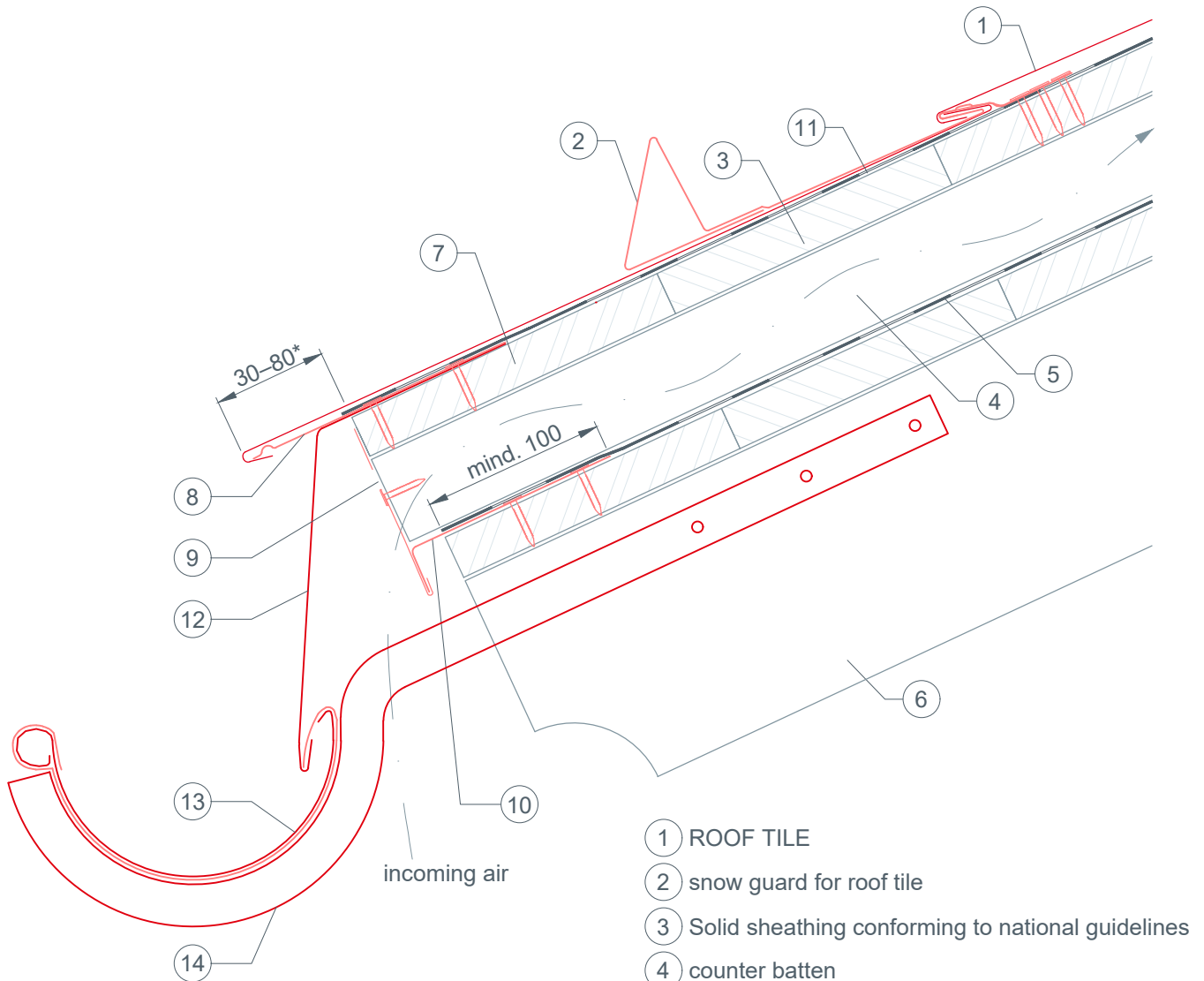
* The eaves projection must not exceed 80 mm.



STARK WIE EIN STIER

eaves construction with upright gutter bracket (variant 1) ROOF TILE

CAD DETAILS



- ① ROOF TILE
- ② snow guard for roof tile
- ③ Solid sheathing conforming to national guidelines
- ④ counter batten
- ⑤ roof underlay
- ⑥ rafters
- ⑦ edge board
- ⑧ edge cleat strip for roof tile
- ⑨ perforated metal plate
- ⑩ underlayment eaves apron strip
- ⑪ separation layer
- ⑫ eaves apron strip
- ⑬ gutter
- ⑭ upright gutter bracket

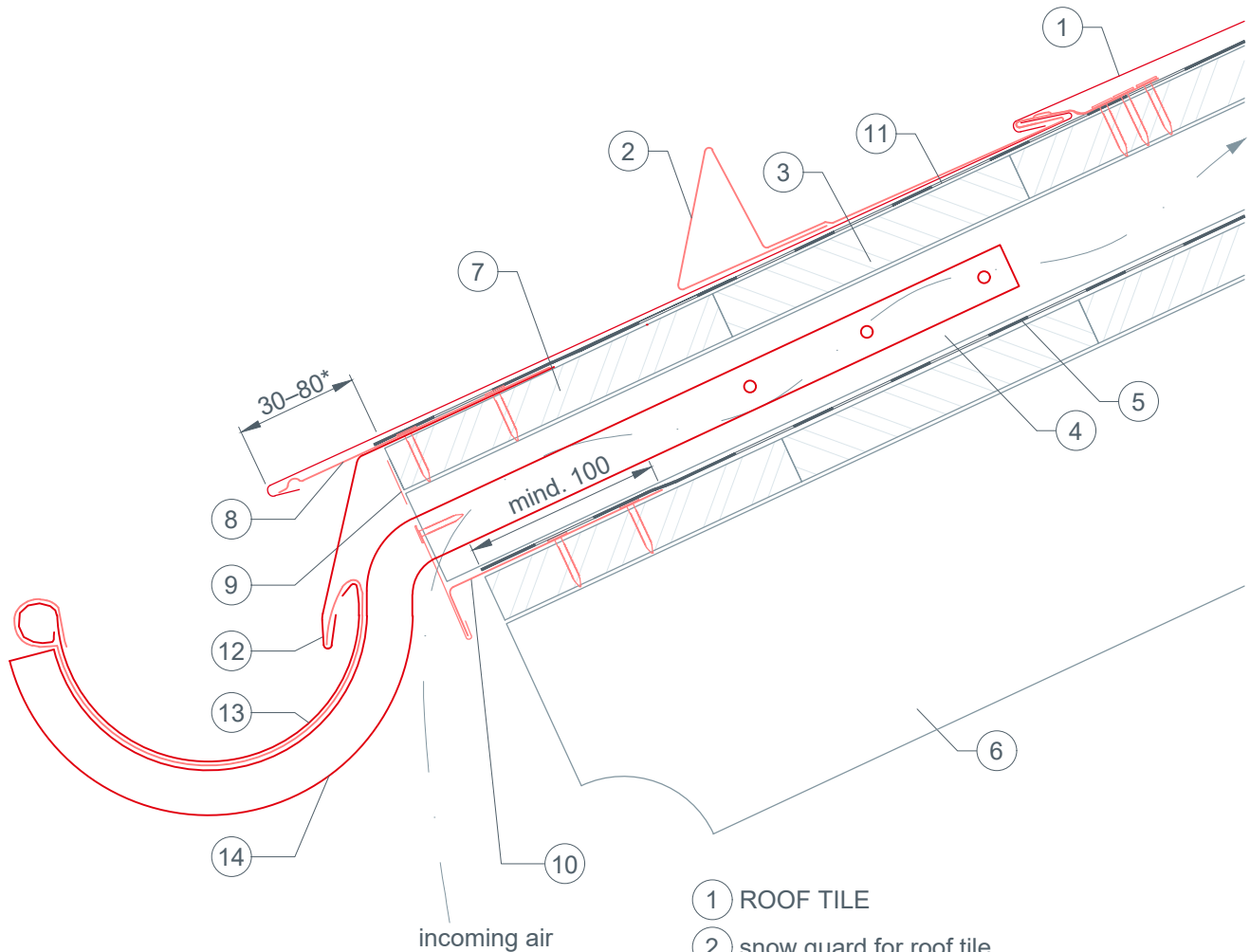
* The eaves projection must not exceed 80 mm.



STARK WIE EIN STIER

eaves construction with upright gutter bracket (variant 2) ROOF TILE

CAD DETAILS



- ① ROOF TILE
- ② snow guard for roof tile
- ③ Solid sheathing conforming to national guidelines
- ④ counter batten
- ⑤ roof underlay
- ⑥ rafters
- ⑦ edge board
- ⑧ edge cleat strip for roof tile
- ⑨ perforated metal plate
- ⑩ underlayment eaves apron strip
- ⑪ separation layer
- ⑫ eaves apron strip
- ⑬ gutter
- ⑭ upright gutter bracket

* The eaves projection must not exceed 80 mm.

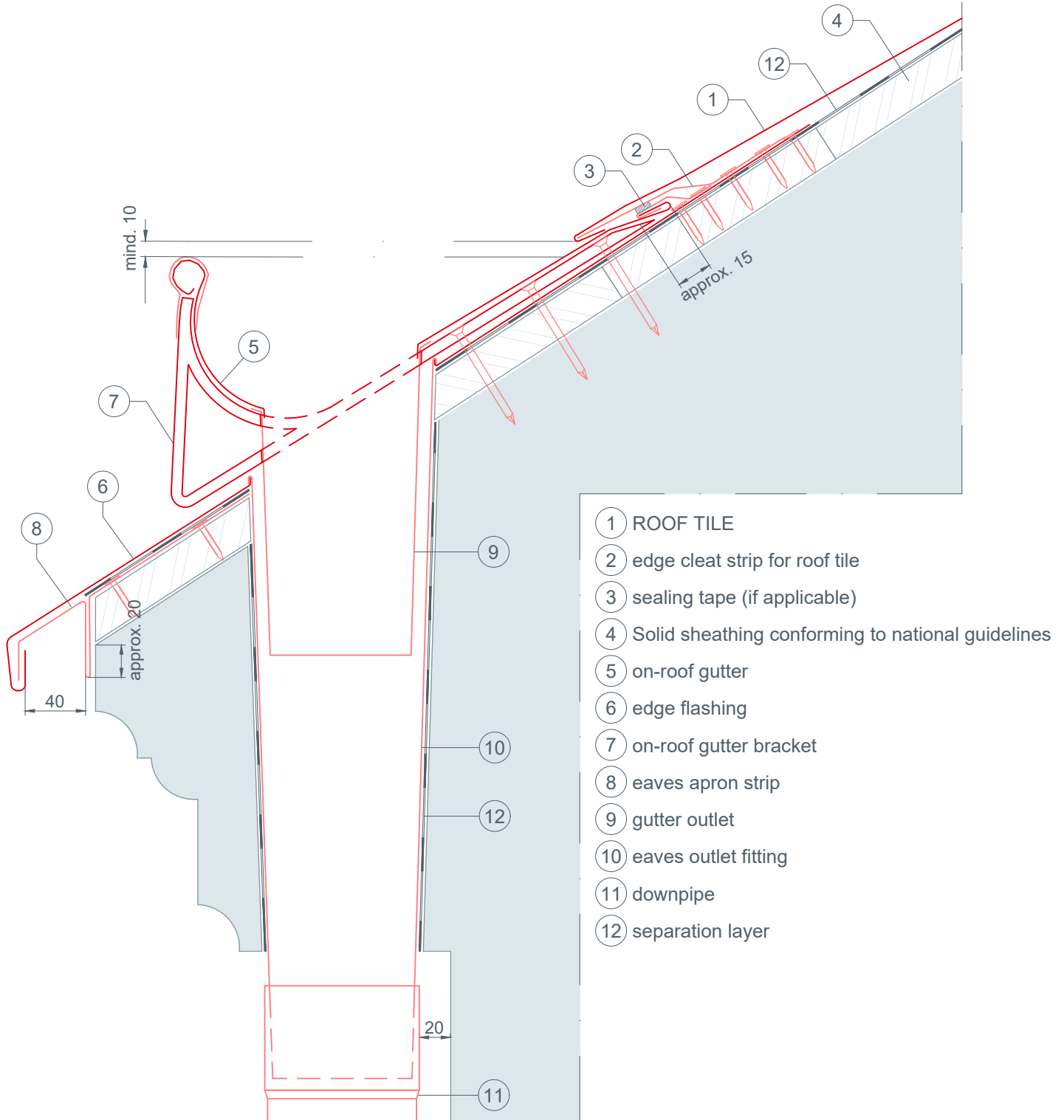


STARK WIE EIN STIER

eaves construction with on-roof gutter

ROOF TILE

CAD DETAILS



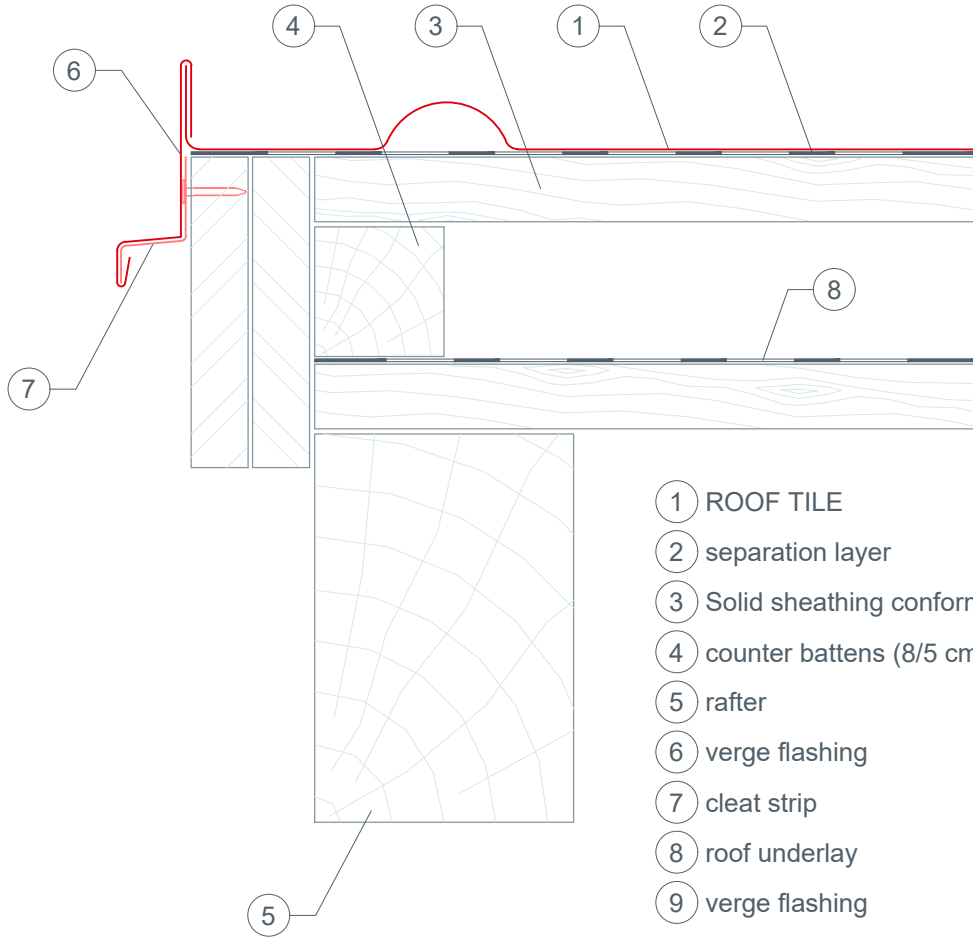


STARK WIE EIN STIER

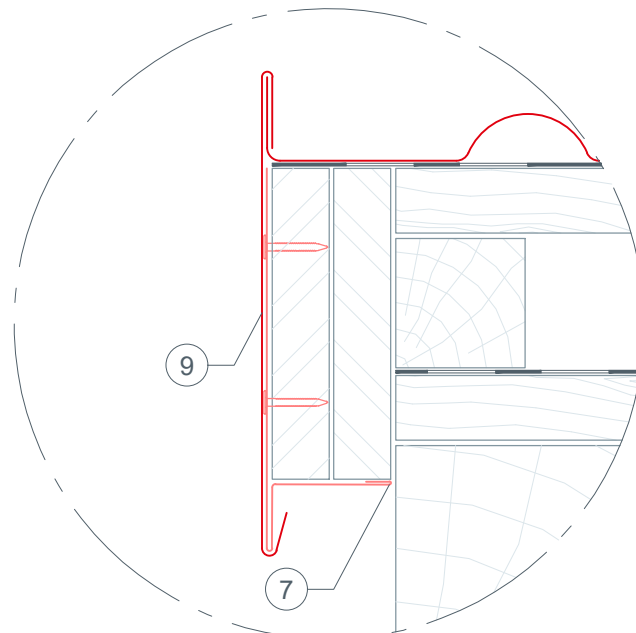
roof verge construction with verge flashing

ROOF TILE

CAD DETAILS



connection variant



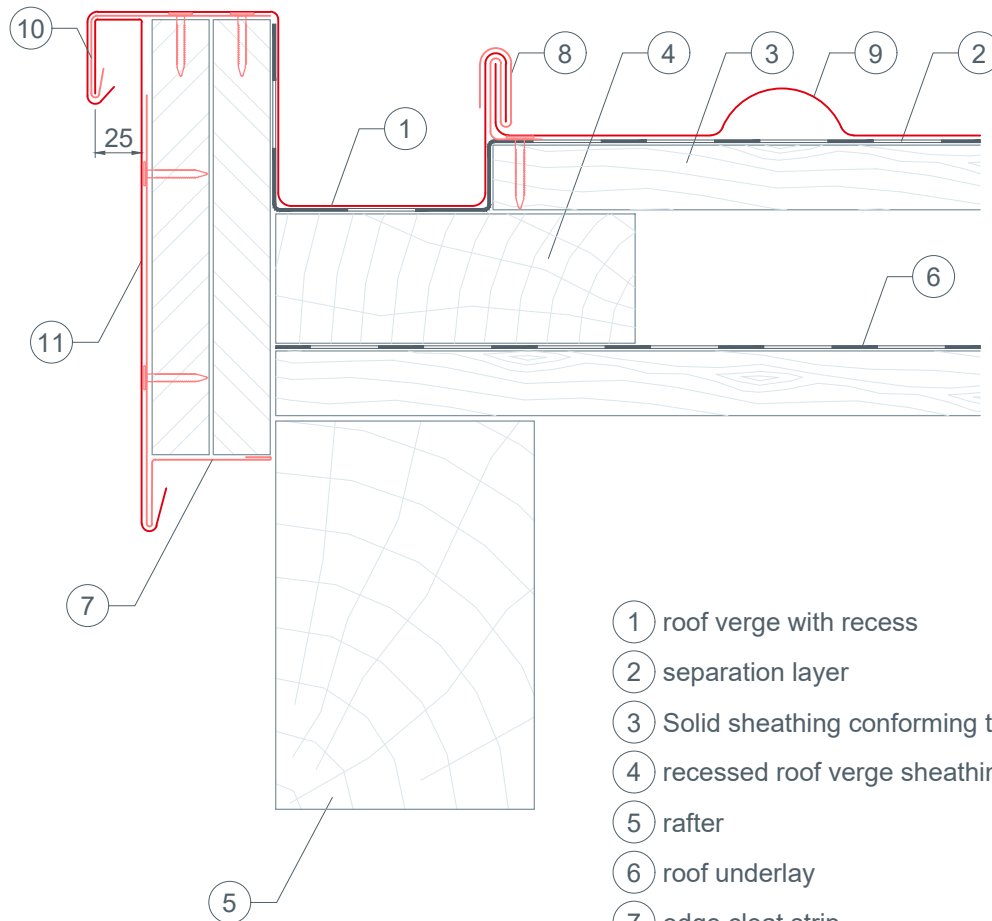


STARK WIE EIN STIER

roof verge construction with recess

ROOF TILE

CAD DETAILS



- ① roof verge with recess
- ② separation layer
- ③ Solid sheathing conforming to national guidelines
- ④ recessed roof verge sheathing
- ⑤ rafter
- ⑥ roof underlay
- ⑦ edge cleat strip
- ⑧ double-lock clip
- ⑨ ROOF TILE
- ⑩ cleat strip
- ⑪ verge flashing

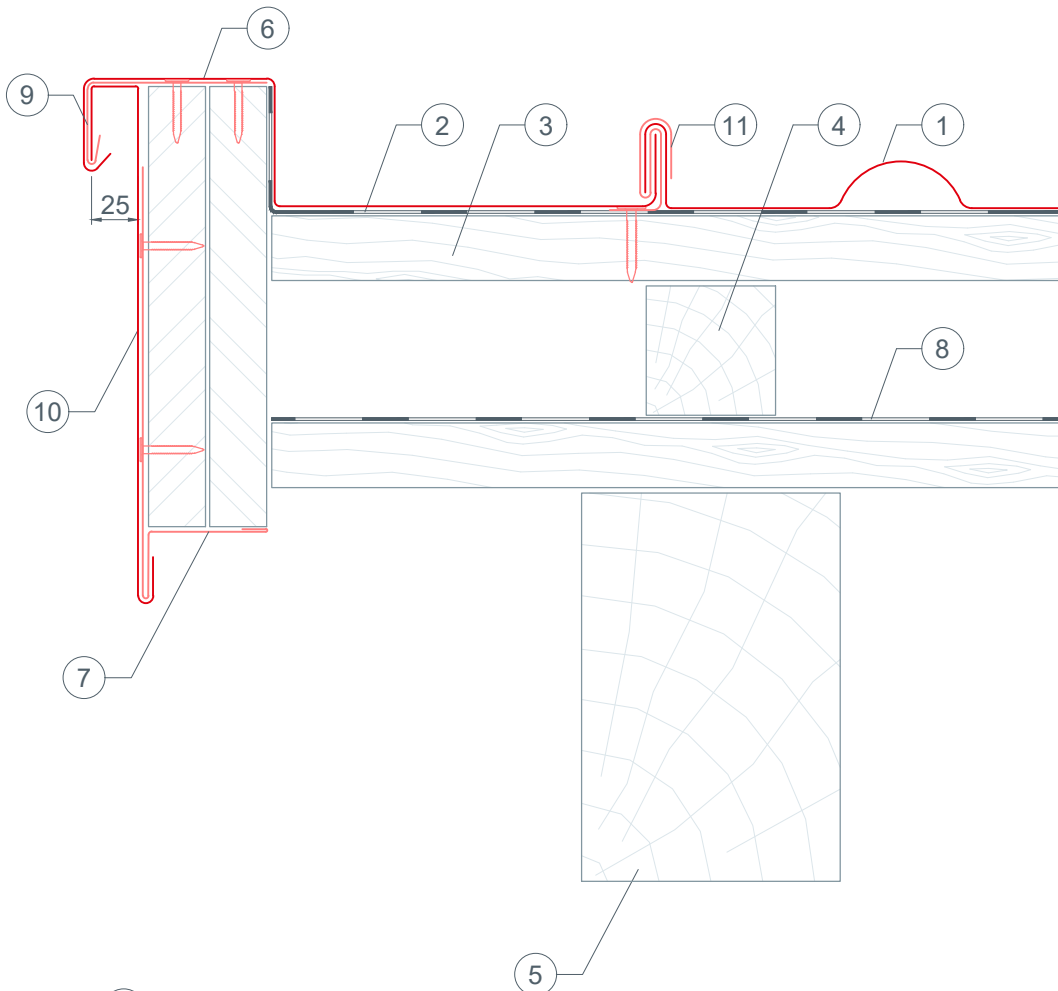


STARK WIE EIN STIER

roof verge construction with bargeboard

ROOF TILE

CAD DETAILS

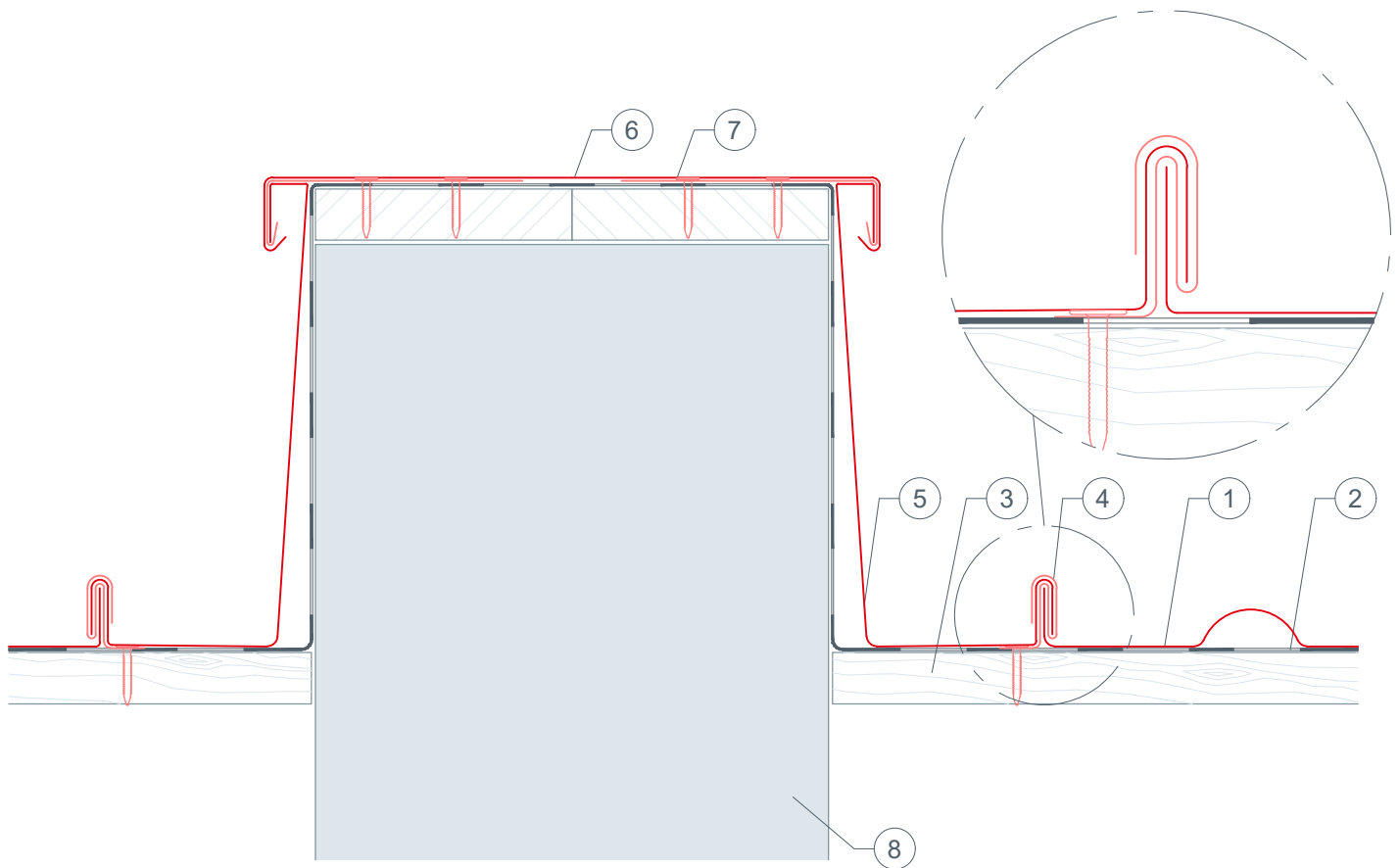


- ① ROOF TILE
- ② separation layer
- ③ Solid sheathing conforming to national guidelines
- ④ counter battens (8/5 cm)
- ⑤ rafter
- ⑥ verge flashing
- ⑦ edge cleat strip
- ⑧ roof underlay
- ⑨ cleat strip
- ⑩ verge flashing
- ⑪ double-lock clip



STARK WIE EIN STIER

wall flashing ROOF TILE CAD DETAILS

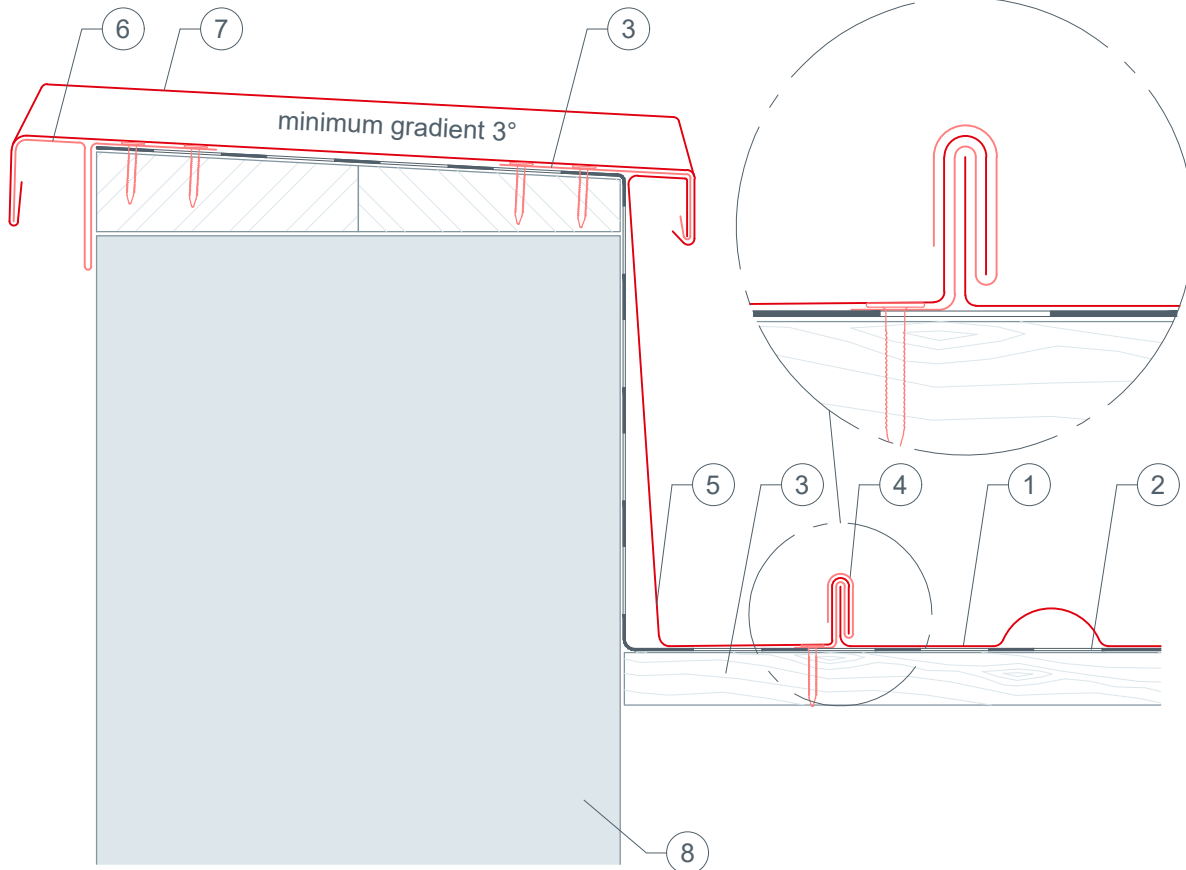


- ① ROOF TILE
- ② separation layer
- ③ Solid sheathing conforming to national guidelines
- ④ double-lock clip
- ⑤ wall connection plate
- ⑥ wall flashing
- ⑦ cleat strip
- ⑧ wall



STARK WIE EIN STIER

roof parapet flashing ROOF TILE CAD DETAILS

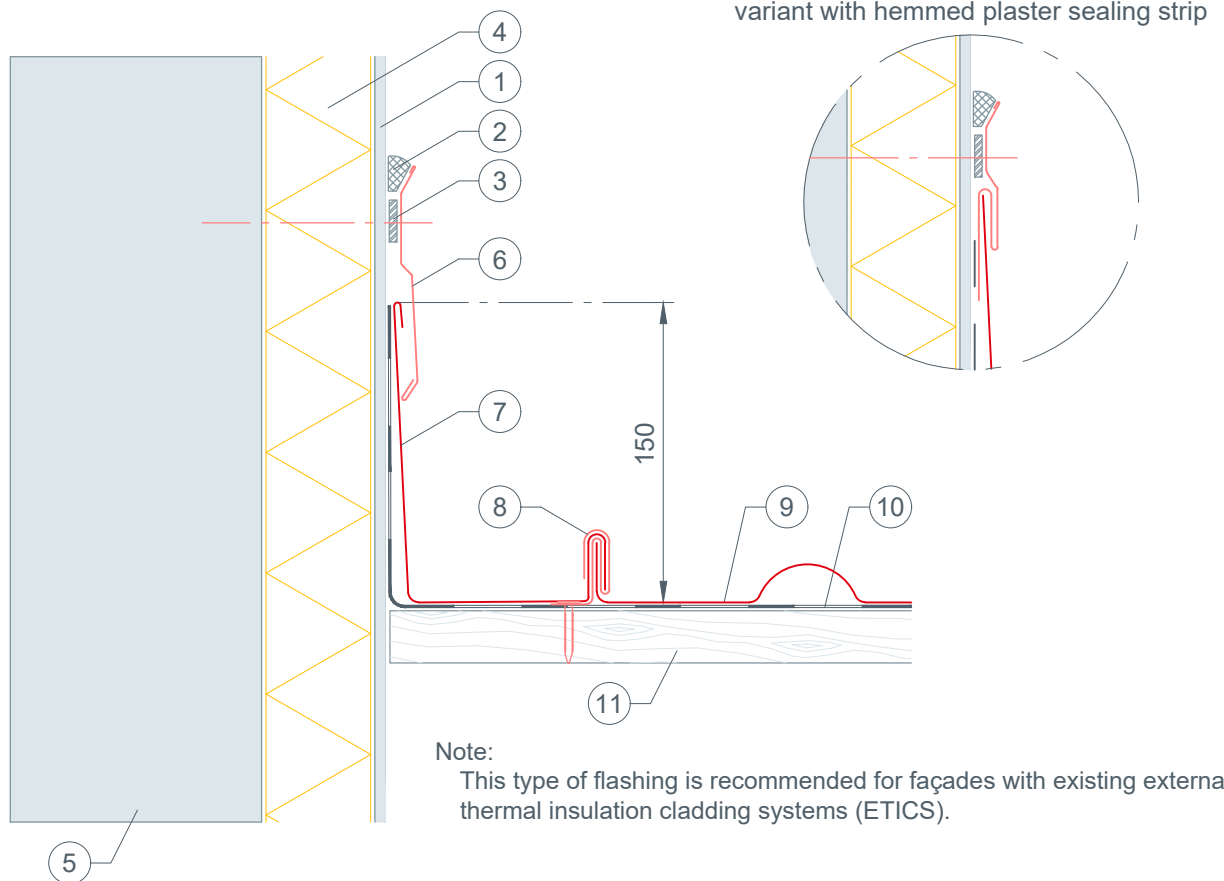


- ① ROOF TILE
- ② separation layer
- ③ Solid sheathing conforming to national guidelines
- ④ double-lock clip
- ⑤ wall connection plate
- ⑥ cleat strip
- ⑦ roof parapet flashing
- ⑧ wall



STARK WIE EIN STIER

lateral wall connection ROOF TILE CAD DETAILS



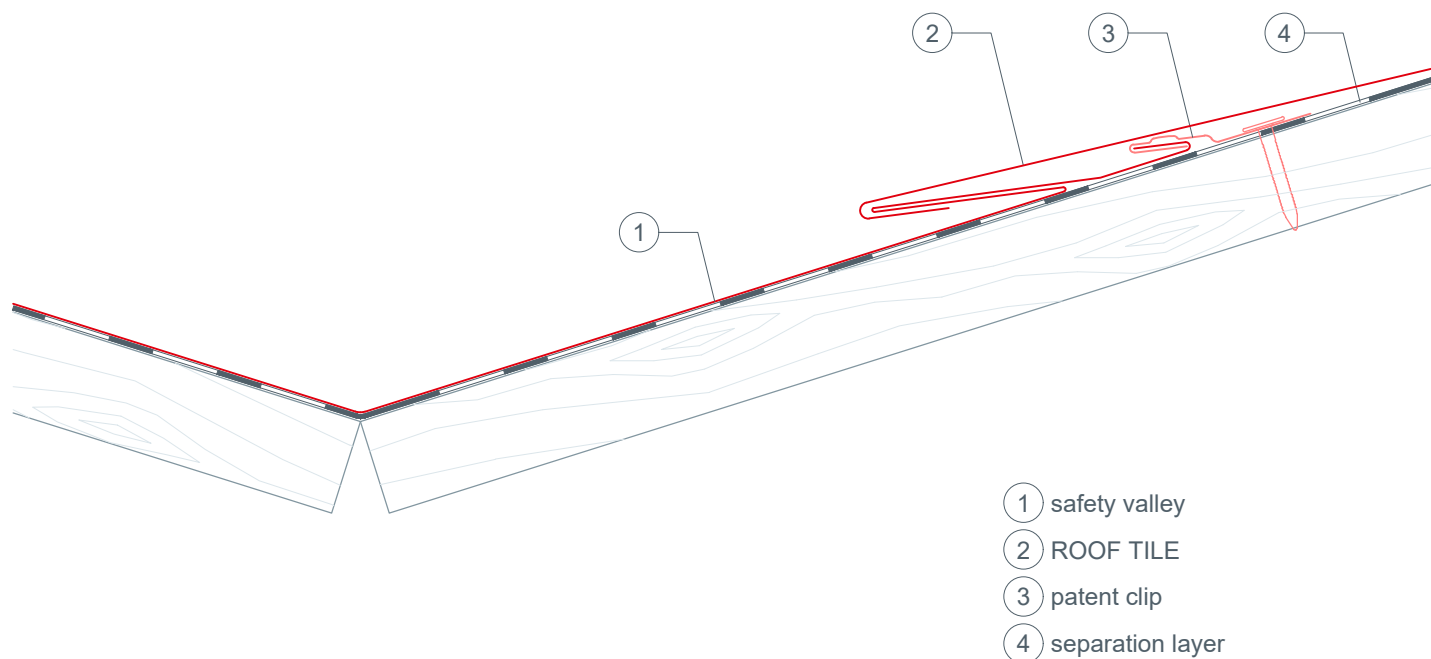
- ① plaster
- ② elastic sealant
- ③ sealing tape
- ④ full thermal insulation
- ⑤ wall
- ⑥ counter flashing (plaster sealing strip)
- ⑦ wall flashing (height: min. 150 mm)
- ⑧ double-lock clip
- ⑨ ROOF TILE
- ⑩ separation layer
- ⑪ Solid sheathing conforming to national guidelines



STARK WIE EIN STIER

valley construction with safety valley ROOF TILE

CAD DETAILS

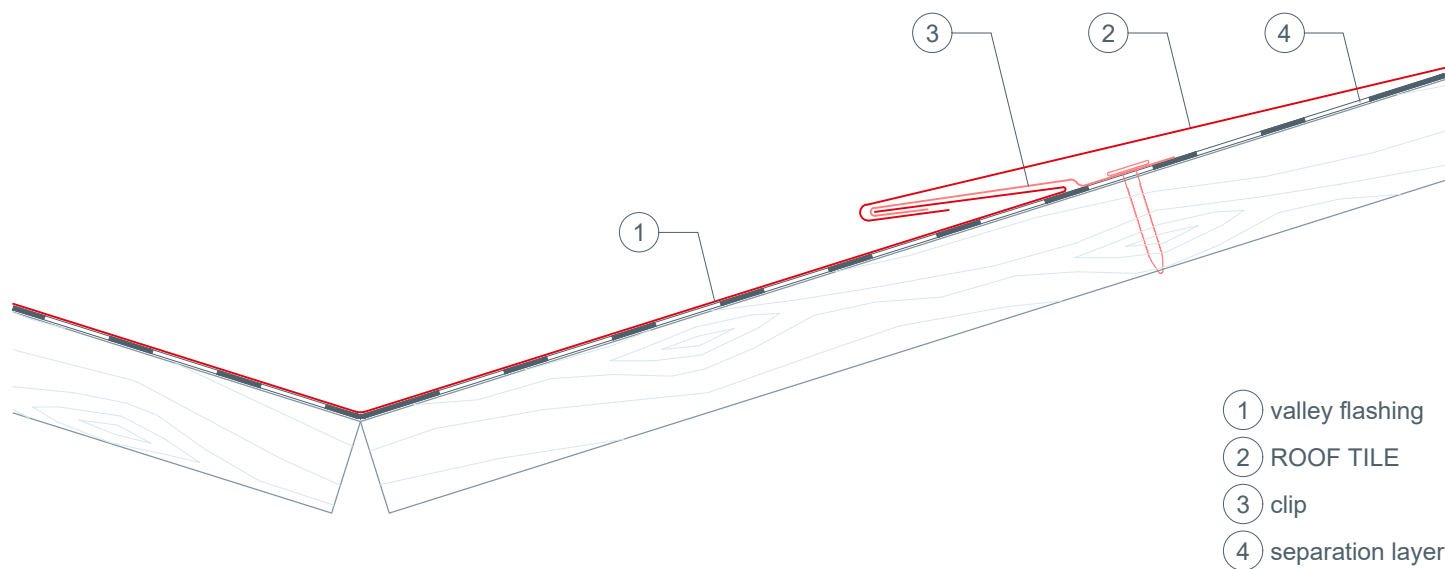




STARK WIE EIN STIER

valley construction with simple valley ROOF TILE

CAD DETAILS



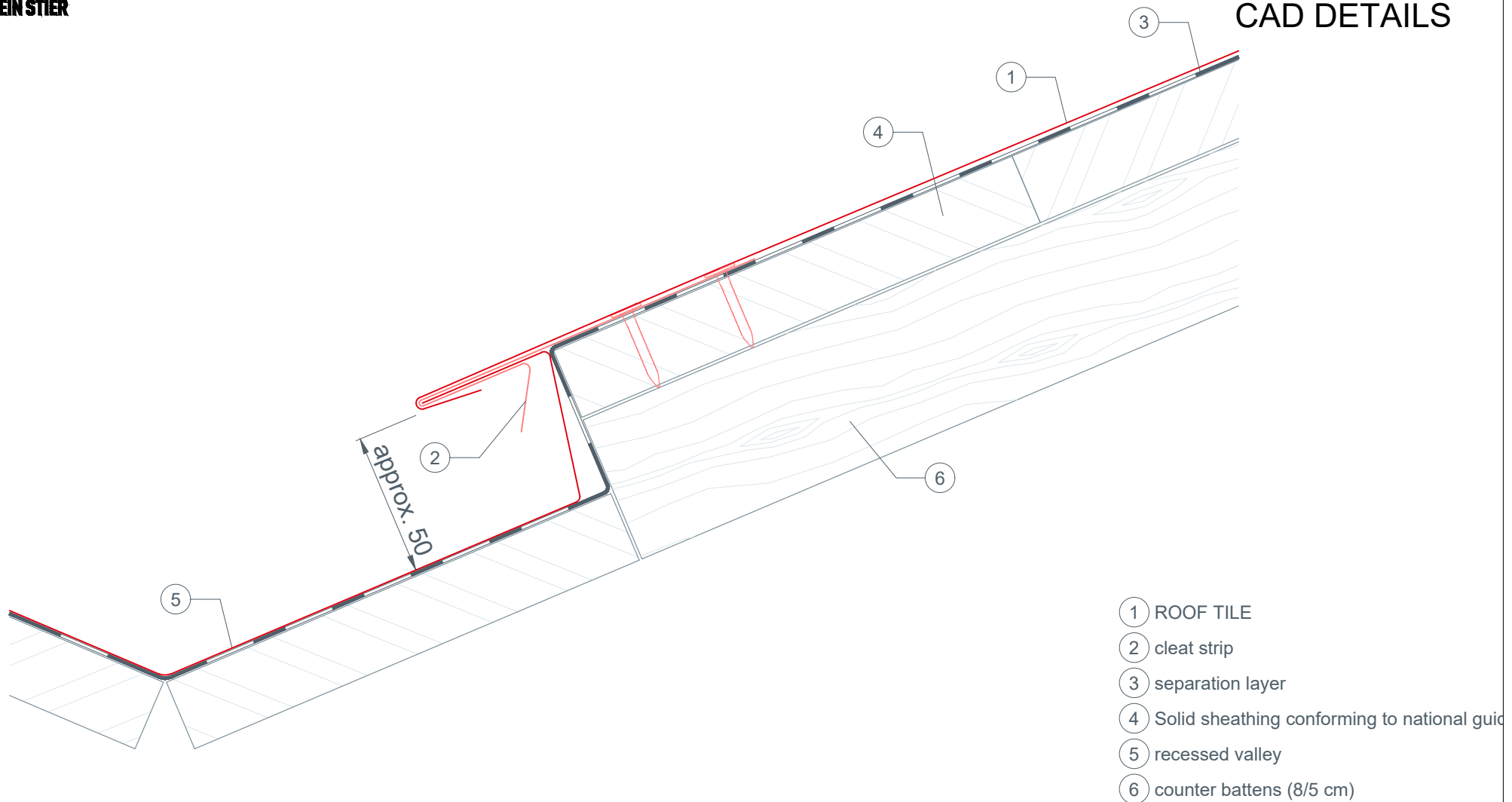
- ① valley flashing
- ② ROOF TILE
- ③ clip
- ④ separation layer



STARK WIE EIN STIER

valley construction with recessed valley ROOF TILE

CAD DETAILS

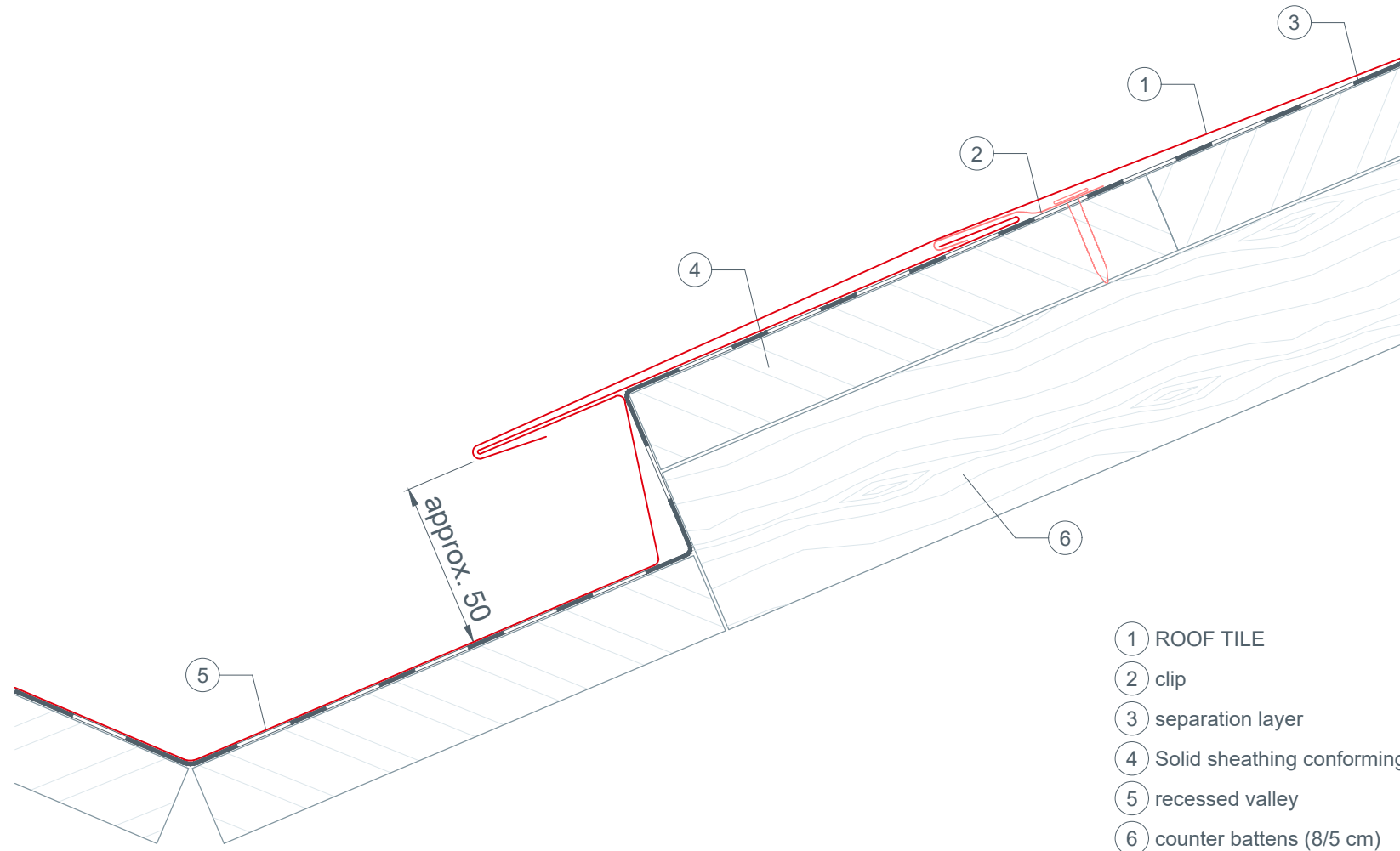




STARK WIE EIN STIER

valley construction with recessed valley ROOF TILE

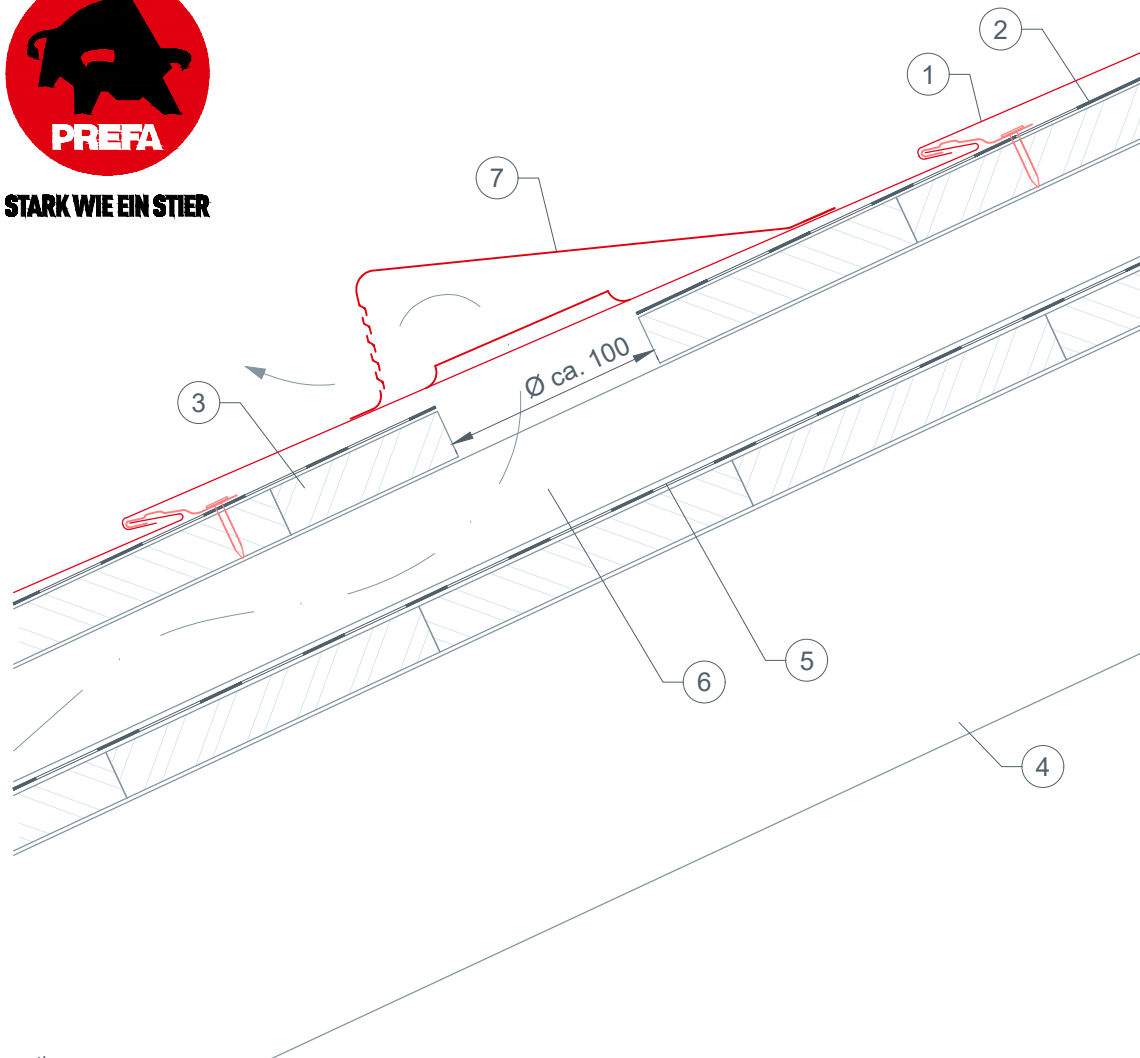
CAD DETAILS



- ① ROOF TILE
- ② clip
- ③ separation layer
- ④ Solid sheathing conforming to national guidelines
- ⑤ recessed valley
- ⑥ counter battens (8/5 cm)

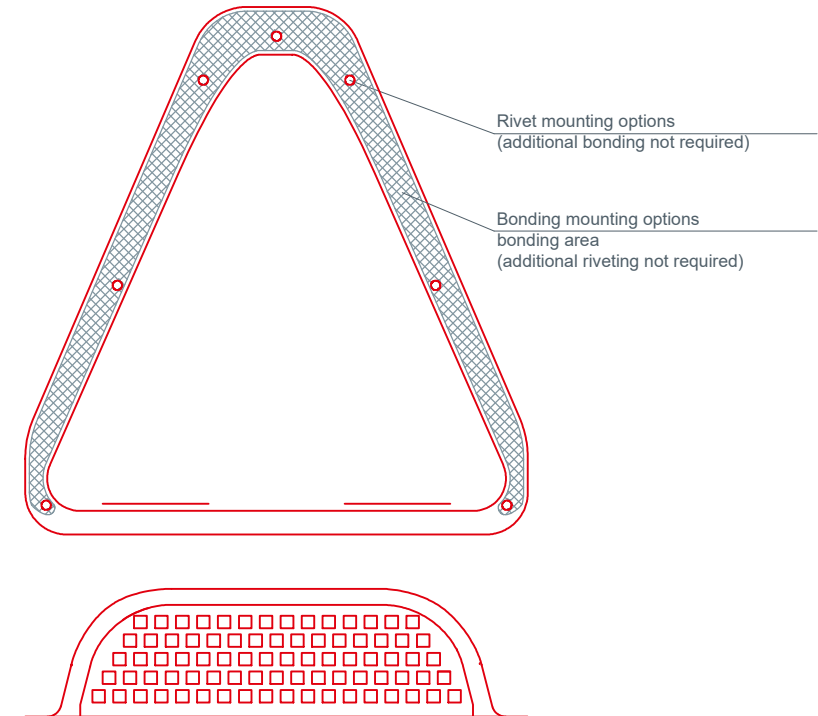


STARK WIE EIN STIER



Information:
air intake section of frog-mouth vents: approx. 30 cm²
The air intake section must be taken into account when cutting out the sheathing (diameter: approx. 10 cm).
The edges of the cut-outs on the roof covering must be surrounded by a raised curve with a height of 1 cm.

frog-mouth vent cover ROOF TILE CAD DETAILS



Rivet mounting options
(additional bonding not required)

Bonding mounting options
bonding area
(additional riveting not required)

- 1 ROOF TILE
- 2 separation layer
- 3 Solid sheathing conforming to national guidelines
- 4 rafter
- 5 roof underlay
- 6 counter battens (8/5 cm)
- 7 frog-mouth vent cover

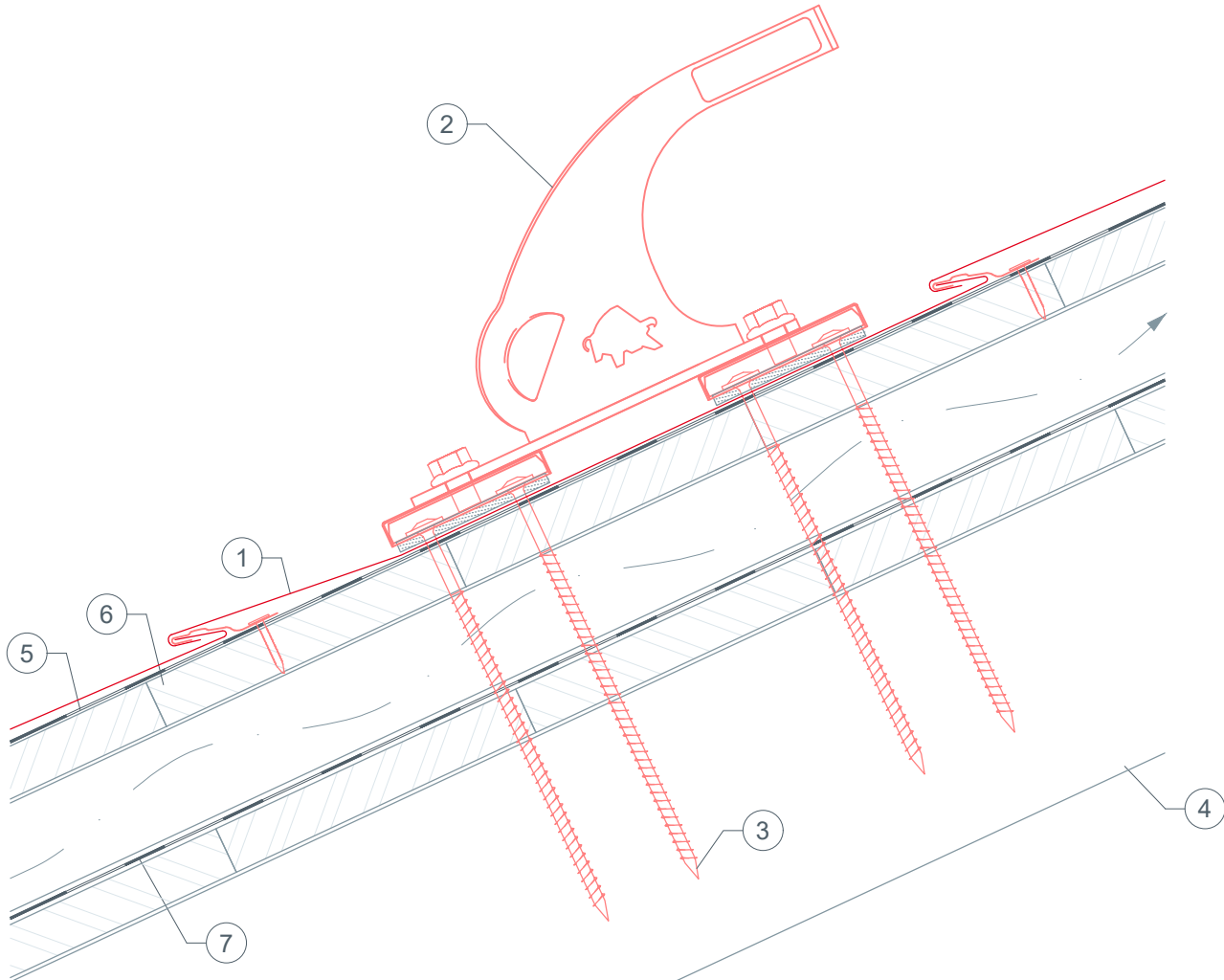


STARK WIE EIN STIER

roof anchor hook according on mounts

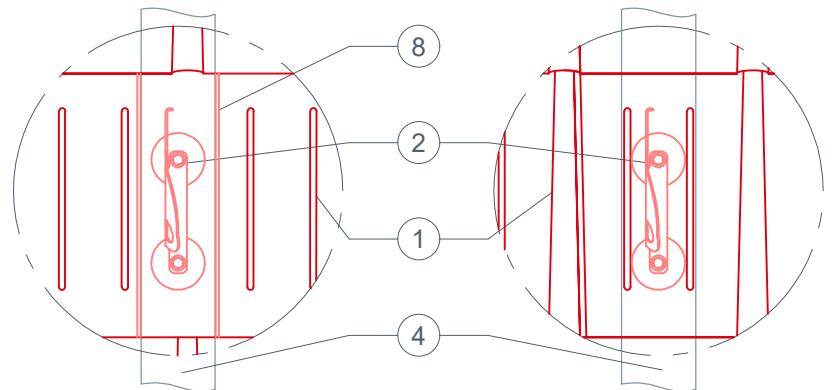
ROOF TILE

CAD DETAILS



installation with base plate

installation without base plate



- ① ROOF TILE
- ② roof anchor hook
- ③ fasteners (timber construction screws)
- ④ rafter
- ⑤ separation layer
- ⑥ Solid sheathing conforming to national guidelines
- ⑦ roof underlay
- ⑧ base plate

With small-format shingles, it may be necessary to install a base plate in order to mount the roof anchor hook (e.g. if a seam is lying above a rafter in the installation area).

Double-skin roof structure: 2 fixing screws 8 × 220 mm.
Single-skin roof structure: 2 fixing screws 8 × 120 mm.

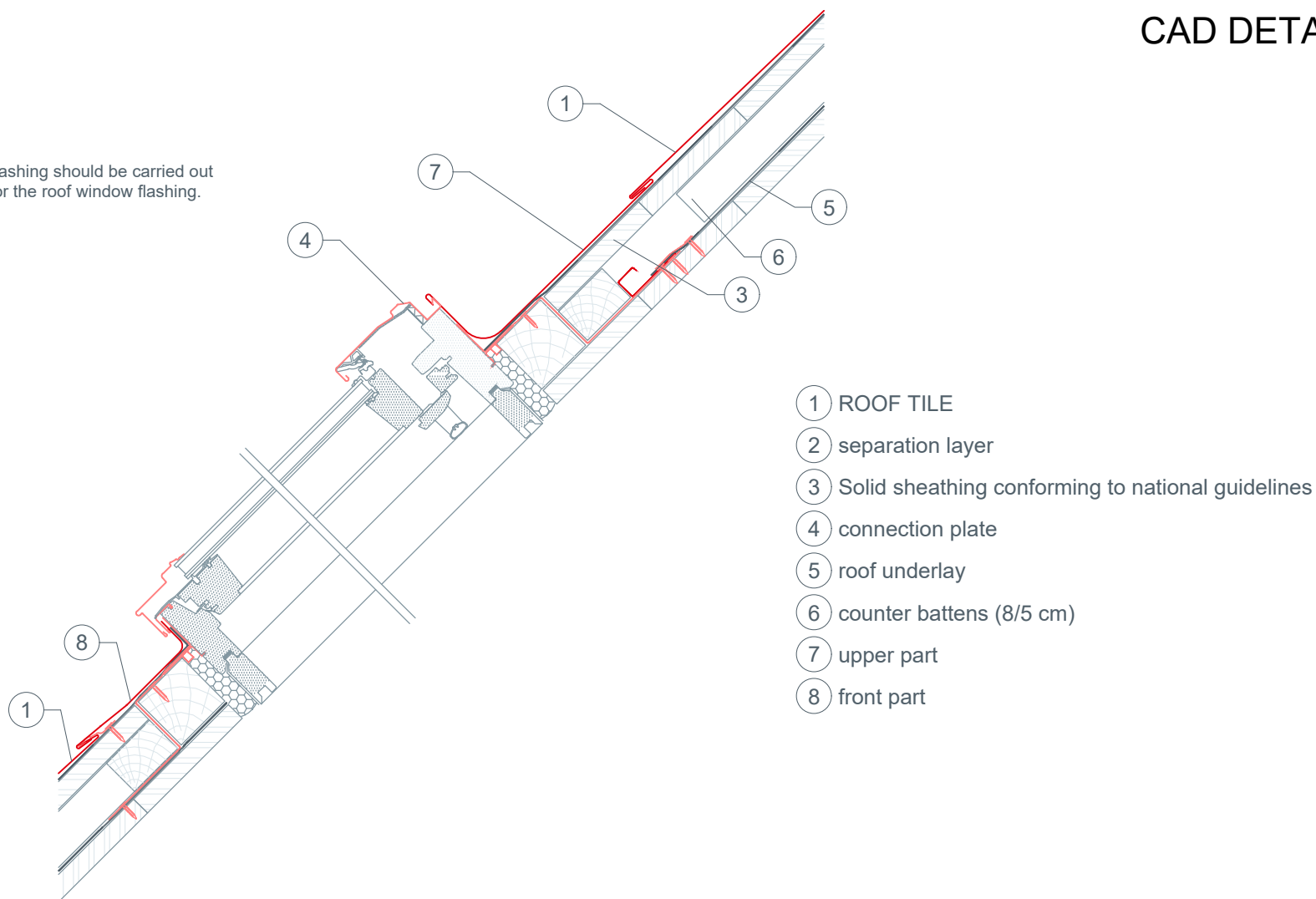


STARK WIE EIN STIER

Roof window flashing on a roof pitch over 25°

ROOF TILE CAD DETAILS

Professional installation of the roof window flashing should be carried out according to the manufacturer's guidelines for the roof window flashing.





STARK WIE EIN STIER

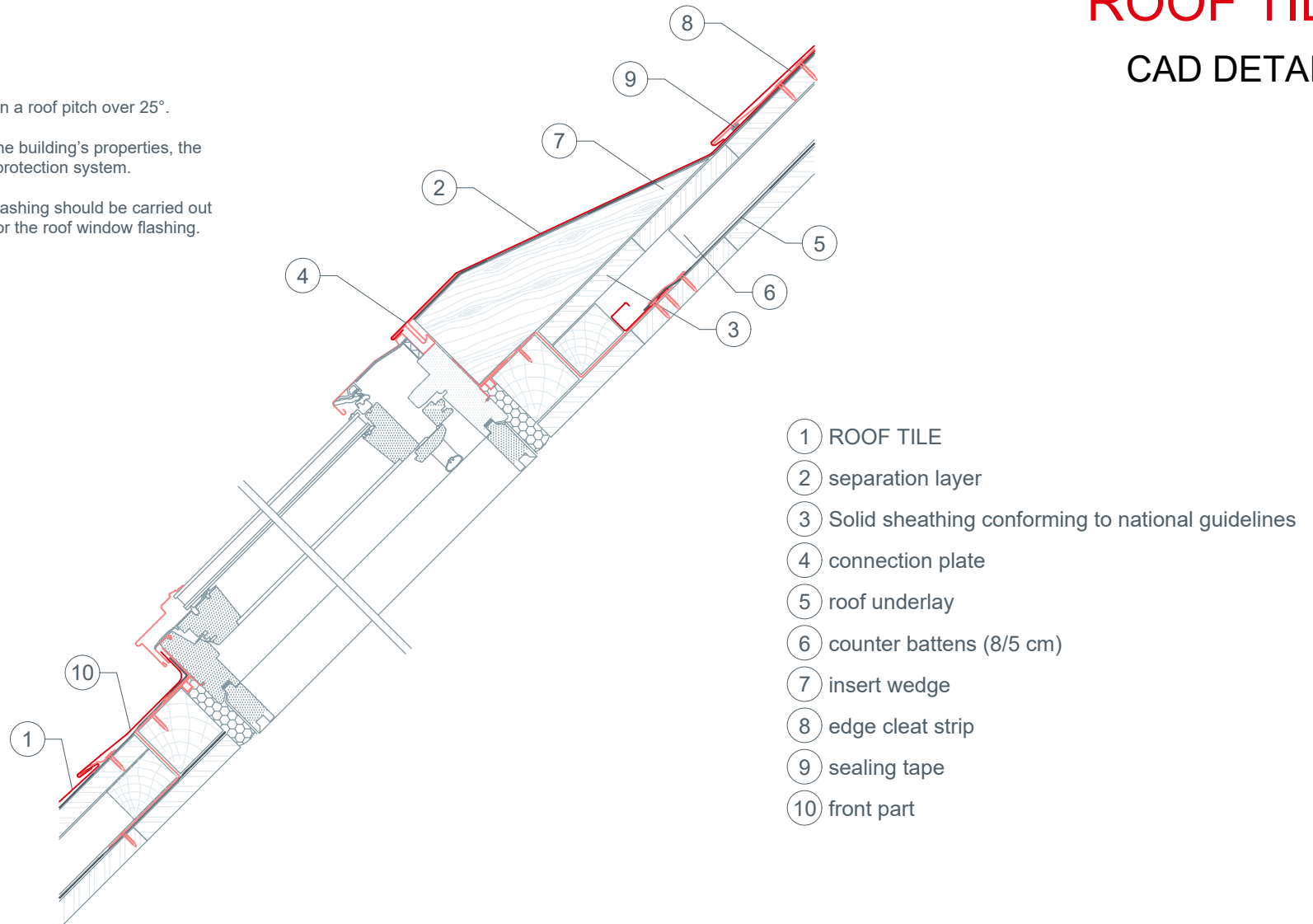
Roof window flashing with an insert wedge on a roof pitch over 25°. Installation in snowy areas.

The need for the insert wedge depends on the building's properties, the location and whether or not there is a snow protection system.

Professional installation of the roof window flashing should be carried out according to the manufacturer's guidelines for the roof window flashing.

Roof window flashing with an insert wedge on a roof pitch over 25°

ROOF TILE CAD DETAILS

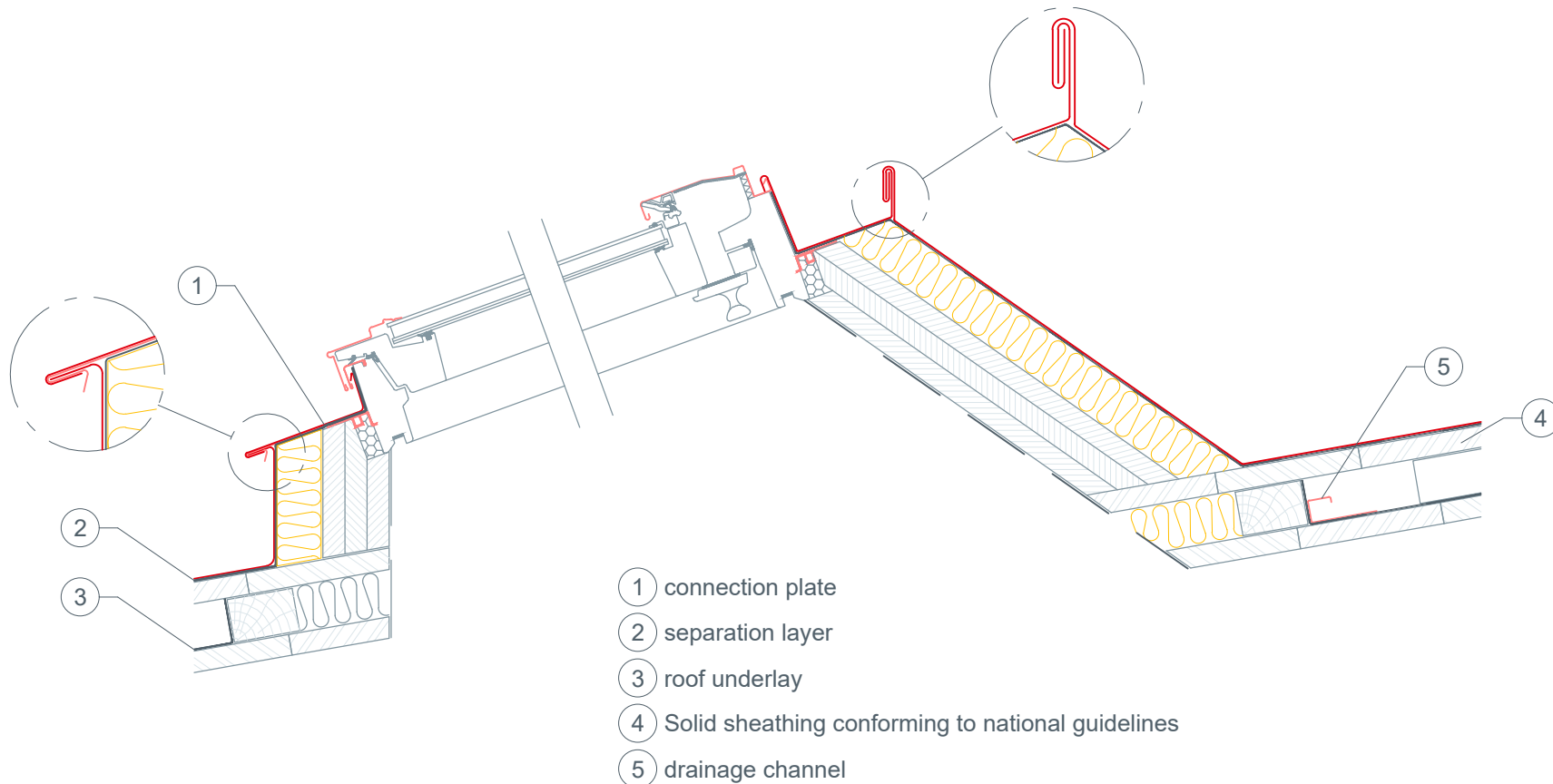




STARK WIE EIN STIER

ROOF WINDOW FLASHING WITH WEDGE FRAME ROOF TILE

CAD DETAILS



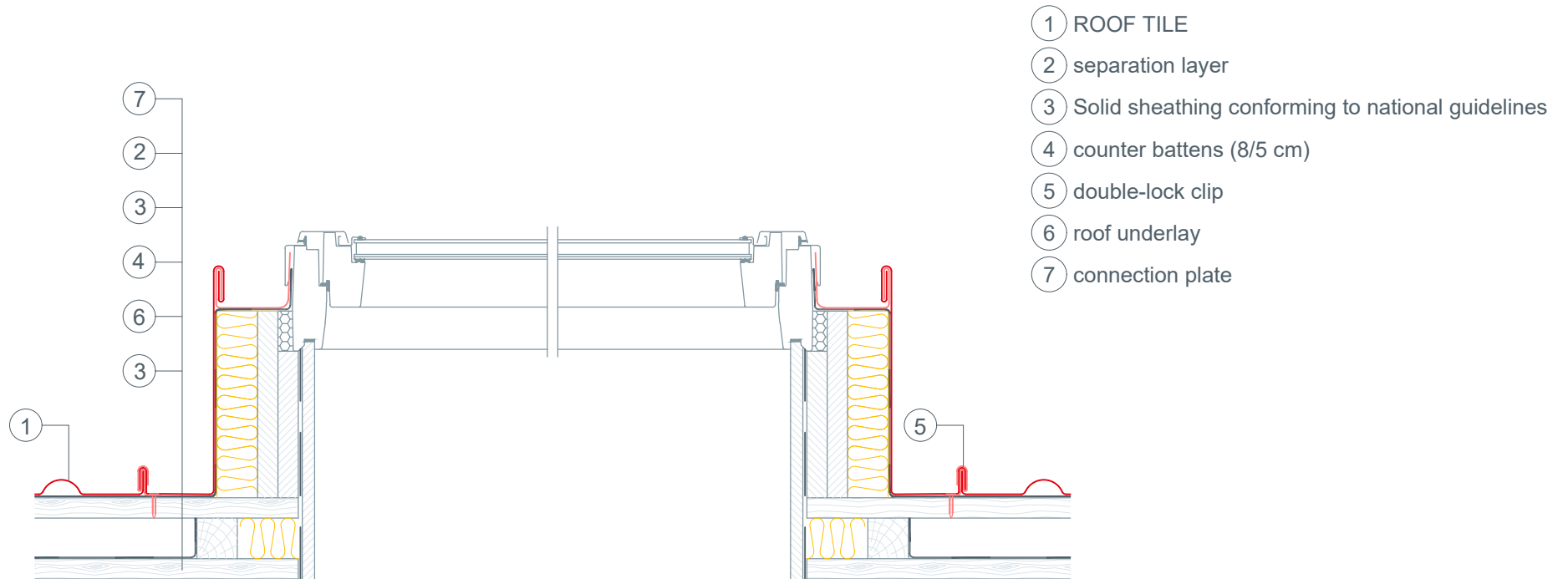
* Professional installation should be carried out, and the need for the roof window flashing wedge frame assessed, according to the manufacturer's guidelines for the roof window.



STARK WIE EIN STIER

ROOF WINDOW FLASHING WITH WEDGE FRAME ROOF TILE

CAD DETAILS

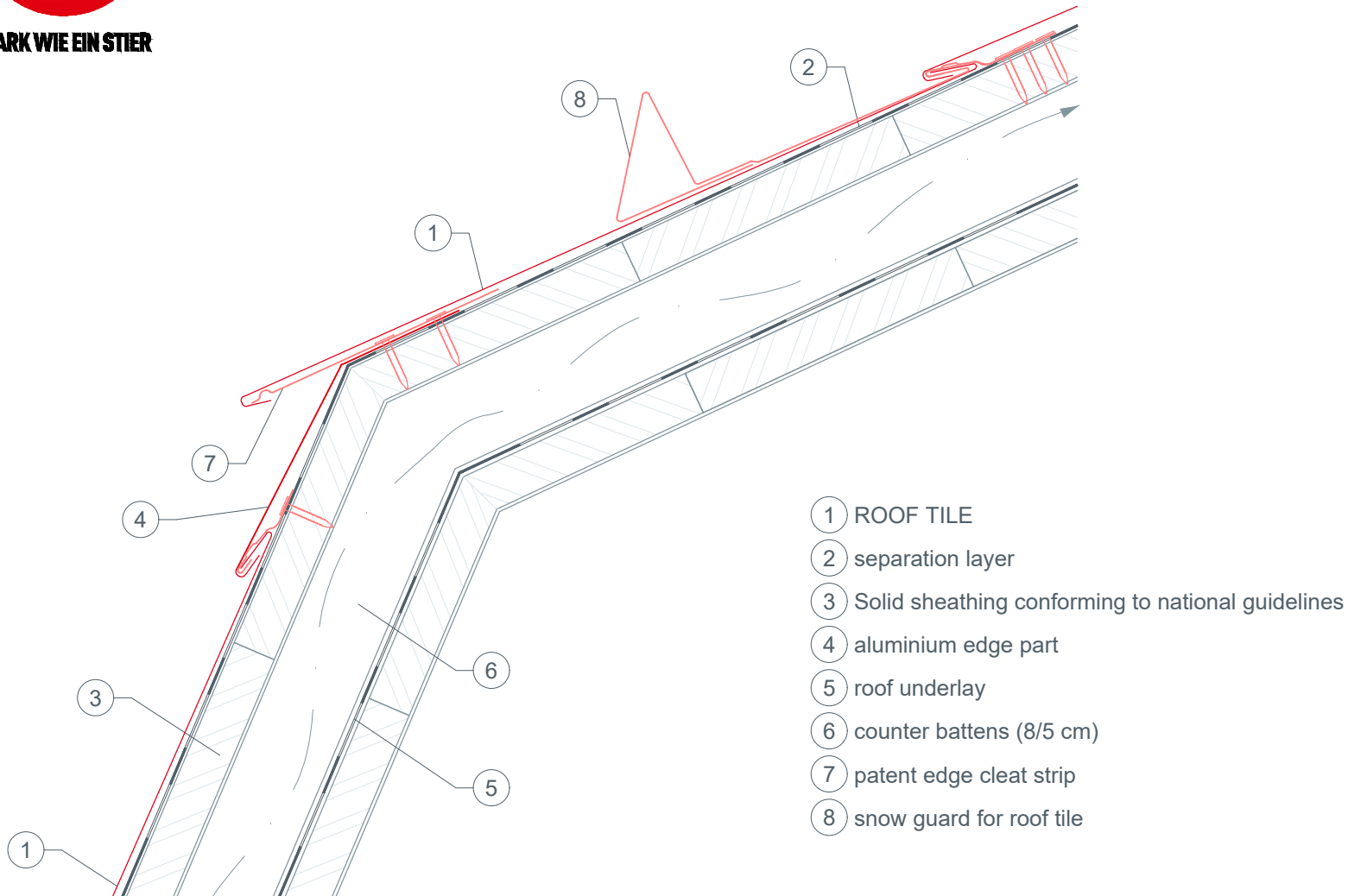


* Professional installation should be carried out, and the need for the roof window flashing wedge frame assessed, according to the manufacturer's guidelines for the roof window.



STARK WIE EIN STIER

mansard crease ROOF TILE CAD DETAILS

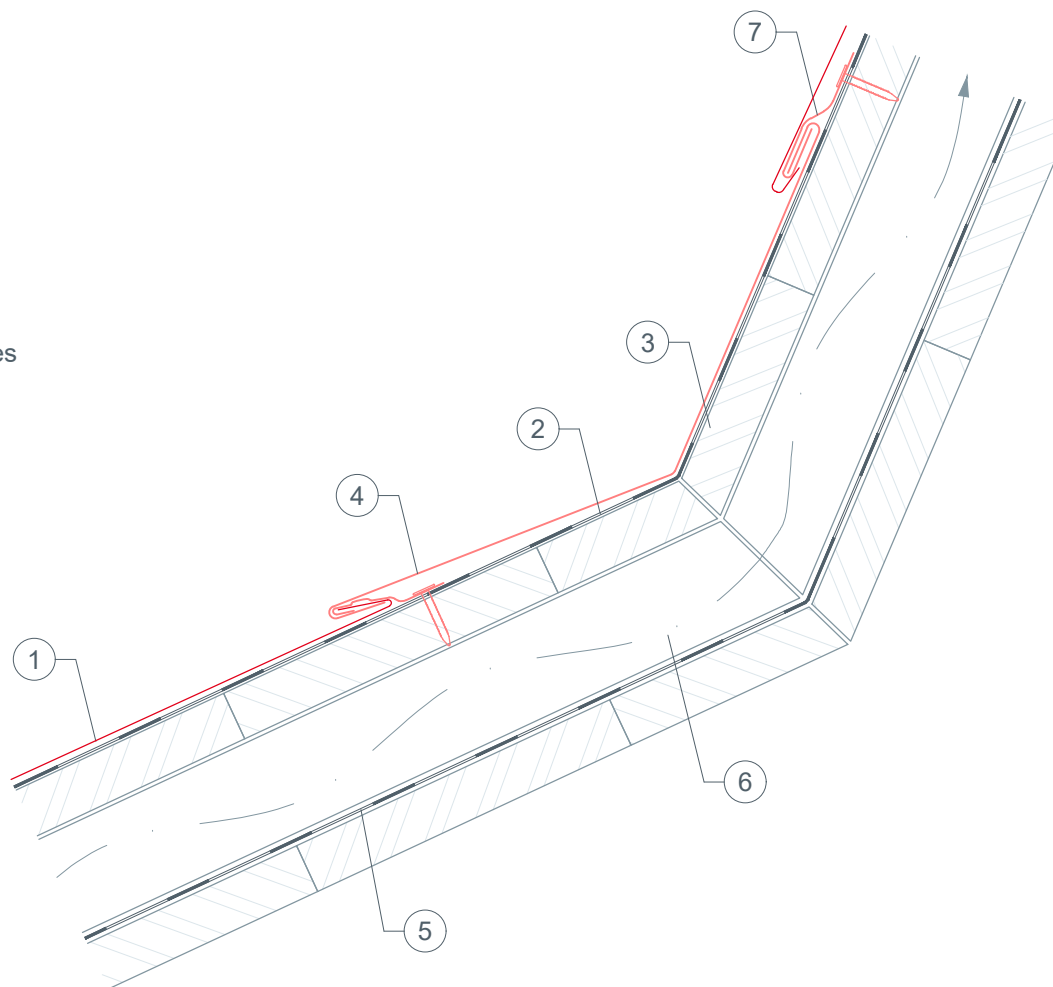




STARK WIE EIN STIER

construction of pitch transition ROOF TILE CAD DETAILS

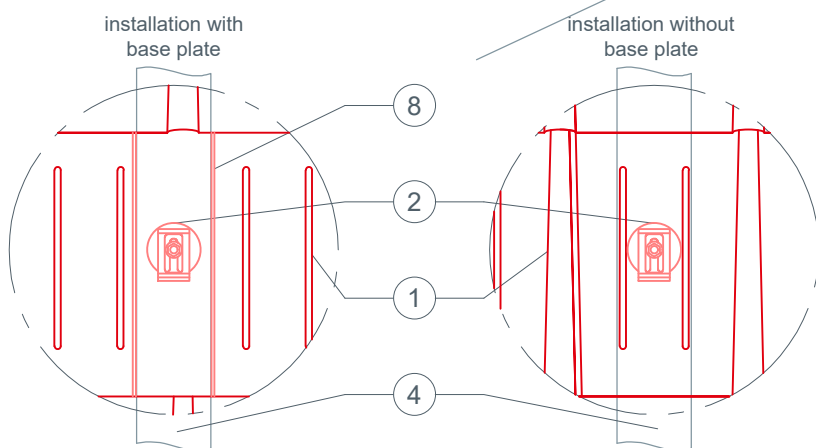
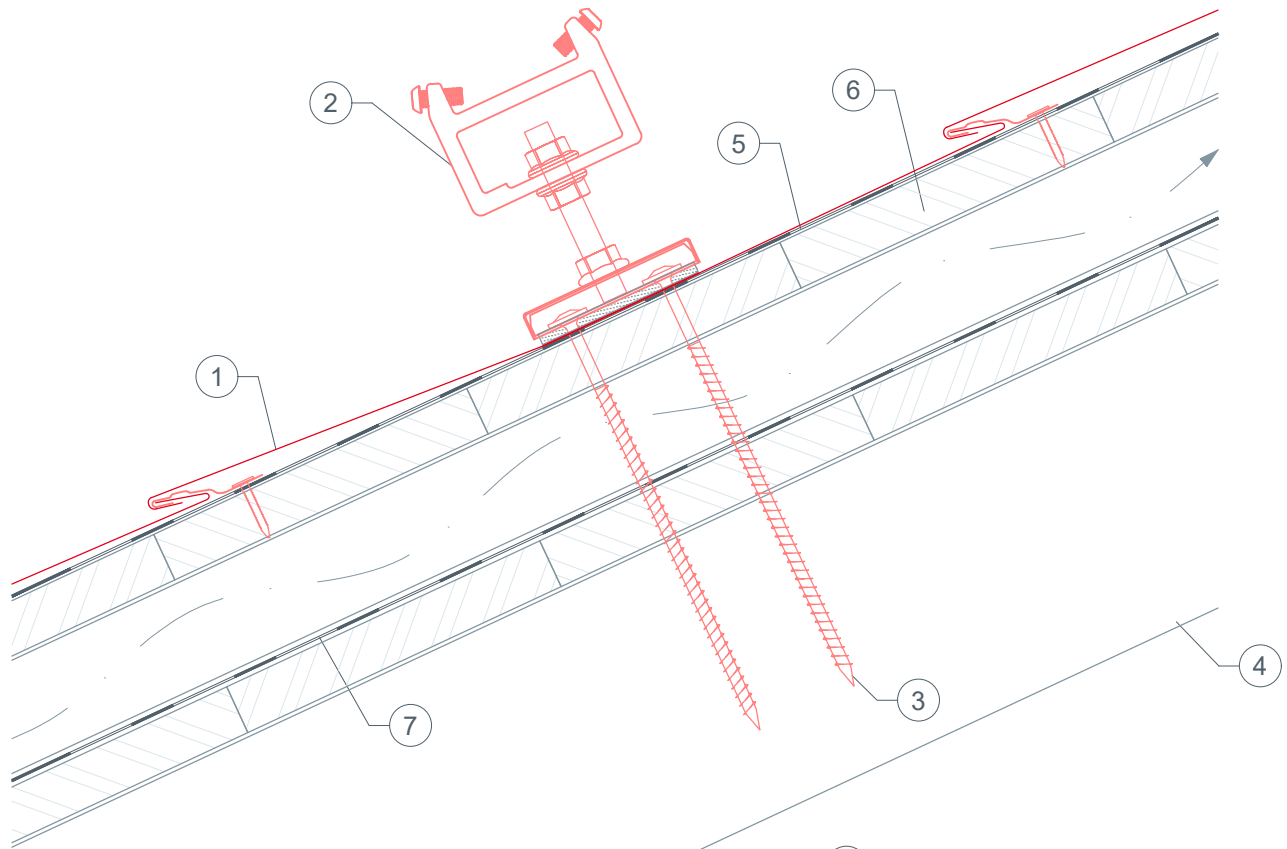
- ① ROOF TILE
- ② separation layer
- ③ Solid sheathing conforming to national guidelines
- ④ transition flashing
- ⑤ roof underlay
- ⑥ counter battens (8/5 cm)
- ⑦ clips





STARK WIE EIN STIER

Vario (or Fix) solar bracket ROOF TILE CAD DETAILS



- ① ROOF TILE
- ② Vario (or Fix) solar bracket
- ③ fasteners (timber construction screws)
- ④ rafter
- ⑤ separation layer
- ⑥ Solid sheathing conforming to national guidelines
- ⑦ roof underlay
- ⑧ base plate

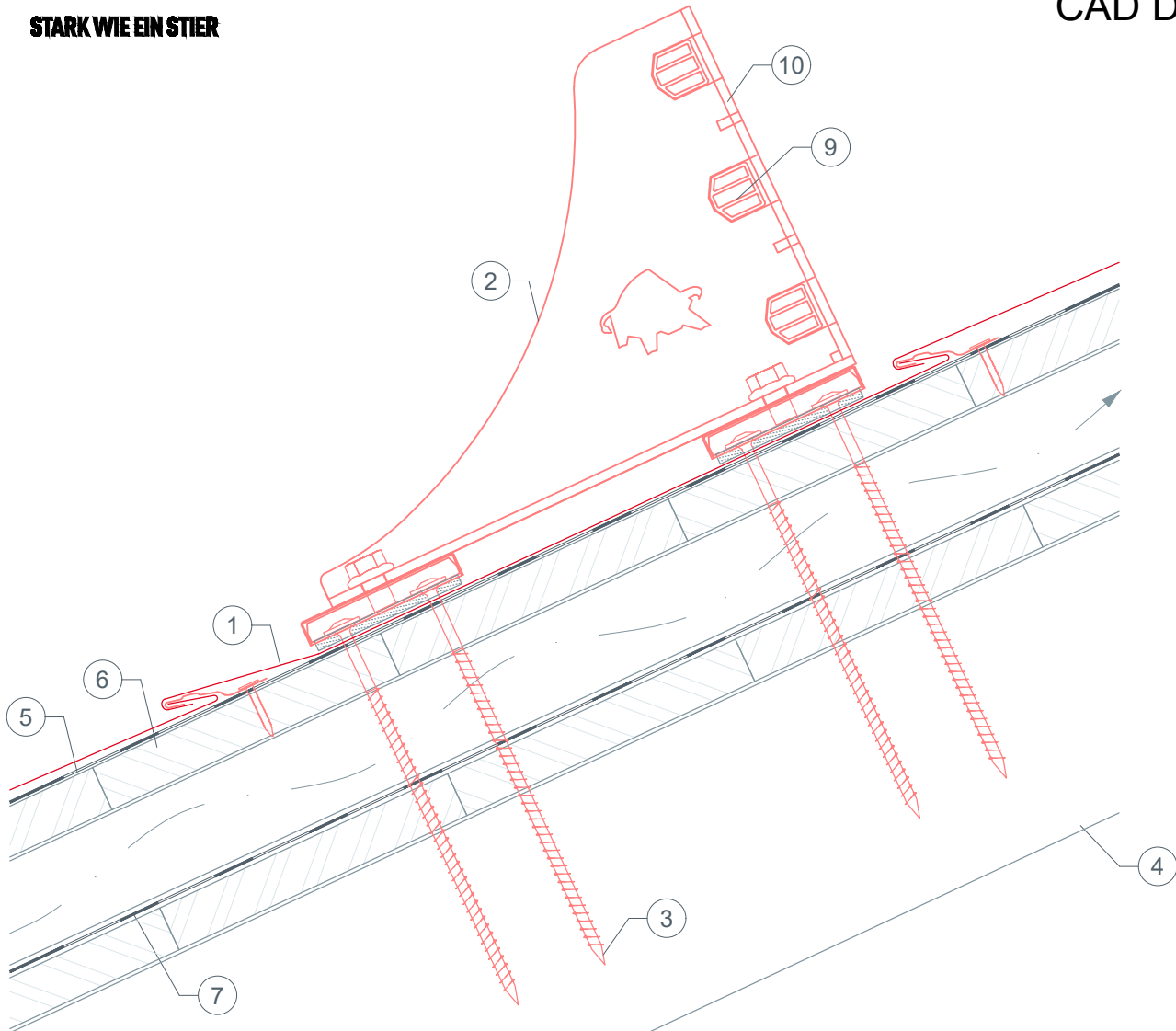
With small-format shingles, it may be necessary to install a base plate in order to mount the Vario or Fix solar bracket (e.g. if a seam is lying above a rafter in the installation area).

Double-skin roof structure: 2 fixing screws 8 × 220 mm.
Single-skin roof structure: 2 fixing screws 8 × 120 mm.

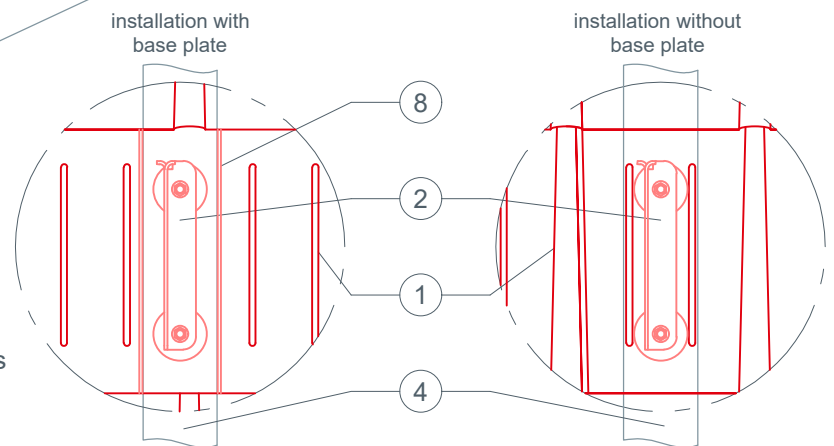


STARK WIE EIN STIER

pipe-style snow guard system ROOF TILE CAD DETAILS



- ① ROOF TILE
- ② pipe-style snow guard system
- ③ fasteners (timber construction screws)
- ④ rafter
- ⑤ separation layer
- ⑥ Solid sheathing conforming to national guidelines
- ⑦ roof underlay
- ⑧ base plate
- ⑨ removable pipe for pipe-style snow guard system
- ⑩ fixing slide



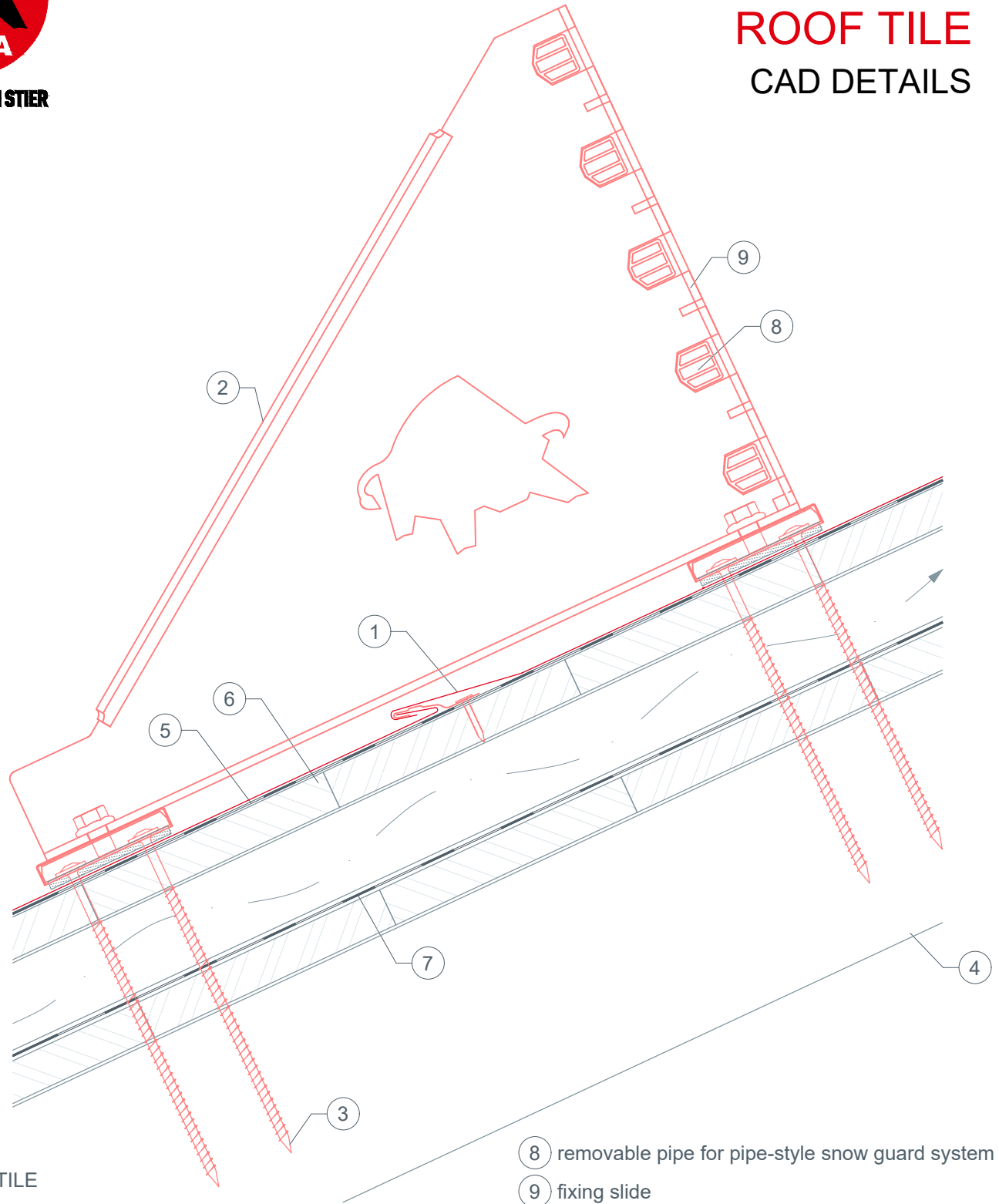
With small-format roof elements, it may be necessary to install a base plate in order to mount the pipe-style snow guard system (e.g. if a seam is lying above a rafter in the installation area).

Double-skin roof structure: 2 fixing screws 8 × 220 mm.
Single-skin roof structure: 2 fixing screws 8 × 120 mm.



STARK WIE EIN STIER

pipe-style snow guard system XL ROOF TILE CAD DETAILS



- ① ROOF TILE
- ② pipe-style snow guard system XL
- ③ fasteners (timber construction screws)
- ④ rafter
- ⑤ separation layer
- ⑥ Solid sheathing conforming to national guidelines
- ⑦ roof underlay

- ⑧ removable pipe for pipe-style snow guard system
- ⑨ fixing slide

With small-format roof elements, it may be necessary to install a base plate in order to mount the pipe-style snow guard system (e.g. if a seam is lying above a rafter in the installation area).

Double-skin roof structure: 2 fixing screws 8 × 220 mm.
Single-skin roof structure: 2 fixing screws 8 × 120 mm.

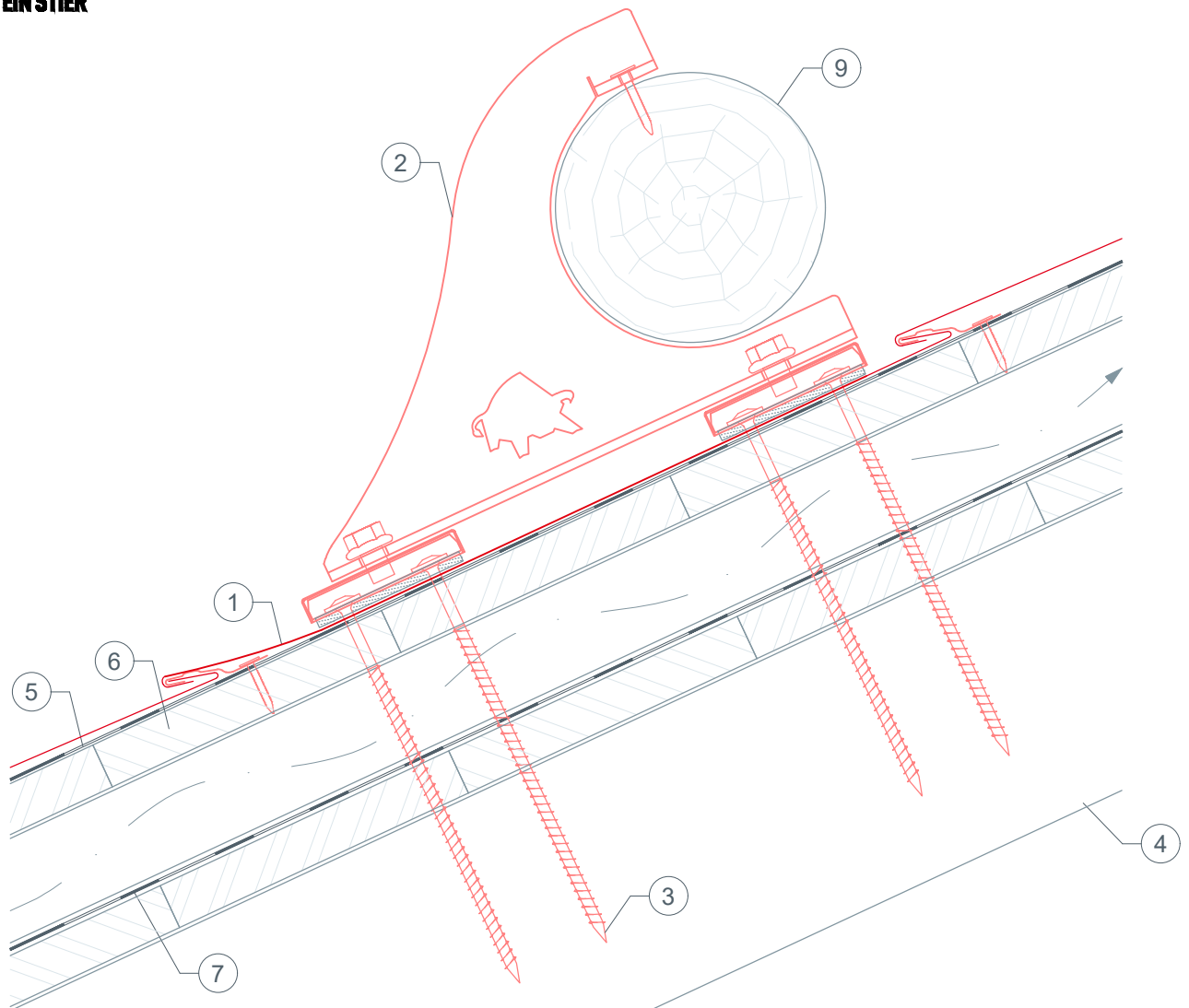


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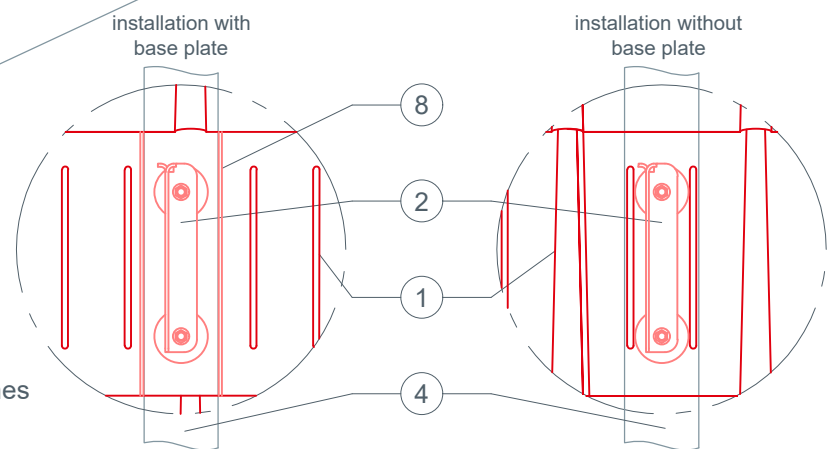
mountain snow-guard bracket

ROOF TILE

CAD DETAILS



- ① ROOF TILE
- ② mountain snow-guard bracket
- ③ fasteners (timber construction screws)
- ④ rafter
- ⑤ separation layer
- ⑥ Solid sheathing conforming to national guidelines
- ⑦ roof underlay
- ⑧ base plate
- ⑨ log (diameter 140 mm)



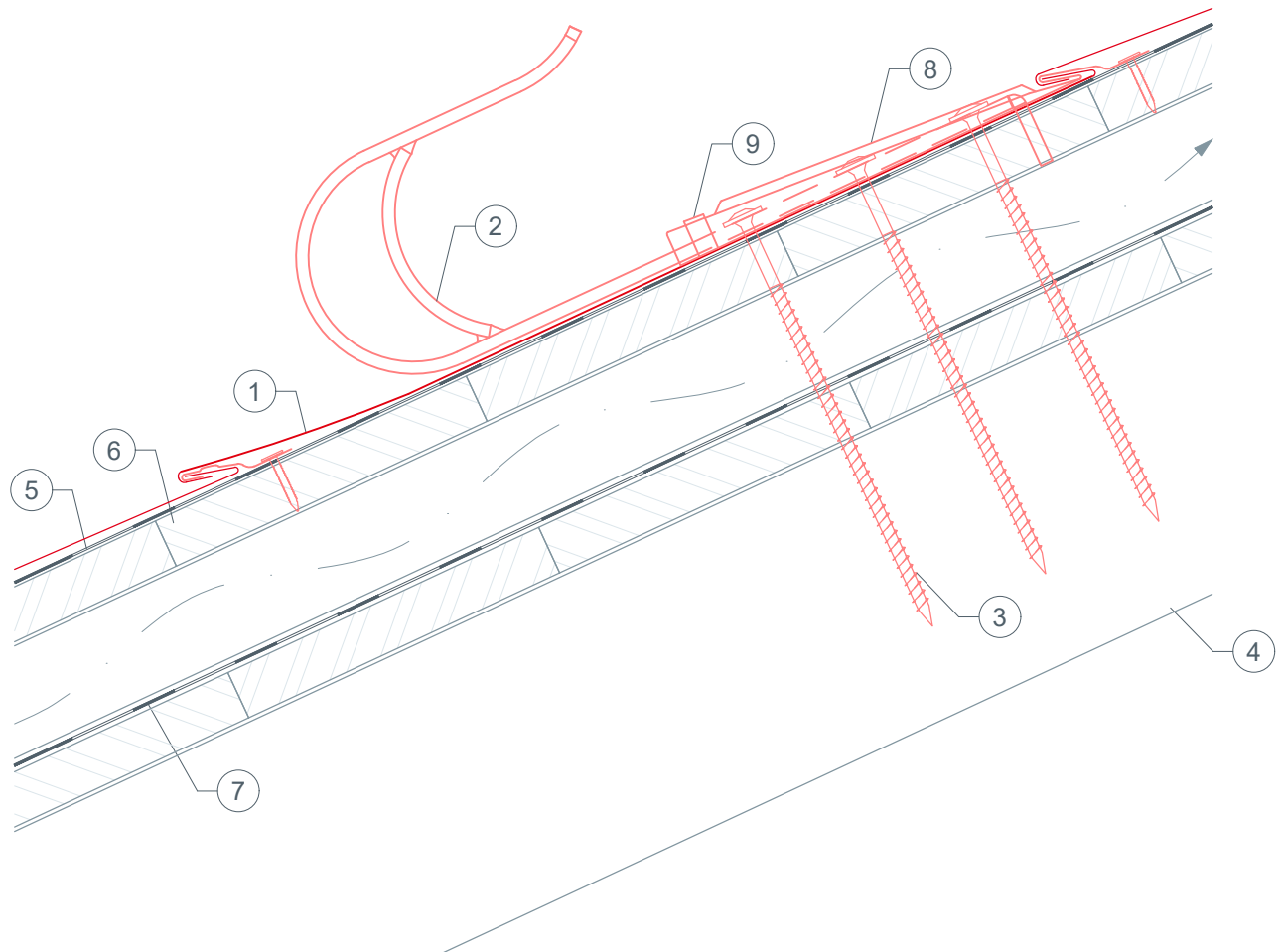
With small-format roof elements, it may be necessary to install a base plate in order to mount the mountain snow guard bracket (e.g. if a seam is lying above a rafter in the installation area).

Double-skin roof structure: 2 fixing screws 8 × 220 mm.
Single-skin roof structure: 2 fixing screws 8 × 120 mm.



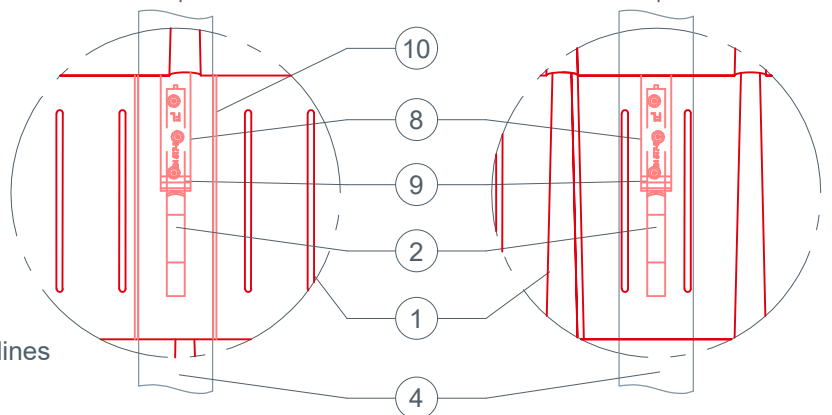
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roof anchor hook ROOF TILE CAD DETAILS



installation with
base plate

installation without
base plate



- ① ROOF TILE
- ② roof anchor hook
- ③ fasteners (timber construction screws)
- ④ rafter
- ⑤ separation layer
- ⑥ Solid sheathing conforming to national guidelines
- ⑦ roof underlay
- ⑧ protective cap
- ⑨ fixing strip
- ⑩ base plate

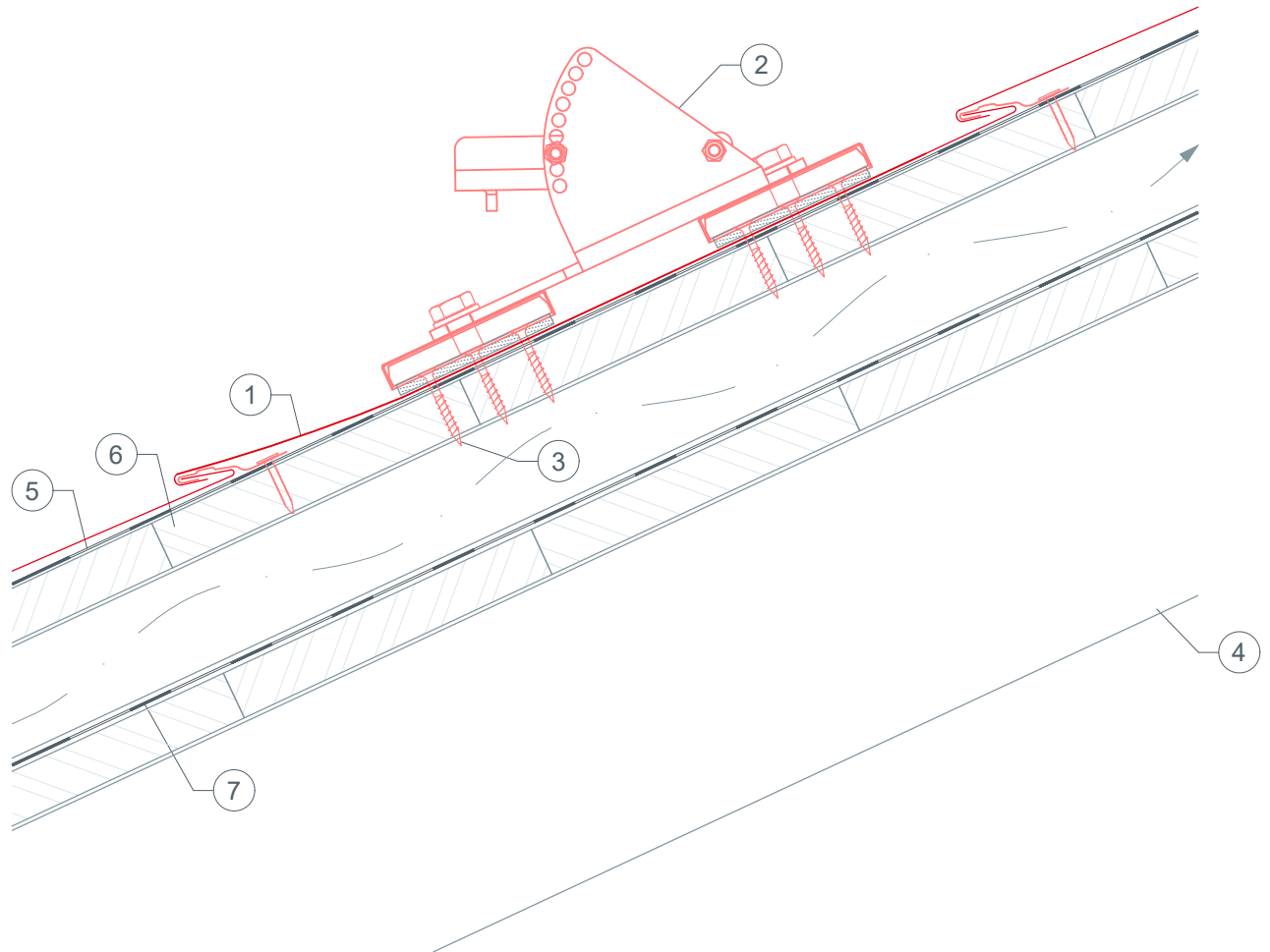
With small-format shingles, it may be necessary to install a base plate in order to mount the roof anchor hook (e.g. if a seam is lying above a rafter in the installation area).

Double-skin roof structure: 2 fixing screws 8 × 220 mm.
Single-skin roof structure: 2 fixing screws 8 × 120 mm.



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safety tread ROOF TILE CAD DETAILS

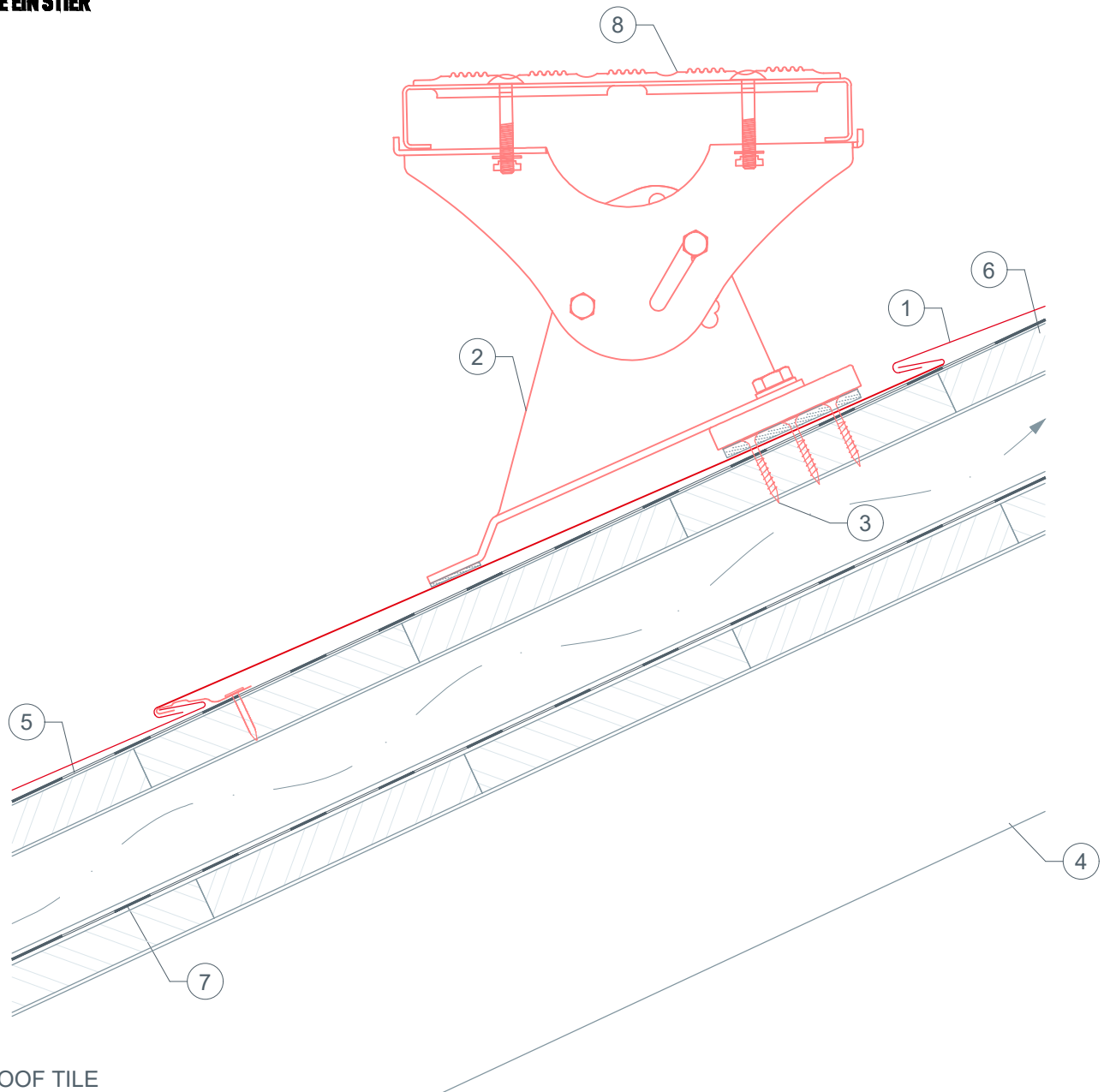


- ① ROOF TILE
- ② safety tread
- ③ fixing material
- ④ rafter
- ⑤ separation layer
- ⑥ Solid sheathing conforming to national guidelines
- ⑦ roof underlay



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walkway support ROOF TILE CAD DETAILS

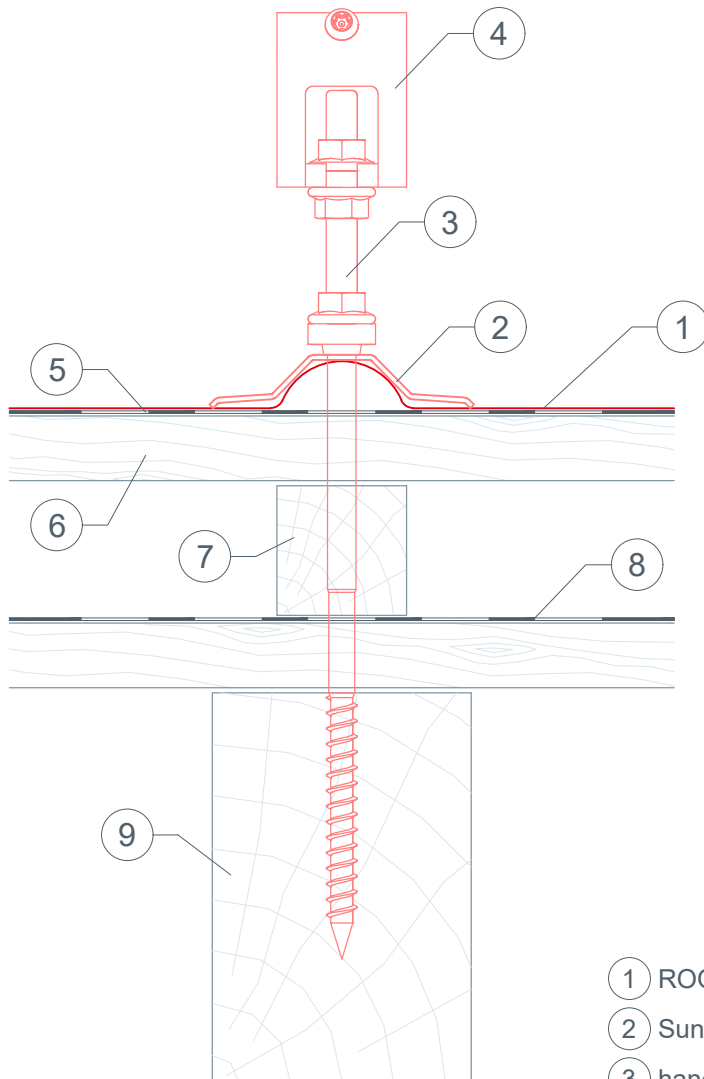


- ① ROOF TILE
- ② walkway support on one mount
- ③ fixing material
- ④ rafter
- ⑤ separation layer
- ⑥ Solid sheathing conforming to national guidelines
- ⑦ roof underlay
- ⑧ walkway grating



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SUNNY SPEZIAL ROOF TILE CAD DETAILS



- ① ROOF TILE
- ② Sunny Spezial
- ③ hanger bolt
- ④ cross connector
- ⑤ separation layer
- ⑥ Solid sheathing conforming to national guidelines
- ⑦ counter battens
- ⑧ roof underlay
- ⑨ rafter