



THE ROOF
AS STRONG AS A BULL!

PLANNING GUIDE

FOR PREFA ROOF SYSTEMS



70
YEARS
QUALITY
since 1946

NOTE

The planning guide shows examples of the different PREFA products and PREFA Aluminiumprodukte GmbH accessories in various scenarios.

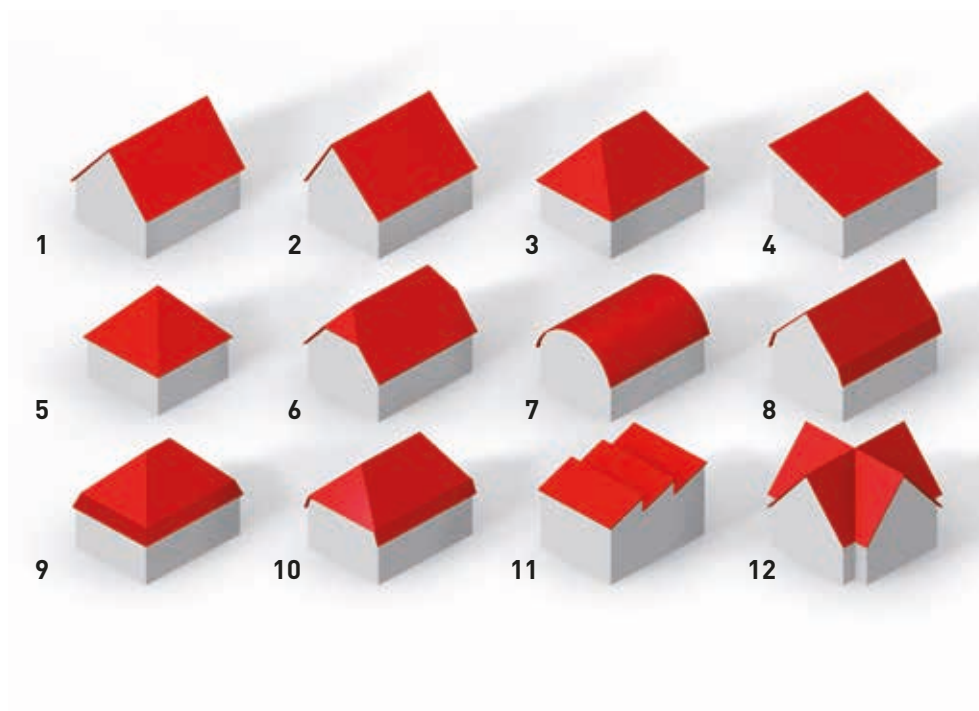
The planning guide is by no means an exhaustive list of all the details or implementation options, and is not meant to be understood as planning or installation guidelines. Visit www.prefa.com where you can find a comprehensive description of the details next to each respective product.

National standards and guidelines may stipulate other designs and must be taken into account.



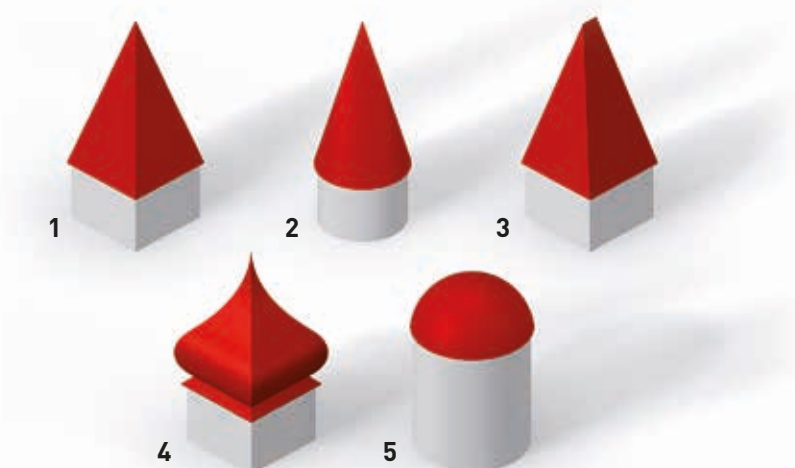
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ROOF SHAPES

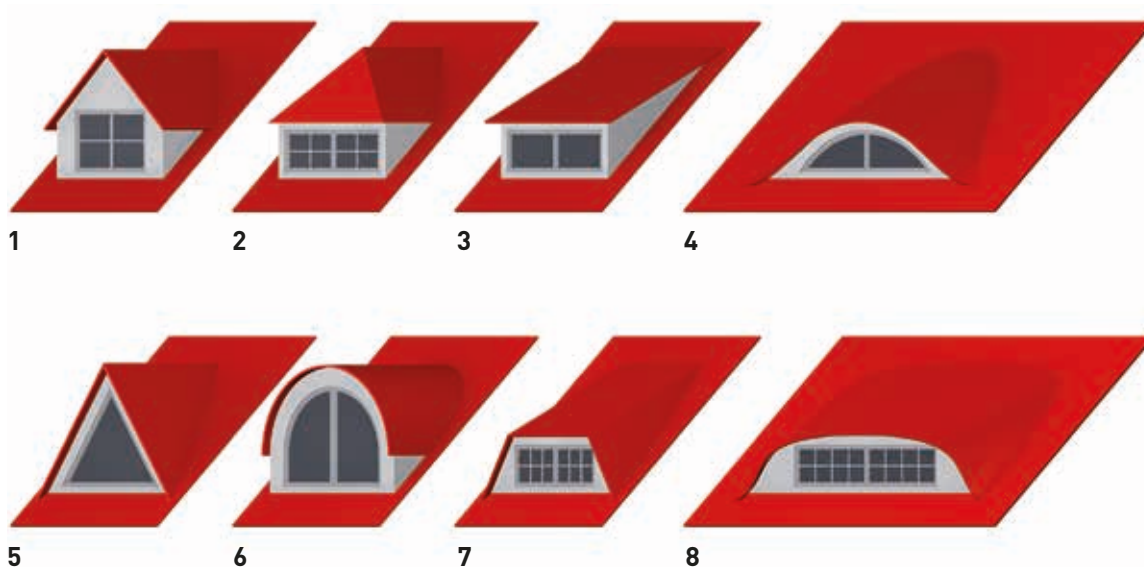


- 1 gable roof
- 2 saltbox roof
- 3 hip roof
- 4 mono-pitched roof
- 5 square hip roof
- 6 clipped-gable roof
- 7 barrel roof
- 8 mansard roof
- 9 mansard hipped roof
- 10 mansard roof with a hipped main roof surface
- 11 saw tooth roof
- 12 cross gabled roof

- 1 pyramidal roof
- 2 conical roof
- 3 hipped tower roof
- 4 onion dome
- 5 dome

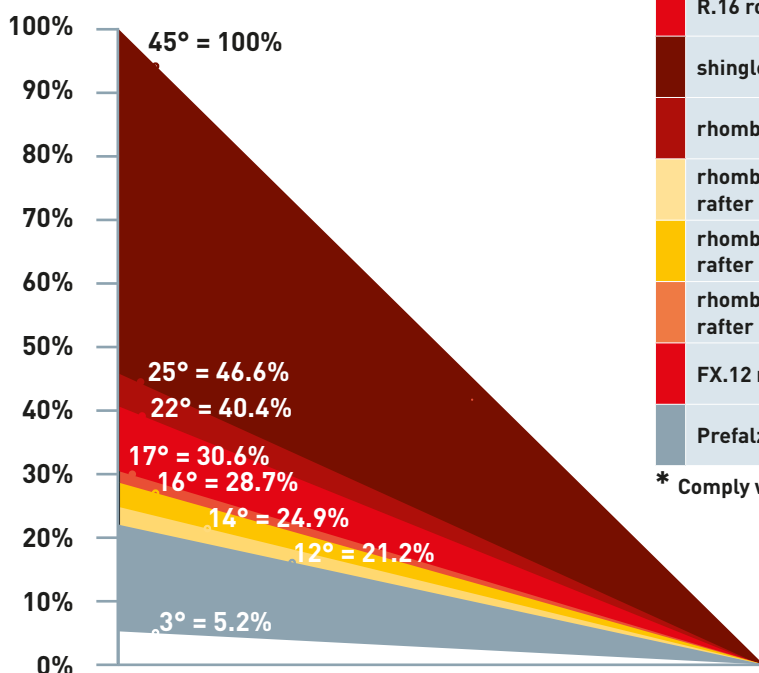


DORMER TYPES



- 1 gable fronted dormer
- 2 hip roof dormer
- 3 shed dormer
- 4 eyebrow dormer
- 5 triangular dormer
- 6 barrel roof dormer
- 7 trapezoidal dormer
- 8 eyebrow dormer with steep cheeks

ROOF PITCH



Minimum roof pitch:	from 3°	from 12°	14°	16°	17°	22°	25°
roof tile rafter length < 7 m		•					
roof tile rafter length 7–12 m			•				
roof tile rafter length > 12 m				•			
R.16 roof tile					•		
shingle							•
rhomboid roof tile 29 × 29						•	
rhomboid roof tile 44 × 44 rafter length < 7 m		•					
rhomboid roof tile 44 × 44 rafter length 7–12 m			•				
rhomboid roof tile 44 × 44 rafter length > 12 m				•			
FX.12 roof panel					•		
Prefalz	• *						

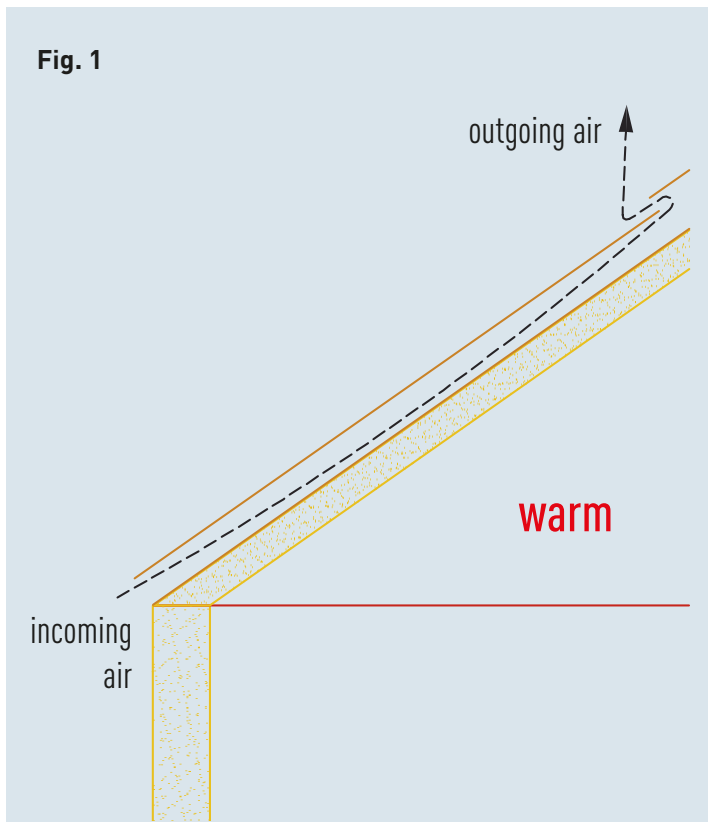
* Comply with restrictions according to ÖNORM 3521-1.

ROOF STRUCTURE

WE RECOMMEND THAT YOU CONSTRUCT PREFALUMINIUM ROOFS WITH A VENTILATED SUBSTRUCTURE

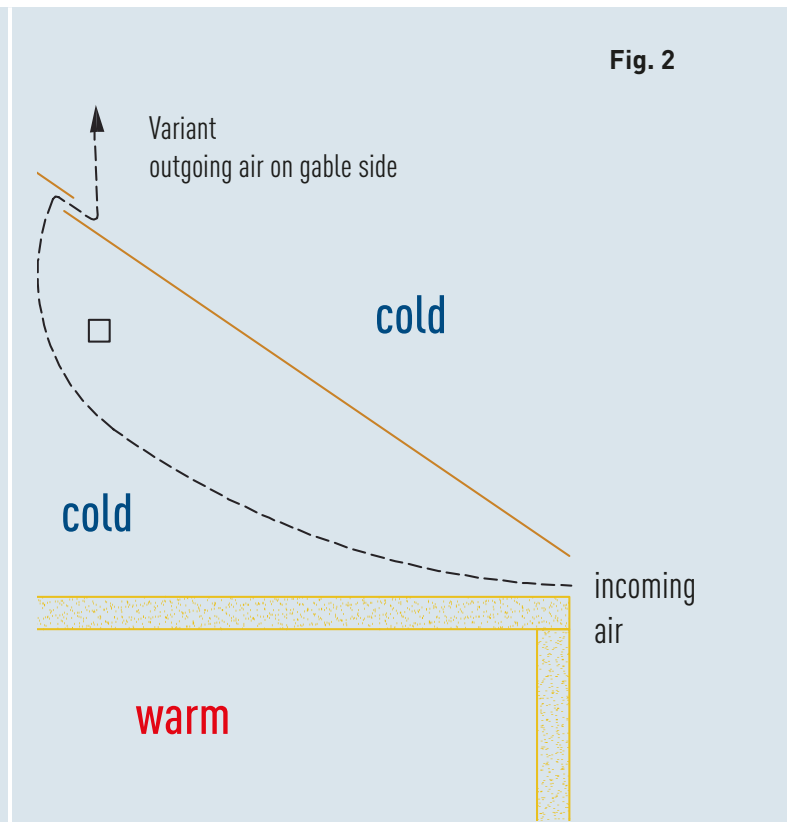
The roof covering and thermal insulation layers are separated by a ventilated gap. The advantage of this is that occasional moisture is wicked away. In principle, the roof covering is ventilated (see Figure 1).

However, the entire attic can be ventilated too (see Figure 2).



THE ATTIC CAN ALSO BE USED AS LIVING SPACE (FIG. 1)

Compared to a single-skin roof structure, a ventilated channel is added to the double-skin roof structure (counter battens). This makes it possible to also thermally insulate between the rafters (straightforward creation of an attic extension at a later stage).



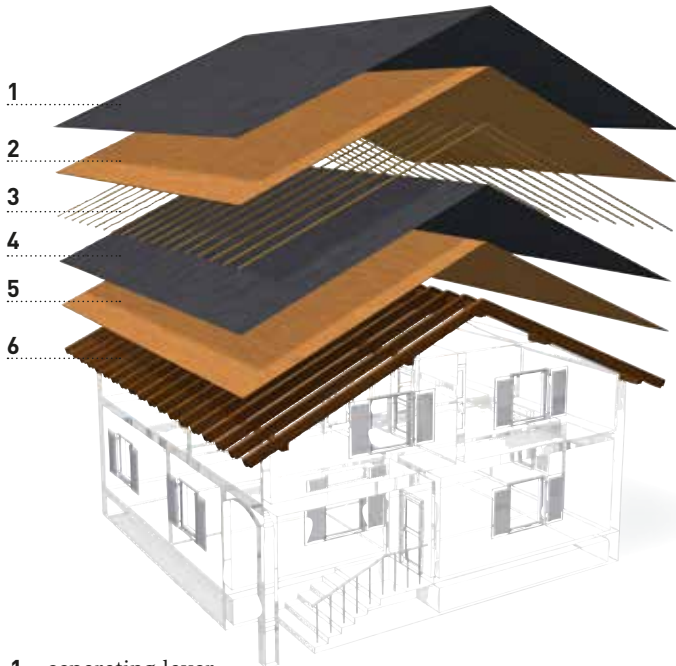
THE ATTIC IS NOT USED AS LIVING SPACE (FIG. 2)

With this type of roof structure, the attic ceiling must be thermally insulated (complicated creation of an attic extension at a later stage).

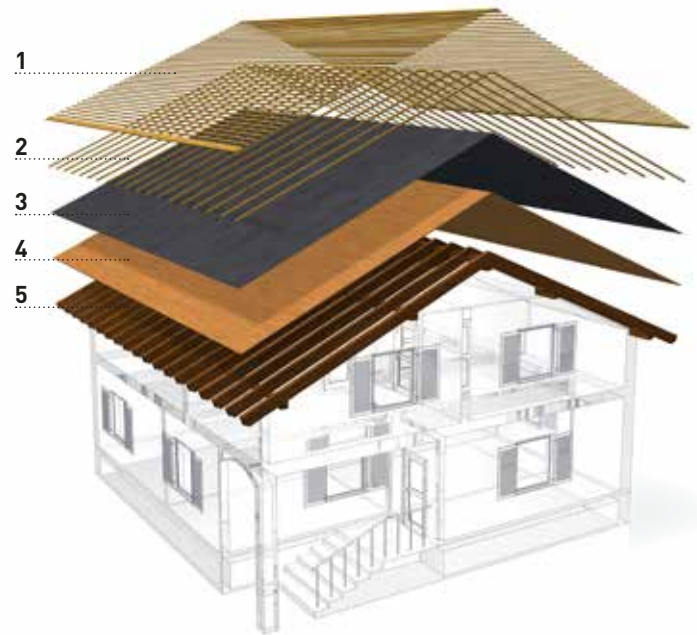
! THE ROOF STRUCTURE MUST COMPLY WITH BUILDING PHYSICS CRITERIA.
! NON-VENTILATED STRUCTURES SHOULD BE QUOTED FOR AND DESIGNED SEPARATELY.

ROOF STRUCTURE

THE ATTIC CAN ALSO BE USED AS LIVING SPACE

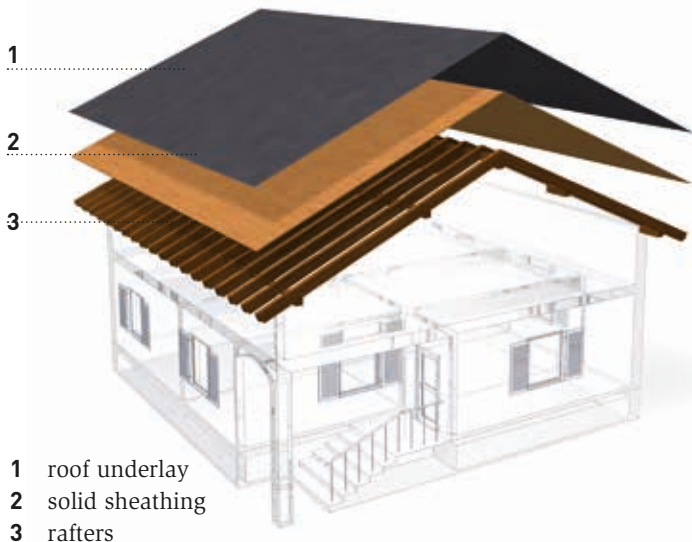


- 1 separating layer
- 2 solid sheathing
- 3 counter battens
- 4 roof underlay
- 5 solid sheathing
- 6 rafters



- 1 battening (only with PREFA roof tiles)
- 2 counter battens
- 3 roof underlay
- 4 solid sheathing
- 5 rafters

THE ATTIC IS NOT USED AS LIVING SPACE



- 1 roof underlay
- 2 solid sheathing
- 3 rafters

**! THE ROOF STRUCTURE MUST BE DESIGNED ACCORDING TO BUILDINGS PHYSICS CRITERIA (E.G. THERMAL INSULATION, AIRFLOW).
! ATTENTION MUST BE PAID TO THE MINIMUM ROOF PITCH REQUIRED FOR THE PRODUCT BEING USED.**

SEPARATING LAYER AND SUBSTRUCTURE

THE SUBSTRUCTURES MUST BE DESIGNED AND BUILT ACCORDING TO STATIC REQUIREMENTS.

SOLID SHEATHING

PREFA R.16 roof tiles, shingles, rhomboid roof tiles 29×29 and 44×44 , FX.12 roof panels and Prefalz must be installed on solid sheathing. PREFA roof tiles can be installed on solid sheathing.

The solid sheathing must comply with applicable standards.

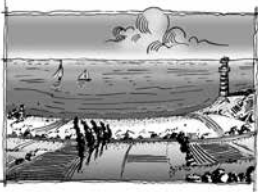
- Board width: 80–160 mm*
- Board thickness: min. 24 mm*
- Wood moisture: max. 20%*

* National standards and guidelines must be taken into account.

ROOF BATTENS

PREFA roof tiles can be installed on roofing battens — battens (minimum dimension: 30×50 mm) together with intermediate laths. It is essential to ensure an accurate spacing of 419 mm between one batten and the next. The intermediate laths should not be omitted under any circumstances as they serve as additional support battens.

! WITH SNOW LOADS OF OVER 3.25 kN/m^2 (REFERENCE HEIGHT 925 m) OR IN TERRAIN CATEGORIES 0, I OR II, ALL SMALL-FORMAT PREFA PRODUCTS MUST BE INSTALLED ON SOLID SHEATHING WITH A BITUMEN LAYER.



Terrain category 0 – lakes and coastal areas exposed to the open sea.



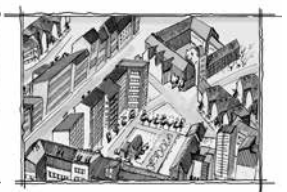
Terrain category I – lakes and areas with low vegetation and without obstacles.



Terrain category II – areas with low vegetation such as grass and various obstacles (trees, buildings) with intervals of at least 20 times the obstacle height.



Terrain category III – regions with uniform vegetation and housing or individual buildings set at distances of less than 20 times the obstacle height (e.g. villages, suburban development, forest areas).



Terrain category IV – regions in which at least 15% of the surface is built up with buildings that have an average height of 15 m.

DERIVED TIMBER PANELS

- When using derived timber panels as a laying surface for aluminium roof coverings, the selection of the thickness, the fastening to the wood material and the intended use as a metal roof substructure must be coordinated with the manufacturer or distributor of the derived timber panels.
- When using derived timber panels, a separating layer is required.
- Structural woodwork such as step work, internal gutters, recessed (lowered) valley or roof verge constructions should already be taken into account during the design stage.
- According to specialist guidelines for sheet metal work, OSB panels are not permitted for use as a base for any type of sheet facing with or without separating layers. OSB panels for use as a base are special structures and must be designed as such.

SEPARATING LAYERS

Separating layers perform the following functions:

- to protect the metal on the underside against harmful alkaline influences and the possible damaging influences of wood preservatives;
- to improve slippage in the event of thermal length modifications;
- to protect the timber formwork or wooden composite boards from damp during the building phase;
- to improve sound insulation;
- to reduce unevenness in the top layer of the roof structure.

! IN GENERAL, WE RECOMMEND USING A SUITABLE SEPARATING LAYER.

! WITH A ROOF PITCH OF UP TO 25° , A SEPARATING LAYER IS REQUIRED FOR PREFA R.16 ROOF TILES AND PREFA FX.12 ROOF PANELS. PREFA DOES NOT RECOMMEND THE USE OF STRUCTURED SEPARATING LAYERS (APART FROM FOR PARTICULAR BUILDING PHYSICS REQUIREMENTS) AND THESE ARE NOT NECESSARY DUE TO THE CORROSION RESISTANCE OF ALUMINIUM.

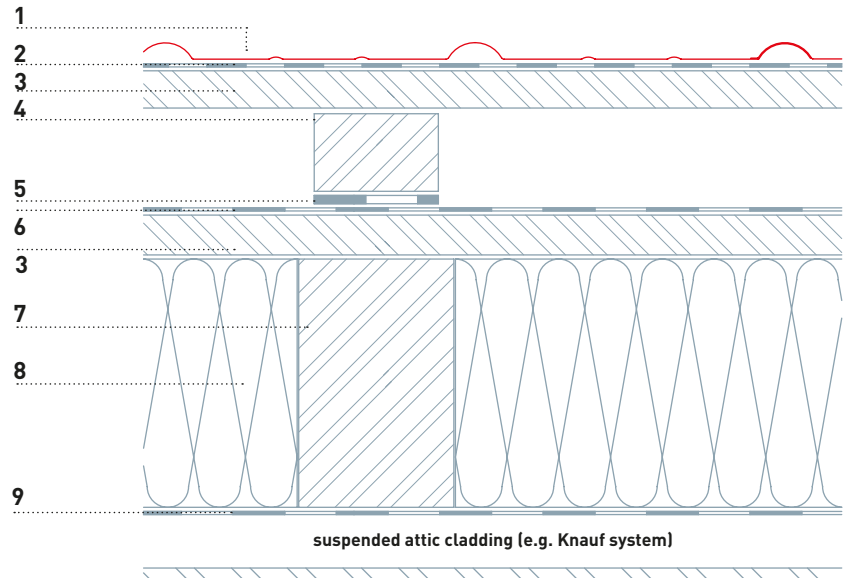
CONSTRUCTION EXAMPLES

FOR CONVERTED ATTICS

- 1 PREFA roof covering (small format)
- 2 bitumen layer
- 3 solid sheathing (at least 24 mm)
- 4 counter battens
- 5 nail sealing tape ($\leq 35^\circ$)
- 6 roof underlay (according to table)
- 7 rafters
- 8 insulation material
- 9 air-tight layer (vapour barrier)

ROOF UNDERLAY TO BE USED ACCORDING TO UNDERLAYMENT REQUIREMENTS

	< 3.25 kN	≥ 3.25 kN
e.g. BauderTop Difuplus	—	12–25°
e.g. BauderTop Difutex NSK	$\geq 12^\circ$	$\geq 25^\circ$

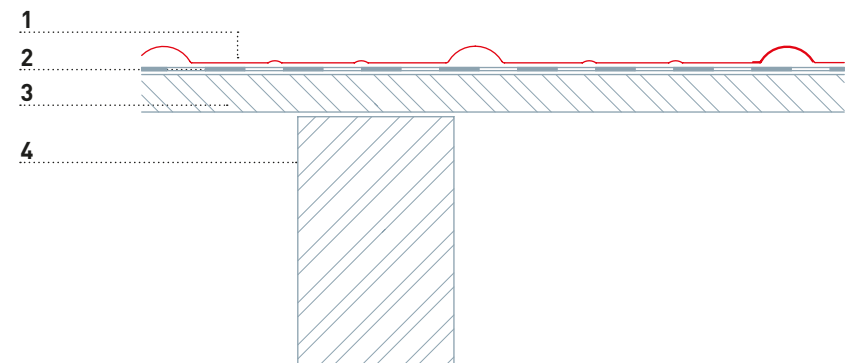


FOR NON-CONVERTED ATTICS

- 1 PREFA roof covering (small format)
- 2 roof underlay (acc. to table below; installed vertically to eaves)
- 3 solid sheathing (at least 24 mm)
- 4 rafters

ROOF UNDERLAY TO BE USED ACCORDING TO UNDERLAYMENT REQUIREMENTS

	< 3.25 kN	≥ 3.25 kN
e.g. BauderTop UDS 3 NK	—	12–25°
e.g. BauderTop UDS 1.5 NK	$\geq 12^\circ$	$\geq 25^\circ$



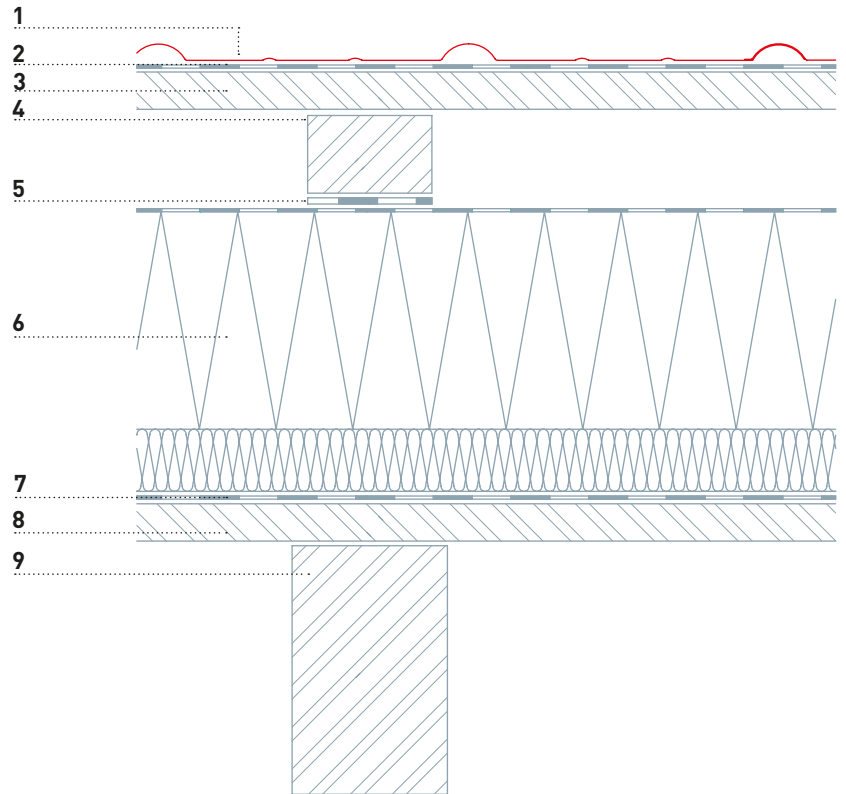
NOTE

In the construction examples, the separating layers and roof underlay shown are examples of our reference products. Equivalent products made by other manufacturers may also be used.

CONSTRUCTION EXAMPLES

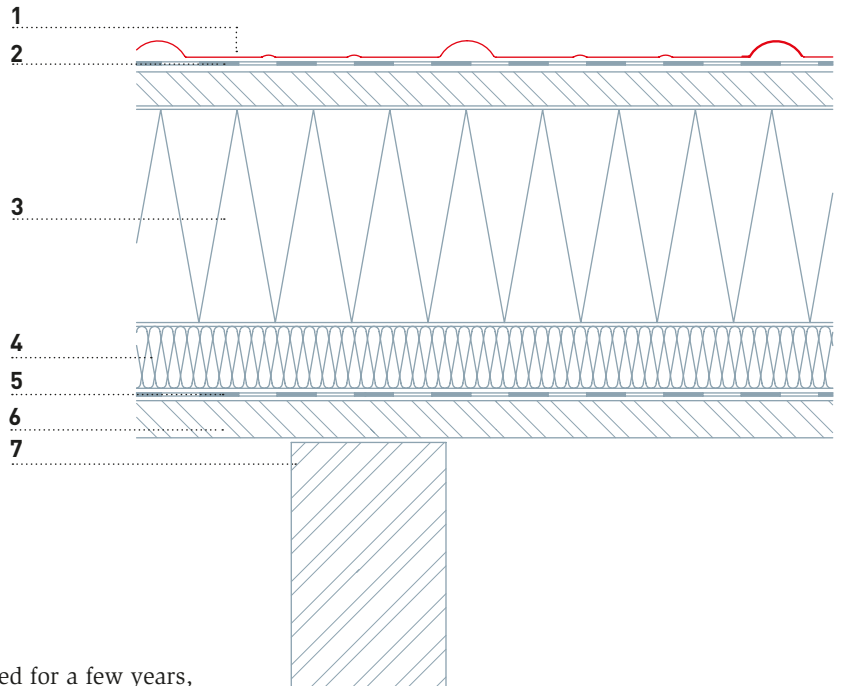
FOR CONVERTED ATTICS

- 1 PREFA roof covering (small format)
- 2 bitumen layer
- 3 solid sheathing (at least 24 mm)
- 4 counter battens
- 5 nail sealing tape ($\leq 35^\circ$)
- 6 thermal insulation panel (e.g. BauderPIR SWE › BauderPIR + 40/35 sound insulation board)
- 7 roof underlay (e.g. BauderTOP TS 40 NSK)
- 8 visible sheathing
- 9 rafters



FOR CONVERTED ATTICS

- 1 PREFA roof covering (small format)
- 2 roof underlay (according to table below)
- 3 thermal insulation panel (e.g. BauderPIR MDE + 22 mm derived timber panel on top)
- 4 sound insulating panel 40/35
- 5 roof underlay BauderTOP TS 40 NSK + vapour barrier, if applicable
- 6 solid sheathing (at least 24 mm)
- 7 rafters



ROOF UNDERLAY TO BE USED ACCORDING TO UNDERLAYMENT REQUIREMENTS

	< 3.25 kN	≥ 3.25 kN
e.g. BauderTop UDS 3 NK	—	12–25°
e.g. BauderTop UDS 1.5 NK	≥ 12°	≥ 25°

NON-VENTILATED ROOF STRUCTURE

Non-ventilated, warm roof structures have been used for a few years, including with metal roofs. In this case, the guidelines (particularly building physics requirements) for warm roofs should be observed. Non-ventilated structures should be quoted for and designed separately.

To apply the recommendations specified above, the product's roof pitch information must be observed.

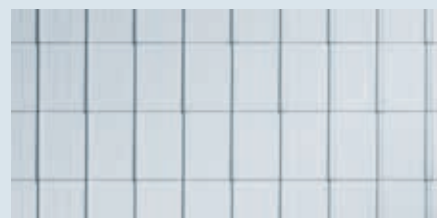


PRODUCT OVERVIEW

ROOF SYSTEMS

PREFA ROOF TILE

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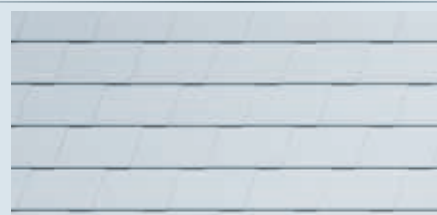
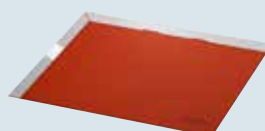
PREFA R.16 ROOF TILE

PAGE 14



PREFA SHINGLE

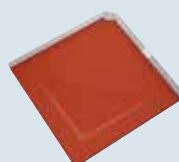
PAGE 17



PREFA RHOMBOID ROOF TILE

29 × 29

PAGE 20



PREFA RHOMBOID ROOF TILE

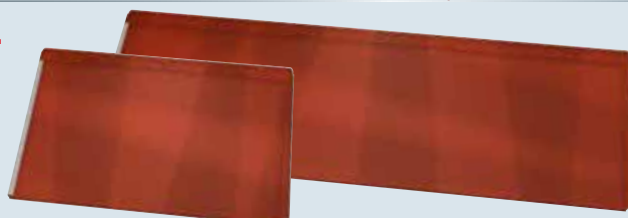
44 × 44

PAGE 23



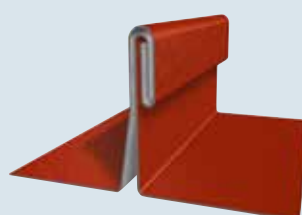
PREFA FX.12 ROOF PANEL

PAGE 26



PREFALZ

PAGE 29



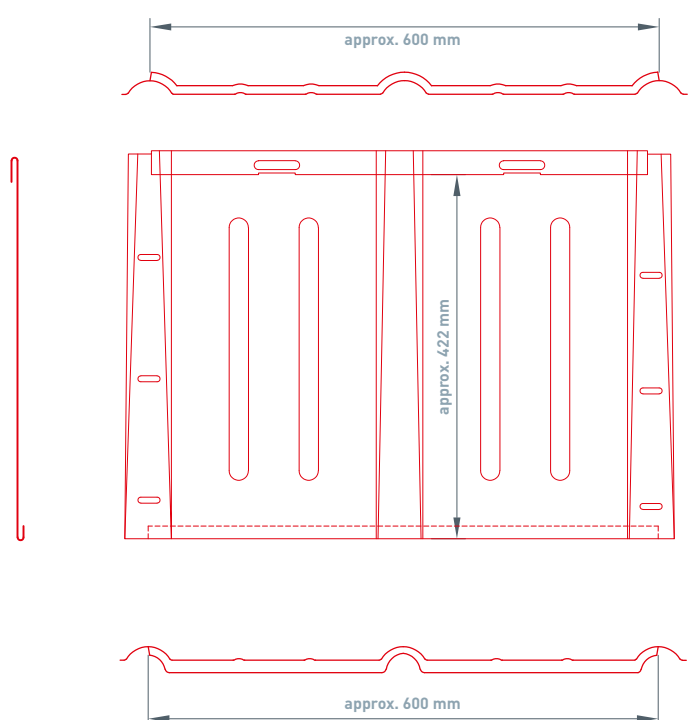
APPLICATION

PREFA ROOF TILE

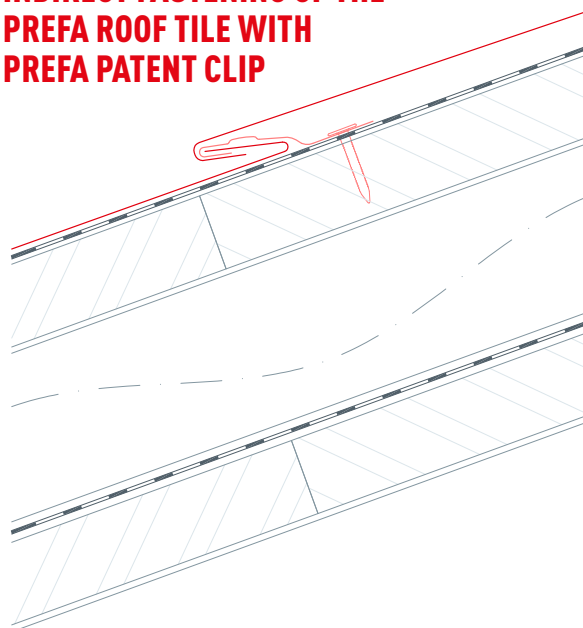
PREFA ROOF TILE

TECHNICAL DATA

MATERIAL	coated aluminium, 0.7 mm thick, two-layer stove-enamel finish
SIZE	600 × 420 mm (cover)
WEIGHT	1 m ² = approx. 2.3 kg = 4 roof tiles
ROOF PITCH	from 12° = approx. 21% (rafter length: up to 7 m) from 14° = approx. 25% (rafter length: 7–12 m) from 16° = approx. 29% (rafter length: over 12 m)
SUBSTRUCTURE AND SEPARATING LAYER	see page 7
FASTENING	2 PREFA patent clips per roof tile = 8 clips per m ²



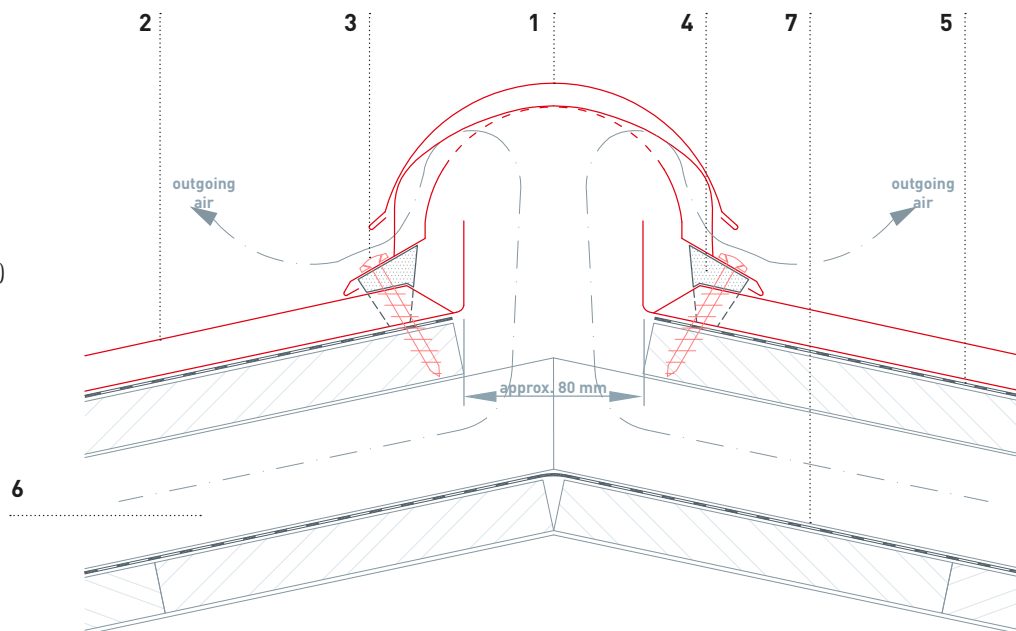
SECTION: INDIRECT FASTENING OF THE PREFA ROOF TILE WITH PREFA PATENT CLIP



APPLICATION PREFA ROOF TILE

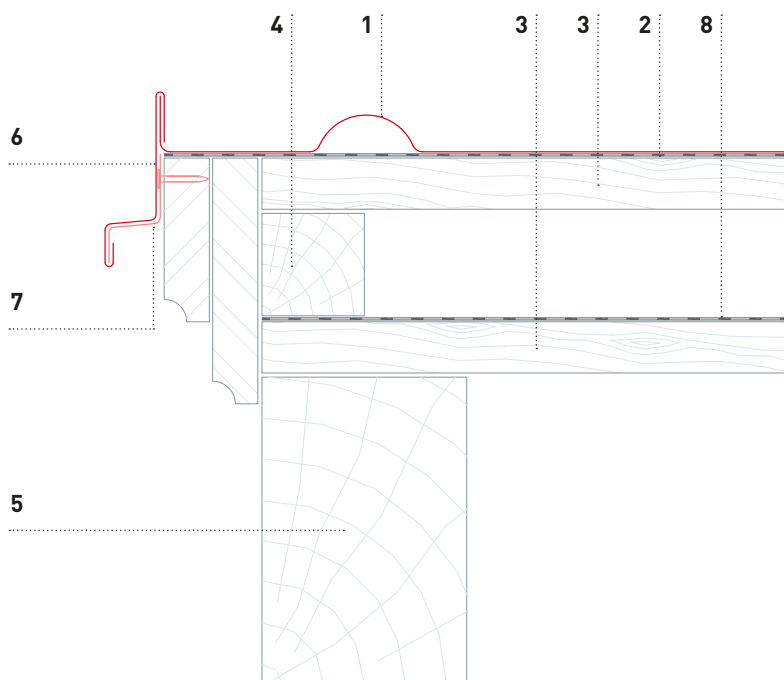
RIDGE CONSTRUCTION WITH PREFA RIDGE VENT

- 1 PREFA ridge vent
- 2 PREFA roof tile
- 3 sealing screw at tile crest
- 4 self-adhesive foam wedge
- 5 separating layer
- 6 counter battens (ventilated channel)
- 7 roof underlay



ROOF VERGE CONSTRUCTION WITH PREFA VERGE FLASHING

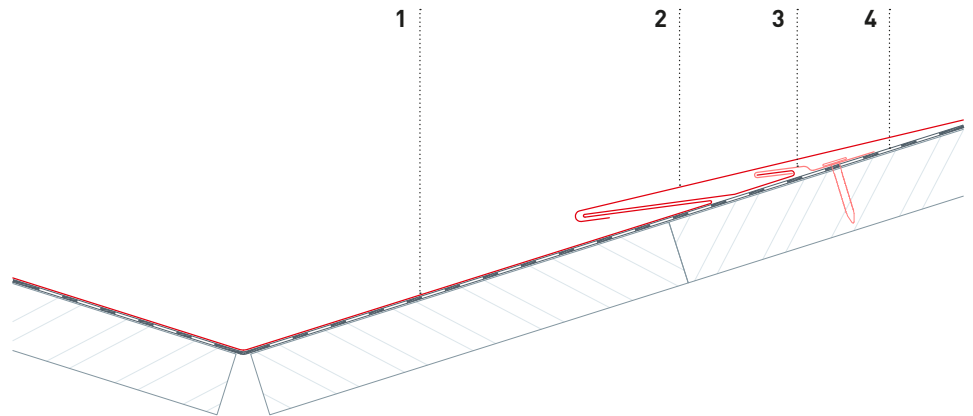
- 1 PREFA roof tile
- 2 separating layer
- 3 sheathing (at least 24 mm)
- 4 counter battens
- 5 rafter
- 6 PREFA verge flashing
- 7 PREFA cleat strip
- 8 roof underlay



APPLICATION PREFA ROOF TILE

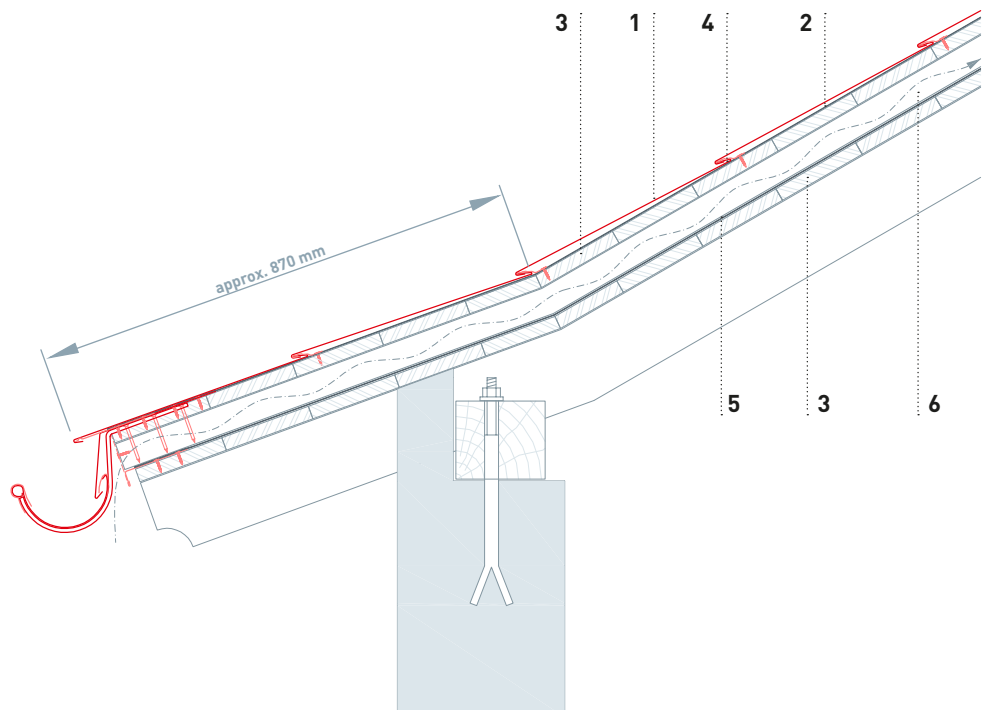
VALLEY FORMATION WITH PREFA SAFETY VALLEY

- 1 PREFA safety valley
- 2 PREFA roof tile
- 3 clip
- 4 separating layer



CONSTRUCTION OF PITCH TRANSITION WITH PREFA ROOF TILES

- 1 PREFA roof tile
- 2 separating layer
- 3 solid sheathing (at least 24 mm)
- 4 clip
- 5 roof underlay
- 6 counter battens



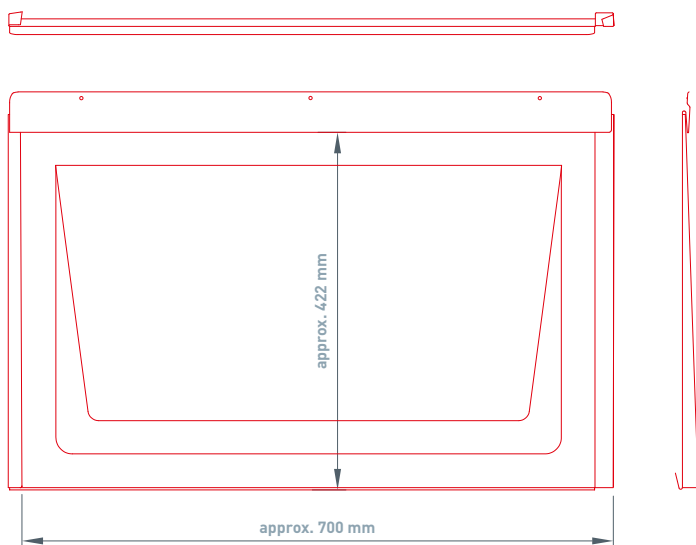


APPLICATION PREFA R.16 ROOF TILE

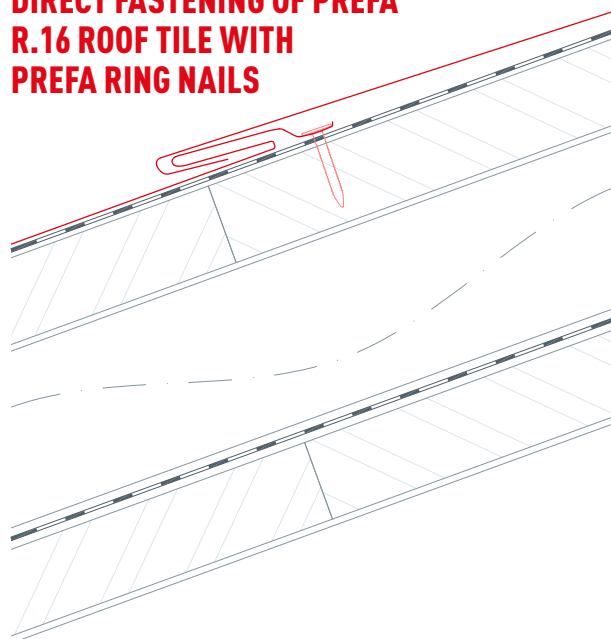
PREFA R.16 ROOF TILE

TECHNICAL DATA

MATERIAL	coated aluminium, 0.7 mm thick, two-layer stove-enamel finish
SIZE	700 × 420 mm (cover)
WEIGHT	1 m ² = approx. 2.5 kg = 3.4 roof tiles
ROOF PITCH	from 17° = approx. 31%
SUBSTRUCTURE AND SEPARATING LAYER	see page 7; a separating layer is required for a roof pitch up to 25°
FASTENING	direct, using 3 PREFA ring nails 28/25 for each R.16 roof tile



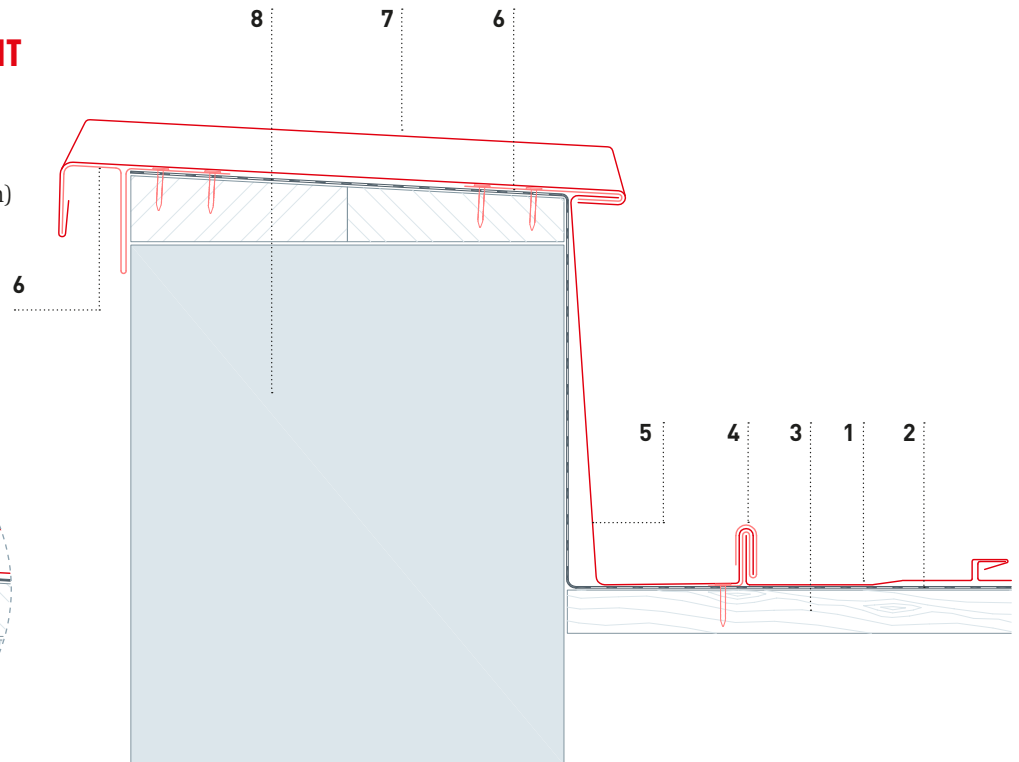
SECTION: DIRECT FASTENING OF PREFA R.16 ROOF TILE WITH PREFA RING NAILS



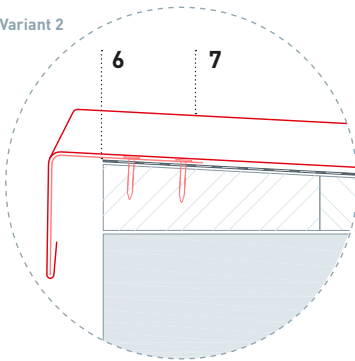
APPLICATION PREFA R.16 ROOF TILE

ROOF PARAPET FLASHING WITH CONNECTING ELEMENT TO PREFA R.16 ROOF TILES

- 1 PREFA R.16 roof tile
- 2 separating layer
- 3 solid sheathing (at least 24 mm)
- 4 double-lock clip
- 5 wall connection plate
- 6 cleat strip
- 7 roof parapet flashing
- 8 masonry



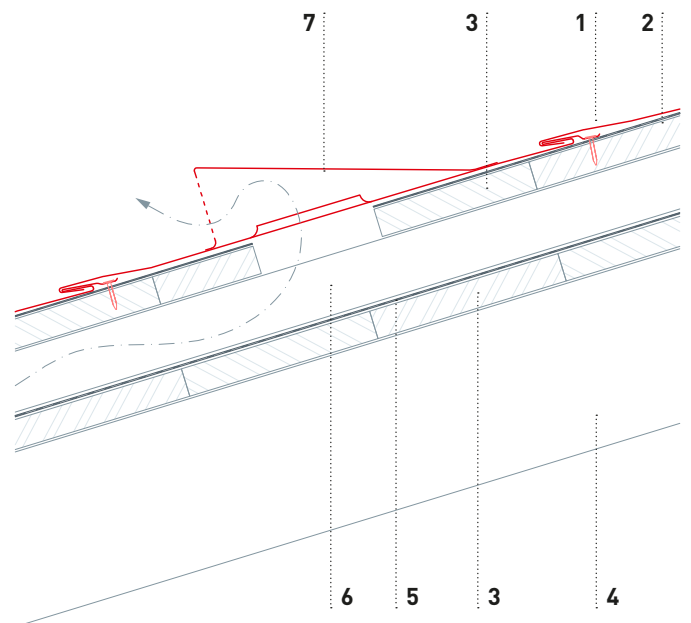
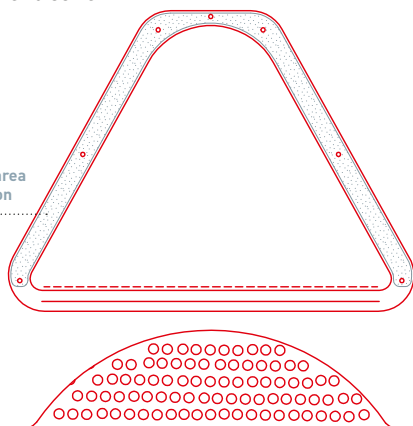
Variant 2



PREFA FROG-MOUTH VENT COVER WITH PREFA R.16 ROOF TILES

- 1 PREFA R.16 roof tile
- 2 separating layer
- 3 solid sheathing (at least 24 mm)
- 4 rafter
- 5 roof underlay
- 6 counter battens
- 7 PREFA frog-mouth vent cover

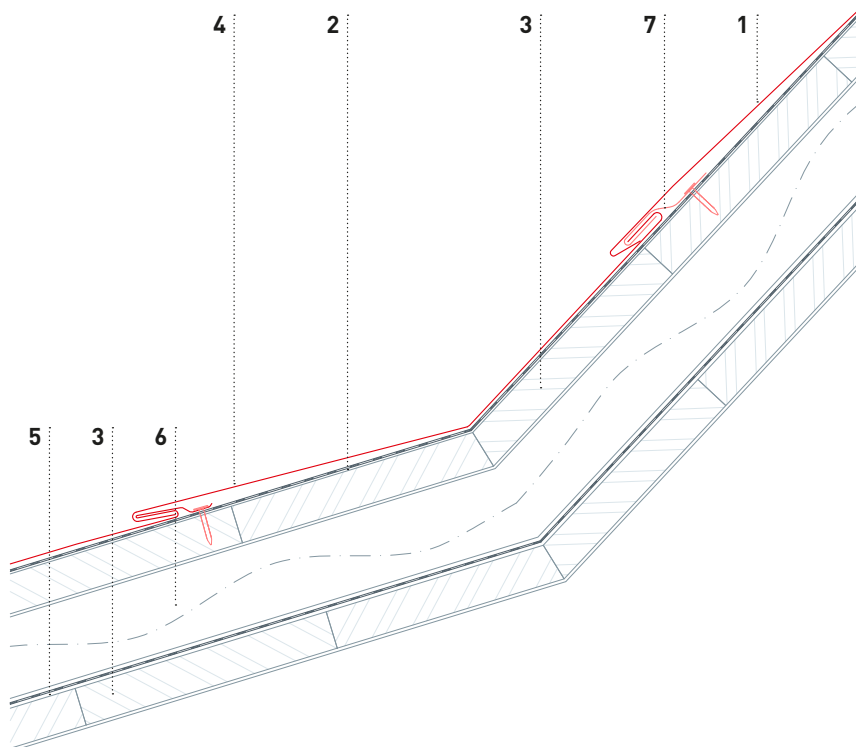
Seal off shaded area
during installation



APPLICATION PREFA R.16 ROOF TILE

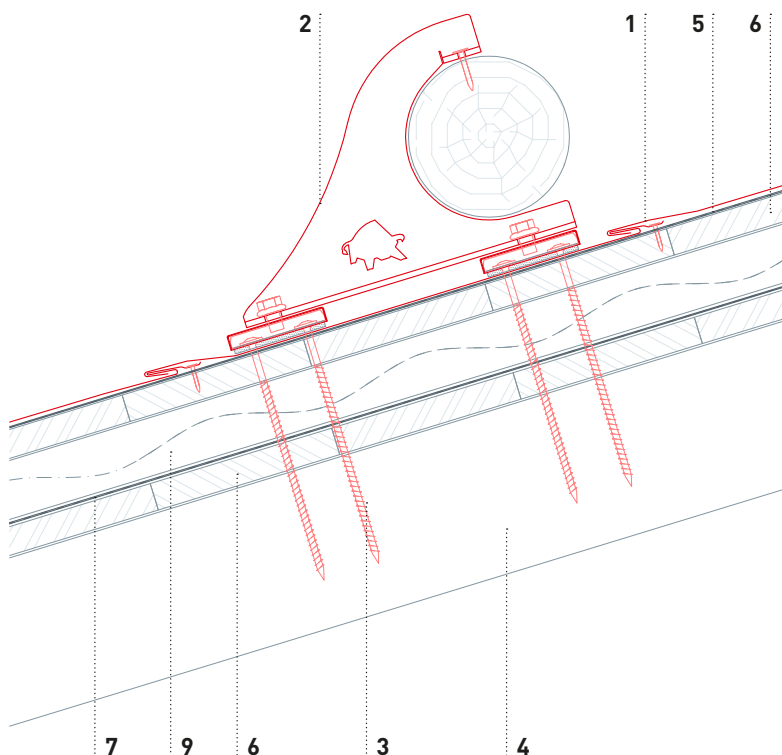
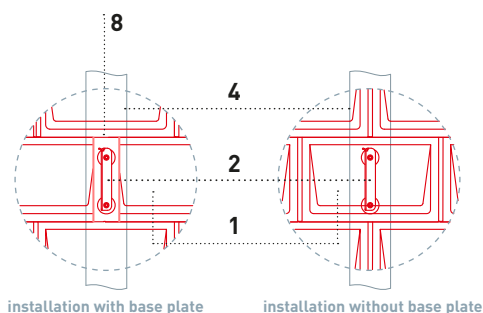
CONSTRUCTION OF PITCH TRANSITION WITH PREFA R.16 ROOF TILES

- 1 PREFA R.16 roof tile
- 2 separating layer
- 3 solid sheathing (at least 24 mm)
- 4 transition flashing
- 5 roof underlay
- 6 counter battens
- 7 clip



PREFA MOUNTAIN SNOW-GUARD BRACKET FOR R.16 ROOF TILES

- 1 PREFA R.16 roof tile
- 2 PREFA mountain snow-guard bracket
- 3 fixing material
- 4 rafter
- 5 separating layer
- 6 solid sheathing (at least 24 mm)
- 7 roof underlay
- 8 base plate
- 9 counter battens

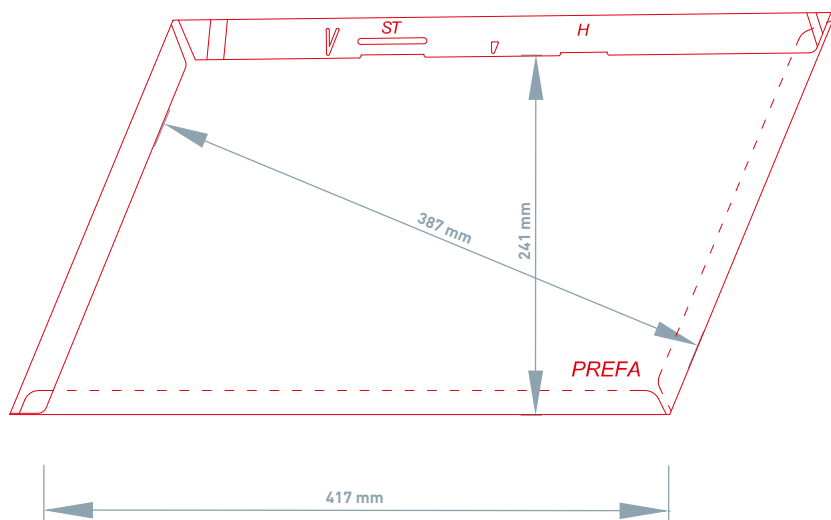
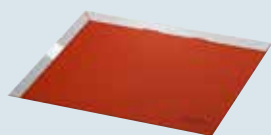


APPLICATION PREFA SHINGLE

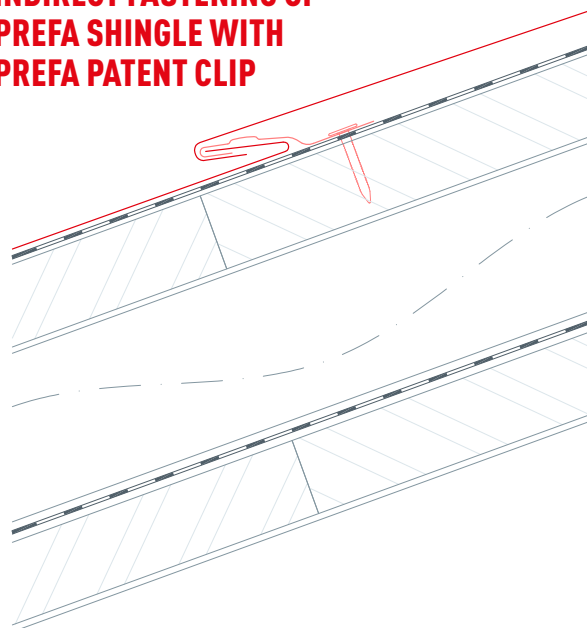
PREFA SHINGLE

TECHNICAL DATA

MATERIAL	coated aluminium, 0.7 mm thick, two-layer stove-enamel finish
SIZE	420 × 240 mm (cover)
WEIGHT	1 m ² = approx. 2.5 kg = 10 shingles
ROOF PITCH	from 25° = approx. 47%
SUBSTRUCTURE AND SEPARATING LAYER	see page 7
FASTENING	1 PREFA patent clip per shingle = 10 clips per m ²



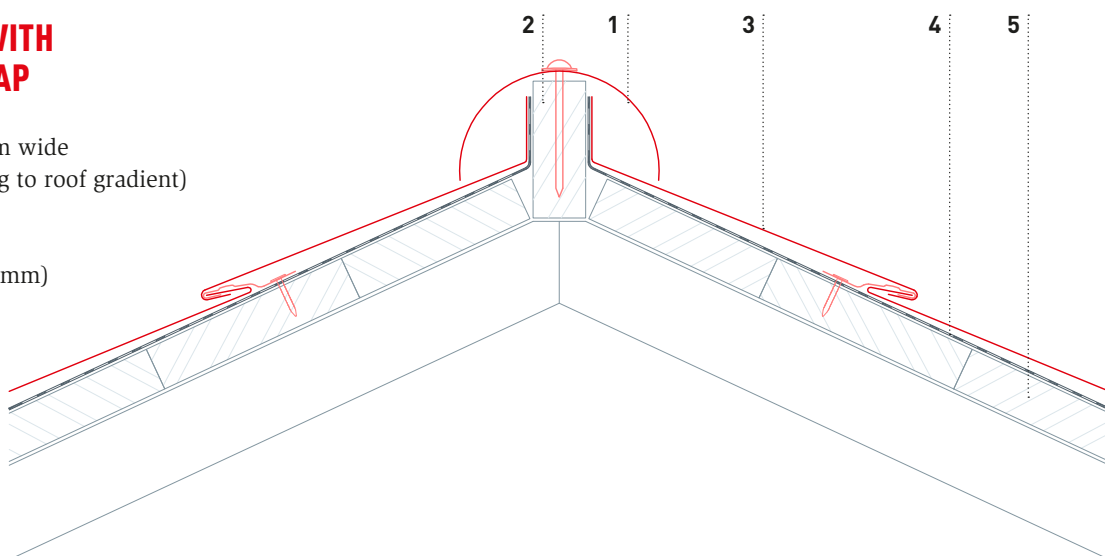
SECTION: INDIRECT FASTENING OF PREFA SHINGLE WITH PREFA PATENT CLIP



APPLICATION PREFA SHINGLE

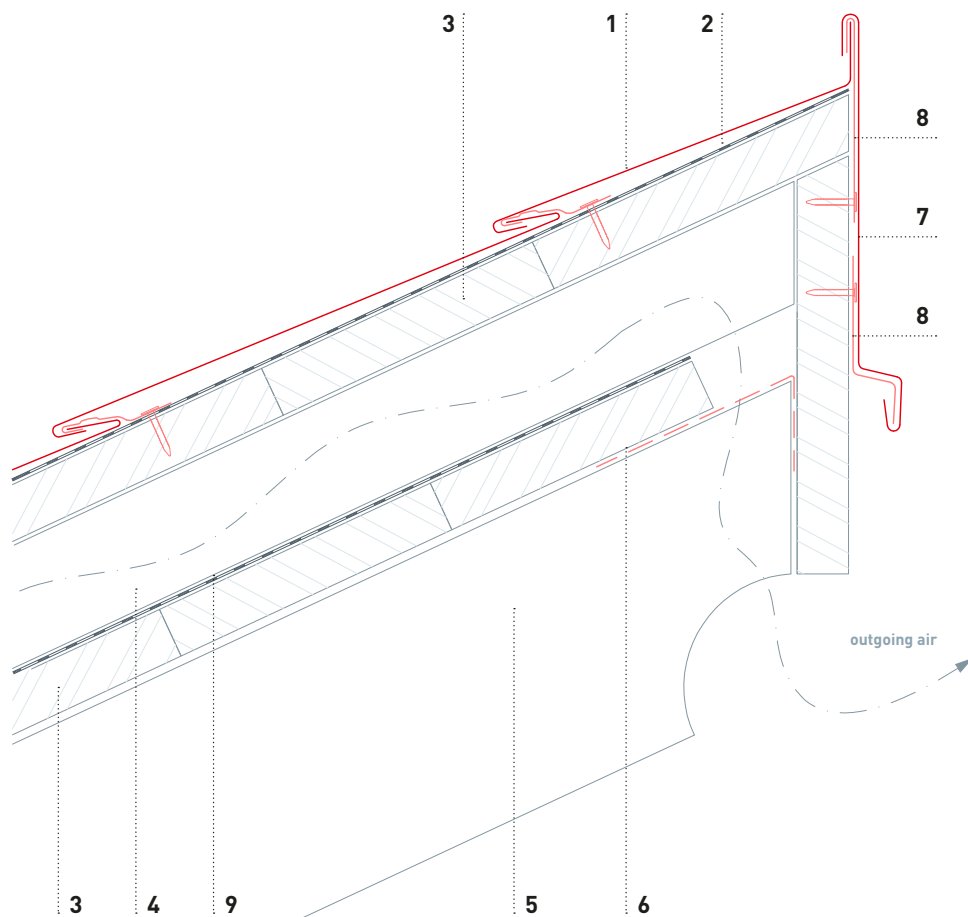
RIDGE CONSTRUCTION WITH PREFA HIP AND RIDGE CAP

- 1 PREFA hip and ridge cap
- 2 hip and ridge batten, 30 mm wide
(height may differ according to roof gradient)
- 3 PREFA shingle
- 4 separating layer
- 5 solid sheathing (at least 24 mm)



MONO-PITCHED-ROOF END WITH PREFA SHINGLES

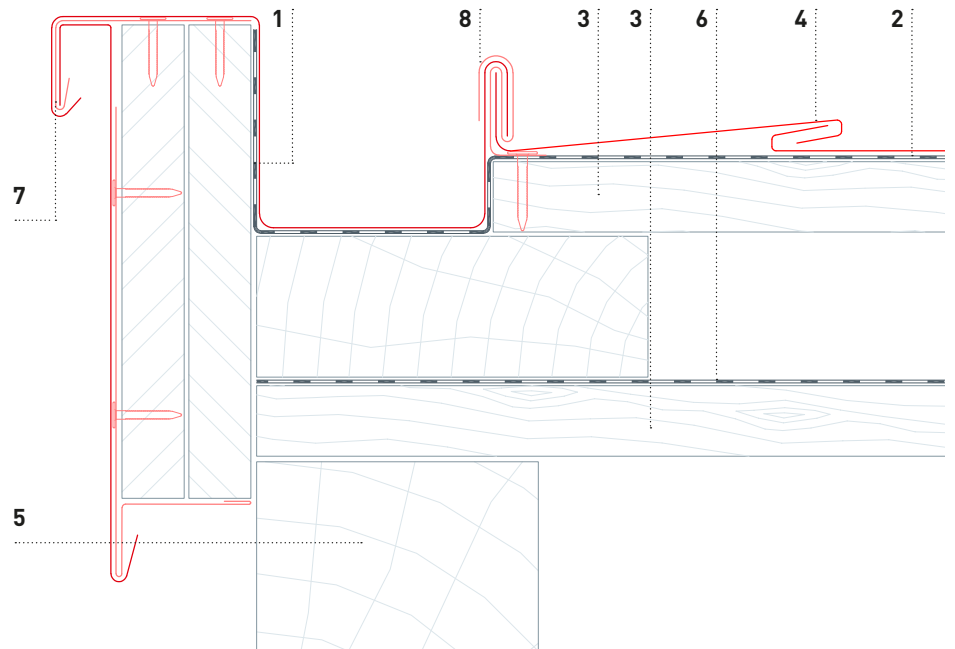
- 1 PREFA shingle
- 2 separating layer
- 3 solid sheathing (at least 24 mm)
- 4 counter battens
- 5 rafter
- 6 perforated metal plate
- 7 end of mono-pitched roof
- 8 cleat strip
- 9 roof underlay



APPLICATION PREFA SHINGLE

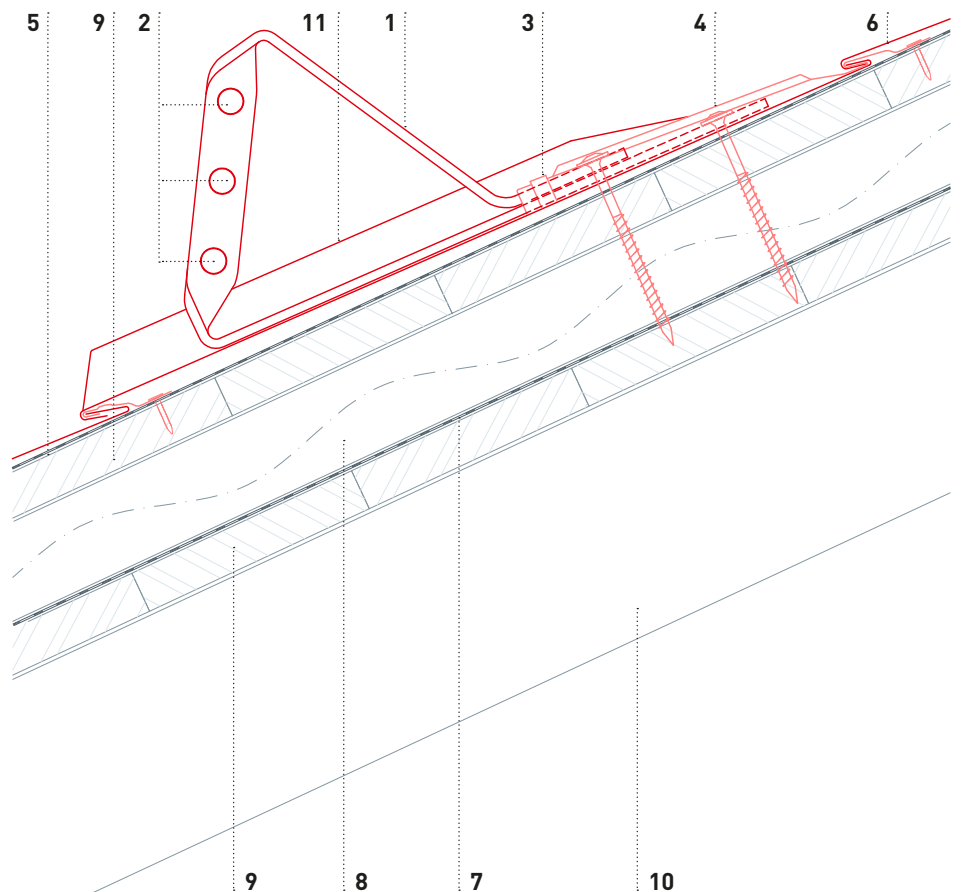
ROOF VERGE CONSTRUCTION (WITH RECESS) WITH PREFA SHINGLES

- 1 roof verge with recess
- 2 separating layer
- 3 solid sheathing (at least 24 mm)
- 4 PREFA shingle
- 5 rafter
- 6 roof underlay
- 7 cleat strip
- 8 double-lock clip



PREFA PIPE-STYLE SNOW GUARD BRACKET WITH SHINGLES

- 1 PREFA pipe-style snow guard bracket
- 2 pipes (Ø 15 mm)
- 3 fixing strip
- 4 protective cap
- 5 separating layer
- 6 PREFA shingle
- 7 roof underlay
- 8 counter battens
- 9 solid sheathing (at least 24 mm)
- 10 rafter
- 11 base plate





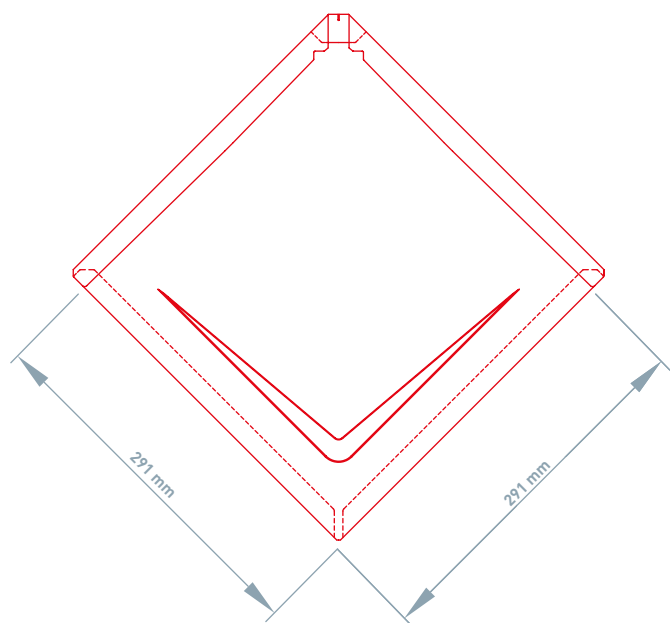
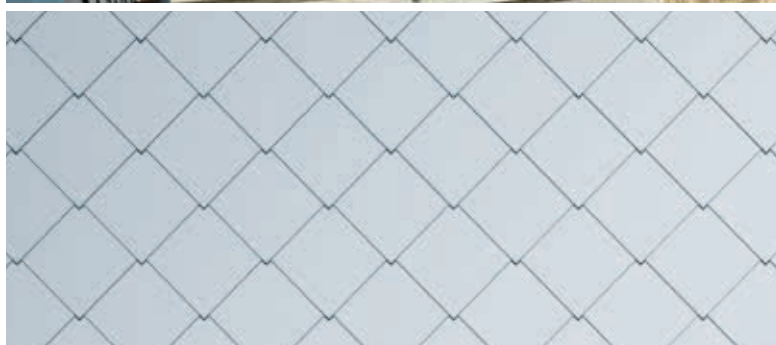
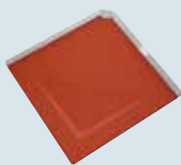
APPLICATION

PREFA RHOMBOID ROOF TILE 29 × 29

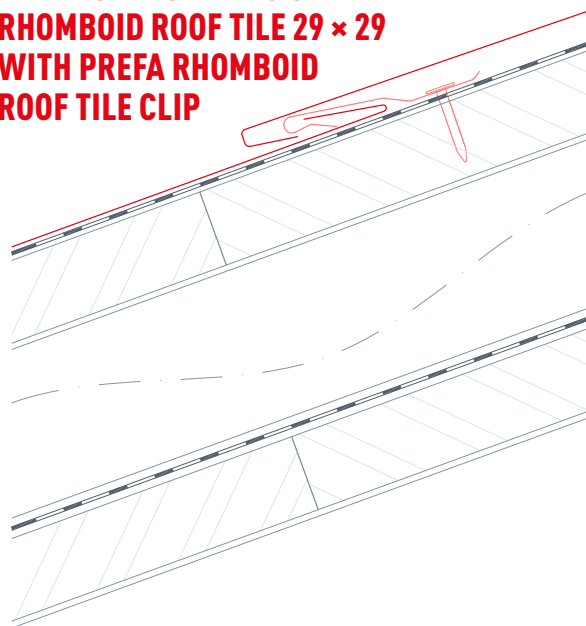
PREFA RHOMBOID ROOF TILE 29 × 29

TECHNICAL DATA

MATERIAL	coated aluminium, 0.7 mm thick, two-layer stove-enamel finish
SIZE	290 × 290 mm (cover)
WEIGHT	1 m ² = approx. 2.6 kg = 12 rhomboid roof tiles 29 × 29
ROOF PITCH	from 22° = approx. 40%
SUBSTRUCTURE AND SEPARATING LAYER	see page 7
FASTENING	1 rhomboid roof tile clip per rhomboid roof tile 29 × 29 = 12 clips per m ²



SECTION: INDIRECT FASTENING OF PREFA RHOMBOID ROOF TILE 29 × 29 WITH PREFA RHOMBOID ROOF TILE CLIP

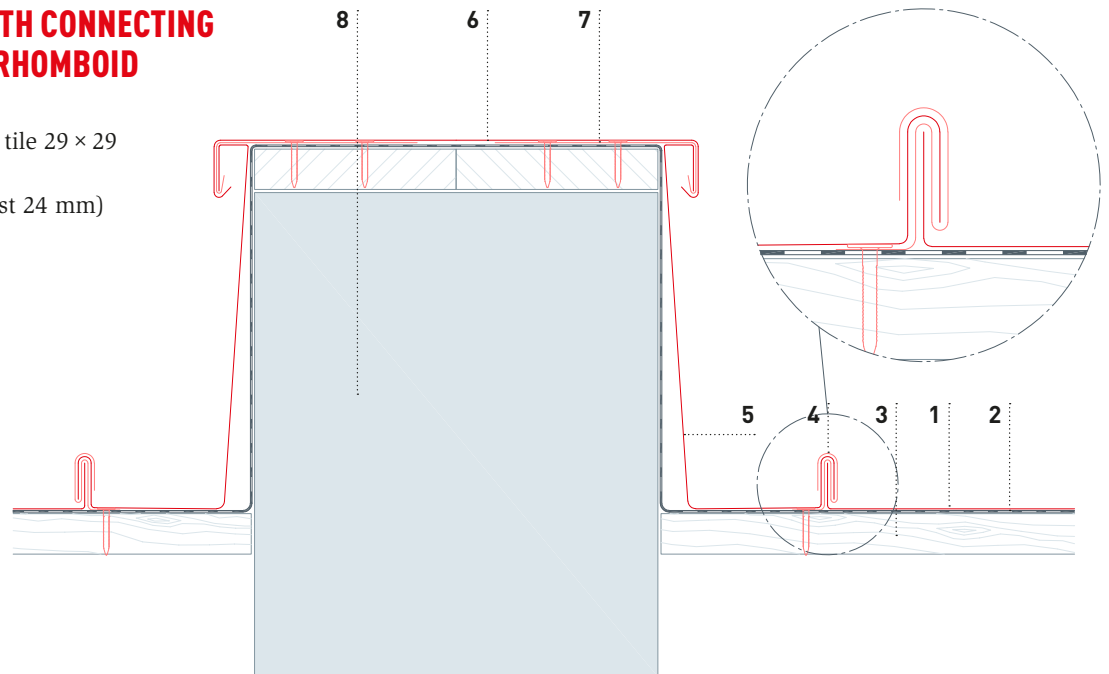


APPLICATION

PREFA RHOMBOID ROOF TILE 29 × 29

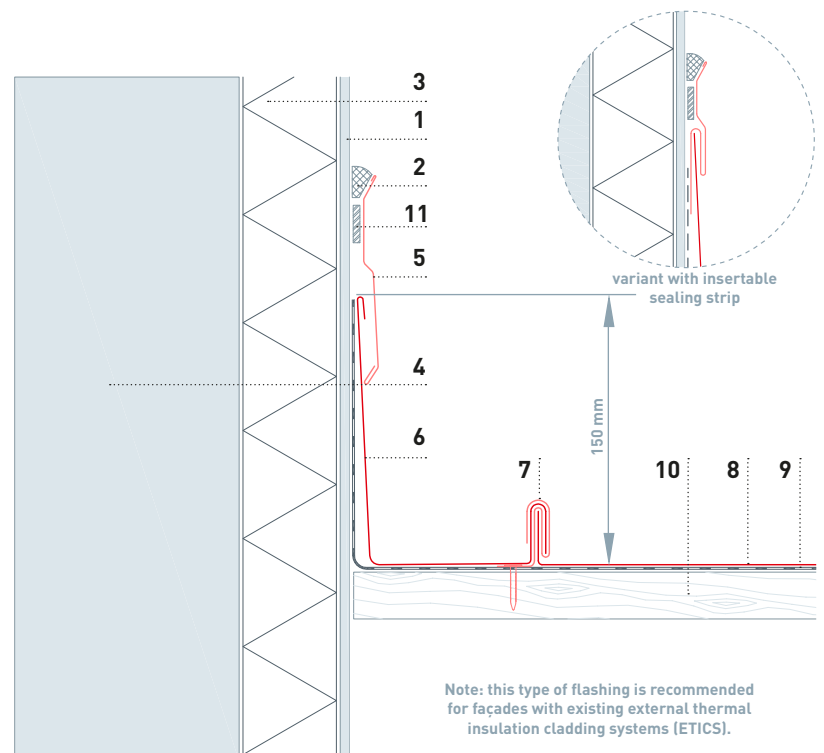
WALL FLASHING WITH CONNECTING ELEMENT TO PREFA RHOMBOID ROOF TILES 29 × 29

- 1 PREFA rhomboid roof tile 29 × 29
- 2 separating layer
- 3 solid sheathing (at least 24 mm)
- 4 double-lock clip
- 5 wall connection plate
- 6 wall flashing
- 7 cleat strip
- 8 masonry



LATERAL WALL FLASHING WITH PREFA RHOMBOID ROOF TILES 29 × 29

- 1 plaster
- 2 elastic sealant
- 3 full thermal insulation
- 4 masonry
- 5 counter flashing (plaster sealing strip)
- 6 wall flashing (height: min. 150 mm)
- 7 double-lock clip
- 8 PREFA rhomboid roof tile 29 × 29
- 9 separating layer
- 10 solid sheathing (at least 24 mm)
- 11 sealing tape

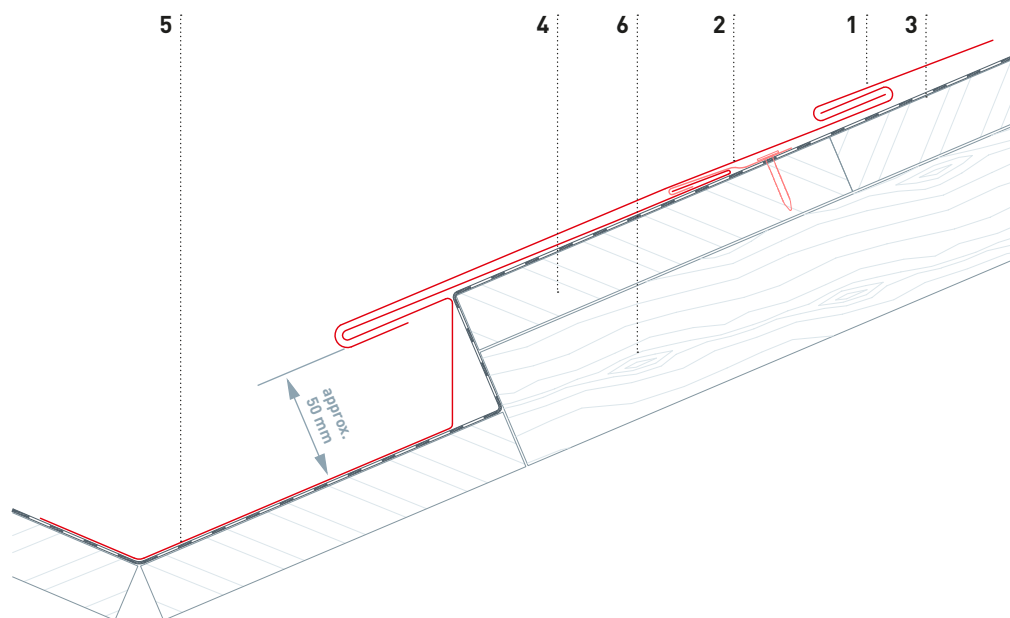


APPLICATION

PREFA RHOMBOID ROOF TILE 29 × 29

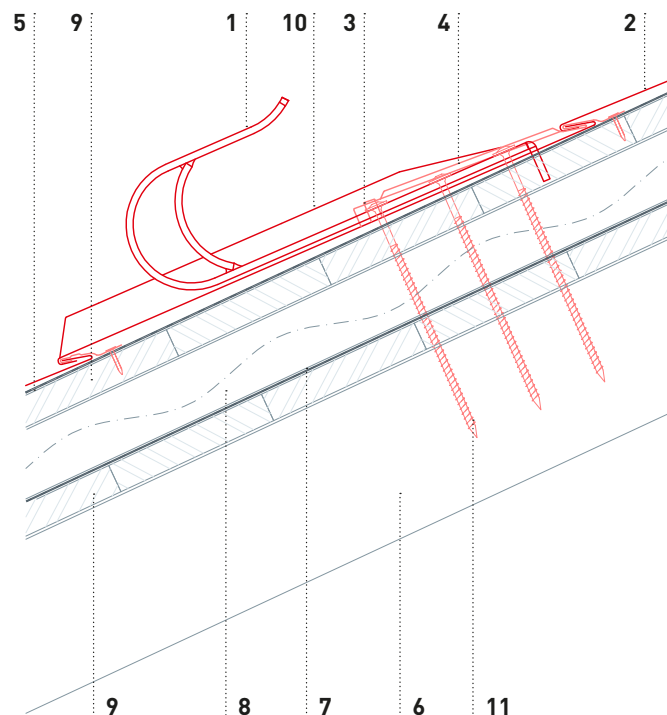
VALLEY CONSTRUCTION WITH RECESS WITH PREFA RHOMBOID ROOF TILES 29 × 29

- 1 PREFA rhomboid roof tile 29 × 29
- 2 clip
- 3 separating layer
- 4 solid sheathing (at least 24 mm)
- 5 recessed valley
- 6 counter battens



PREFA ROOF ANCHOR HOOK EN 517 B WITH PREFA RHOMBOID ROOF TILES 29 × 29

- 1 PREFA roof anchor hook according to EN 517 B
- 2 PREFA rhomboid roof tile 29 × 29
- 3 fixing strip
- 4 protective cap
- 5 separating layer
- 6 rafter
- 7 roof underlay
- 8 counter battens
- 9 solid sheathing (at least 24 mm)
- 10 base plate
- 11 fixing material



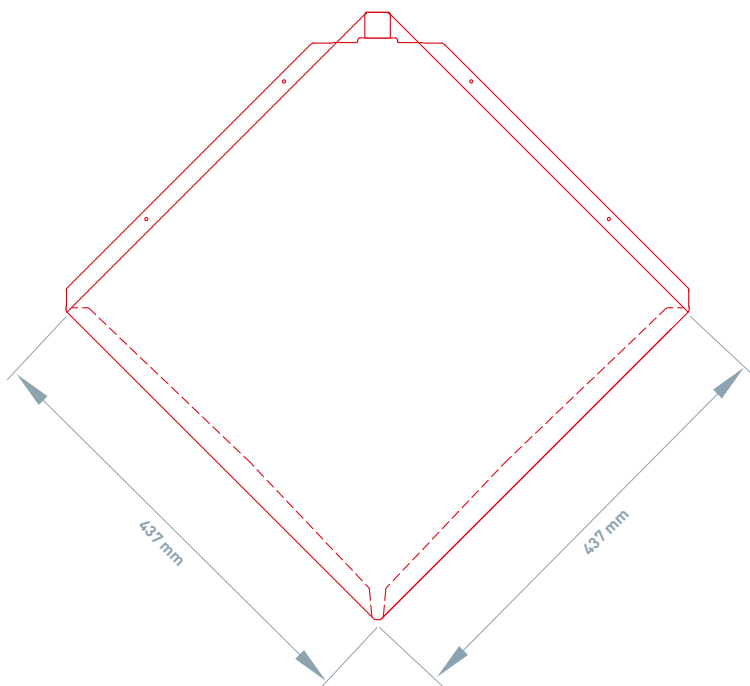
APPLICATION

PREFA RHOMBOID ROOF TILE 44 × 44

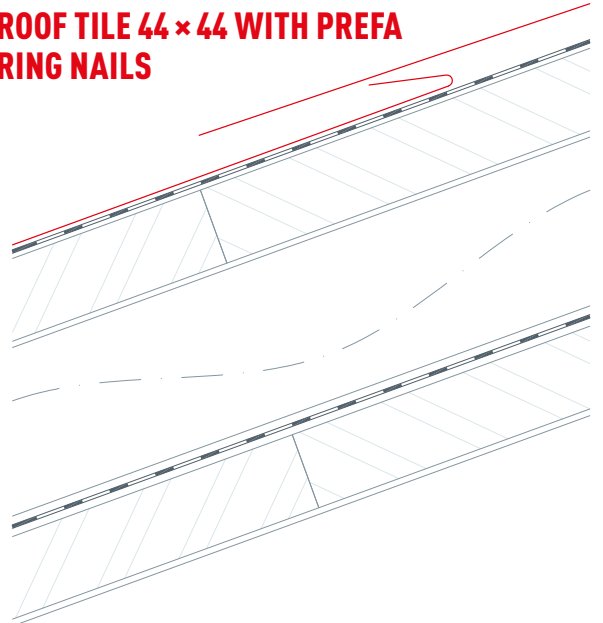
PREFA RHOMBOID ROOF TILE 44 × 44

TECHNICAL DATA

MATERIAL	coated aluminium, 0.7 mm thick, two-layer stove-enamel finish
SIZE	437 × 437 mm (cover)
WEIGHT	1 m ² = approx. 2.6 kg = 5 rhomboid roof tiles 44 × 44
ROOF PITCH	from 12° = approx. 21% (rafter length: up to 7 m) from 14° = approx. 25% (rafter length: 7–12 m) from 16° = approx. 29% (rafter length: over 12 m)
SUBSTRUCTURE AND SEPARATING LAYER	see page 7
FASTENING	direct, using 4 PREFA ring nails per rhomboid roof tile 44 × 44 = 20 ring nails per m ²



SECTION: DIRECT FASTENING OF PREFA RHOMBOID ROOF TILE 44 × 44 WITH PREFA RING NAILS

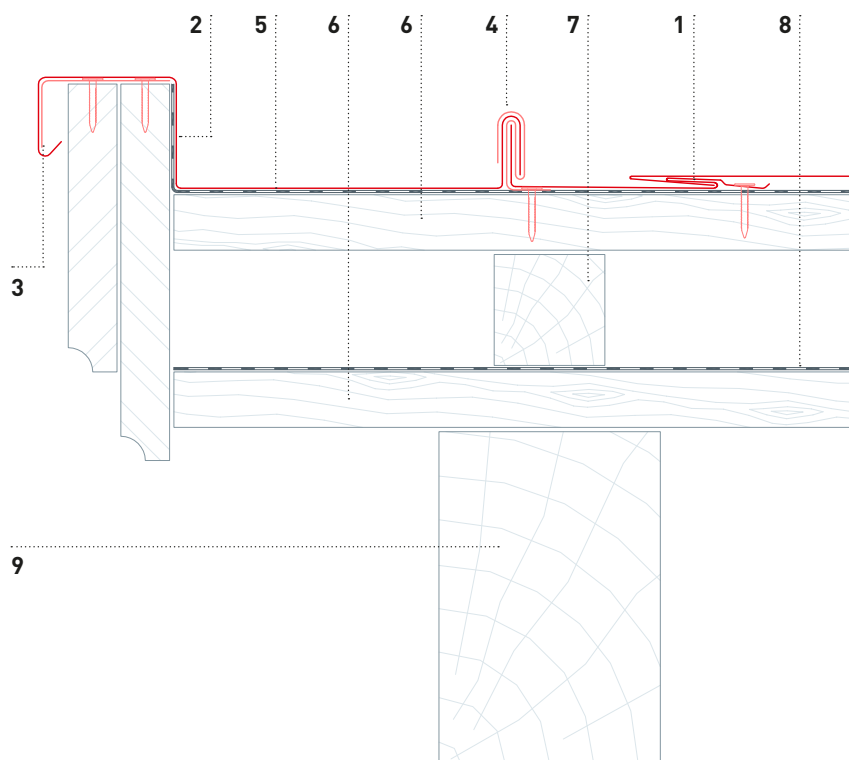


APPLICATION

PREFA RHOMBOID ROOF TILE 44 × 44

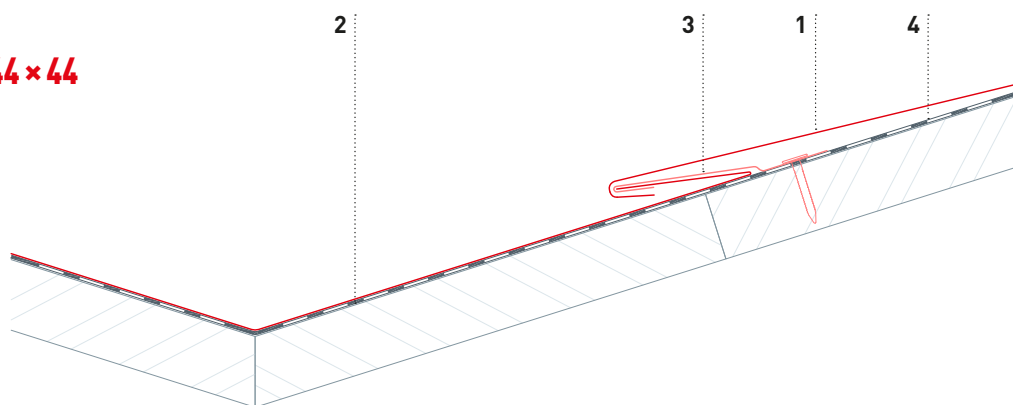
ROOF VERGE CONSTRUCTION WITH BARGEBOARD FOR PREFA RHOMBOID ROOF TILES 44 × 44

- 1 PREFA rhomboid roof tile 44 × 44
- 2 verge flashing
- 3 cleat strip
- 4 double-lock clip
- 5 separating layer
- 6 solid sheathing (at least 24 mm)
- 7 counter battens
- 8 roof underlay
- 9 rafter



VALLEY CONSTRUCTION WITH PREFA RHOMBOID ROOF TILES 44 × 44

- 1 PREFA rhomboid roof tile 44 × 44
- 2 valley flashing
- 3 clip
- 4 separating layer

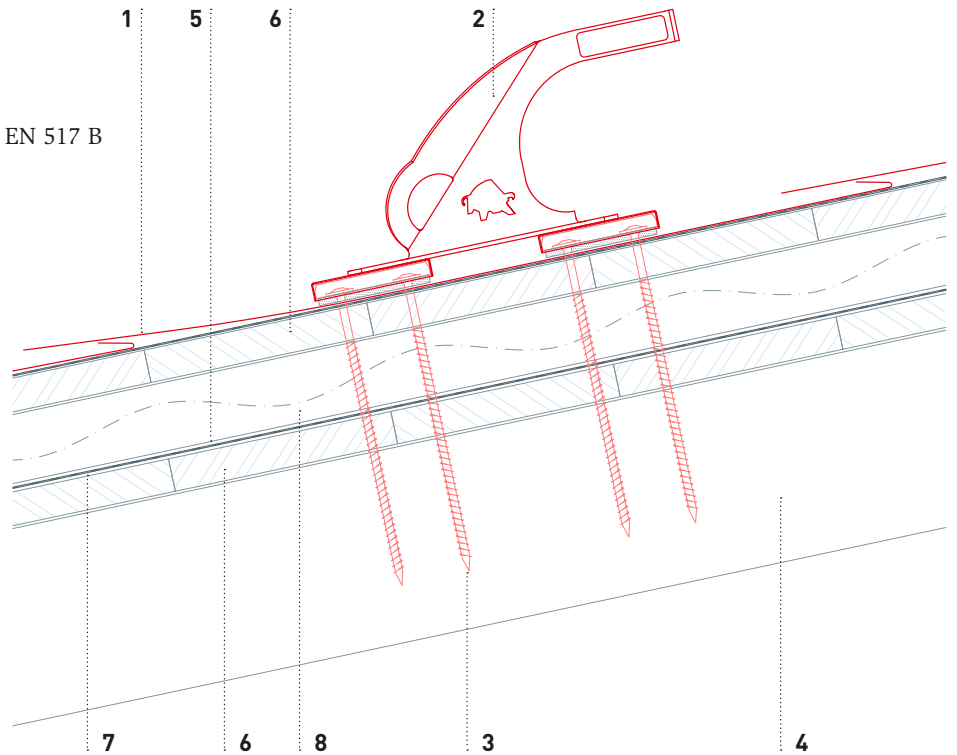


APPLICATION

PREFA RHOMBOID ROOF TILE 44 × 44

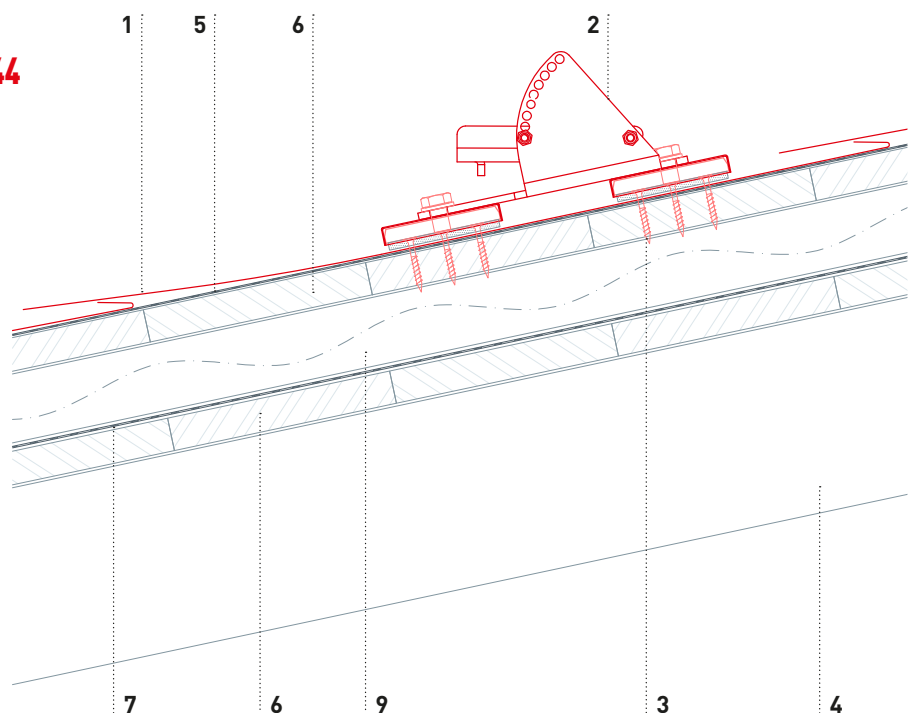
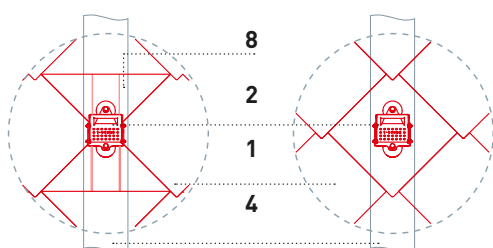
PREFA ROOF ANCHOR HOOK WITH ROUND BASES

- 1 PREFA rhomboid roof tile 44 × 44
- 2 PREFA roof anchor hook according to EN 517 B
- 3 fixing material
- 4 rafter
- 5 separating layer
- 6 solid sheathing (at least 24 mm)
- 7 roof underlay
- 8 counter battens



PREFA SAFETY TREAD WITH PREFA RHOMBOID ROOF TILES 44 × 44

- 1 PREFA rhomboid roof tile 44 × 44
- 2 PREFA safety tread
- 3 fixing material
- 4 rafter
- 5 separating layer
- 6 solid sheathing (at least 24 mm)
- 7 roof underlay
- 8 base plate
- 9 counter battens



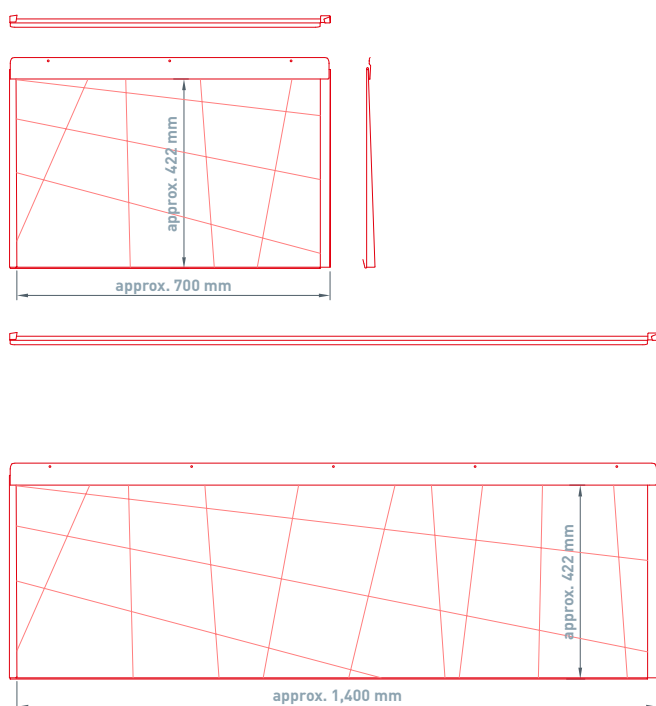
APPLICATION

PREFA FX.12 ROOF PANEL

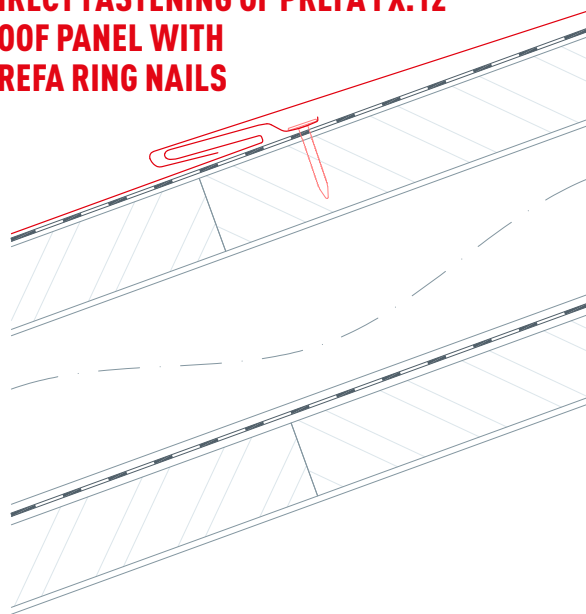
PREFA FX.12 ROOF PANEL

TECHNICAL DATA

MATERIAL	coated aluminium, 0.7 mm thick, two-layer stove-enamel finish
SIZE	700 × 420 mm (3.4 pc./m ²) and 1,400 × 420 mm (1.7 pc./m ²) — cover
WEIGHT	1 m ² = approx. 2.4–2.5 kg
ROOF PITCH	from 17° = approx. 31%
SUBSTRUCTURE AND SEPARATING LAYER	see page 7; a separating layer is required for a roof pitch up to 25°
FASTENING	direct, using 3 PREFA ring nails 28/25 (small panel) or 5 PREFA ring nails 28/25 (large panel)
NOTE	ratio large to small = 2:1 items To maintain the individual surface on the entire surface, standing seams (vertical seams) should not be located directly on top of one another. When installing PREFA FX.12 roof panel as a roof covering, a minimum offset of 220 mm must be observed. Installation examples are available as a guide and can be downloaded (in PDF or DWG format) from www.prefa.com . Installation from right to left.



SECTION: DIRECT FASTENING OF PREFA FX.12 ROOF PANEL WITH PREFA RING NAILS

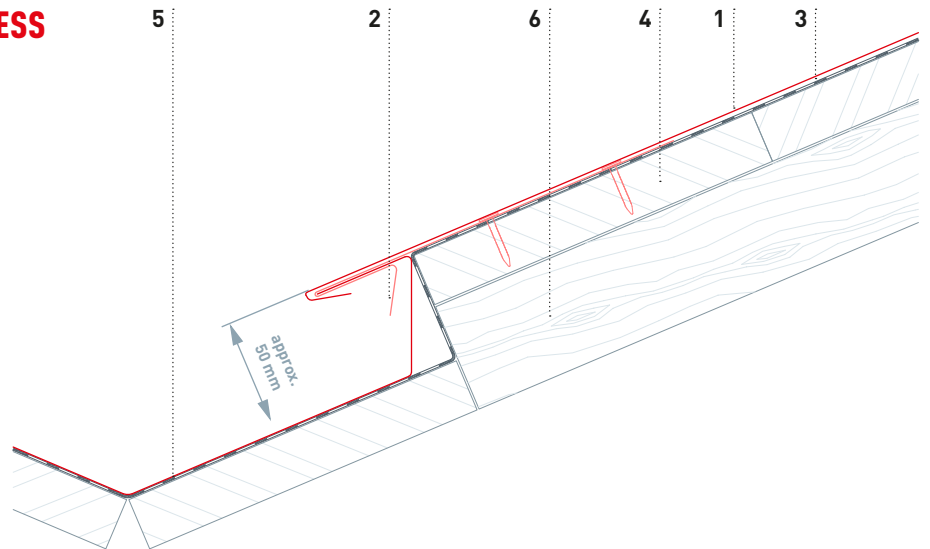


APPLICATION

PREFA FX.12 ROOF PANEL

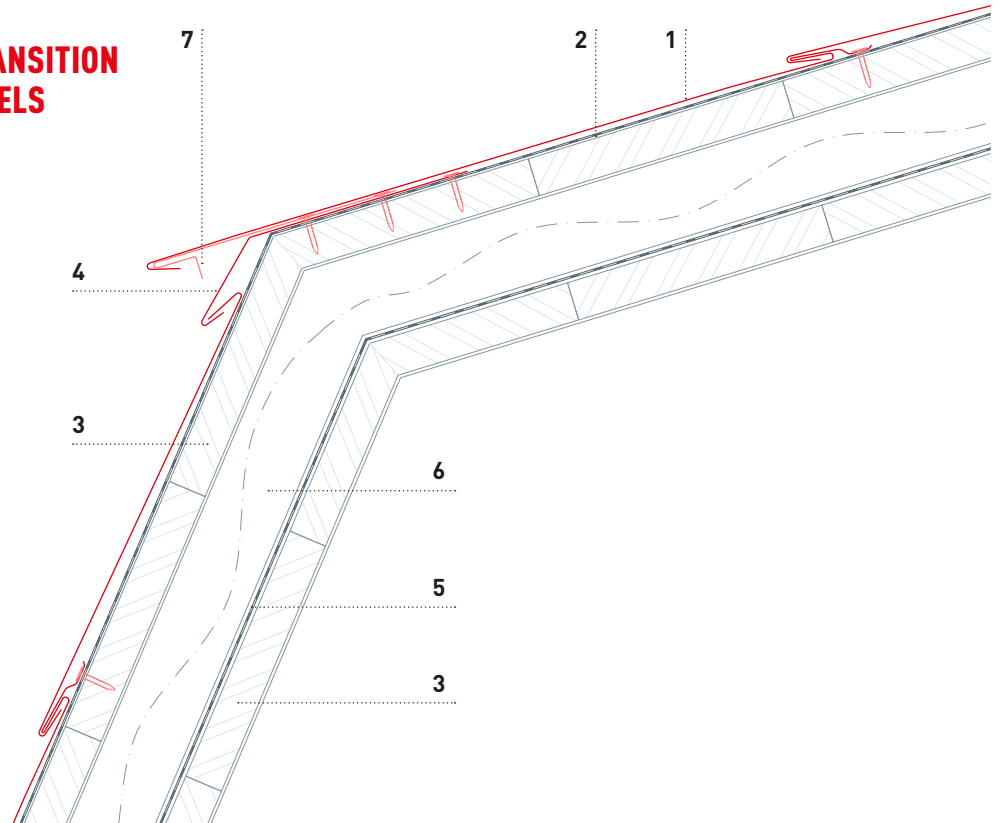
VALLEY CONSTRUCTION WITH RECESS WITH PREFA FX.12 ROOF PANELS

- 1 PREFA FX.12 roof panel
- 2 cleat strip
- 3 separating layer
- 4 solid sheathing (at least 24 mm)
- 5 recessed valley
- 6 counter battens



CONSTRUCTION OF PITCH TRANSITION WITH PREFA FX.12 ROOF PANELS

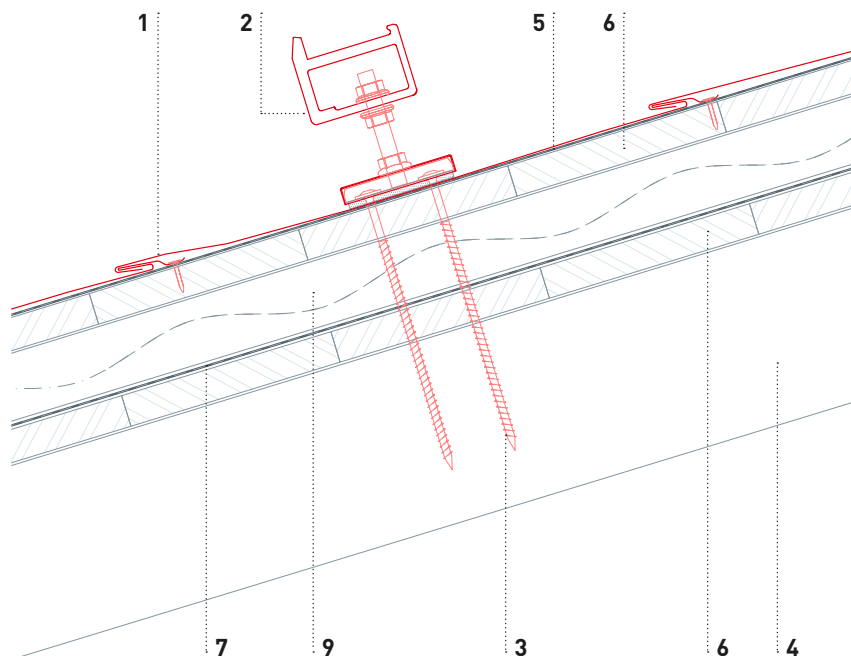
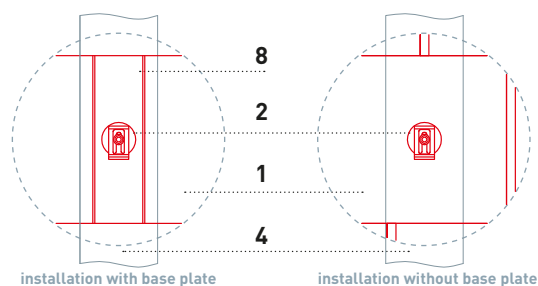
- 1 PREFA FX.12 roof panel
- 2 separating layer
- 3 solid sheathing (at least 24 mm)
- 4 apron
- 5 roof underlay
- 6 counter battens
- 7 PREFA edge cleat strip for FX.12



APPLICATION PREFA FX.12 ROOF PANEL

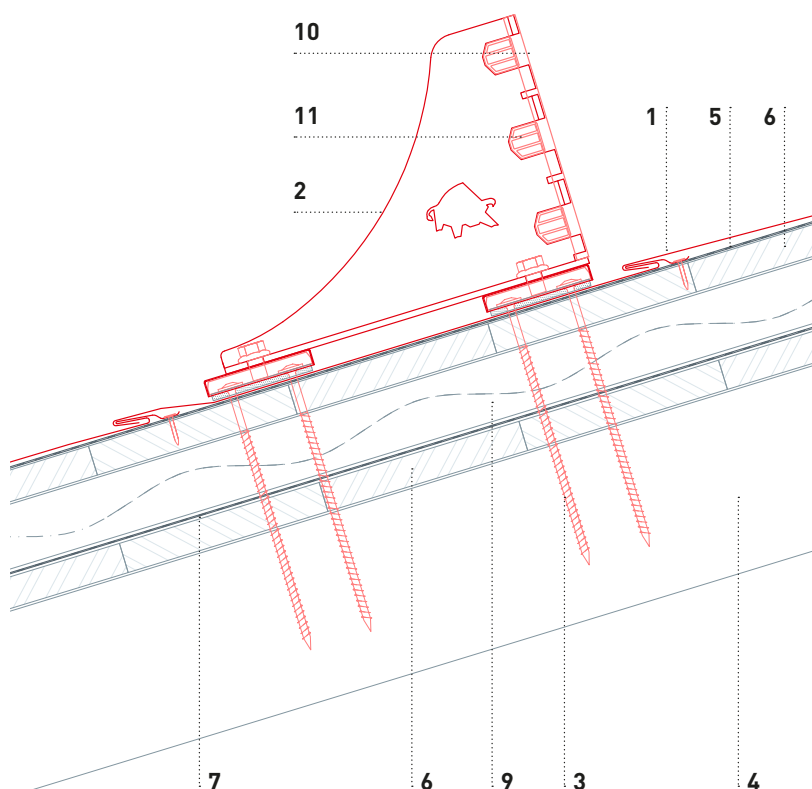
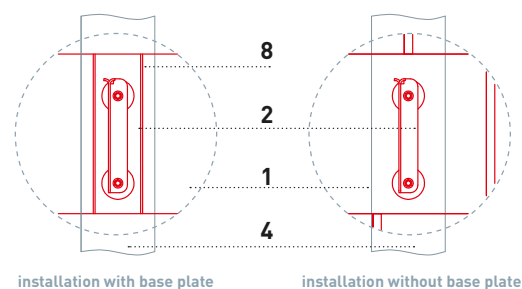
PREFA VARIO SOLAR BRACKET WITH FX.12 ROOF PANELS

- 1 PREFA FX.12 roof panel
- 2 PREFA Vario (or Fix) solar bracket
- 3 fixing material
- 4 rafter
- 5 separating layer
- 6 solid sheathing (at least 24 mm)
- 7 roof underlay
- 8 base plate
- 9 counter battens



PREFA PIPE-STYLE SNOW GUARD SYSTEM WITH FX.12 ROOF PANELS

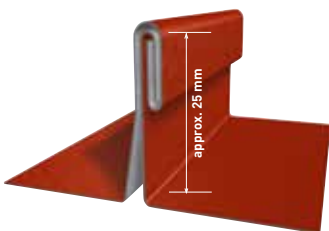
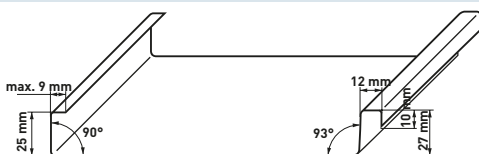
- 1 PREFA FX.12 roof panel
- 2 PREFA pipe-style snow guard system
- 3 fixing material
- 4 rafter
- 5 separating layer
- 6 solid sheathing (at least 24 mm)
- 7 roof underlay
- 8 base plate
- 9 counter battens
- 10 fixing slide
- 11 PREFA removable pipe for pipe-style snow guard system



APPLICATION PREFALZ

PREFALZ TECHNICAL DATA

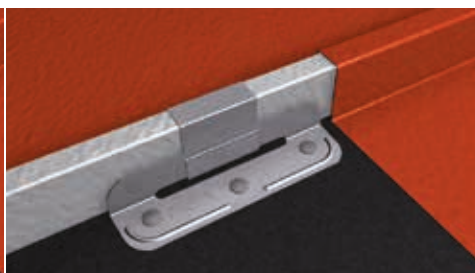
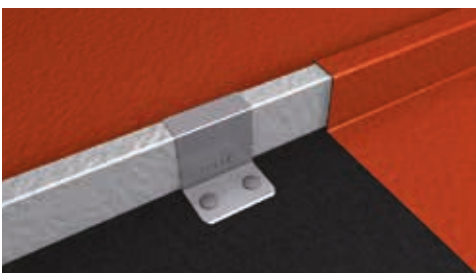
MATERIAL	coated aluminium, 0.7 mm thick, two-layer stove-enamel finish
DIMENSIONS	0.7 × 500 mm (centre-to-centre seam distance: 430 mm) 0.7 × 650 mm (centre-to-centre seam distance: 580 mm) 0.7 × 1,000 mm (flashing strip)
STANDARD SIZES	strip width of 500 mm: 60 kg (inside diameter = 320 mm) — approx. 63 m 500 kg (inside diameter = 500 mm) — approx. 529 m strip width of 650 mm: 60 kg (inside diameter = 320 mm) — approx. 49 m 500 kg (inside diameter = 500 mm) — approx. 407 m
WEIGHT	approx. 1.89 kg/m ² (actual consumption with 500 mm strip: approx. 2.3 kg/m ² ; with 650 mm strip: approx. 2.2 kg/m ²)
ROOF PITCH	from 3° = approx. 5%
INSTALLATION	on solid sheathing (at least 24 mm; Switzerland: at least 27 mm); from a roof pitch of 3°; observe country-specific standards and specialist guidelines
SEPARATING LAYER	we recommend the use of a suitable bitumen layer (local conditions must be taken into consideration)
FASTENING	with "fixed and sliding clips", according to static requirements To cover mono-pitched roofs or for buildings in exposed areas (increased wind load), we recommend the use of Prefalz with a strip width of 500 mm (or thinner) and the use of a separating layer.



RECOMMENDATION:

The lower the roof pitch, the greater the risk that water in the form of heavy rain, snow or possibly also retained water could penetrate through the seam under the sheet metal covering.

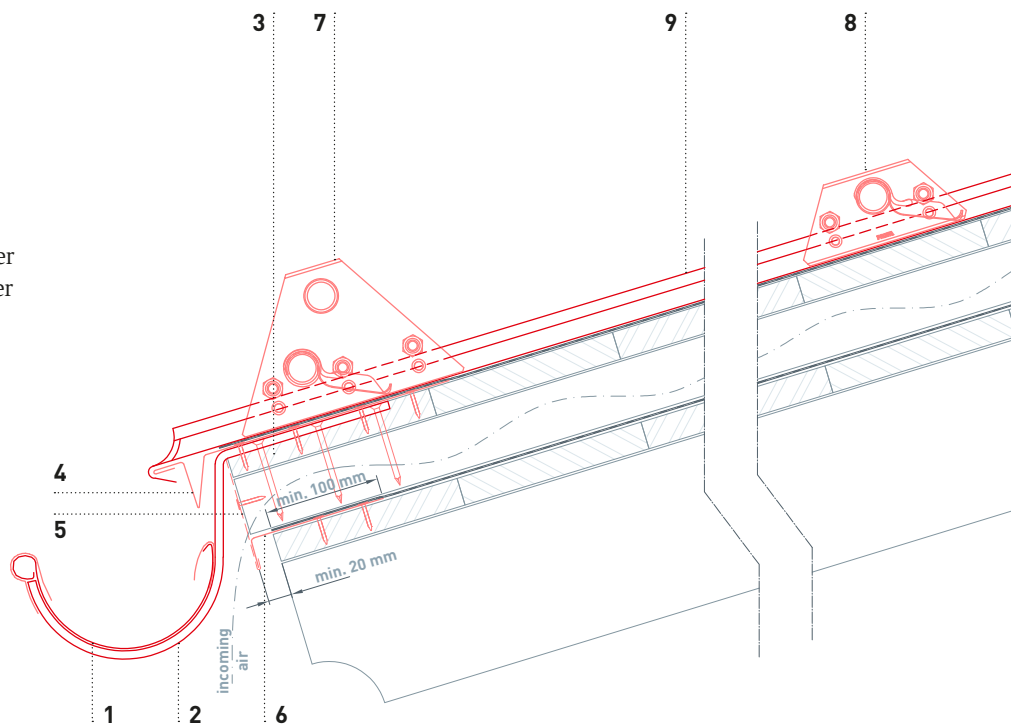
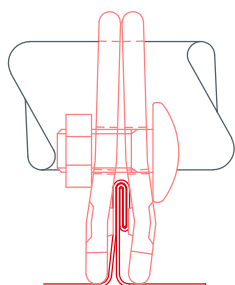
We therefore recommend designing the substructure with a roof pitch > 7° (13%). For a roof pitch of up to 7°, special precautions (e.g. seam gel, sealing tapes) must be taken.



APPLICATION PREFALZ

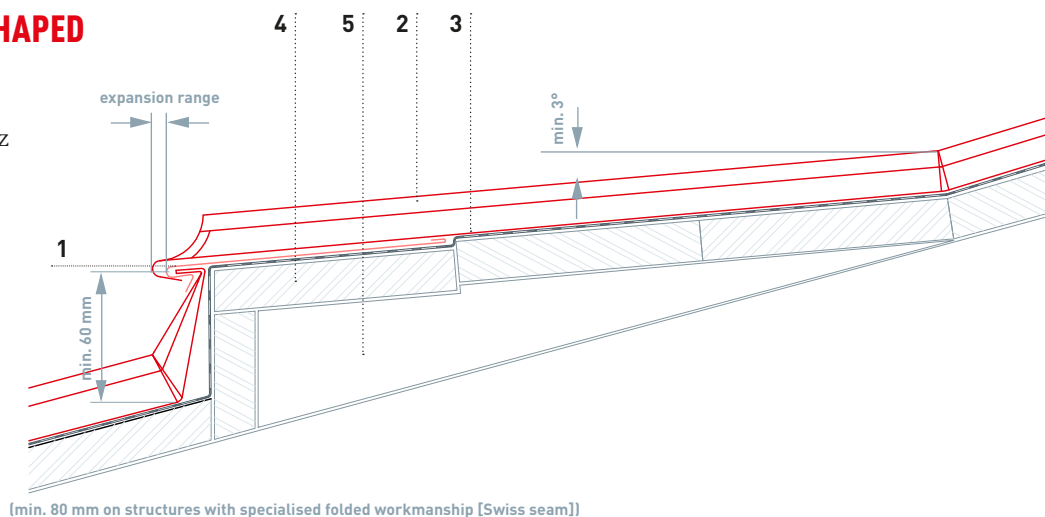
PREFA SEAM CLAMPS

- 1 PREFA gutter
- 2 PREFA bracket for box gutter
- 3 edge board
- 4 patent edge cleat strip
- 5 perforated metal plate
- 6 underlayment eaves apron strip
- 7 two-pipe seam clamp with ice stopper
- 8 one-pipe seam clamp with ice stopper
- 9 Prefalz



CONSTRUCTION OF A STEP-SHAPED TRANSITION WITH PREFALZ

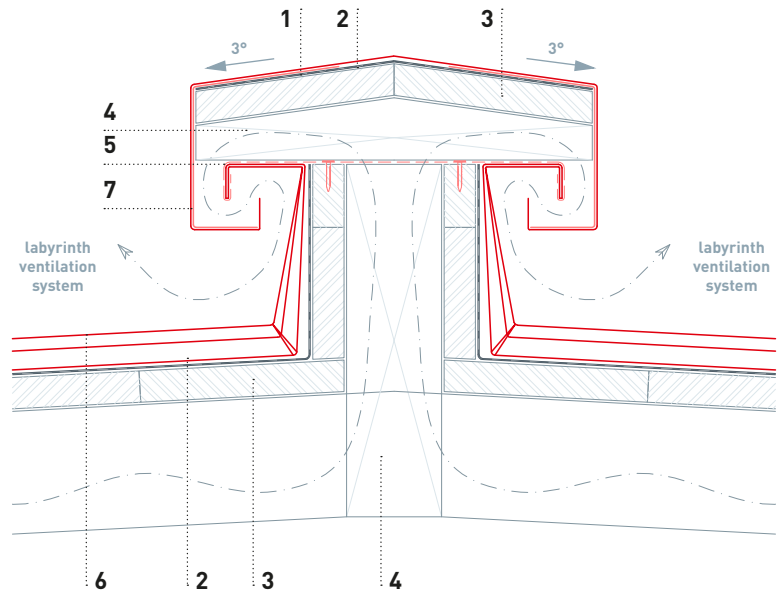
- 1 edge cleat strip
- 2 double-lock standing seam Prefalz
- 3 separating layer
- 4 solid sheathing
- 5 sprocket



APPLICATION PREFALZ

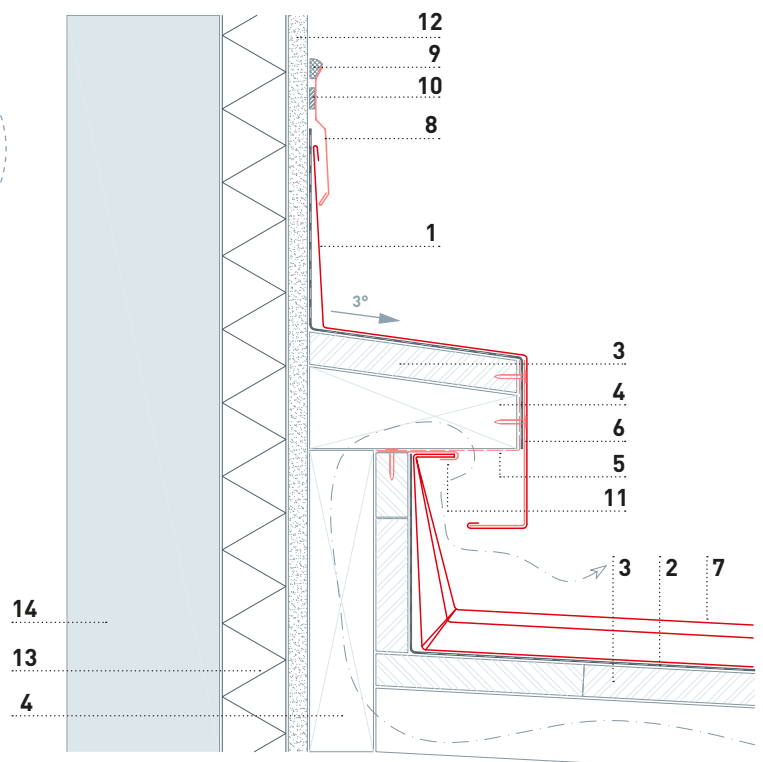
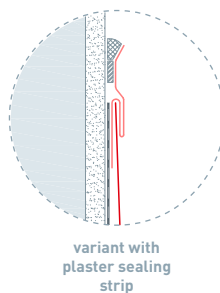
RIDGE CONSTRUCTION WITH PREFALZ

- 1 ridge cap with Prefalz
- 2 separating layer
- 3 solid sheathing
- 4 square timber
- 5 perforated metal plate
- 6 double-lock standing seam Prefalz
- 7 cleat strip



WALL VENTILATION WITH PREFALZ

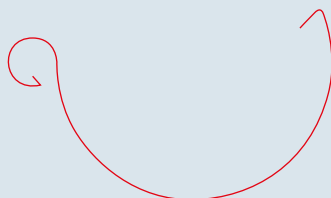
- 1 flashing with Prefalz
- 2 separating layer
- 3 solid sheathing
- 4 square timber
- 5 perforated metal plate
- 6 edge cleat strip
- 7 double-lock standing seam Prefalz
- 8 counter flashing (plaster sealing strip)
- 9 elastic sealant
- 10 sealing tape
- 11 cleat strip
- 12 plaster
- 13 full thermal insulation
- 14 masonry



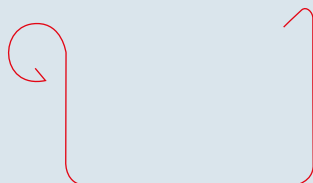
PRODUCT OVERVIEW

ROOF DRAINAGE

PREFA HALF ROUND GUTTER



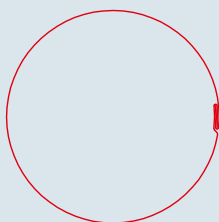
PREFA BOX GUTTER



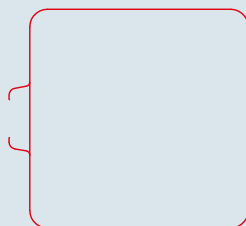
PREFA ON-ROOF GUTTER



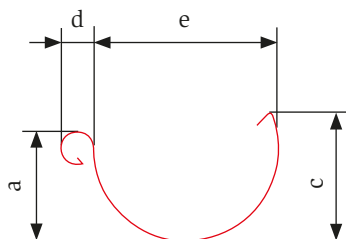
PREFA DOWNPIPE



PREFA SQUARE DOWNPIPE

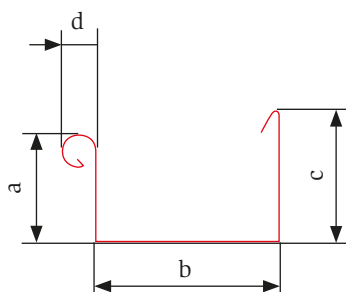


APPLICATION ROOF DRAINAGE



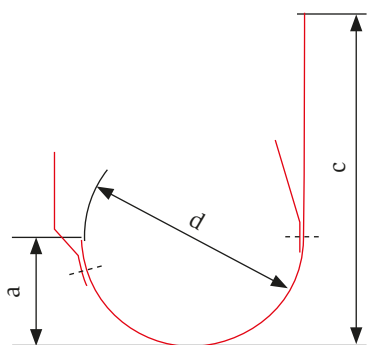
HALF ROUND GUTTERS

Gutter dimensions	Height of gutter front: a [mm]	Height of gutter back: c [mm]	Gutter diameter: e [mm]	Bead diameter: d [mm]
25 cm	61	72	110	19
28 cm	67	78	126	19
33 cm	87	98	153	19
40 cm	110	121	192	19



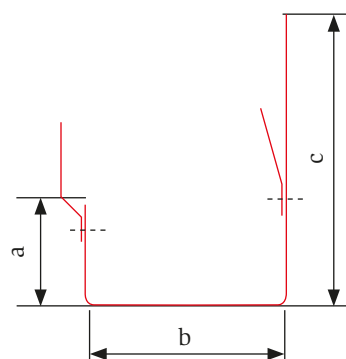
BOX GUTTERS

Gutter dimensions	Height of gutter front: a [mm]	Gutter base: b [mm]	Height of gutter back: c [mm]	Bead diameter: d [mm]
25 cm	54	86	63	19
33 cm	75	120	93	19
40 cm	92	150	113	19
50 cm	114	200	142	19



GUTTER BRACKET FOR HALF ROUND GUTTERS

PREFA gutter	Length of gutter bracket: c [mm]	Front of gutter bracket: a [mm]	Diameter of gutter bracket: d [mm]	Cross-section
25 cm	330	50	107	23 × 7 mm
25 cm (short)	281	50	107	23 × 7 mm
28 cm	347	58	134	28 × 7 mm
28 cm (short)	294	58	134	28 × 7 mm
28 cm (long)	446	58	134	28 × 7 mm
33 cm	374	77	153	28 × 7 mm
33 cm (short)	312	77	153	28 × 7 mm
33 cm (long)	467	77	153	28 × 7 mm
40 cm	436	107	192	30 × 7 mm

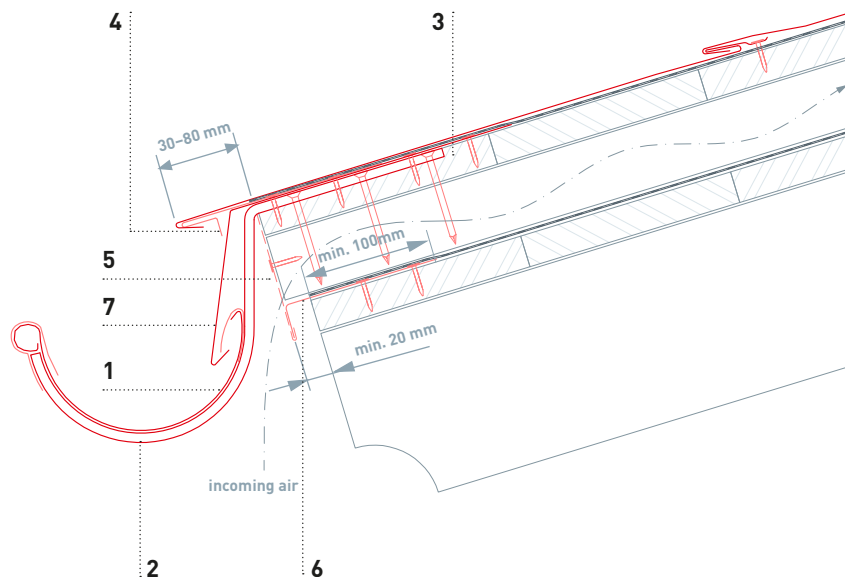


GUTTER BRACKET FOR BOX GUTTERS

PREFA gutters	Length of gutter bracket: c [mm]	Front of gutter bracket: a [mm]	Base of gutter bracket: b [mm]	Cross-section
25 cm	325	41	85	23 × 7 mm
33 cm	375	57	120	28 × 7 mm
40 cm	435	76	150	30 × 7 mm
50 cm	455	102	205	35 × 7 mm

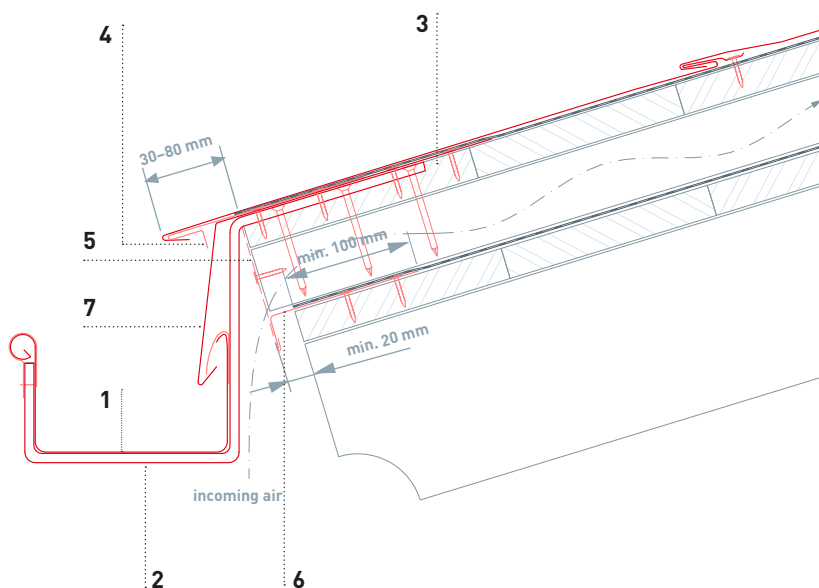
EAVES CONSTRUCTION WITH HALF-ROUND GUTTERS

- 1 PREFA gutter
- 2 PREFA gutter bracket
- 3 edge board
- 4 PREFA edge cleat strip
- 5 perforated metal plate
- 6 underlayment eaves apron strip
- 7 eaves apron ice strip



EAVES CONSTRUCTION WITH BOX GUTTER

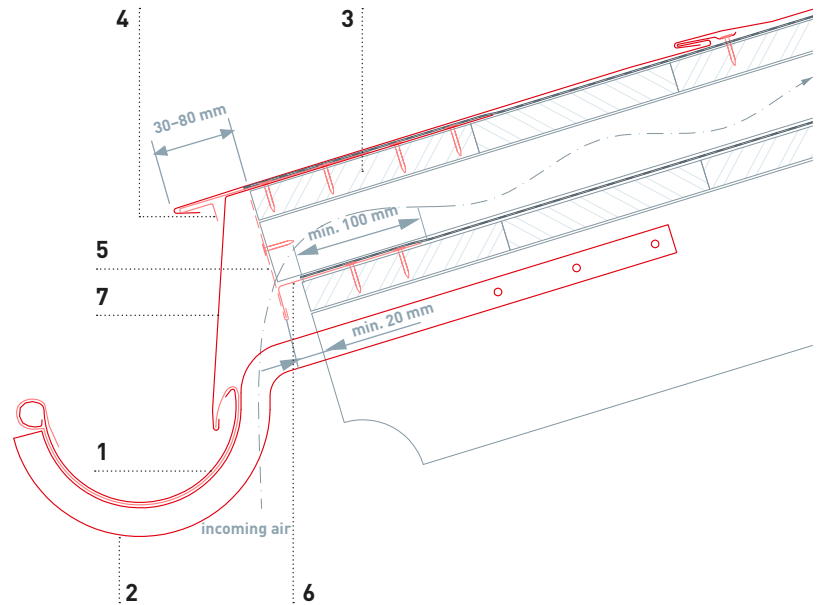
- 1 PREFA box gutter
- 2 PREFA bracket for box gutter
- 3 edge board
- 4 PREFA edge cleat strip
- 5 perforated metal plate
- 6 underlayment eaves apron strip
- 7 eaves apron ice strip



APPLICATION ROOF DRAINAGE

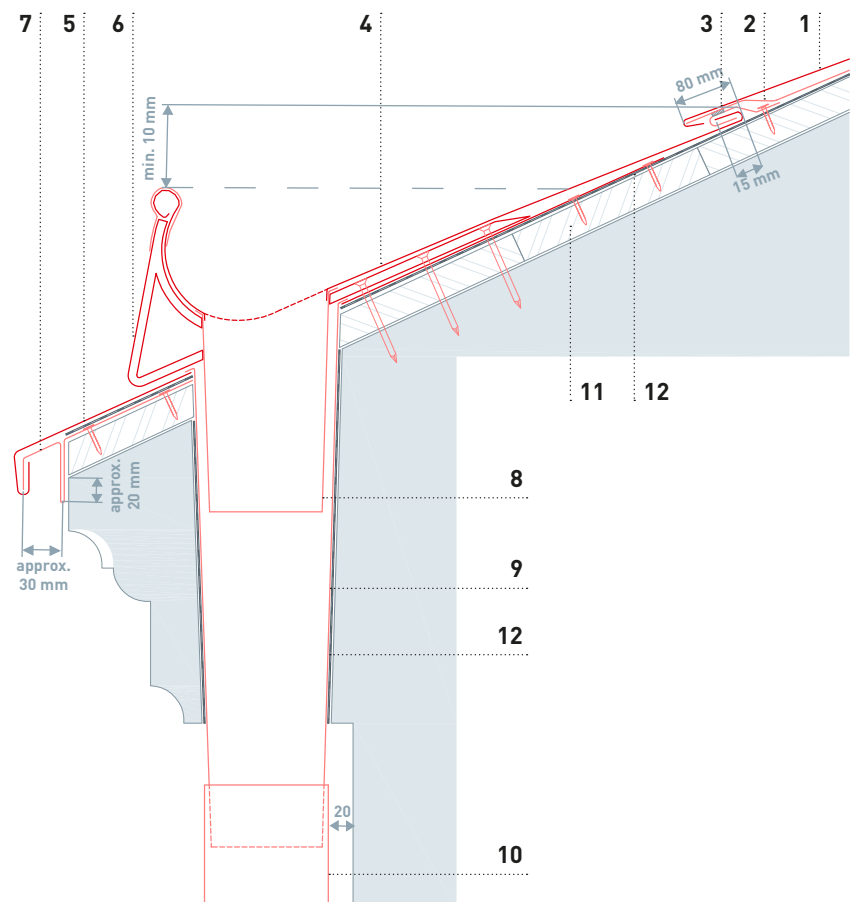
EAVES CONSTRUCTION WITH UPRIGHT GUTTER BRACKETS (LATERAL MOUNTING)

- 1 PREFE gutter
- 2 PREFE upright gutter bracket
- 3 edge board
- 4 PREFE edge cleat strip
- 5 perforated metal plate
- 6 underlayment eaves apron strip
- 7 eaves apron ice strip



EAVES CONSTRUCTION WITH ON-ROOF GUTTER

- 1 PREFE roof product
- 2 edge cleat strip (canted)
- 3 sealing tape (if applicable)
- 4 PREFE on-roof gutter
- 5 edge flashing
- 6 PREFE on-roof gutter bracket
- 7 eaves apron strip
- 8 gutter outlet
- 9 eaves outlet fitting
- 10 PREFE downpipe
- 11 solid sheathing (at least 24 mm)
- 12 separating layer





**THE ROOF
AS STRONG AS A BULL!**

THE PREFA GROUP

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