



LA PARISIENNE

The word "PARISIENNE" is rendered in a bold, black, sans-serif font. The letter "P" is stylized with a vertical black bar and a curved black shape that forms the top of the letter. The letter "S" is a solid black shape that looks like a stylized 'S'. The letters "I", "E", "N", and "N" are simple black rectangles. The letter "E" has a small black rectangle at its top right corner. The letters are arranged in a staggered, non-linear fashion.

Conventional and yet so much more beautiful

67

The numbers "6" and "7" are drawn in a light green color. The "6" is a thick, rounded shape. The "7" has a vertical black bar on its right side and a horizontal black bar at the top.

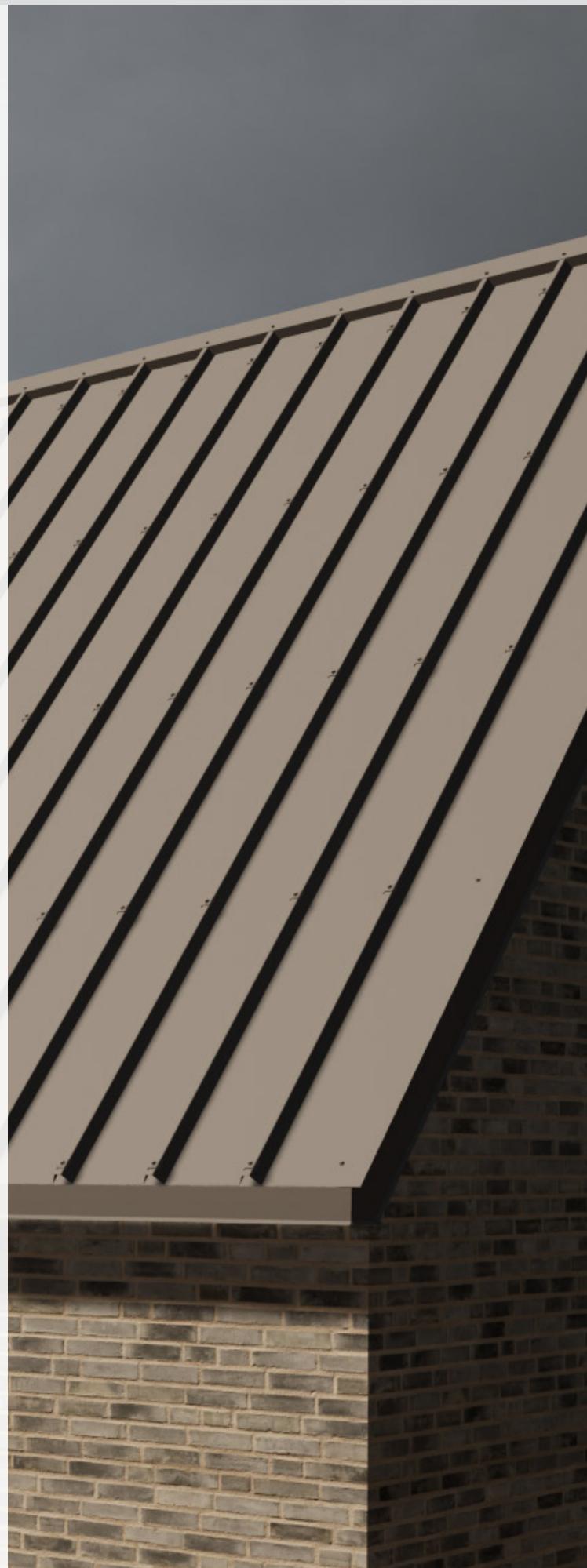
ATELIERS 
metal cladding creators



SUMMARY

LA PARISIENNE

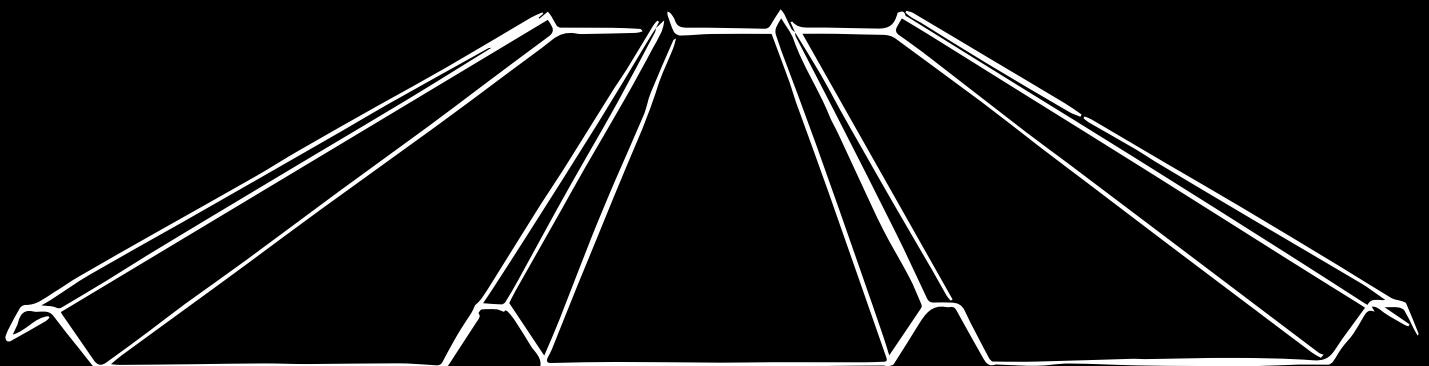
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LA PARISIENNE 67

Conventional and yet so much more beautiful



PARISIENNE® RANGE



LA PARISIENNE 67

Conventional and yet so much more beautiful

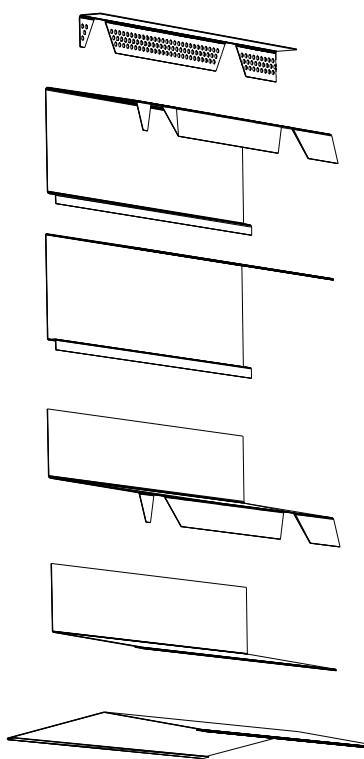
EVOLUTION

Ateliers 3S has always maintained a strong focus on the original design of new steel cladding ranges. Rather like a Michelin-starred restaurant during the creation of its signature dishes, where a passion for cuisine leads to new takes on the very best traditional recipes.

We have worked on all the ingredients to make one of the most widely used roofing panel solutions a responsible, high-performing and aesthetically pleasing choice; one that will continue to be as relevant in years to come as it has been in the past.



aesthetic



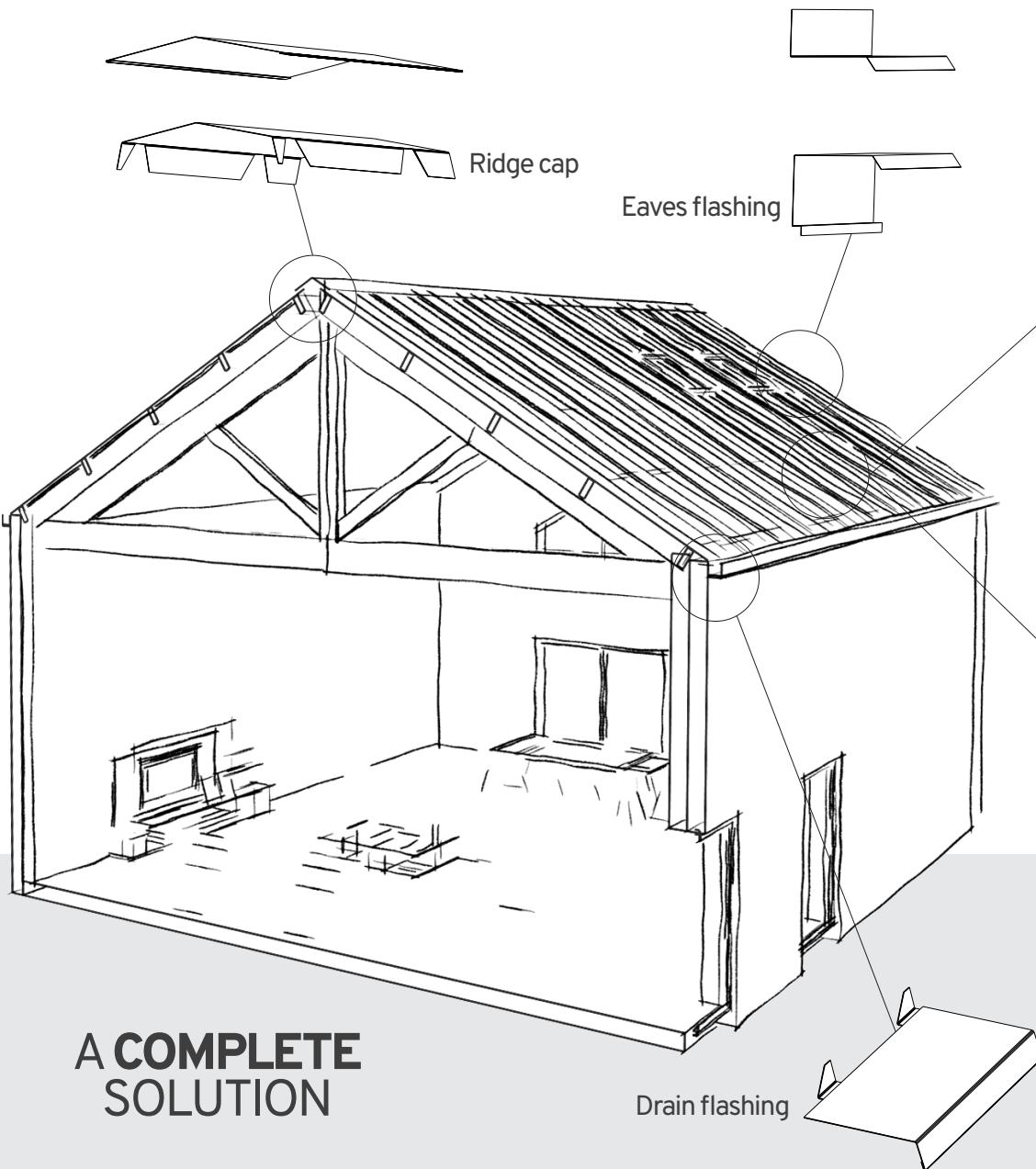
With its flat surfaces, ultra-matte zinc-look colorways and discreet fixing systems, **La Parisienne** offers the same aesthetic appeal as Paris-style zinc roofing along with the speed and ease of installation of steel roofing solutions.

AESTHETIC FINISHINGS



Example: **Perforated closer**
Its ultra-matte black coating ensures its aesthetic appeal and discreet design.

DISCREET FIXING SYSTEMS



Elysée® Rodéo Screw

The all-in-one screw that doesn't need a saddle washer for a discreet, unobtrusive finish.



Triomphe® Saddle washer

The saddle washer that is perfectly moulded to the rib heads. Made from the same material as La Parisienne, its perfect tone-on-tone finish renders it invisible.

A COMPLETE SOLUTION

6 MATE COLORS ZINC SPIRIT

50μ Coating - 30 YEAR WARRANTY

sustainable

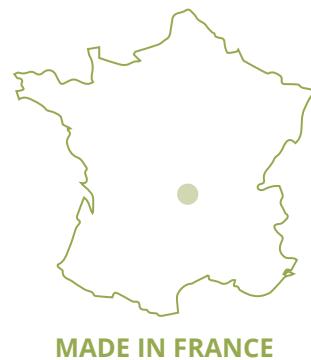
LOW CARBON ROOFING PANEL



*Arcelor XCarb® EPD value + HSS (High Strength Steel) bonus HLE



By combining XCarb® recycled and renewably produced technology, Ateliers 3S reduces the La Parisienne's carbon footprint by 67% compared to conventional roofing panels.



PRODUCTS WITH LONG-TERM WARRANTIES

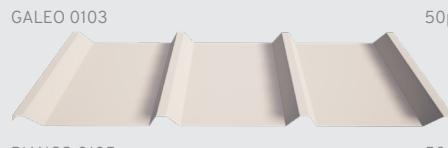
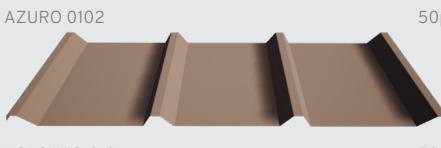
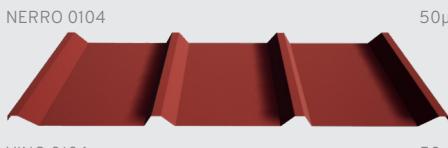
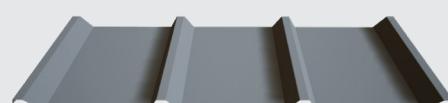
Very high galvanic protection, attractive high-performance coatings, double-sided and extra thick; we have selected the very best ingredients to offer an exceptional 30-year warranty.

Reduce your consumption by extending the life of your buildings.



Ateliers 3S has selected a special High Tensile Strength steel that allows us to reduce the product's weight, remove unsightly stiffeners, while still optimizing performance. This lightweight steel sheet is also perfectly suited to renovation projects.

efficient

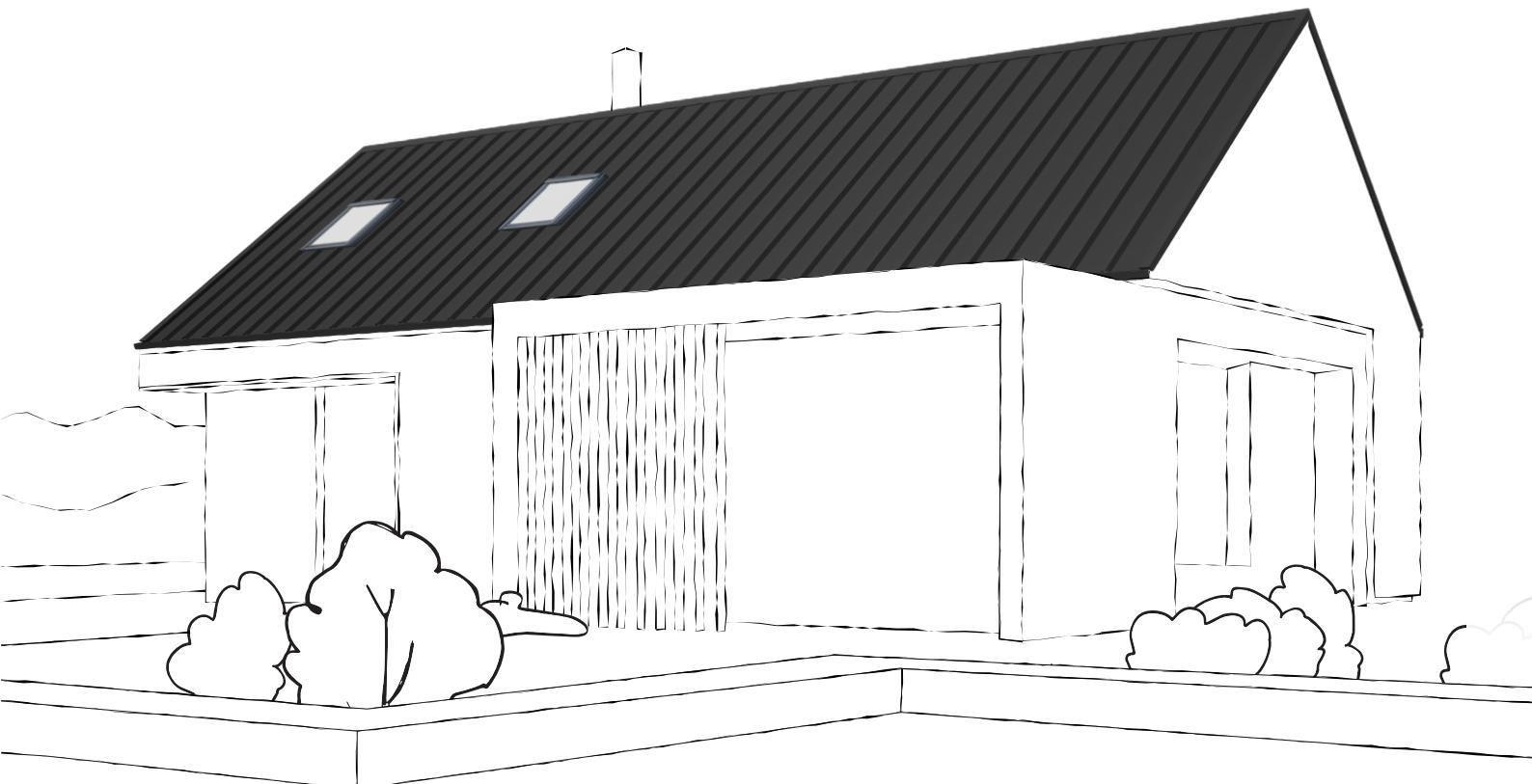


50µ

50µ

50µ

PARISIENNE 1000®



PROFILE PARISIENNE 1000®

Material	Thickness (mm)	Weight (kg/m ²)
Steel S390 GD + Z275	0.63	6.03

Coating	Norm
Polyurethane 50μ	Coil coating EN 10169

Effective width : **1000 mm** - Sheets length : **13000 mm maximum**

CONVENTIONAL
INSTALLATION
DTU 40.35

MAXIMUM
COMPATIBILITY WITH
ROOF ACCESSORIES

30-YEAR
WARRANTY
A1 (MO)
BROOF (T3)

MADE IN FRANCE

DWG
TO DOWNLOAD
ON WEBSITE

LA PARISIENNE, CONVENTIONAL AND YET SO MUCH MORE BEAUTIFUL

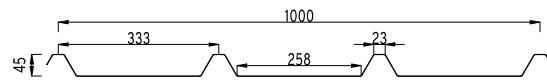


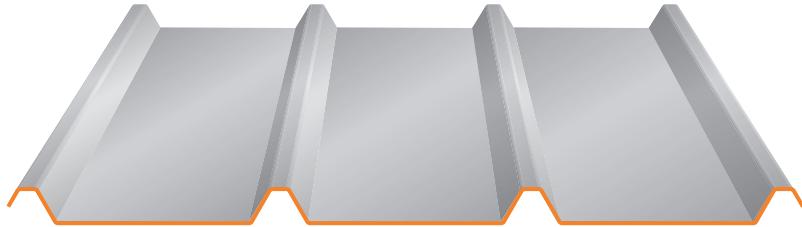
PARISIENNE 1000®

Aesthetics serving the 5th facade.

Designed to the standard dimensions of 3.45.333.1000, La Parisienne is
natively compatible with all the steel roof accessories.

With its flat surfaces and ultra-matte zinc-look colourways, it offers the same
aesthetic appeal as zinc roofing in La Parisienne batten cap style.





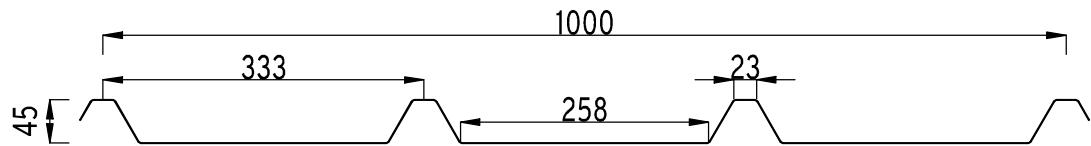
PARISIENNE 1 1000®
Profile height 45 mm

Material	Thickness (mm)	Weight (kg/m ²)	Coating	Norm
Acier S390 GD + Z275	0.63	6.03	Polyurethane 50 μ	Coil coating EN 10169

Effective width : **1000 mm** - Sheets length : **13000 mm maximum**

CALCULATION VALUES

Downward load action	All ribs fixed	Moment of inertia cm ⁴ /ml	single span		I2	cm ⁴ /ml	19,18
			2 equal spans		I3	cm ⁴ /ml	15,04
			continuity		Im	cm ⁴ /ml	17,11
		Bending moment m.daN/ml	In span	Elastic system	Md2T	m.daN/ml	143,79
				Elastoplastic system	Md3T	m.daN/ml	173,02
			On support		Md3A	m.daN/ml	150,87
				Under concentrated load	Mc	m.daN/ml	120,84
			Support reaction			Rd	daN/ml
		Bending moment m.daN/ml	In span	Elastic system	Ma2T	m.daN/ml	124,21
				Elastoplastic system	Ma3T	m.daN/ml	155,46
			On support		Ma3A	m.daN/ml	144,82
Upward load action	Fasteners at rib top	Pull-out force on support			Sar	daN/ml	548,89
		Characteristic pull-out resistance			Pk/ym	daN	253
		Bending moment m.daN/ml	In span	Elastic system	Ma2Tr	m.daN/ml	82,81
				Elastoplastic system	Ma3Tr	m.daN/ml	103,64
			On support		Ma3Ar	m.daN/ml	96,55
		Pull-out force on support			Sar	daN/ml	365,93
		Characteristic pull-out resistance			Pk/ym	daN	253



SPAN TABLES

Test report n°R134476108-001-1

apave Test carried out according to standard NF P 34-503-1 and interpretation according to DTU 40.35 (NF P 34-205-1 May 1997)

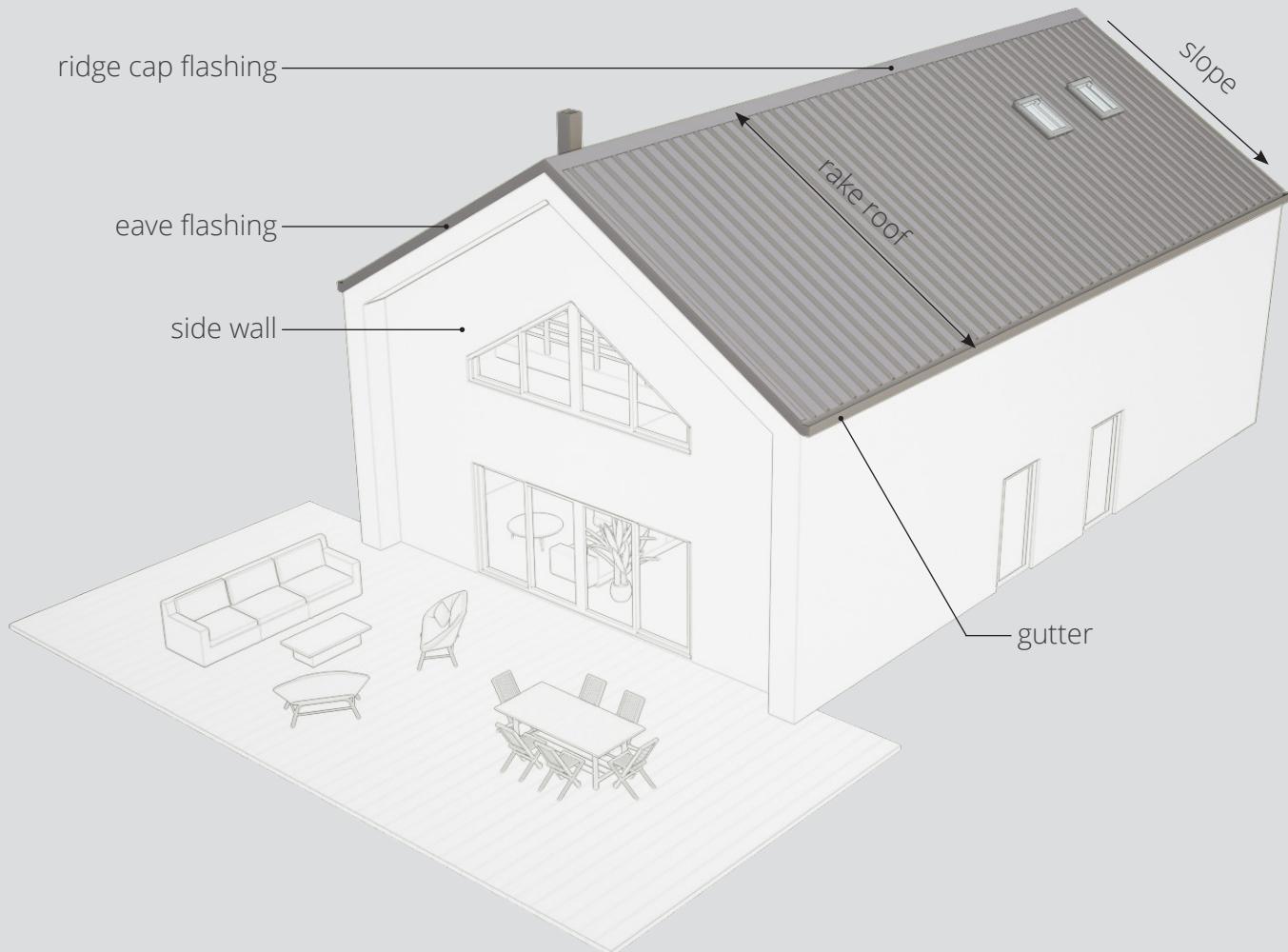
The table below shows the spans in meters according to upward loads (wind) and downward loads (snow) and according to the type of installation:

Loads daN/m ²	Downward loads			Upward loads (all ribs fixed)			Upward loads (2 ribs fixed out of 3)	
	single span	double span	multiple span	single span	double span	multiple span	double span	multiple span
50	2,45	3,00	3,00	2,45	3,00	3,00	3,00	3,00
75	2,45	3,00	3,00	2,45	3,00	3,00	3,00	3,00
100	2,45	2,95	2,95	2,45	3,00	3,00	2,45	2,65
125	2,35	2,65	2,65	2,35	2,85	2,90	1,90	2,10
150	2,20	2,45	2,45	2,15	2,40	2,60	1,60	1,75
175	2,05	2,25	2,25	1,95	2,05	2,20	1,35	1,50
200	1,95	2,10	2,10	1,75	1,75	1,95	1,20	1,30
225	1,80	2,00	2,00					
250	1,75	1,85	1,90					



INSTALLATION

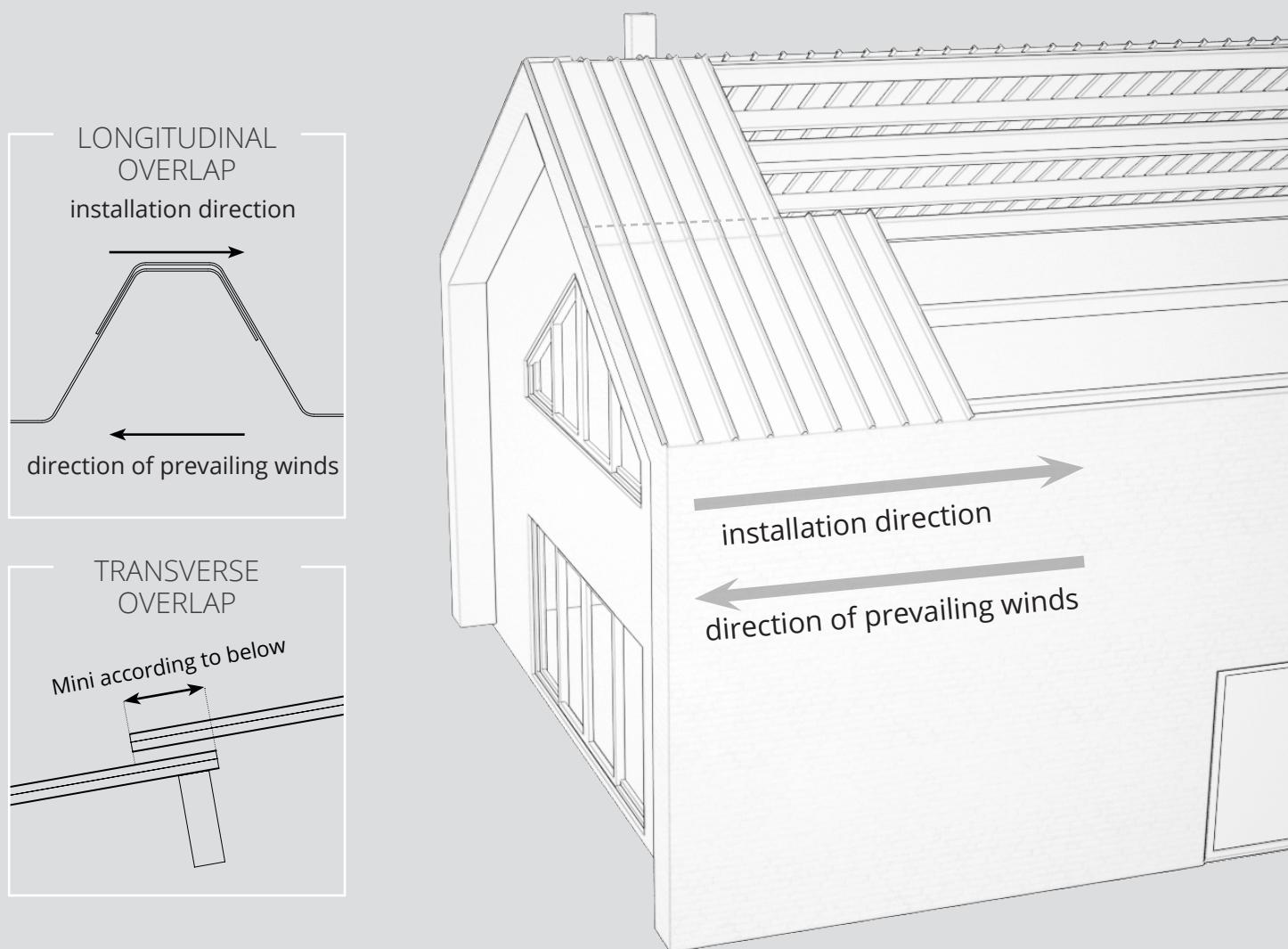
PROFESSIONAL VOCABULARY



Definitions

Eave flashing :	steel piece covering the edge of a roof
Filler :	profile ensuring the sealing and caulking of the profile ribs
Gutter :	lower part of a roof through which rainwater flows out of the building
Center distance :	distance between two éléments measured from axis to axis
Ridge cap flashing :	piece covering the upper edge of a roof
Slope :	inclination of a roof. It can be expressed in degrees ° or in percentages %
Side wall :	facade of a building between 2 roof slopes
Span :	distance between single span
Rake roof :	inclined structural elements of a roof

INSTALLATION DIRECTION



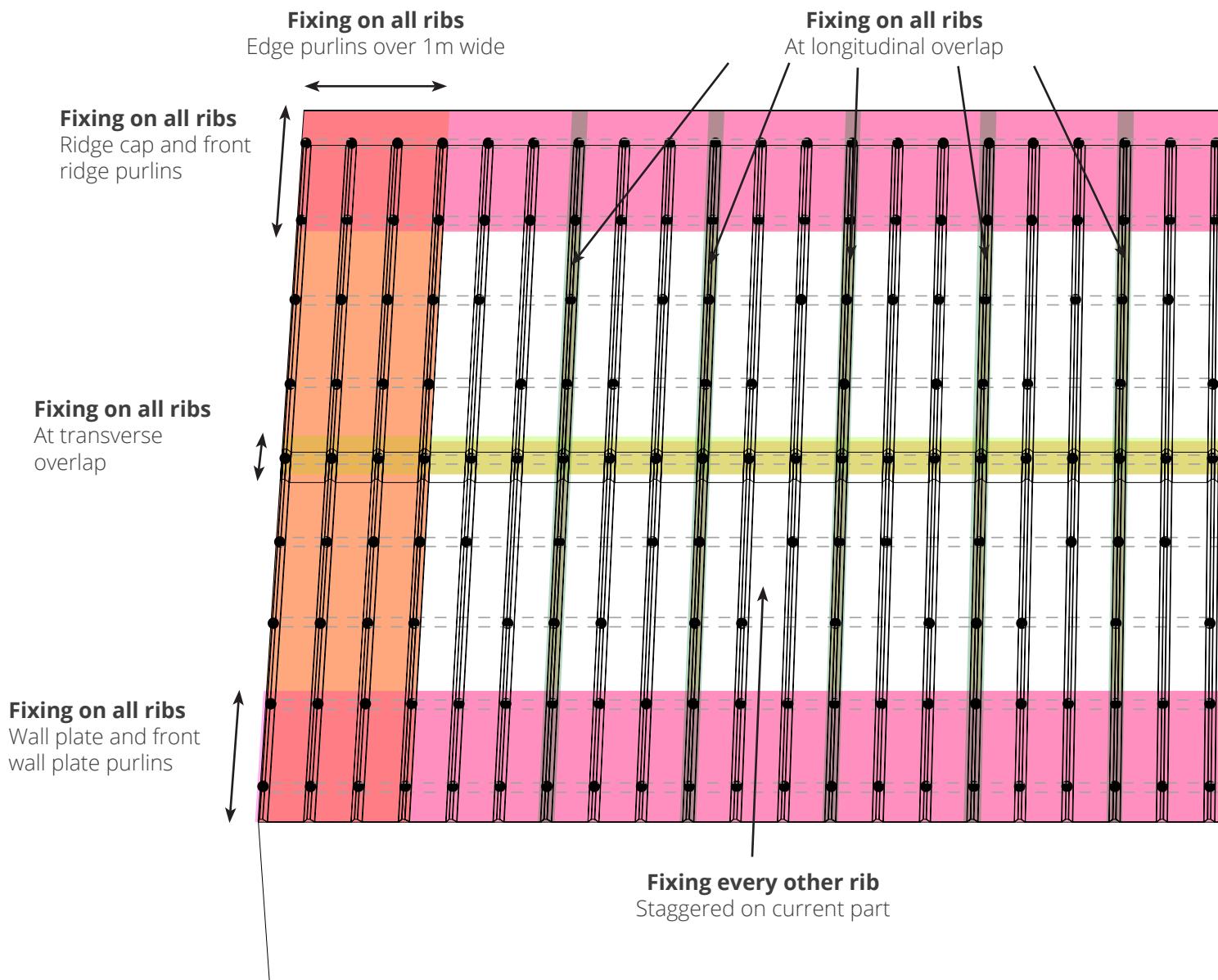
The sheets are installed with ribs parallel to the line of greatest slope. The longitudinal overlap is given by the interlocking of the «interlocking» edge rib on the «interlocked» edge rib of the previous sheet. It is carried out in the direction opposite to the prevailing winds. Transverse overlaps are always made at the supports.

Minimum transverse overlap according to DTU 40.35

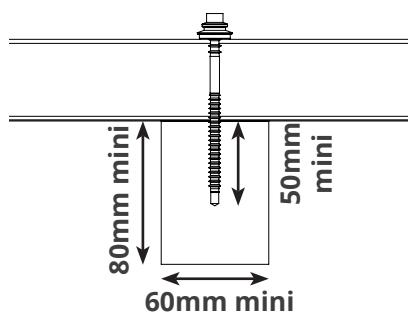
Slope	Waterproof supplement (W.S.)* :			With W.S.* All zones	
	Without W.S.*				
	Climate zone				
7% ≤ slope < 10%	300mm	Case not covered by DTU 40.35		150 à 200mm	
10% ≤ slope < 15%	200mm	300mm			
slope ≥ 15%	150mm	200mm			

*Waterproofing supplement compliant with NF P 30-305 according to DTU 40.35. The implementation of waterproofing supplements must comply with the provisions of DTU 40.35

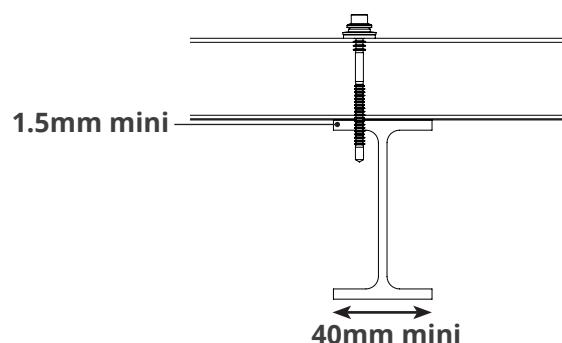
FIXING PATTERN



FIXING SPECIFICITIES :



Wood support



Steel support



RODÉO ELYSÉE® SCREW

The **all-in-one screw** that doesn't need a saddle washer for a discreet, unobstructive finish.

These fixings are not covered by DTU 40.35 but are subject to a New Technique Survey (NTS) by the manufacturing company SFS. The field of use and implementation of these screws must comply with this NTS.



Rodéo Elysée® Screw

6.5x100



Wood

5.5x86



Thick steel purlins
(thickness from 4
to 12mm)

5.5x75



Thin steel purlins
(thickness from
1.5 to 4mm)

article code :

ELYSEE-BOIS ELYSEE-EPAIS ELYSEE-MINCE



TRIOMPHE® SADDLE WASHER

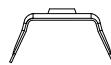
The saddle washer that perfectly matches the top of the ribs.

Formed from the same material as La Parisienne, it disappears in perfect tone-on-tone.

La Parisienne remains compatible with traditional fixing solutions within the meaning of DTU 40.35. The previously described fixing pattern must be respected with traditional screws.

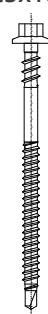


Triomphe®
saddle
washer



Traditional screw

6.5x100



Wood

5.5x86



Thick steel purlins
(thickness from 4
to 12mm)

5.5x75



Thin steel purlins
(thickness from
1.5 to 4mm)

article code : TRIOMPHE

FIXCOU-BOIS

FIXCOU-5.5-86

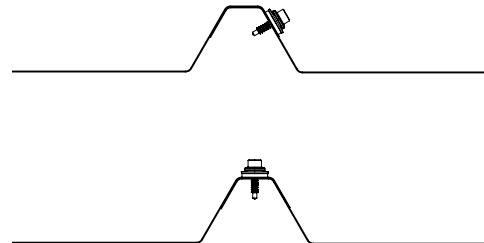
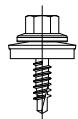
FIXCOU-5.5-75

SEAM SCREWS

Special provisions relating to seam screws.

Seam fixings are placed on longitudinal overlaps according to the location indicated in the table below.

SEAM 4.8x20



article code : **FIXCOU-4.8-20**

Position of seam screw at longitudinal overlap

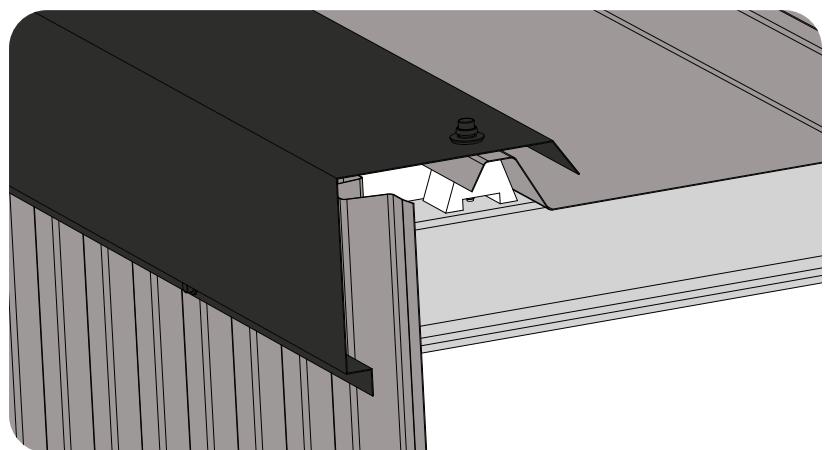
Span L (m)	Normal situation with slope $\geq 10\%$ defined on page 53	Exposed situation or slope $< 10\%$ defined on page 53
$L \leq 2$	L	L/2
$2 \leq L < 3,50$	L/2	1m
$L \geq 3,50$	1m	1m

The fixing on purlin of the longitudinal overlap ribs of the sheets is also considered as a seam fixing when it is located at the top of the rib.

BRIDGE BRACKET

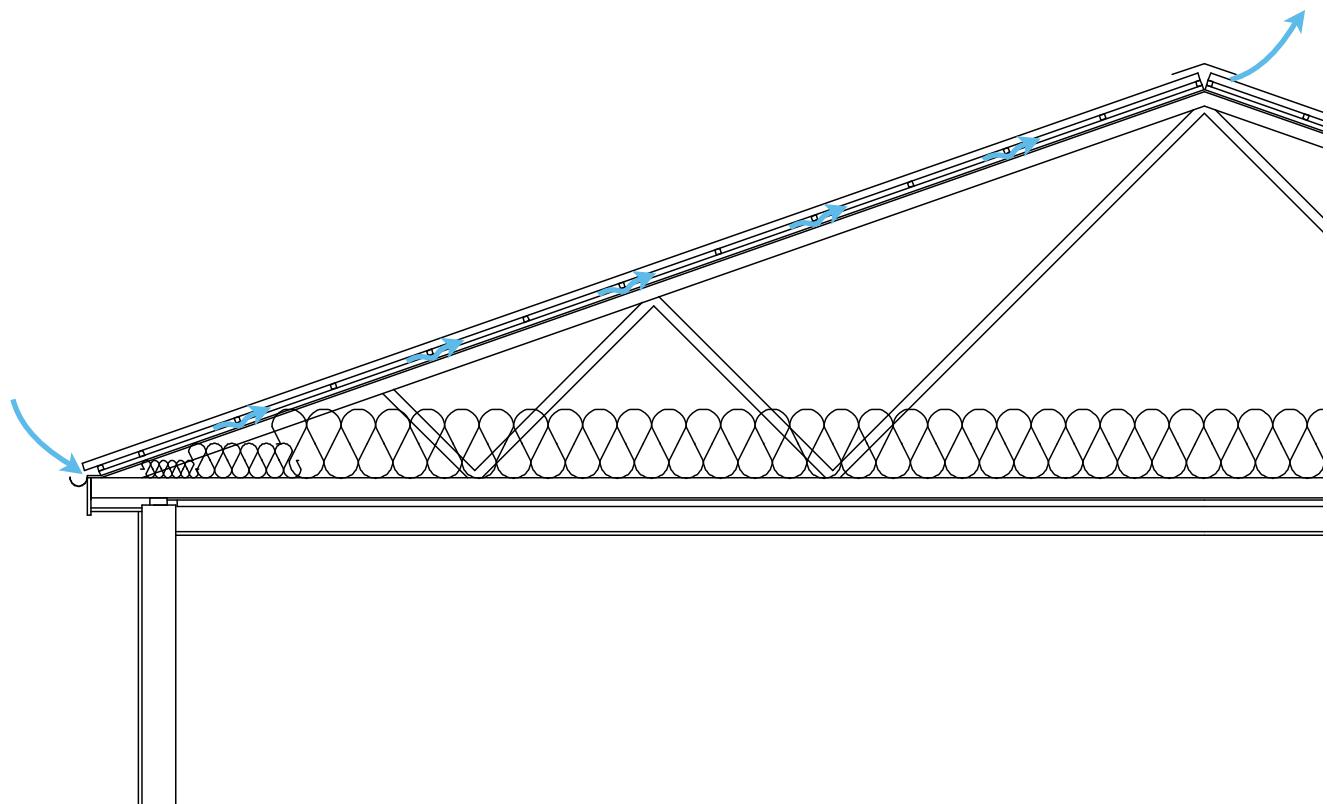
Bridge brackets are pieces installed under the end ribs of La Parisienne in the following cases :

- at eaves flashing (see «eaves» paragraph)
- at overlap on translucent sheets or on polyester accessories



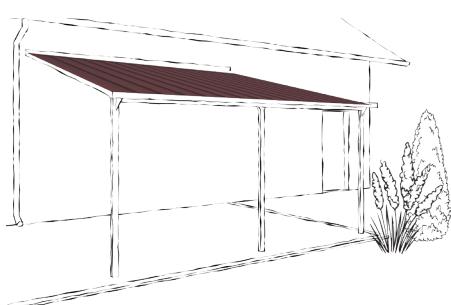
VENTILATED ROOF (COLD ROOF)

A ventilated roof (also called cold roof in DTU 40.35) is a roof characterized by the presence, on the underside of the corrugated sheet, of an air gap ventilated by outside air.

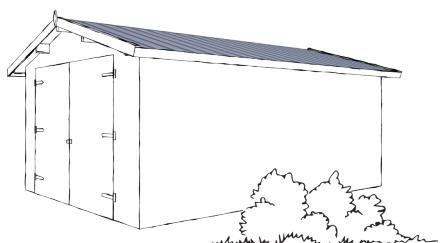


These roofs are found in 3 types of buildings: open buildings, closed non-insulated buildings, or closed buildings insulated under purlins.

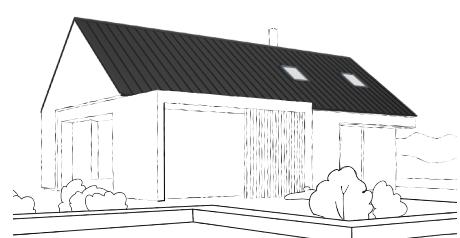
Open building



Closed non-insulated building

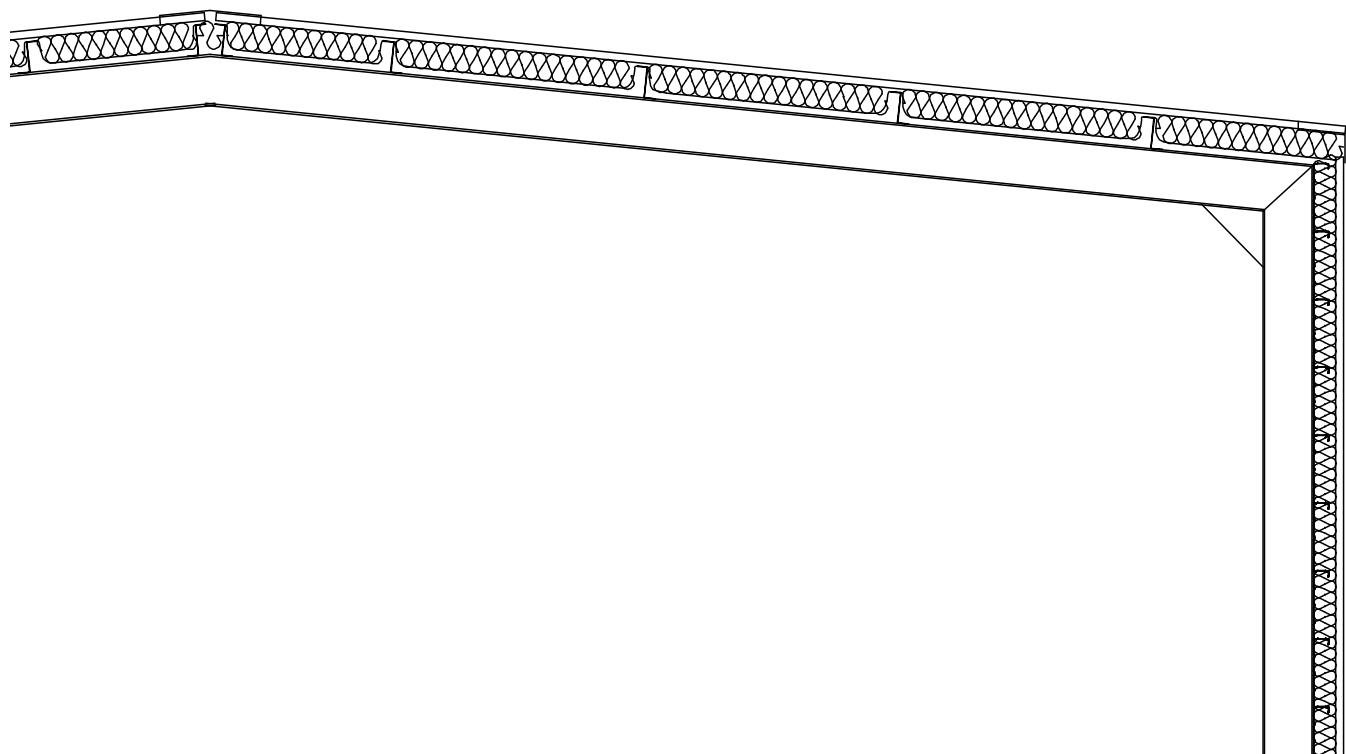


Closed building
insulated under purlins

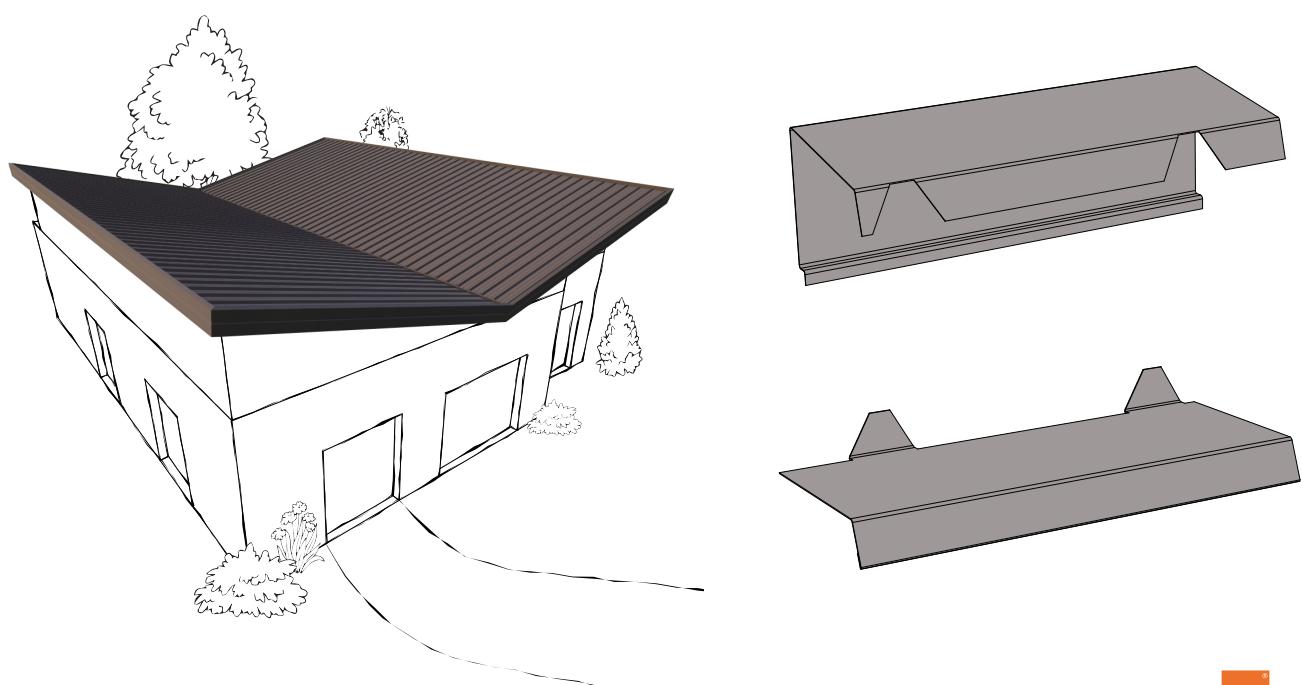


NON-VENTILATED ROOF (WARM ROOF)

A non-ventilated roof (also called warm roof in DTU 40.35) is an insulated roof on the underside of corrugated sheets and generally characterized by the absence of an air gap between the underside of the roofing and the insulation. When an air gap exists, it is not ventilated with outside air.



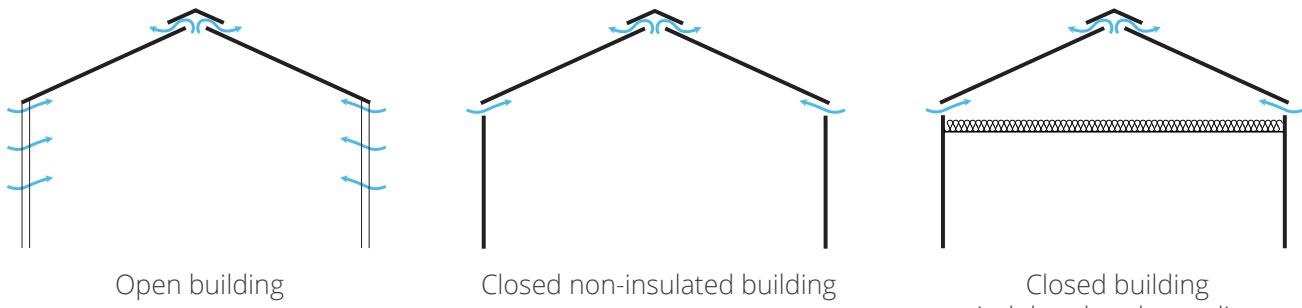
In this type of roof, it is necessary to install notched finishing accessories (at ridge cap and drain flashings).





VENTILATED ROOF (COLD ROOF)

Général provisions



The ventilation of this type of roof is a fundamental element for its proper functioning and depends on the building typology:

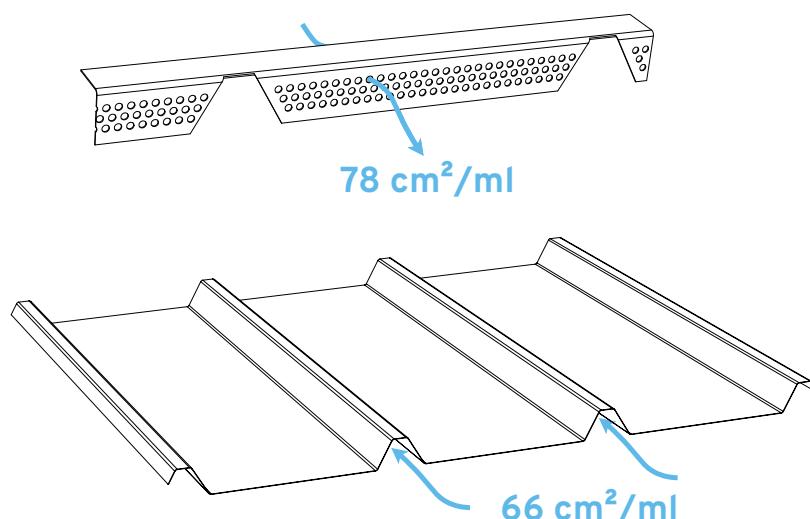
Building type	Humidity	Minimum cross-section of airin-lets or outlets
Closed non-insulated building	all levels	1/500e of the projected surface of the considered slope
Closed building insulated under purlins Thickness of continuous air gap between insulation and underside of roof support = 4cm	low humidity	1/2000e of the projected surface of the considered slope
	medium humidity	1/1000e of the projected surface of the considered slope

For buildings humidity levels, refer to the «ENVIRONMENTS AND CLIMATIC ZONES» section in this guide.

The cross-section of each series of openings must not exceed 400cm²/ml.

Roof ventilation can be achieved through the following methods:

- Natural ventilation cross-section of Parisienne profile: 66 cm²/ml
- Perforated closer filler: 78cm²/ml



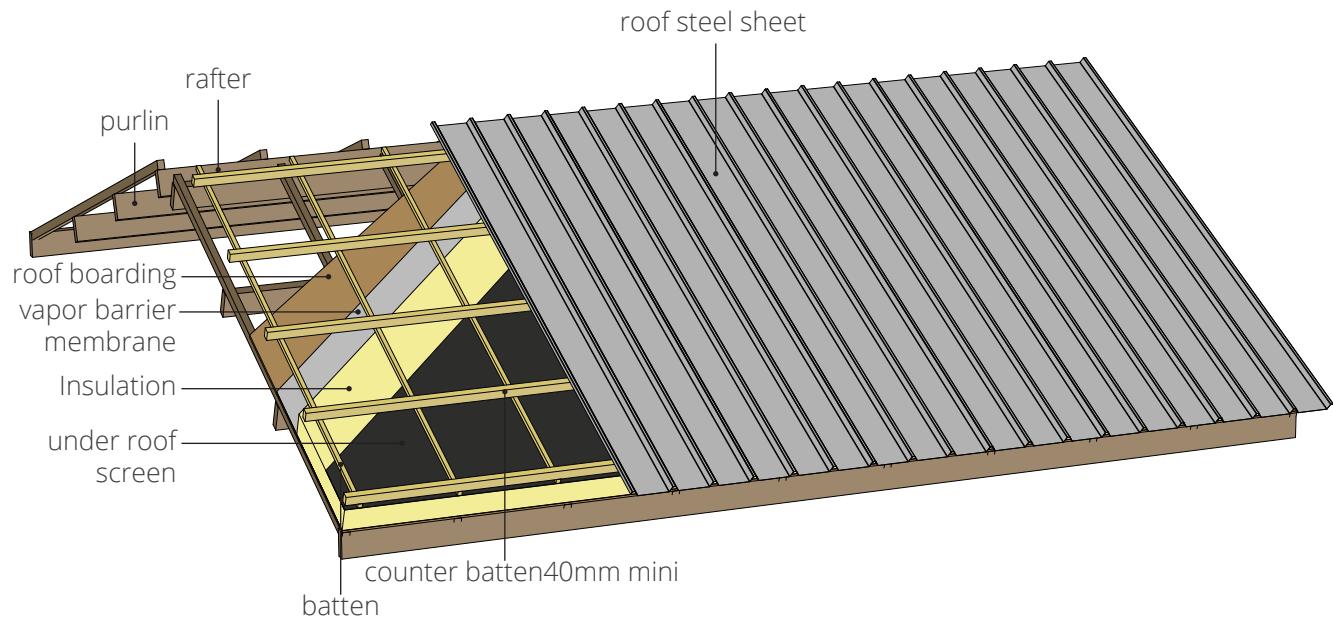
- Roof vents
- Cross-battens with 40mm height within the framework of a continuous 4cm air gap (between insulation and underside of roof support)

The provisions for implementing ventilation are given in DTU 40.35

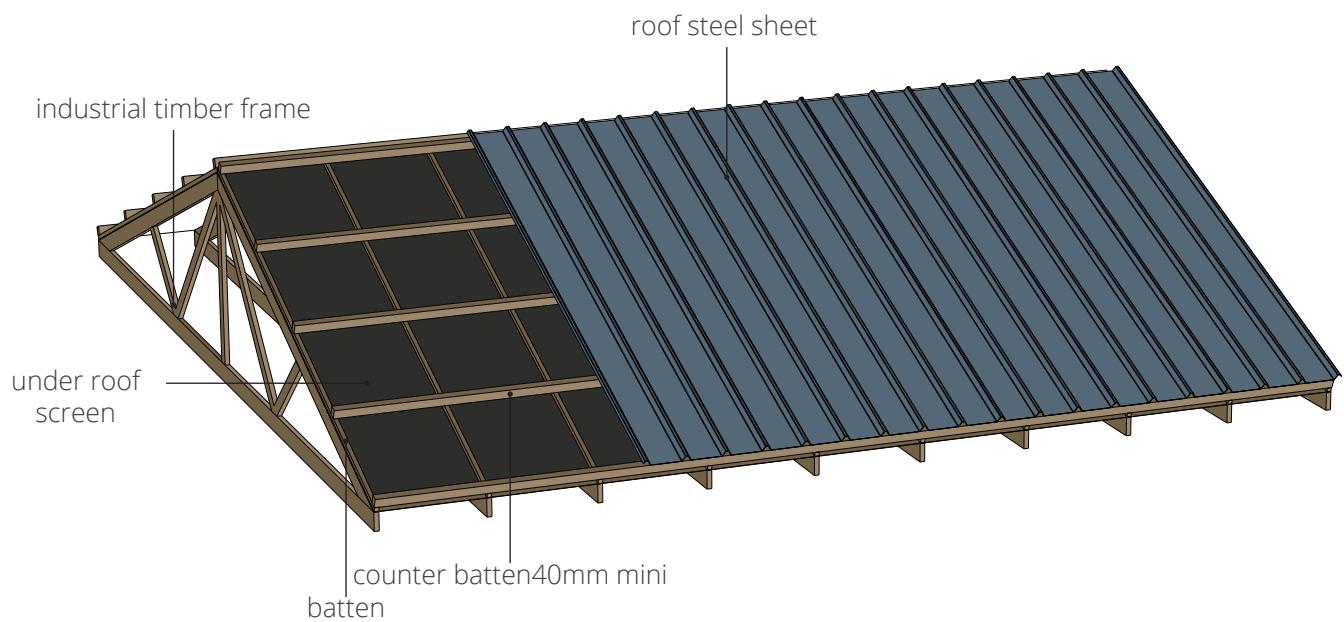
VENTILATED ROOF

Some examples of ventilated roofs :

TRADITIONAL TIMBER FRAME – INSULATION - SARKING

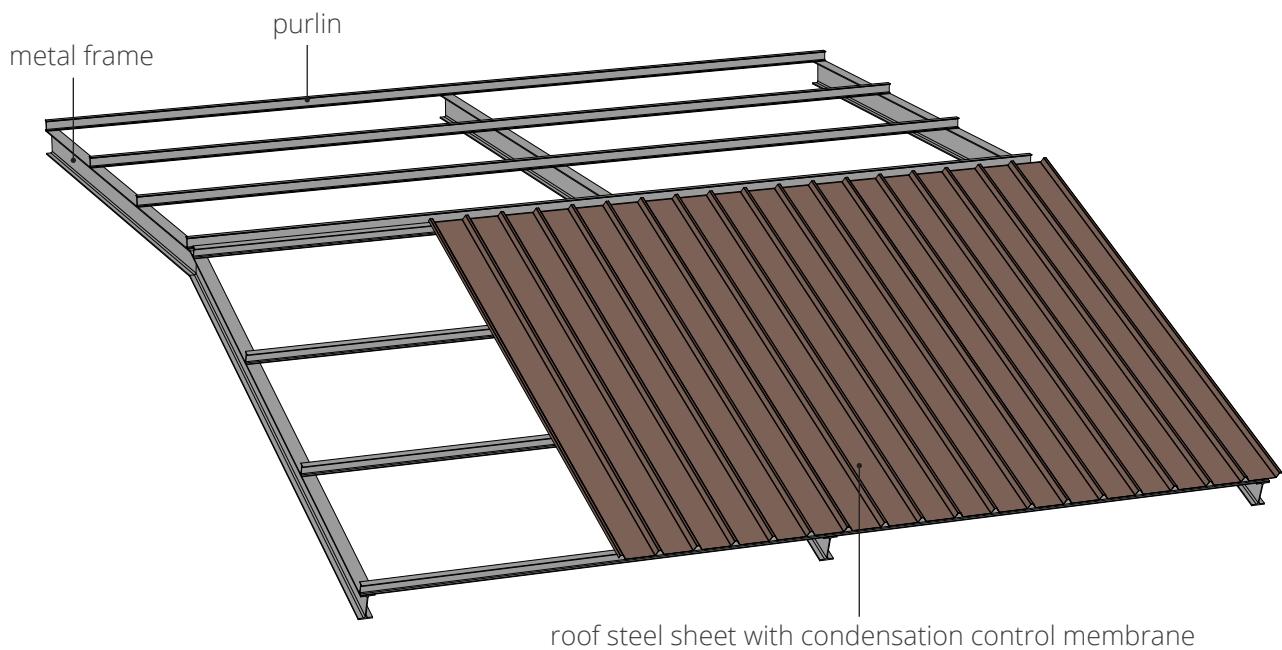


INDUSTRIAL TIMBER FRAME – INSULATION IN CEILING

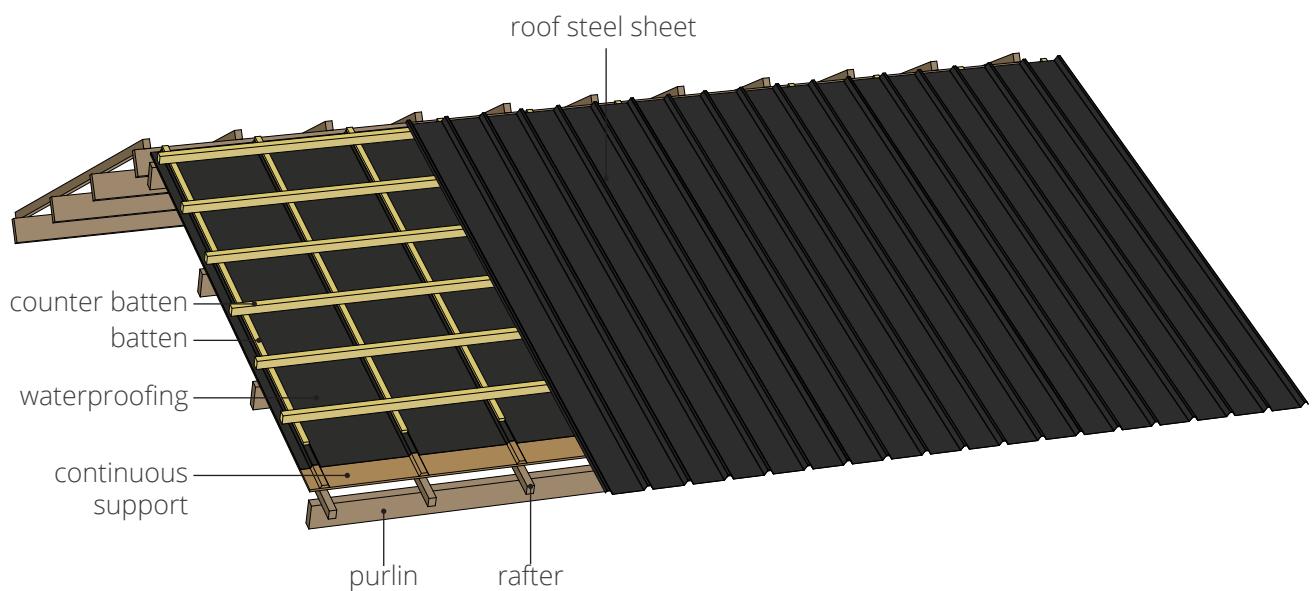


VENTILATED ROOF

METAL FRAME WITH CONDENSATION CONTROL MEMBRANE



ROOF IN MOUNTAIN CLIMATE ZONE



This type of roofing (altitude > 900m) is covered by Cahier CSTB 2267-1, (« Guide des couvertures en climat de montagne »). This guide provides additional provisions to DTU 40.35 for this particular application. These instructions should be followed in the construction of the roof, and in particular in the installation of ventilation.

THERMAL INSULATION PRINCIPLE

VENTILATED ROOF (COLD ROOF)

Case of a ventilated roof (or cold roof) receiving insulation under purlins as per DTU 40.35:

Roof type	Insulation type	Room humidity	
		Low	Medium
Cold	Under purlin	with condensation control membrane	yes
		with felt	yes

The implementation of insulation processes under purlins consists of placing insulating materials on a horizontal ceiling or a ceiling parallel to the slopes.

The connection to the framework must be such that the upward or downward loads exerted on the ceiling are entirely transmitted to the main structure.

A vapor barrier membrane is placed under the insulation (added or incorporated into the insulation or ceiling). These techniques fall under standard NF P 68-203 (DTU 58.1) supplemented as follows:

- The sub-roofing must be implemented taking care to maintain a continuous ventilated air gap with thickness at least equal to 4 cm.
- The permeability of the material used as vapor barrier membrane must be at most equal to 0.02 g/m².h.mmHg measured according to standard NF ISO 2528

NON VENTILATED ROOF (WARM ROOF)

DTU 40.35 covers the following warm roofs:

- Insulation on purlins
- Insulation between purlins with non-ventilated air gap
- Insulation between purlins without air gap
- Parallel frame insulation

The adequacy of warm roof typologies according to room humidity is given below:

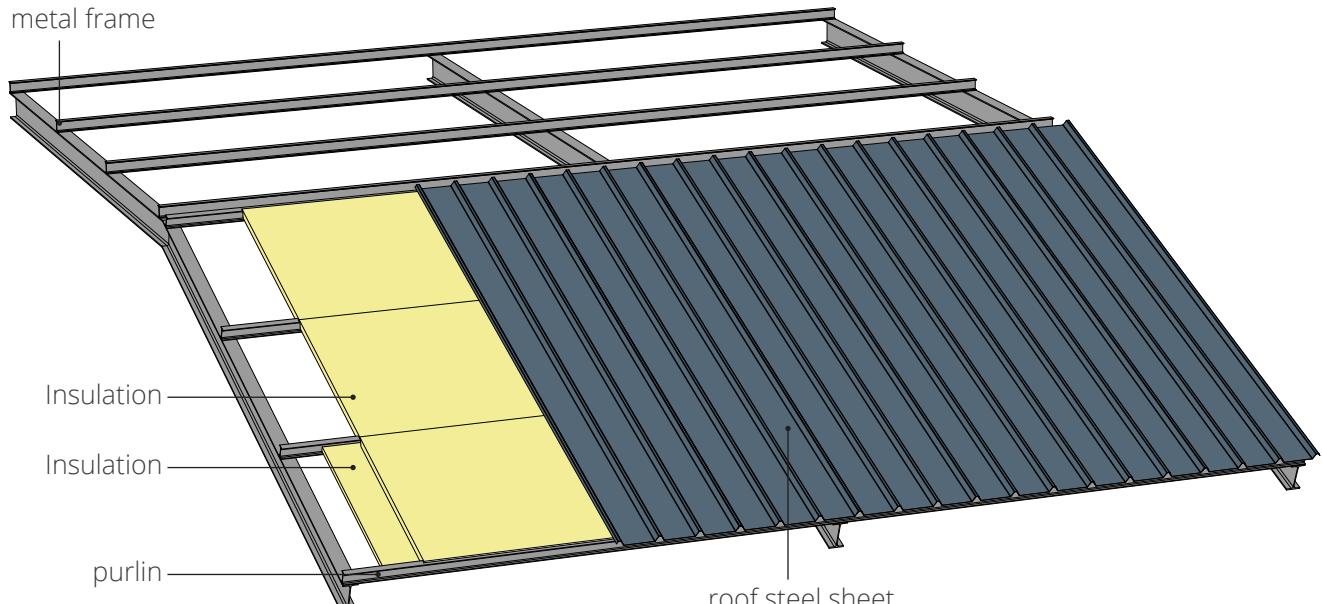
Roof type	Insulation type	Room humidity	
		Low	Medium
Warm	On purlin	yes*	x*
Warm	Between purlins	with non-ventilated air gap	yes
		without air gap	yes
Warm	Parallel frame	yes	yes

* Subject to Technical Assessment (AT)

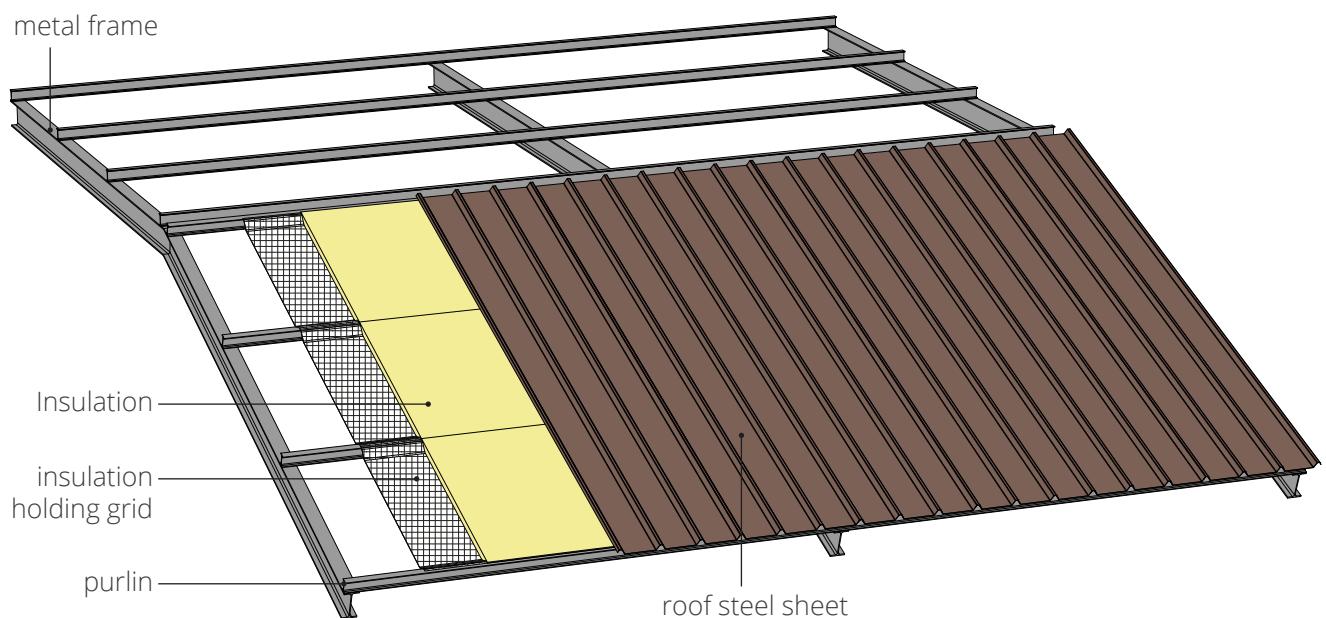
x Subject to favorable AT for medium humidity

NON-VENTILATED ROOF

INSULATION BETWEEN PURLLINS

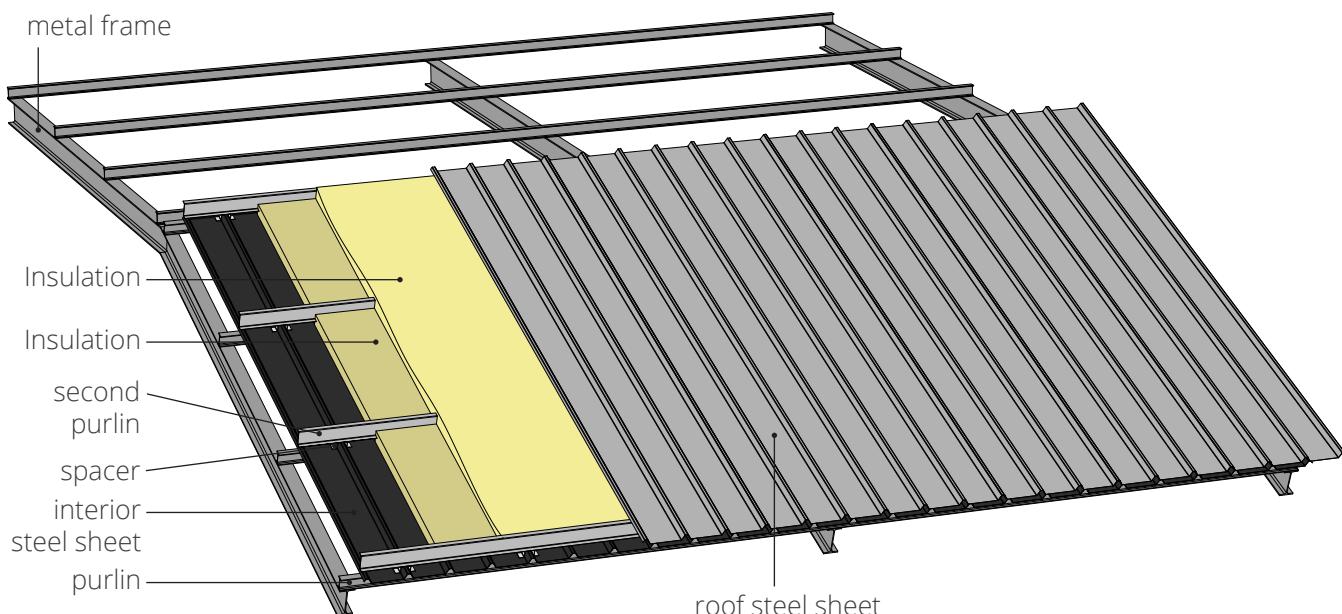


INSULATION ON PURLLINS



NON-VENTILATED ROOF

PARALLEL FRAME INSULATION



Other warm roof typologies exist on the market. They are not covered by DTU 40.35, but by other documents (DTA, AT, Atex, ETN...). These documents should be referenced for installation provisions.

Among these warm roof typologies, we mention:

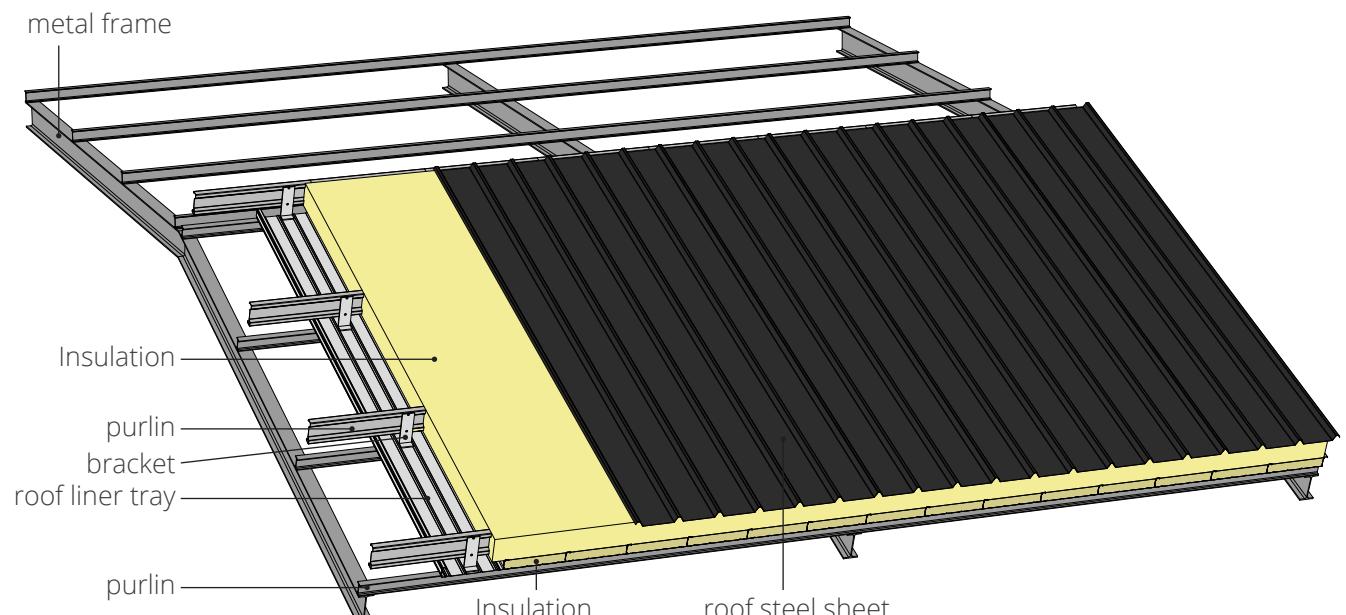
- Parallel installation steel liner trays
- Perpendicular installation steel liner trays

These systems may consist of second purlins, spacers, decks. The decks may be load-bearing or non-load-bearing.

In any case, it is necessary to refer to the documents dealing with their installation

NON-VENTILATED ROOF

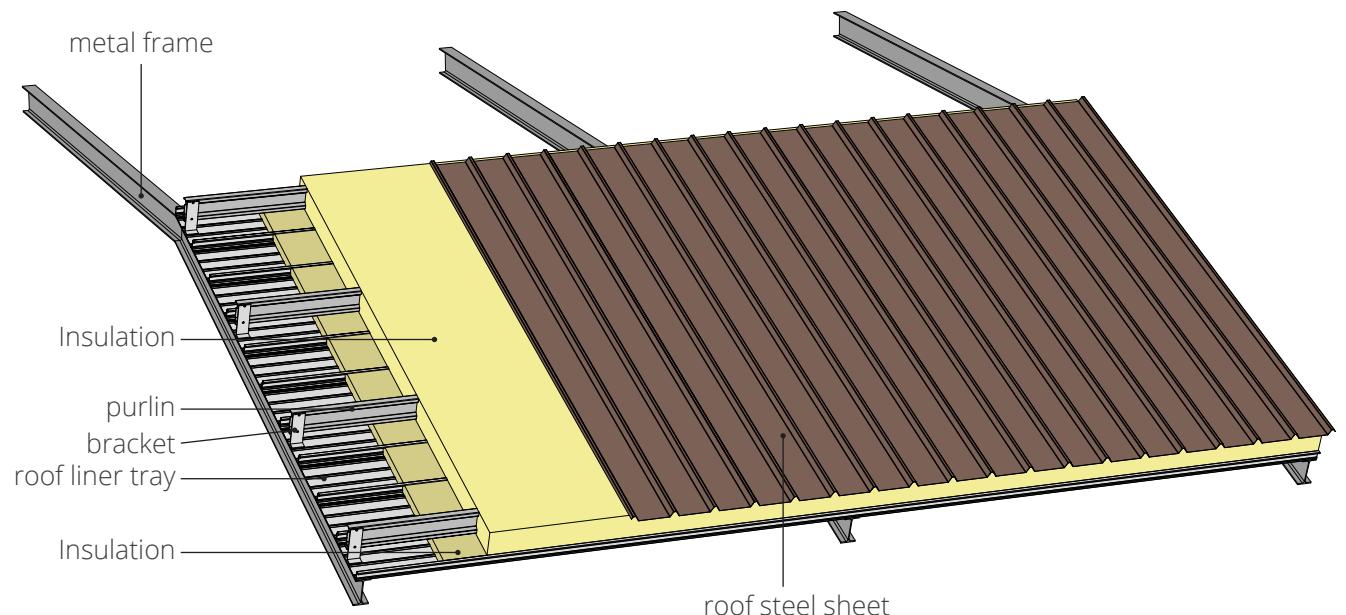
PARALLEL STEEL LINER TRAY INSTALLATION



Installation system not covered by DTU 40.35

System suitable for timber frame

PERPENDICULAR STEEL LINER TRAY INSTALLATION



Installation system not covered by DTU 40.35

System suitable for timber frame

PRINCIPALS OF FLASHING PROFILES INSTALLATION

General Provisions

The installation requirements for flashing profiles are given in DTU 40.35.

The following pages serve as illustration of these requirements; reference should be made to DTU 40.35 for any additional information.

In accordance with DTU 40.35, preliminary layout planning helps to avoid cutting operations on site. If cutting is necessary, the use of a nibbler is recommended. During cutting operations, the coating of accessories (and roof sheets) must be protected to avoid any incrustation of hot metal particles.

Where applicable, deburring of cut areas must be performed.

Flashing profiles are installed at the same time as the roof sheets. The fixing of roof accessories is common and of the same type as those of the roof sheets.

The use of support and sealing washers is recommended for fixing flashing profiles at the top of ribs of metal sheets.

The overlap between two fixing profiles is at least 100mm.



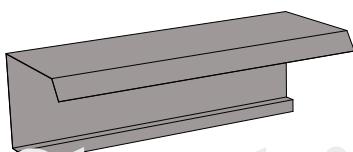
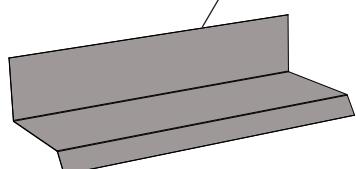
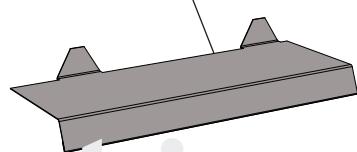
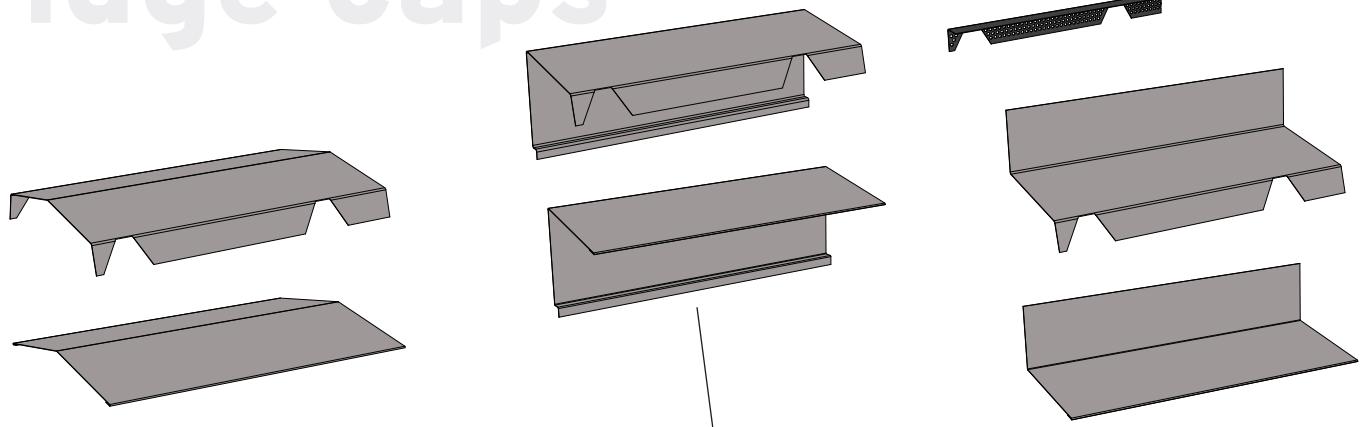
Beyond the aesthetic quality of its panels, a successful metal roof requires precise and well-designed flashing profiles. ATELIERS 3S takes particular care to offer discreet elements that connect with the styles of the associated ranges of products.

In these pages, you'll find a selection of models that are fully adaptable to the actual dimensions of your project.

No matter how precise your installation is, **flashing profiles will always be custom-made elements**. Please don't hesitate to provide us with your exact dimensions and any other installation drawings..

PRINCIPALS OF FLASHING PROFILES INSTALLATION

ridge caps

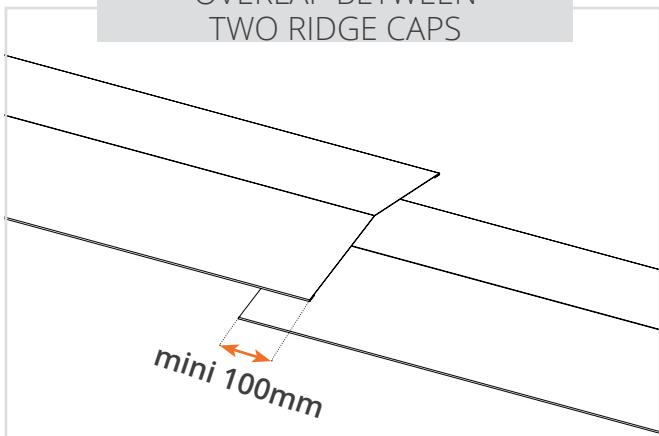


eaves flashings

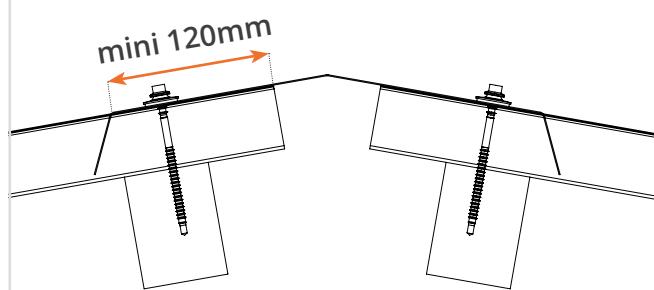
ridge caps



OVERLAP BETWEEN
TWO RIDGE CAPS



OVERLAP BETWEEN
RIDGE CAP AND METAL SHEET

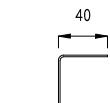
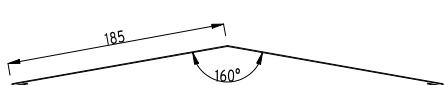


For low slopes (<10%) it is necessary to create a raised edge of the sheets.

For slopes <7%, it is also necessary to install a foam counter-closer.



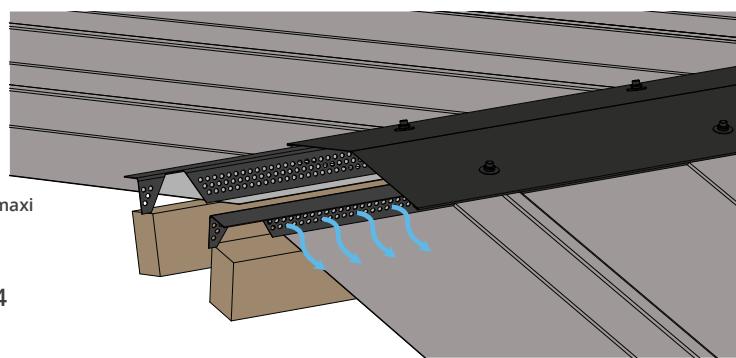
DOUBLE RIDGE CAP FOR VENTILATED ROOF



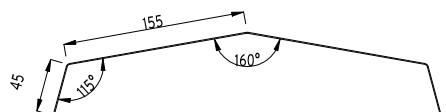
Effective Lg : 2.0 m maxi
Th : 1.0 mm

article code : FAITIERE-DP

CLOSOIR-PERF-104

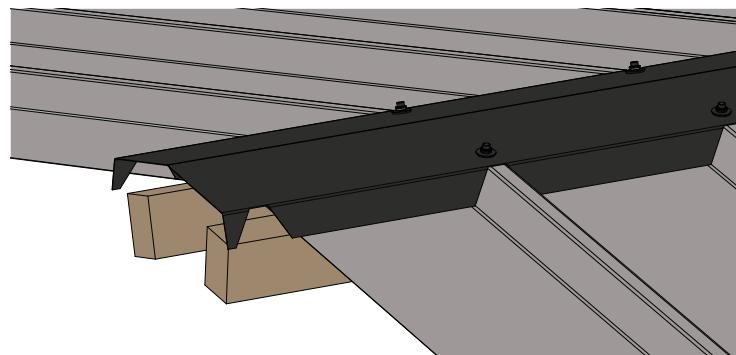


DOUBLE RIDGE CAP FOR NON-VENTILATED ROOF

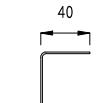
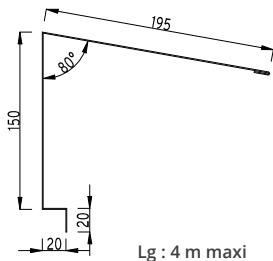


Lg : 2,1 m maxi
Th : 0.75 mm

article code : FAITIERE-DC



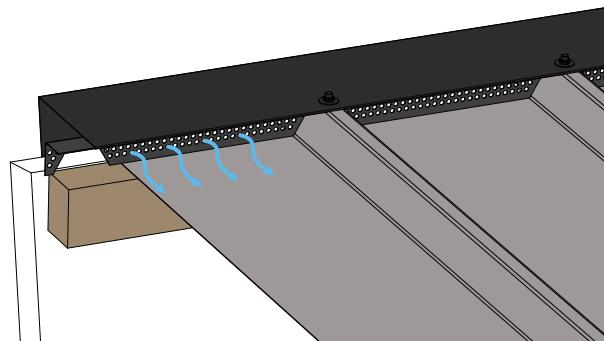
SINGLE RIDGE CAP FOR VENTILATED ROOF



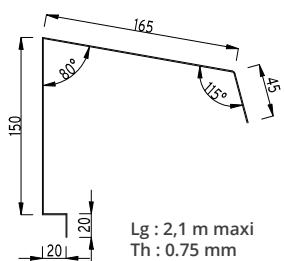
Effective Lg : 2.0 m maxi
Th : 1.0 mm

article code : FAITIERE-SP

CLOSOIR-PERF-104

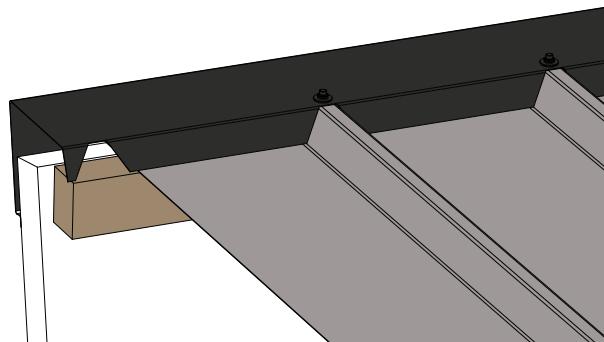


SINGLE RIDGE CAP FOR NON-VENTILATED ROOF

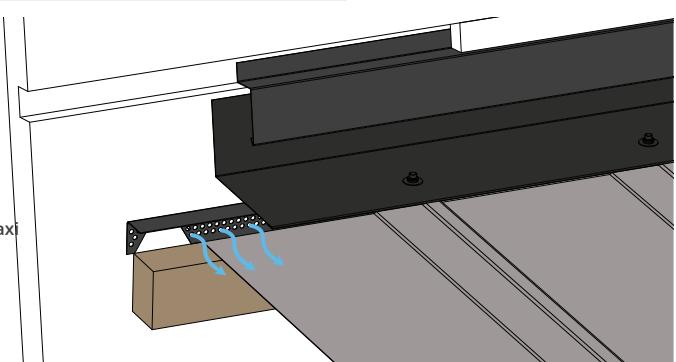
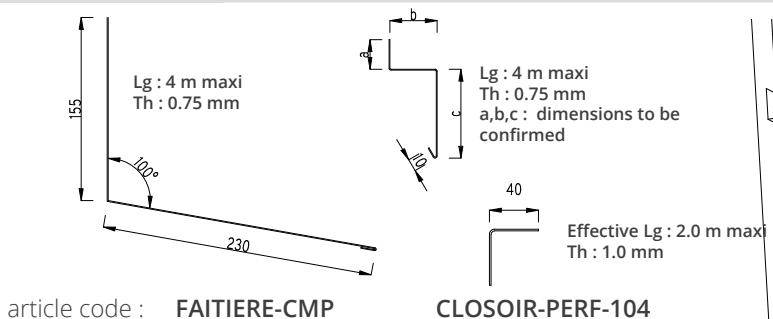


Lg : 2,1 m maxi
Th : 0.75 mm

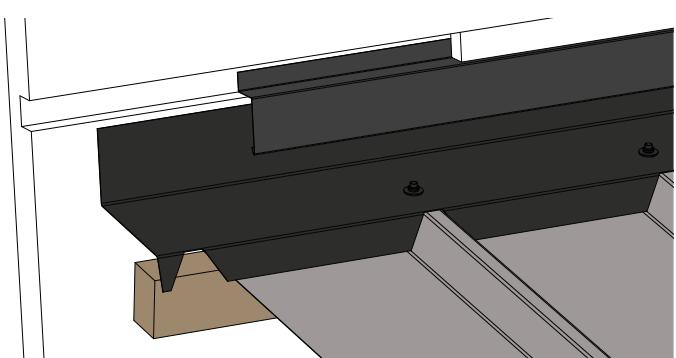
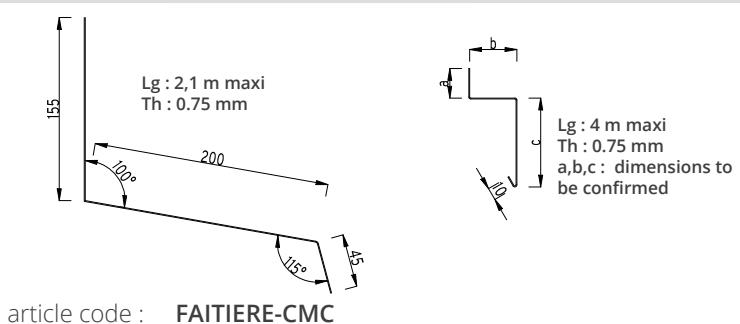
article code : FAITIERE-SC



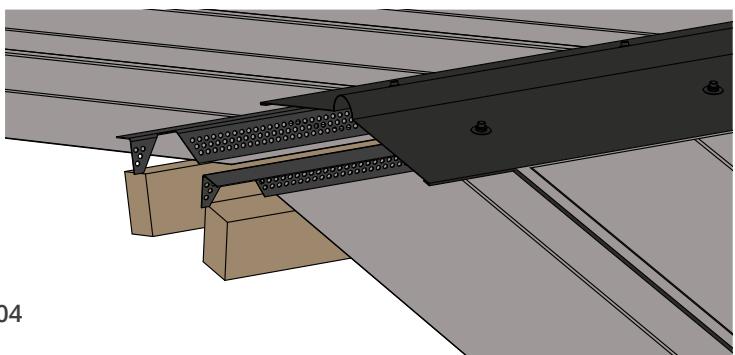
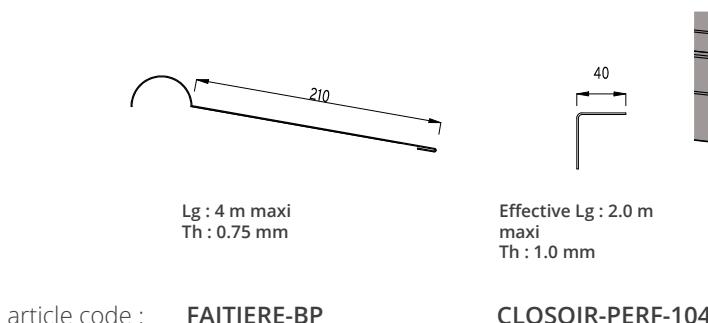
WALL RIDGE CAP FOR VENTILATED ROOF



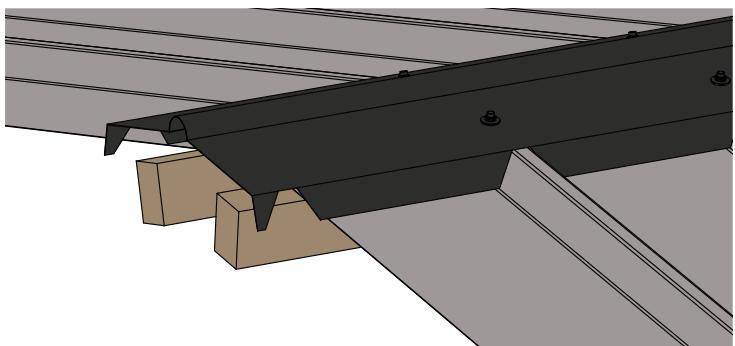
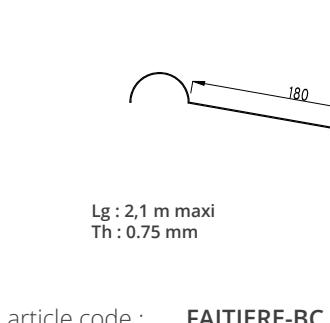
WALL RIDGE CAP FOR NON-VENTILATED ROOF

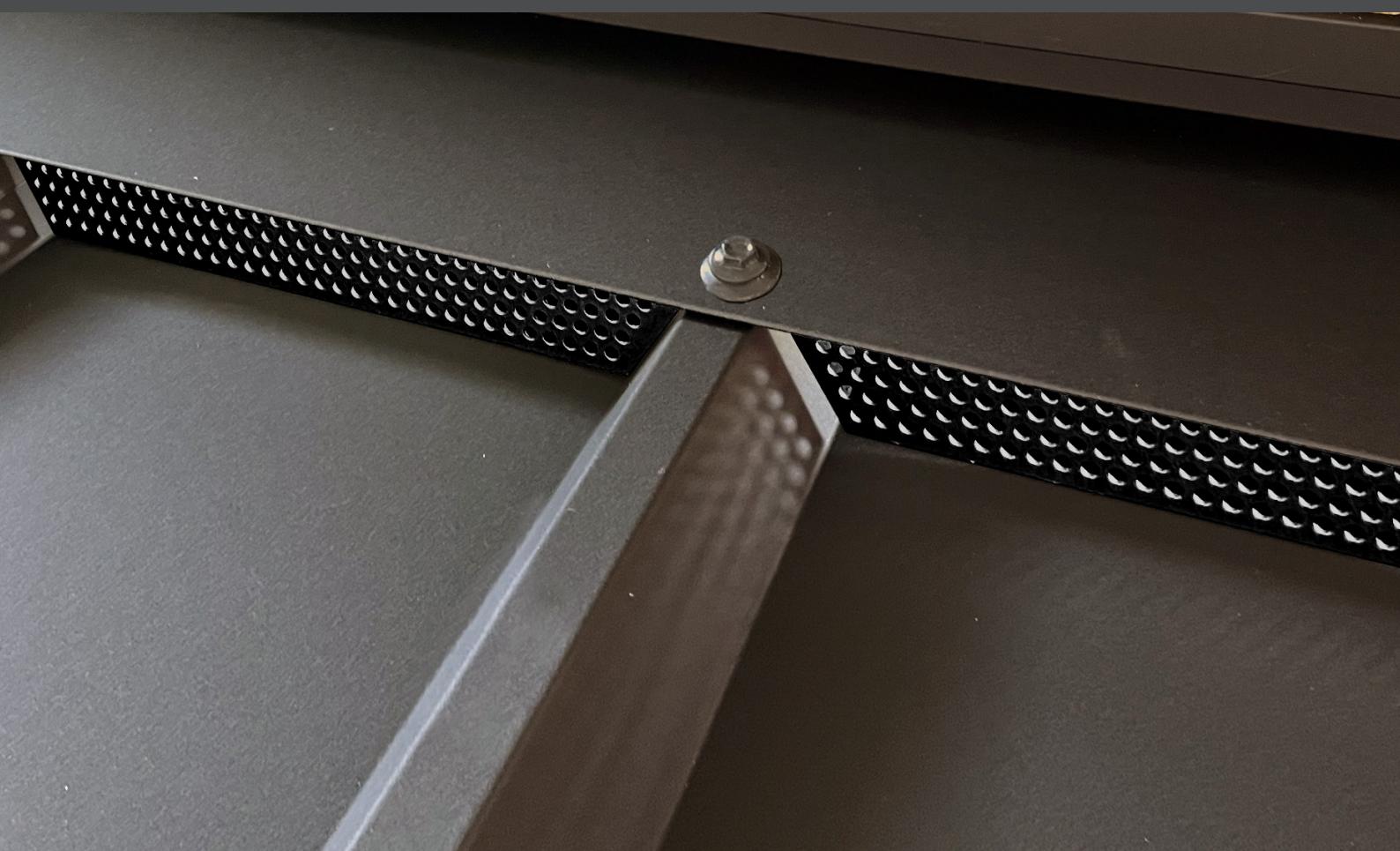


HALF-ROUND RIDGE CAP FOR VENTILATED ROOF



HALF-ROUND RIDGE CAP FOR NON-VENTILATED ROOF



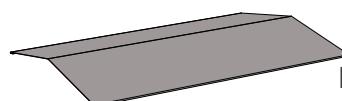


the little +

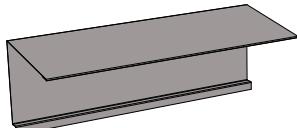
Perforated closer

To go even further in aesthetics, ATELIERS 3S has developed a perforated closer that integrates into the ribs. It allows creating a very discreet ventilated ridge.

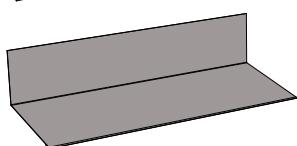
The perforation size has been studied to allow a ventilation cross-section (78cm²/ml) in adequacy with the one at the bottom of the slope.



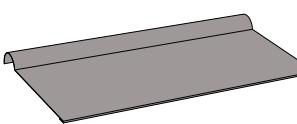
Double ridge cap



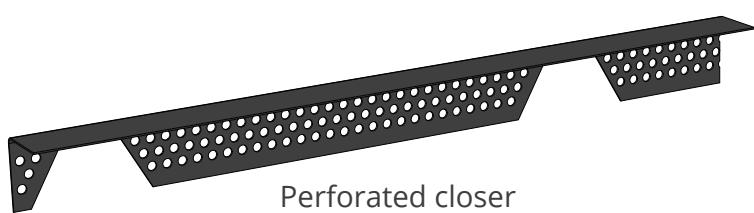
Single ridge cap



Wall ridge cap



Half-round ridge cap



Perforated closer

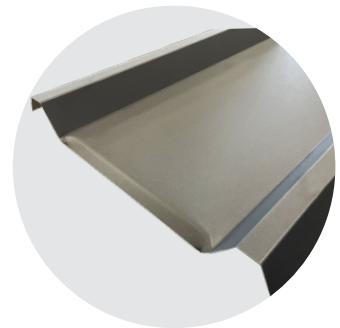
drain flashings



The rainwater drainage is treated by simple overhang or by overhang with closer. At the wall fascia level, the overhanging part of La Parisienne must not exceed either 1/10th of the span or 400mm. The overhang must be at least 100mm.

The connection of the roofing to gutters and built-in gutters can be achieved:

- Either by a drain-flashing
- Either by a folded edge of La Parisienne acting as a drip edge (recommended for cold roofs with low slope)



the little +

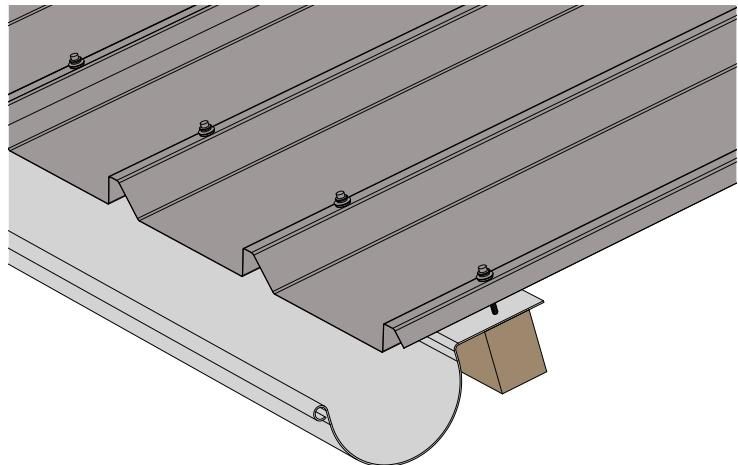
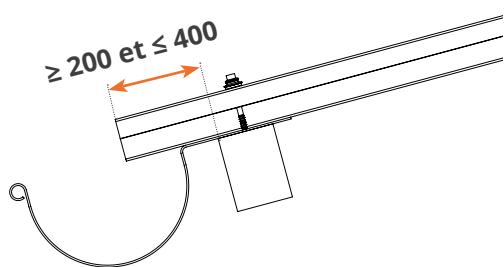


Roof-Facade Continuity

To go even further in the aesthetics of your projects, you can combine **La Parisienne** roof profile with the standing seam profile **EPURE 333** for ribs continuity



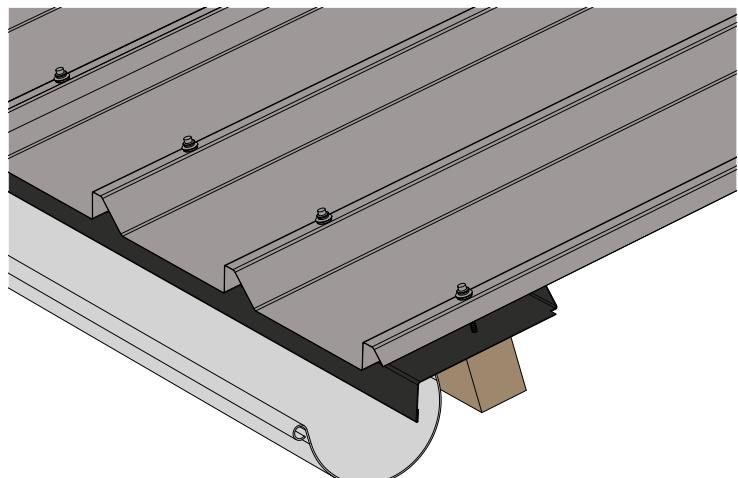
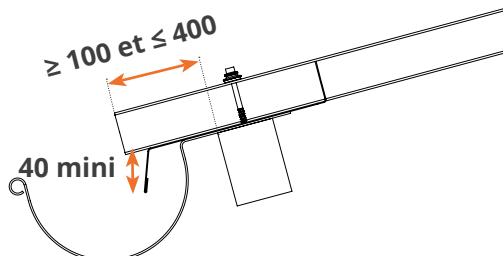
VENTILATED DRAIN FLASHING



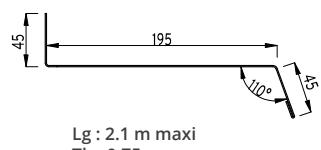
NON-VENTILATED DRAIN FLASHING



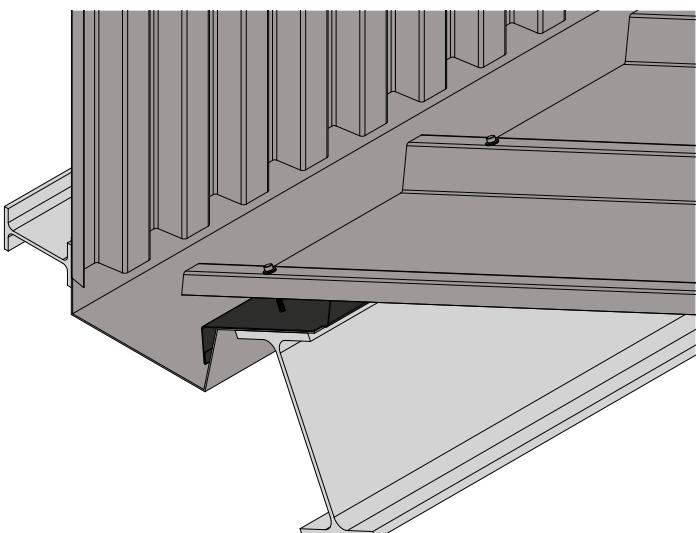
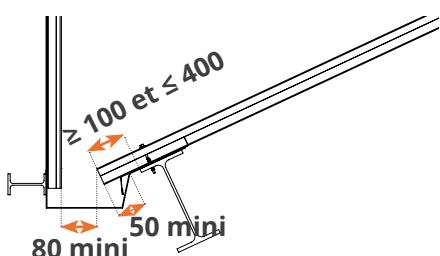
article code : **CLOSOIR-BP**



BUILT-IN GUTTER



article code : **CLOSOIR-BP**



eave flashings

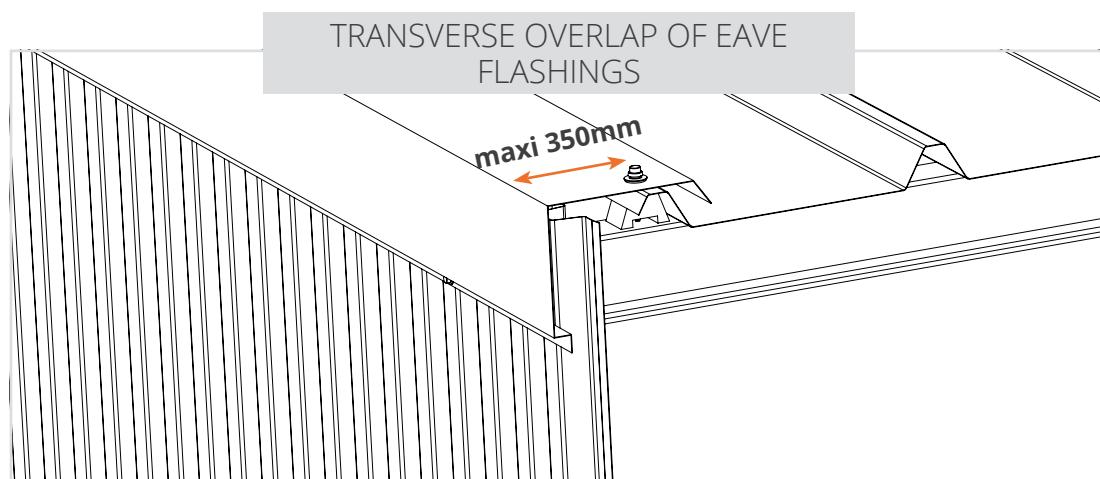


The edges are cladded with eaves flashing that cover the end rib of the last sheet. The eave flashing overhang is fixed to the facade piece it covers (wall fascia, steel cladding...).

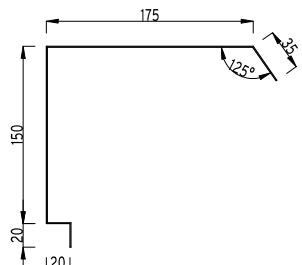
The bridge bracket

Bridge brackets are components installed under the end ribs of La Parisienne in the following cases:

- At building edge (see «Eaves flashing » paragraph)
- At overlap on translucent sheets or on polyester accessories

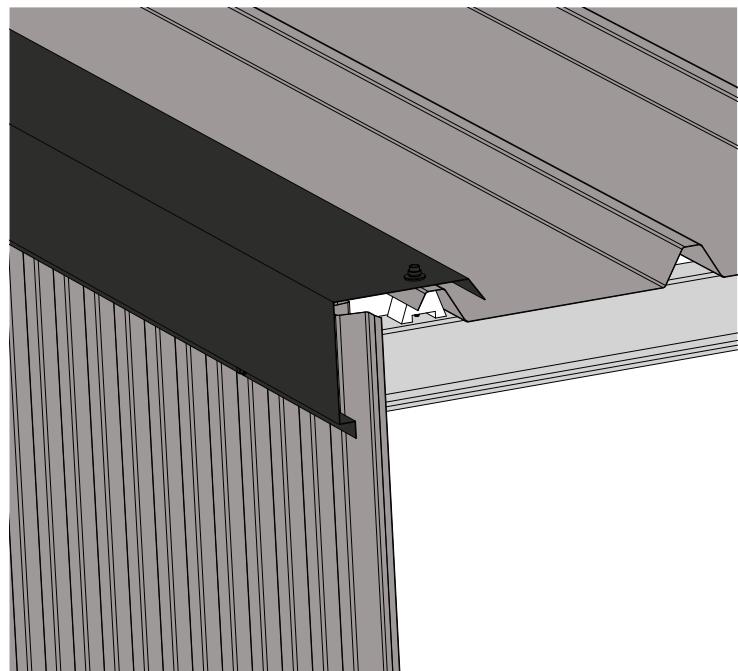


EAVE FLASHING

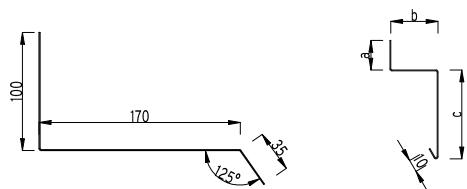


Lg : 4 m maxi
 Th : 0.75 mm

article code : **BANDEDERIVE**



EAVE FLASHING AGAINST WALL

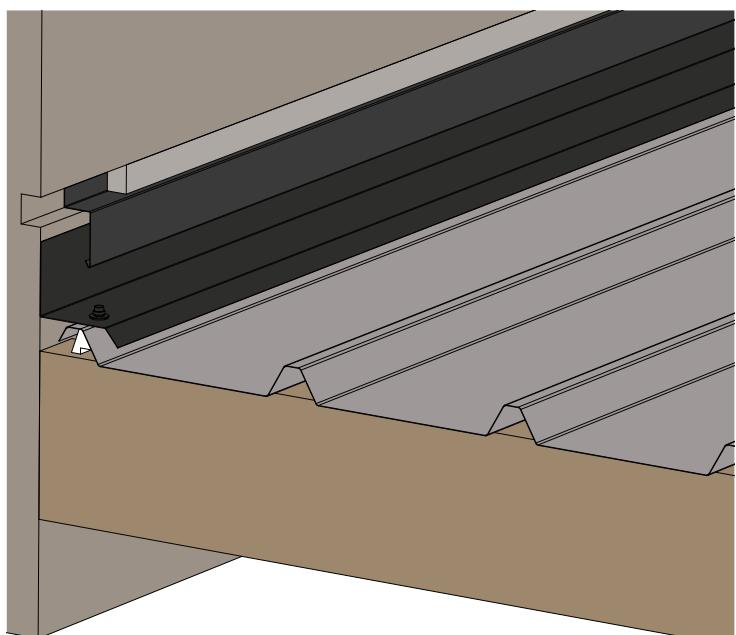


EAVE FLASHING AGAINST WALL FLASHING

Lg : 4 m maxi
 Th : 0.75 mm

Lg : 4 m maxi
 Th : 0.75 mm
 a,b,c : dimensions to be confirmed

article code : **RIVE-CONTRE-MUR**



ROOF PENETRATION

Flue plates

Flue plate kits allow for roof penetrations at flue locations (chimneys, wood stoves...) while ensuring roof weatherproofing.

Available in several opening sections, they are made to match your roof pitch.

These kits are crimped onto the Parisienne sheets and include the flue sleeve, flange and cap.



Skylights and curbs

To integrate accessories such as roof windows, ventilation hoods... into your roof, it is necessary to use a base that integrates perfectly into your roof plane.

A frame is provided around penetrations exceeding 400mm in one dimension (width or length).

Our bases are notably compatible with standard dimensions of market roof windows, we also have the possibility to create other configurations, contact us.

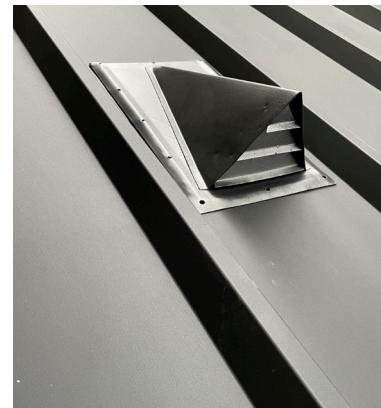


Ventilation ridge vents

The ridge vent provides additional ventilation when conventional solutions are insufficient. (see «Ventilation requirements» table p.33)

Its capacity of 115cm² to be distributed across your roof ensures the proper functioning of the condensation control membrane, while adding an aesthetic touch to your roof.

The ridge vent is crimped to the sheet in the holes provided for this purpose, and also sealed with butyl tape.



VENTILATED ROOF (COLD ROOF)

Condensation Control Membrane

In the case of ventilated (or cold) roofs, when the outside temperature is lower than the inside temperature, condensation forms when the interior air meets the colder roofing.

To manage this condensation phenomenon, the Parisienne can be equipped with an absorbent felt on the underside.

This absorbent felt solves condensation problems by capturing condensation water, storing it and releasing it when external conditions allow its evaporation.

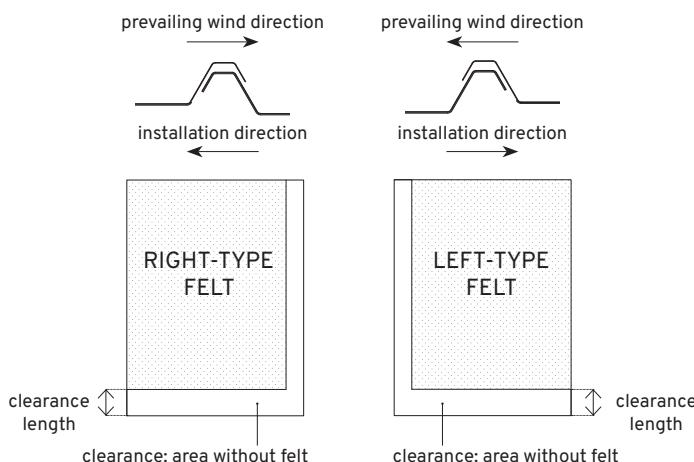
This cycle of capture, storage and drying via evaporation can only occur with ventilation under the felt adapted to the building types and its humidity levels (see page 33).

To ensure the proper functioning of the felt on the underside, it is necessary to create areas without felt.

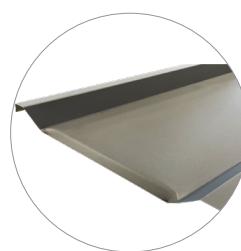
These areas, called clearances, are to be positioned in the transverse and longitudinal direction of the sheet.

Longitudinal clearances (right type or left type) allow felt continuity at the transverse overlap of the sheets.

The transverse clearances allow felt continuity at the transverse overlap according to the slope and climate zone (see table below)



It is also essential to create a drip edge at the bottom of the slope on each sheet to ensure the proper functioning of the absorbent felt.





ENVIRONMENTS AND CLIMATIC AREAS

INTERIOR ENVIRONMENT

General information

The interior environments of buildings can be categorized according to the following constraints:

- Chemical (acidity, salinity, etc.) or biochemical aggressiveness (mold, bacteria, etc.)
- Humidity
- Maintenance conditions, depending on the frequency and intensity of cleaning

Aggressiveness criteria

Non aggressive environment

Area with no aggressiveness due to corrosive chemical compounds and/or microorganisms.

Slightly aggressive environment

Non-aggressive area where surfaces may occasionally be exposed to slightly aggressive liquid splashes.

Aggressive environment

Area with acidic, basic, or saline gases or vapors and/or microorganisms and/or subject to disinfection.

Highly aggressive environment

Area with high concentrations of acidic, basic, or saline gases or vapors, and/or microorganisms, with frequent splashes or aggressive disinfections.

Humidity criteria

Definition

Humidity levels are defined by 2 characteristics :

- W : quantity of water vapor produced indoors per hour in grams/hour (g/h)
- n : Air renewal rate in cubic meters per hour (m³/h)

Humidity level = W/n in g/m³.

Four types of buildings are defined based on average humidity during the cold season:

- Low humidity room
- Medium humidity room
- High humidity room
- Very high humidity room

Low 2.5 Medium 5.0 High 7.5 Very High

INTERIOR ENVIRONMENT

Classification indicative des locaux en fonction des ambiances et Coatings adaptés

Criteria			Exemples de locaux
Agressiveness	Cleaning	Humidity	
Non-aggressiv environment	Regular	Low	<ul style="list-style-type: none"> - Unconditioned office buildings - Housings equipped with controlled mechanical ventilation and systems to evacuate peaks in water vapour production when they occur (hoods, etc.) - Industrial buildings used for storage - Industrial production buildings in which no water vapour is generated - Sports facilities without public access, not including their outbuildings (showers, changing rooms, etc.) - Storage of packaged dry goods, frozen or deep-frozen products (except unpackaged fish) - Freezing
Non-aggressiv environment	Regular	Medium	<ul style="list-style-type: none"> - Refrigeration, sorting and packaging of fruit and vegetables - Controlled atmosphere storage - Storage and conservation of packaged dairy or meat products - School premises, subject to appropriate mechanical ventilation - Residential buildings, including kitchens and bathrooms; adequately heated and ventilated - Shopping centers, subject to appropriate mechanical ventilation
Non-aggressiv environment	Light	High	<ul style="list-style-type: none"> - Storage and preparation in a humid environment (lettuce, flowers, fruit) - Refrigeration of meat products - Ice cream production
Slightly aggressiv environment	Light	High	<ul style="list-style-type: none"> - Endive cold rooms - Preparation of ready meals - Wine cellar - Butter processing - Bread-making laboratory - Meat cutting, raw meat
Aggressiv environment	High	Very High	<ul style="list-style-type: none"> - Slaughter hall for sheep, cattle, pigs, goats, poultry and rabbits - Slaughter hall for poultry and rabbits - Mushroom culture - Cooking room - Dryers, smokehouses - Scalding, evisceration - Cheese grinder - Bread-making laboratory - Storage and freezing of unpackaged fish
Highly aggressiv environment	Intensive	Saturated	<ul style="list-style-type: none"> - Showering, tripe - Laundries - Industrial cooking - Hides and skins - Salting, brining - Dairy and cheese workrooms - Seafood processing and preparation

EXTERIOR ENVIRONMENT

General informations

The following environments definitions apply only to altitudes less than or equal to 900 m. For higher altitudes, refer to the "Special Atmospheres" section.

Unpolluted rural environment

Environment corresponding to the outside of buildings located in the countryside in the absence of particular pollution, for example: fallout of fumes containing sulphurous vapours (oil heating).

Normal urban or industrial environment

Environment corresponding to the outside of buildings located in built-up areas and/or in an industrial environment comprising one or more factories producing gases and smokes which create a significant increase in atmospheric pollution without being a source of corrosion due to the high content of chemical compounds.

Severe urban or industrial environment

Environment corresponding to the outside of buildings located in built-up areas or in an industrial environment with a high content of chemical compounds, a source of corrosion (e.g. refineries, incineration plants, distilleries, fertilisers, cement works, paper mills, etc....), on a continuous or intermittent basis.

Marine environment

- Environment of buildings located between 10 and 20 km from the coast.
- Environment of buildings located between 3 and 10 km from the coast.
- Seaside: Less than 3 km from the coast, excluding conditions of direct attack by sea water (seafront).
- Mixed environment: environment corresponding to the concomitance of a seaside marine atmosphere and a normal urban or industrial atmosphere or a severe urban or industrial atmosphere.

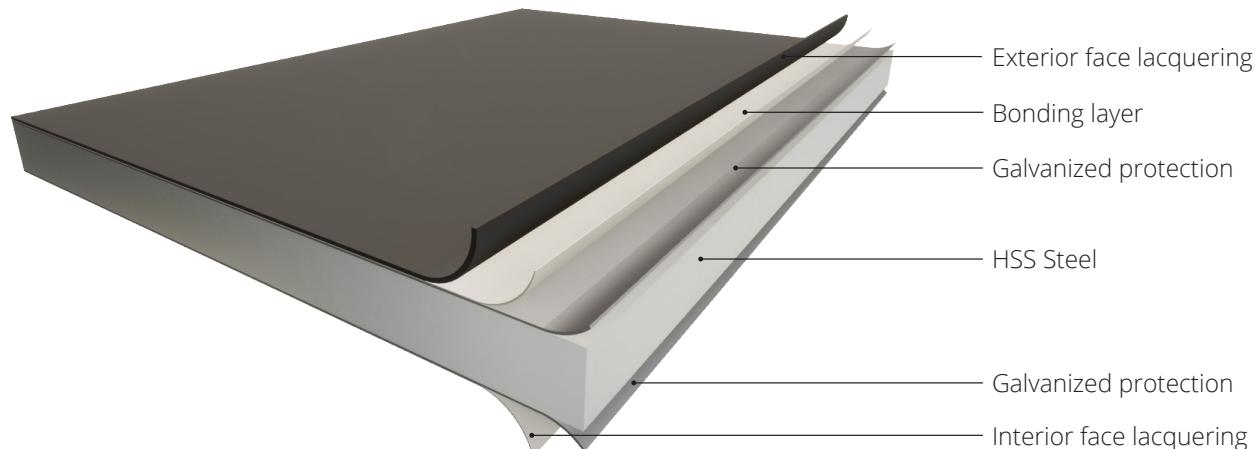
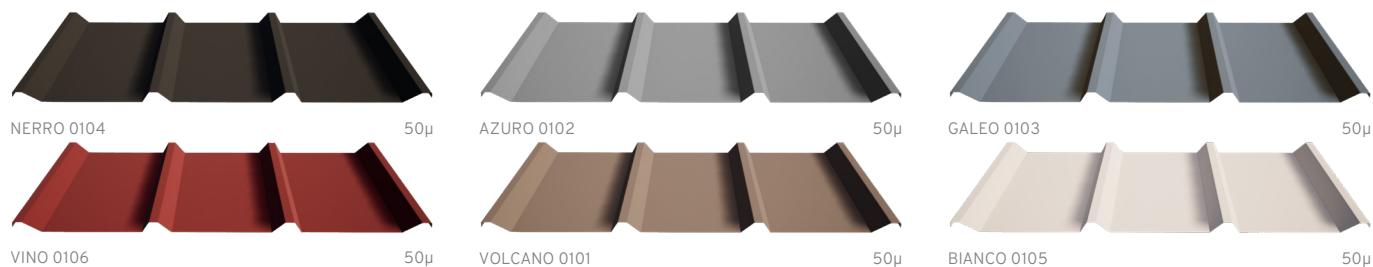
Special environment

- Environment of buildings subject to strong UV radiation: for example buildings located in mainland France at an altitude of over 900 m, buildings located in French overseas departments and territories between the 38th parallels.
- Particular environments: environments where the severity of the exposures described above is increased by certain effects such as :
 - Abrasion ;
 - High temperatures ;
 - High humidity ;
 - Heavy dust deposits ;
 - Sea spray on the seafront ;
 - etc.

The steel used in the Parisienne offers a combination of mechanical strength, aesthetic appeal and durability.

Mechanical strength is ensured by the use of High Strength Steel (HSS).

Six ultra-matte colors from the «Zinc spirit» color chart have been selected for this new product line.



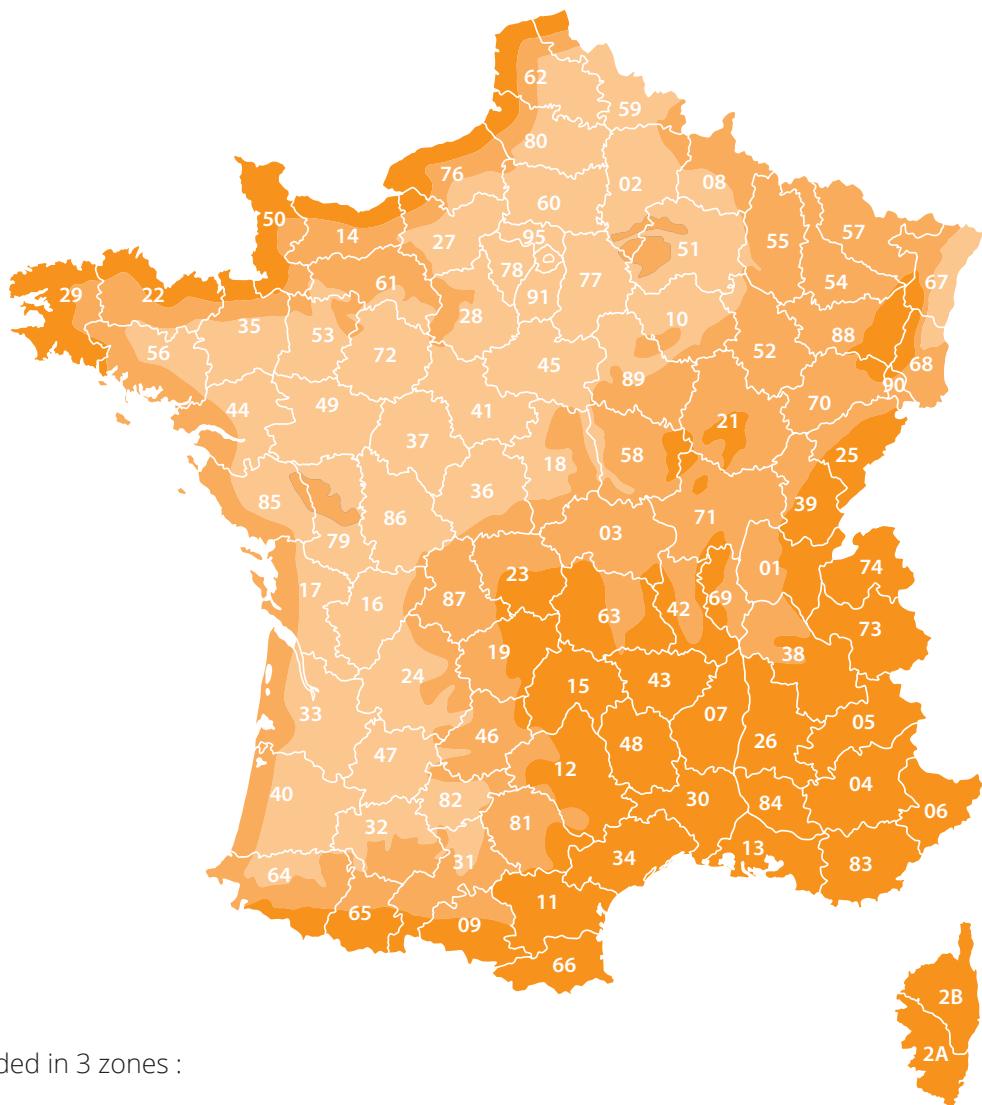
Our specific 50μm-thick coatings provide long-lasting protection and warantee.

The table below can be used to check the suitability of the Parisienne coating for the outdoor environment defined on the opposite page:

Coating on exposed side	Exterior environment										
	Rural		Urban and/or Industrial		Industrial		Marine			Specific	
	Non-polluted	Moderate pollution	High pollution	Severe pollution	3 à 20km	1 à <3km	300m à <1km	Mixed	Strong UV radiation	Specific	
ZINC SPIRIT 50 μm	Suitable	Suitable	Suitable	Environmental Analysis	Suitable	Suitable	Suitable	Environmental Analysis	Suitable	Environmental Analysis	

Please contact us if you have any questions about this selection guide.

CLIMATE ZONES IN FRANCE



France is divided in 3 zones :

Zone I

All inland areas at altitudes under 200 m.

Zone II

Atlantic coast, extending 20 km inland from Lorient to the Spanish border
Transition zone (20 km wide) between Zones I and III for Manche, Brittany, and the North Sea coast; altitudes 200-250 m

Zone III

North Sea, Channel, and Atlantic coasts up to Lorient (20 km inland)
Rhône Valley down to Isère-Drôme-Ardèche
Provence, Languedoc, Roussillon, Corsica
Altitudes above 500 m.

In case of uncertainty about a location's classification, it is up to the project-specific documentation to clarify it.

Situations

The effects resulting from the local situation need to be superimposed on these zones, hence the division into three types of situation within each zone. The situations correspond to localised areas that are very small in relation to the zones.

Protected situation

The bottom of a basin is surrounded by hills and is therefore protected from all wind directions. Land bordered by hills along part of its perimeter corresponding to the direction of the strongest winds and protected for this wind direction.

Normal situation

A plain or plateau that may or may not have significant changes in level (undulations).

Exposed situation

Near the sea: the coastline to a depth of around 5 km, cliff tops, narrow islands or peninsulas, estuaries or deep bays cut deeply into the land.

Inland: narrow valleys where the wind blows in, isolated high mountains (e.g. Mont Aigoual and Mont Ventoux) and certain mountain passes.

Minimum slopes for La Parisienne

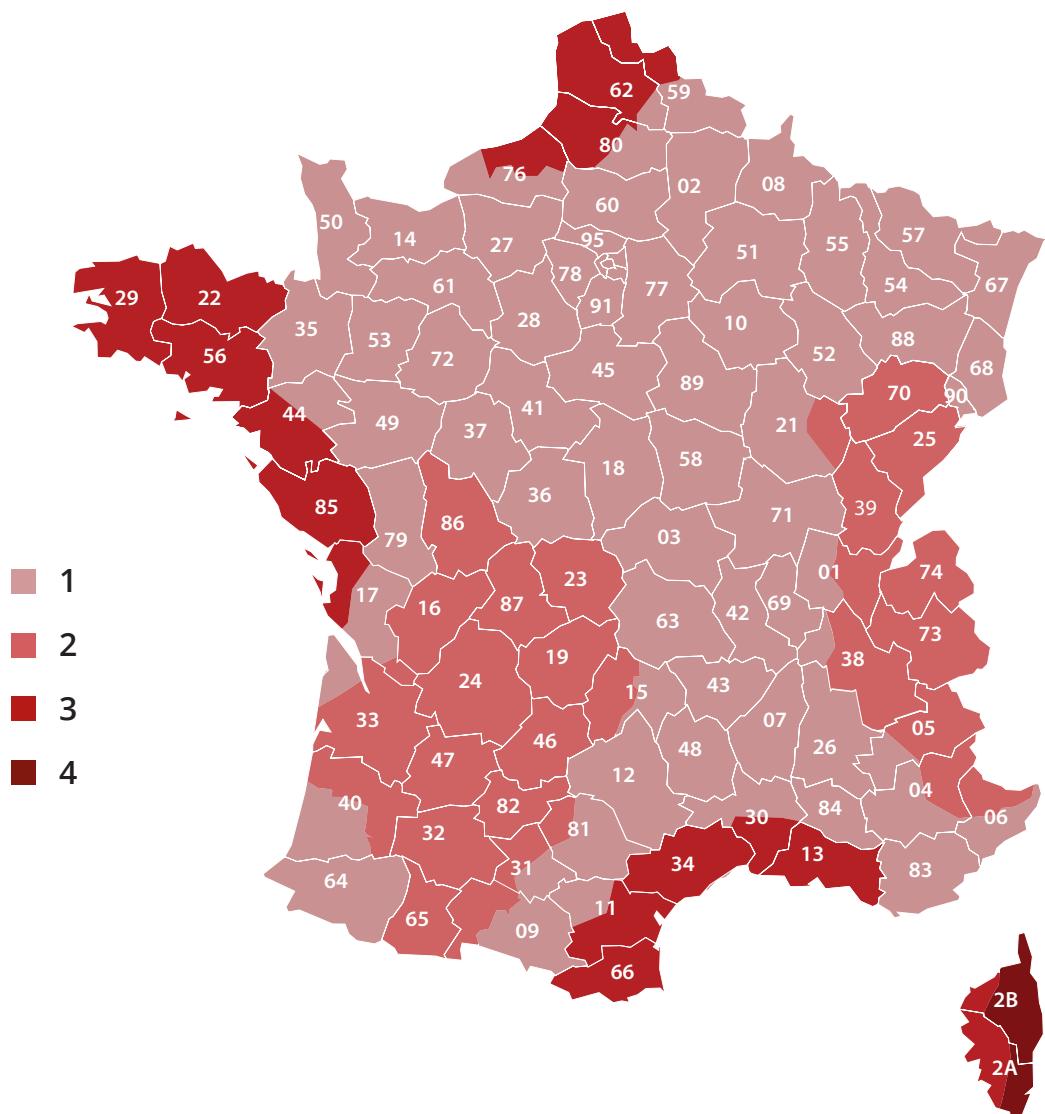
Roof configurations	Climatic zones and situations						
	Zone I			Zone II			Zone III
	Situations			Situations			All situations
	Protected	Normal	Exposed	Protected	Normal	Exposed	
At the same time : - no penetrations - no translucent sheets - ribbed sheets equal in length to the length of the slope	5%	5%	5%	5%	5%	5%	5%
Other cases	7%	7%	10% *	7%	10% *	10% *	altitude \leq 500m : 10% 500m $<$ altitude \leq 900m : 15% *

* Where the roof does not include translucent ribbed sheets but has penetrations or transverse joints of ribbed sheets, the minimum slope may be reduced to 7% by using transverse waterproofing complements.

Minimum transverse overlap

Waterproofing complement :	Slope	Without W.C.			With W.C.	
		Climatic zone				
		Zone I	Zone II	Zone III		
	7% \leq slope $<$ 10%	300mm	Case not covered by DTU			
	10% \leq slope $<$ 15%	200mm	300mm		150 à 200mm	
	15% \leq slope	150mm	200mm			

WIND ZONES IN FRANCE



Definition of wind zones according to the french districts (NV 65 rules)

1	Ain, Alpes-de-Haute-Provence, Hautes-Alpes, Alpes-Maritimes, Cantal, Charente, Charente-Maritime, Corrèze, Côte-d'Or, Creuse, Dordogne, Doubs, Haute-Garonne, Gers, Gironde, Isère, Jura, Landes, Lot, Lot-et-Garonne, Hautes-Pyrénées, Haute-Saône, Savoie, Haute-Savoie, Tarn, Tarn-et-Garonne, Vienne, Haute-Vienne, Guyane
2	Ain, Aisne, Allier, Alpes-de-Haute-Provence, Hautes-Alpes, Alpes-Maritimes, Ardèche, Ardennes, Ariège, Aube, Aude, Aveyron, Calvados, Cantal, Charente-Maritime, Cher, Côte-d'Or, Doubs, Drôme, Eure, Eure-et-Loir, Gard, Haute-Garonne, Gironde, Ille-et-Vilaine, Indre, Indre-et-Loire, Isère, Landes, Loir-et-Cher, Loire, Haute-Loire, Loire-Atlantique, Loiret, Lozère, Maine-et-Loire, Manche, Marne, Haute-Marne, Mayenne, Meurthe-et-Moselle, Meuse, Moselle, Nièvre, Nord, Oise, Orne, Pas-de-Calais, Puy-de-Dôme, Pyrénées-Atlantiques, Bas-Rhin, Haut-Rhin, Rhône, Haute-Saône, Saône-et-Loire, Sarthe, Paris, Seine-Maritime, Seine-et-Marne, Yvelines, Deux-Sèvres, Somme, Tarn, Var, Vaucluse, Vosges, Yonne, Territoire de Belfort, Essonne, Hauts-de-Seine, Seine-Saint-Denis, Val-de-Marne, Val-d'Oise
3	Aude, Bouches-du-Rhône, Charente-Maritime, Haute-Corse, Corse-du-Sud, Côtes-d'Armor, Finistère, Gard, Hérault, Loire-Atlantique, Morbihan, Nord, Pas-de-Calais, Pyrénées-Orientales, Seine-Maritime, Somme, Vendée
4	Haute-Corse, Corse-du-Sud
5	Guadeloupe, Martinique, La Réunion, Mayotte

According to NV65 Rules- DTU P 06-002 of april 2000 - modification n°4 of february 2009

Counties division of districts belonging to several zones

District	County	Zone
01 Ain	Bâgé-le-Châtel, Chalamont, Châtillon-sur-Chalaronne, Coligny, Maximieux, Miribel, Montluel, Montrevet-en-Bresse, Pont-de-Vaux, Pont de-Veyle, Reyrieux, Saint-Triviers-de-Courtes, Saint-Triviers-sur-Moignans, Thoissey, Trévoux, Villars-les-Dombes Tous les autres cantons du département	2 1
04 Alpes-de-Haute-Provence	Annot, Barcelonnette, Colmars, Entrevaux, Javie (la), Lauzet-Ubaye (le), Saint-André-les-Alpes, Seyne Tous les autres cantons du département	1 2
05 Hautes-Alpes	Aspres-sur-Buëch, Barcillonnette, Laragne-Montéglin, Orpierre, Ribiers, Rosans, Serres, Tallard, Veynes Tous les autres cantons du département	2 1
06 Alpes-Maritimes	Guillaumes, Puget-Théniers, Saint-Étienne-de-Tinée, Saint-Martin-Vésubie, Saint-Sauveur-sur-Tinée, Villars-sur-Var Tous les autres cantons du département	1 2
11 Aude	Alaigne, Alzonne, Belpach, Carcassonne (tous cantons), Castelnau-d'Orbieu, Chalabre, Conques-sur-Orbiel, Fanjeaux, Limoux, Mas-Cabardès, Montréal, Saissac, Salles-sur-l'Hers Tous les autres cantons du département	2 3
15 Cantal	Allanche, Chaudes-Aigues, Condat, Massiac, Murat, Pierrefort, Ruynes-en-Margeride, Saint-Flour (tous cantons) Tous les autres cantons du département	2 1
	Montendre, Montguyon, Montlieu-la-Garde	1
17 Charente-Maritime	Archiac, Aulnay, Burie, Cozes, Gémozac, Jonzac, Loulay, Matha, Mirambeau, Pons, Saintes (tous cantons), Saint-Genis-de-Saintonge, Saint-Hilaire-de-Villefranche, Saint-Jean-d'Angély, Saint-Porchaire, Saint-Savinien, Saujon, Tonnay-Boutonne Tous les autres cantons du département	2 3
2A Corse-du-Sud	Bonifacio, Figari, Levie, Porto-Vecchio, Serra-di-Scopamène Tous les autres cantons du département	4 3
2B Haute-Corse	Belgodère, Calenzana, Calvi, Île-Rousse (l') Tous les autres cantons du département	3 4
21 Côte-d'Or	Auxonne, Chenôve, Dijon (tous cantons), Fontaine-Française, Fontaine-les-Dijon, Genlis, Grancey-le-Château-Neuville, Is-sur-Tille, Mirebeau-sur-Bèze, Pontailler-sur-Saône, Saint-Jean-de-Losne, Saint-Seine-l'Abbaye, Selongey Tous les autres cantons du département	1 2
25 Doubs	Audincourt, Clerval, Etupes, Hérimoncourt, Isle-sur-le-Doubs (l'), Maîche, Montbéliard (tous cantons), Pont-de-Roide, Saint-Hippolyte, Sochaux, Valentigney Tous les autres cantons du département	2 1
30 Gard	Aigues-Mortes, Aimargues, Aramon, Beaucaire, Bouillargues, Saint-Gilles, Marguerittes, Nîmes (tous cantons), Quissac, Saint-Mamert-du-Gard, Sommières, Vauvert Tous les autres cantons du département	3 2
31 Haute-Garonne	Auterive, Caraman, Cintegabelle, Lanta, Montgiscard, Nailloux, Revel, Villefranche-de-Lauragais Tous les autres cantons du département	2 1
33 Gironde	Castelnau-de-Médoc, Lesparre-Médoc, Pauillac, Saint-Laurent-Médoc, Saint-Vivien-de-Médoc Tous les autres cantons du département	2 1
38 Isère	Beaurepaire, Heyrieux, Saint-Jean-de-Bournay Tous les autres cantons du département	2 1
40 Landes	Amou, Castets, Dax (tous cantons), Montfort-en-Chalosse, Mugron, Peyrehorade, Pouillon, Saint-Martin-de-Seignanx, Saint-Vincent-de-Tyrosse, Soustons, Tartas (tous cantons) Tous les autres cantons du département	2 1
44 Loire-Atlantique	Ancenis, Blain, Châteaubriant, Derval, Guémené-Penfao, Ligné, Moisdon-la-Rivière, Nort-sur-Erdre, Nozay, Riaillé, Rougé, Saint-Julien-de-Vouvantes, Saint-Marc-la-Jaille, Saint-Nicolas-de-Redon, Varades Tous les autres cantons du département	2 3
59 Nord	Arleux, Anzin, Avesnes-sur-Helpe (tous cantons), Bavay, Berlaimont, Bouchain, Cambrai (tous cantons), Carnières, Cateau-Cambrésis (le), Clary, Condé-sur-l'Escaut, Denain, Douai (tous cantons), Hautmont, Landrecies, Marchiennes, Marcoing, Maubeuge (tous cantons), Solre-le-Château, Orchies, Quesnoy (le) (tous cantons), Saint-Amand-les-Eaux (tous cantons), Solesmes, Trélon, Valenciennes (tous cantons) Tous les autres cantons du département	2 3
62 Pas-de-Calais	Bapaume, Bertincourt, Croisilles, Marquion, Vitry-en-Artois Tous les autres cantons du département	2 3
70 Haute-Saône	Autrey-lès-Gray, Champlite, Dampierre-sur-Salon, Fresne-Saint-Mamès, Gray, Gy, Marnay, Montbozon, Pesmes, Rioz, Scey-sur-Saône-et-Saint-Albin Tous les autres cantons du département	1 2
76 Seine-Maritime	Bacqueville-en-Caux, Blangy-sur-Bresle, Cany-Barville, Eu, Dieppe (tous cantons), Envermeu, Fontaine-le-Dun, Offranville, Saint-Valery-en-Caux Tous les autres cantons du département	3 2
80 Somme	Ailly-sur-Noye, Albert, Bray-sur-Somme, Chaulnes, Combles, Ham, Montdidier, Moreuil, Nesle, Péronne, Roisel, Rosières-en-Santerre, Roye Tous les autres cantons du département	2 3
81 Tarn	Cadalen, Castelnau-de-Montmiral, Cordes-sur-Ciel, Gaillac, Graulhet, Lavaur, Lisle-sur-Tarn, Rabastens, Saint-Paul-Capde-Joux, Salvagnac, Vaour Tous les autres cantons du département	1 2

According to NV65 Rules- DTU P 06-002 of april 2000 - modification n°4 of february 2009

WIND LOADS (NV65)

Basic dynamic pressures

	Normal basic dynamic pressures	Extreme basic dynamic pressures
Zone 1	50 daN/m ²	87.5 daN/m ²
Zone 2	60 daN/m ²	105 daN/m ²
Zone 3	75 daN/m ²	131 daN/m ²
Zone 4	90 daN/m ²	157.5 daN/m ²
Zone 5	120 daN/m ²	210 daN/m ²

Site effect factor

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Protected site	0.80	0.80	0.80	0.80	(1)
Normal site	1.00	1.00	1.00	1.00	1.00
Exposed site	1.35	1.30	1.25	1.20	1.20

(1) The concept of a protected site is not taken into account in this zone.

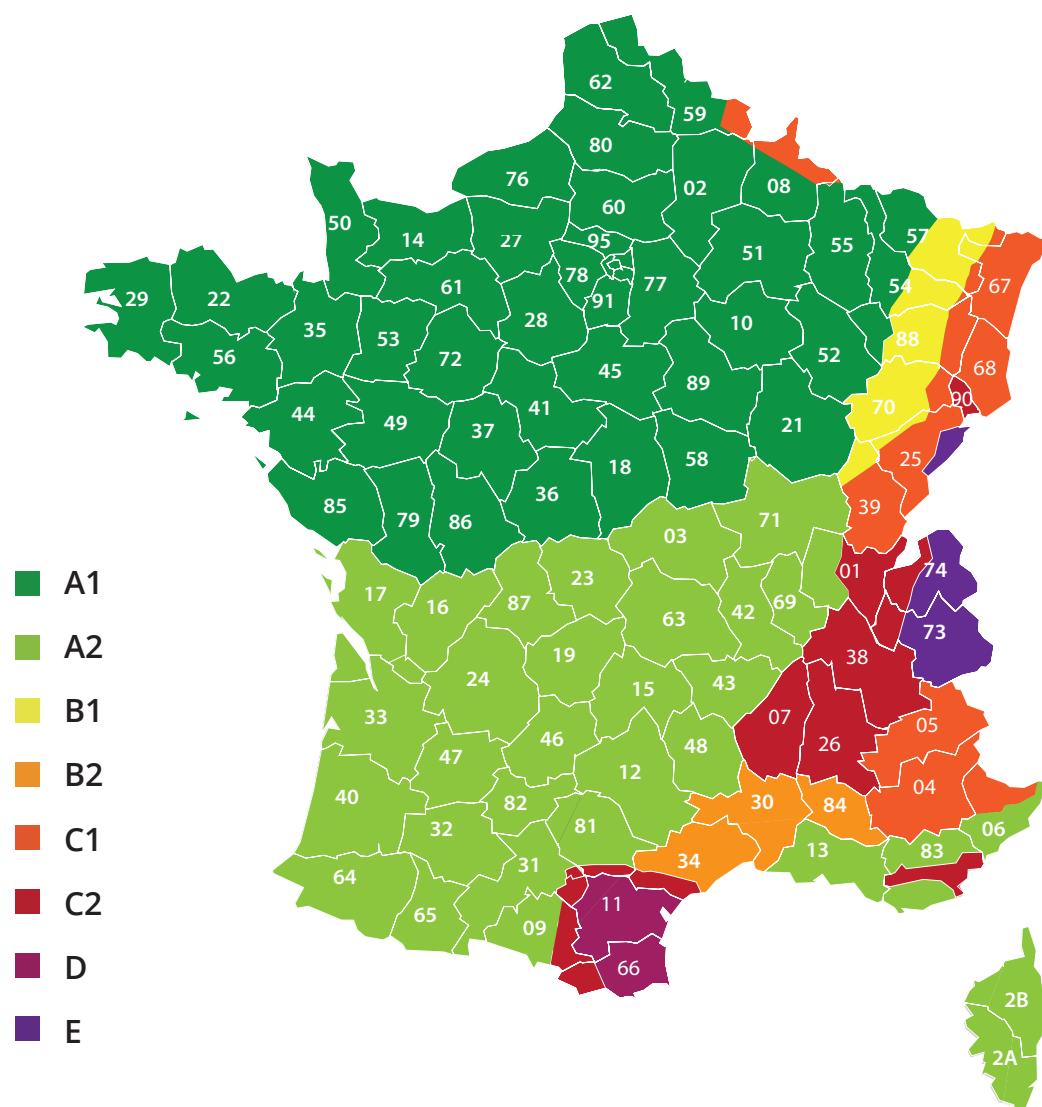
Rising loads for uncurved roof (dAN/m²)

Building type	Height	Wind zone							
		1		2		3		4	
		Site		Site		Site		Site	
		normal	exposed	normal	exposed	normal	exposed	normal	exposed
Closed buildings	≤ 10m	48	65	58	75	72	91	87	104
	≤ 15m	53	72	64	83	80	100	96	115
	≤ 20m	57	77	69	89	86	108	103	124
Open buildings	≤ 10m	71	96	86	111	107	134	128	154
	≤ 15m	78	106	94	122	118	147	141	169
	≤ 20m	85	114	102	132	127	159	152	183

1dAN/m² = 10N/m² = 10Pa

Extract of norm NF-P 34-301 from April 2017 and DTU 40.35

SNOW ZONES



Definition of snow zones according to the french districts (N 84 rules)

A1	Aisne, Ardennes, Aube, Calvados, Cher, Côte d'Or, Côtes-d'Armor, Eure, Eure-et-Loir, Finistère, Ille-et-Vilaine, Indre, Indre-et-Loire, Loir-et-Cher, Loire-Atlantique, Loiret, Maine-et-Loire, Manche, Marne, Haute-Marne, Mayenne, Meurthe-et-Moselle, Meuse, Morbihan, Moselle, Nièvre, Nord, Oise, Orne, Pas-de-Calais, Sarthe, Paris, Seine-Maritime, Seine-et-Marne, Yvelines, Deux-Sèvres, Somme, Vendée, Vienne, Vosges, Yonne, Essonne, Hauts-de-Seine, Seine-Saint-Denis, Val-de-Marne, Val-d'Oise
A2	Ain, Allier, Alpes-Maritimes, Ariège, Aveyron, Bouches-du-Rhône, Cantal, Charente, Charente-Maritime, Corrèze, Haute-Corse, Corse-du-Sud, Creuse, Dordogne, Haute-Garonne, Gers, Gironde, Landes, Loire, Haute-Loire, Lot, Lot-et-Garonne, Lozère, Puy-de-Dôme, Pyrénées-Atlantiques, Hautes-Pyrénées, Rhône, Saône-et-Loire, Tarn, Tarn-et-Garonne, Var, Haute-Vienne
B1	Doubs, Jura, Meurthe-et-Moselle, Moselle, Bas-Rhin, Haute-Saône, Saône-et-Loire, Vosges
B2	Gard, Hérault, Vaucluse
C1	Aisne, Alpes-de-Haute-Provence, Hautes-Alpes, Alpes-Maritimes, Ardennes, Doubs, Jura, Meurthe-et-Moselle, Meuse, Moselle, Nord, Bas-Rhin, Haut-Rhin, Haute-Saône, Vosges
C2	Ain, Ardèche, Ariège, Aude, Drôme, Haute-Garonne, Hérault, Isère, Pyrénées-Orientales, Savoie, Haute-Savoie, Tarn, Var, Vaucluse, Territoire de Belfort
D	Aude, Pyrénées-Orientales
E	Doubs, Savoie, Haute-Savoie

According to NV65 Rules- DTU P 06-002 of april 2000 - modification n°4 of february 2009

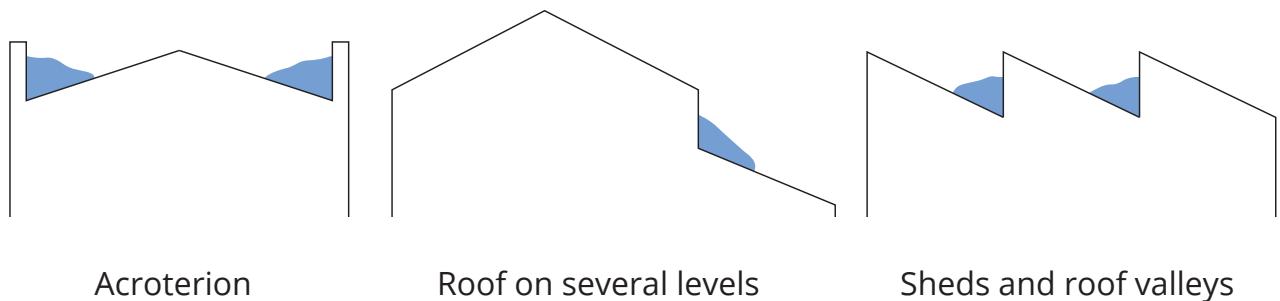
Counties division of districts belonging to several zones

District	County	Zone
01 Ain	Bâgé-le-Châtel, Bourg-en-Bresse (tous cantons), Chalamont, Châtillon-sur-Chalaronne, Coligny, Meximieux, Miribel, Montluel, Montrevel-en-Bresse, Pérignas, Pont-d'Ain, Pont-de-Vaux, Ponte-de-Veyle, Reyrieux, Saint-Trivier-de-Courtes, Saint-Trivier-sur-Moignans, Thoissey, Trévoux, Villars-les-Dombes, Viriat	A2
	Tous les autres cantons du département	C2
02 Aisne	Aubenton, la Capelle, Hirson	C1
	Tous les autres cantons du département	A1
06 Alpes-Maritimes	Breil-sur-Roya, Guillaumes, Lantosque, Puget-Théniers, Roquebillière, St-Etienne-de-Tinée, St-Martin-Vésubie, St-Sauveurs-sur-Tinée, Sospel, Tende, Villars-sur-Var	C1
	Tous les autres cantons du département	A2
08 Ardennes	Asfeld, Attigny, Buzancy, Château-Porcien, Chaumont-Porcien, Chesne (le), Grandpré, Juniville, Machault, Monthois, Novion-Porcien, Rethel, Tourteron, Vouziers	A1
	Tous les autres cantons du département	C1
09 Ariège	Ax-les-Thermes, Cabannes (Les), Lavelanet, Mirepoix, Quérigut	C2
	Tous les autres cantons du département	A2
11 Aude	Belpach, Castelnau-d'Aude (tous cantons), Fanjeaux, Salles-sur-l'Hers	C2
	Tous les autres cantons du département	D
25 Doubs	Audeux, Besançon (tous cantons), Boussières, Marchaux	B1
	Mâche, Montbenoît, Morteau, Pierrefontaine-les-Varans, Russey (le), St-Hippolyte	E
	Tous les autres cantons du département	C1
31 Haute-Garonne	Revel	C2
	Tous les autres cantons du département	A2
34 Hérault	Béziers (tous cantons), Capestang, Olonzac, Saint-Chinian, Saint-Pons-de-Thomières	C2
	Tous les autres cantons du département	B2
39 Jura	Chaussin, Chemin, Dampierre, Dole (tous cantons), Gendrey, Montbarrey, Montmirey-le-Château, Rochefort-sur-Nenon	B1
	Tous les autres cantons du département	C1
54 Meurthe-et-Moselle	Arracourt, Baccarat, Bayon, Blâmont, Gerbéviller, Haroué, Lunéville (tous cantons)	B1
	Badonviller, Cirey-sur-Vezouze	C1
	Tous les autres cantons du département	A1
55 Meuse	Montmédy, Stenay	C1
	Tous les autres cantons du département	A1
57 Moselle	Albestroff, Behren-lès-Forbach, Château-Salins, Dieuze, Fénétrange, Forbach, Freyming-Merlebach, Grostenquin, Réchicourt-le-Château, Rohrbach-lès-Bitche, Saint-Avold (tous cantons), Sarralbe, Sarreguemines, Sarreguemines-Campagne, Stiring-Wendel, Vic-sur-Seille, Volmuster	B1
	Bitche, Lorquin, Phalsbourg, Sarrebourg	C1
	Tous les autres cantons du département	A1
59 Nord	Avesnes-sur-Helpe (tous cantons), Hautmont, Maubeuge (tous cantons), Trélon, Solre-le-Château	C1
	Tous les autres cantons du département	A1
66 Pyrénées-Orientales	Mont-Louis, Olette, Saillegouse	C2
	Tous les autres cantons du département	D
67 Bas-Rhin	Drulingen, Sarre-Union	B1
	Tous les autres cantons du département	C1
70 Haute-Saône	Champagney, Faugney-et-la-Mer, Héricourt, Lure (tous cantons), Mélisey, Villersexel	C1
	Tous les autres cantons du département	B1
71 Saône-et-Loire	Beaurepaire-en-Bresse, Cuiseaux, Cuisery, Louhans, Montpont-en-Bresse, Montret, Pierre-de-Bresse, Saint-Germain-du-Bois, Tournus	B1
	Tous les autres cantons du département	A2
73 Savoie	Aiguebelle, Aime, Albertville (tous cantons), Beaufort, Bourg-St-Maurice, Bozel, Châtelard (le), Chambre (la), Chamoux-sur-Gelon, Grésy-sur-Isère, Lanslebourg-Mont-Cenis, Modane, Moutiers, St-Jean-de-Maurienne, St-Michel-de-Maurienne, St-Pierre-d'Albigny, Rochette (la), Ugine	E
	Tous les autres cantons du département	C2
74 Haute-Savoie	Alby-sur-Chéran, Annemasse (tous cantons), Boëge, Cruseilles, Frangy, Douvaine, Reignier, Rumilly, St-Julien-en-Genevois, Seyssel	C2
	Tous les autres cantons du département	E
81 Tarn	Dourgne, Labruguière, Mazamet (tous cantons), Saint-Amans-Soult	C2
	Tous les autres cantons du département	A2
83 Var	Barjols, Besse-sur-Issole, Brignoles, Cotignac, Fréjus, Grimaud, Lorgues, Luc (Le), Muy (le), Saint-Maximin-la-Sainte-Baume, Saint-Raphaël, Saint-Tropez	C2
	Tous les autres cantons du département	A2
84 Vaucluse	Valréas	C2
	Tous les autres cantons du département	B2
88 Vosges	Bulgnéville, Châtenois, Coussey, Lamarche, Mirecourt, Neufchâteau, Vittel	A2
	Bains-les-Bains, Bruyères, Charmes, Châtel-sur-Moselle, Darney, Dompaire, Epinal (tous cantons), Monthureux-sur-Saône, Plombières-les-Bains, Rambervillers, Remiremont, Xertigny	B1
	Tous les autres cantons du département	C2

Snow loads for an altitude of 0 to 900m: downward loads (daN/m²)

Altitude (m)	A1	A2	B1	B2	C1	C2	D	E
de 0 à 199m	45	45	55	55	65	65	90	140
de 200 à 299m	60	60	70	70	80	80	105	155
de 300 à 399m	75	75	85	85	95	95	120	170
de 400 à 499m	90	90	100	100	110	110	135	185
de 500 à 599m	120	120	130	130	140	140	165	215
de 600 à 699m	150	150	160	160	170	170	195	245
de 700 à 799m	180	180	190	190	200	200	225	275
de 800 à 899m	210	210	220	220	230	230	255	305
above 900m	check the CSTB guide to roofing in mountain climates (issue 2267-1, September 1988)							

Special cases: snow accumulation

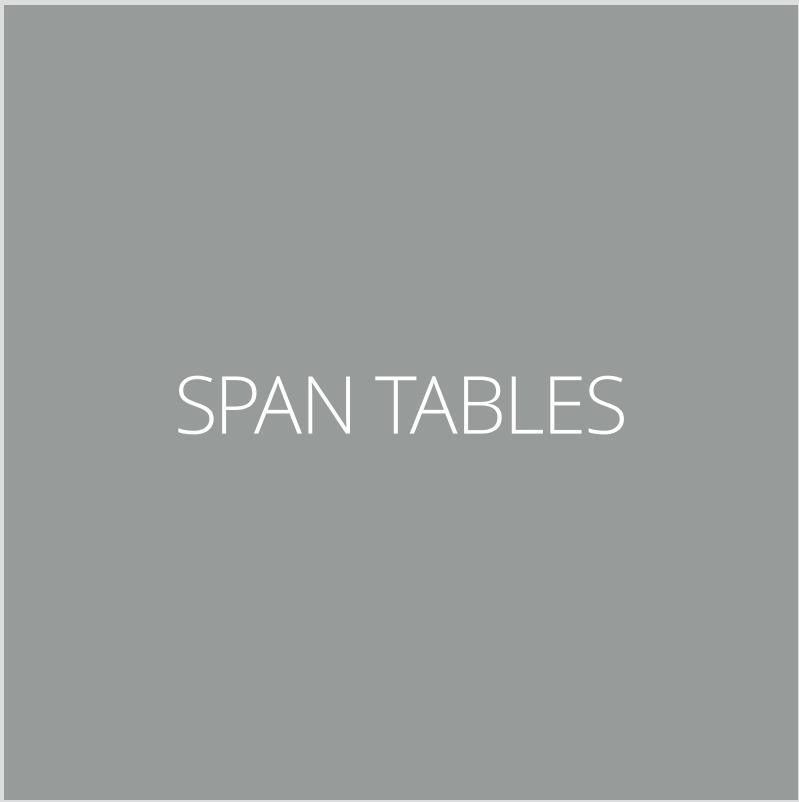


Acroterion

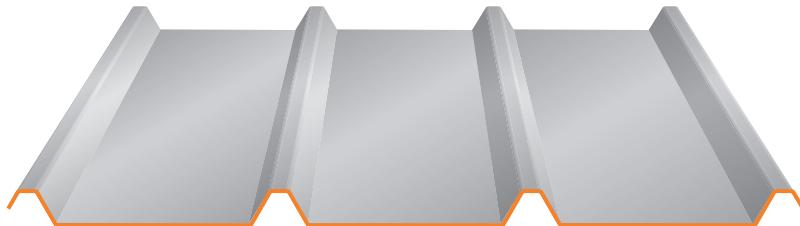
Roof on several levels

Sheds and roof valleys





SPAN TABLES



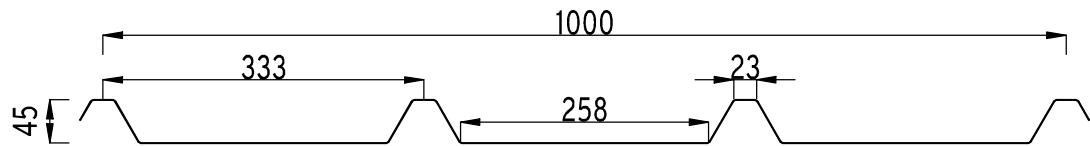
PARISIENNE 1 1000®
Profile height 45 mm

Material	Thickness (mm)	Weight (kg/m ²)	Coating	Norm
Steel S390 GD + Z275	0.63	6.03	Polyurethane 50 μ	Coil coating EN 10169

Effective width : **1000 mm** - Sheets length : **13000 mm maximum**

CALCULATION VALUES

Downward load action	All ribs fixed	Moment of inertia cm ⁴ /ml	single span		I2	cm ⁴ /ml	19,18
			2 equal spans		I3	cm ⁴ /ml	15,04
			continuity		Im	cm ⁴ /ml	17,11
		Bending moment m.daN/ml	In span	Elastic system	Md2T	m.daN/ml	143,79
				Elastoplastic system	Md3T	m.daN/ml	173,02
			On support		Md3A	m.daN/ml	150,87
				Under concentrated load	Mc	m.daN/ml	120,84
			Support reaction			Rd	daN/ml
		Bending moment m.daN/ml	In span	Elastic system	Ma2T	m.daN/ml	124,21
				Elastoplastic system	Ma3T	m.daN/ml	155,46
			On support		Ma3A	m.daN/ml	144,82
Upward load action	Fasteners at rib top	Pull-out force on support			Sar	daN/ml	548,89
		Characteristic pull-out resistance			Pk/ym	daN	253
		Bending moment m.daN/ml	In span	Elastic system	Ma2Tr	m.daN/ml	82,81
				Elastoplastic system	Ma3Tr	m.daN/ml	103,64
			On support		Ma3Ar	m.daN/ml	96,55
		Pull-out force on support			Sar	daN/ml	365,93
		Characteristic pull-out resistance			Pk/ym	daN	253



SPAN TABLES

Test report n°R134476108-001-1

apave Test carried out according to standard NF P 34-503-1 and interpretation according to DTU 40.35 (NF P 34-205-1 May 1997)

The table below shows the spans in meters according to upward loads (wind) and downward loads (snow) and according to the type of installation:

Loads daN/m ²	Downward loads			Upward loads (all ribs fixed)			Upward loads (2 ribs fixed out of 3)	
	single span	double span	multiple span	single span	double span	multiple span	double span	multiple span
50	2,45	3,00	3,00	2,45	3,00	3,00	3,00	3,00
75	2,45	3,00	3,00	2,45	3,00	3,00	3,00	3,00
100	2,45	2,95	2,95	2,45	3,00	3,00	2,45	2,65
125	2,35	2,65	2,65	2,35	2,85	2,90	1,90	2,10
150	2,20	2,45	2,45	2,15	2,40	2,60	1,60	1,75
175	2,05	2,25	2,25	1,95	2,05	2,20	1,35	1,50
200	1,95	2,10	2,10	1,75	1,75	1,95	1,20	1,30
225	1,80	2,00	2,00					
250	1,75	1,85	1,90					

La Parisienne is a non-structural sheet according to standard NF EN 14782:2006, in accordance with DTU 40.35 (NF P 34-205-1:1997), not intended to receive EPI anchoring devices according to standard EN 795 or lifeline.

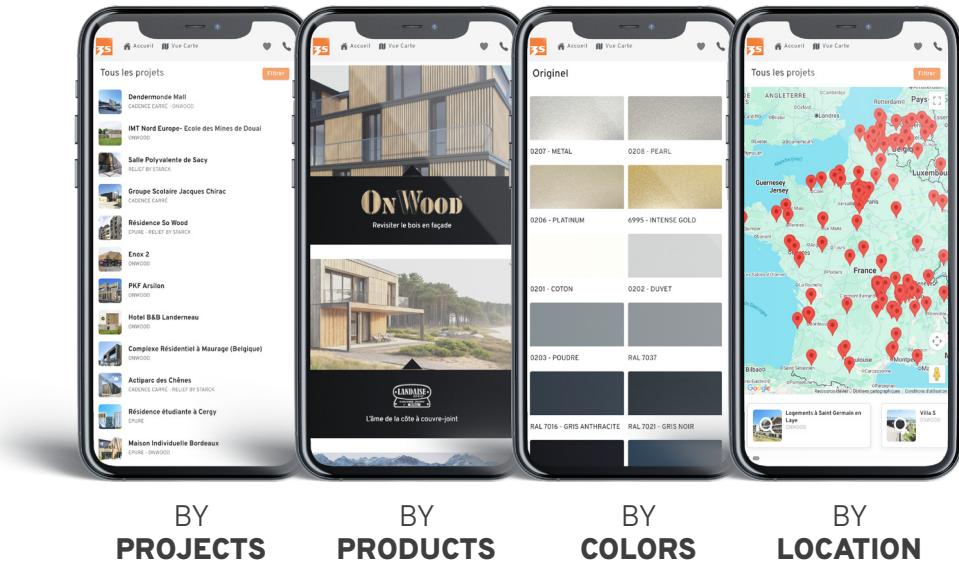


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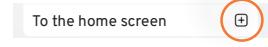


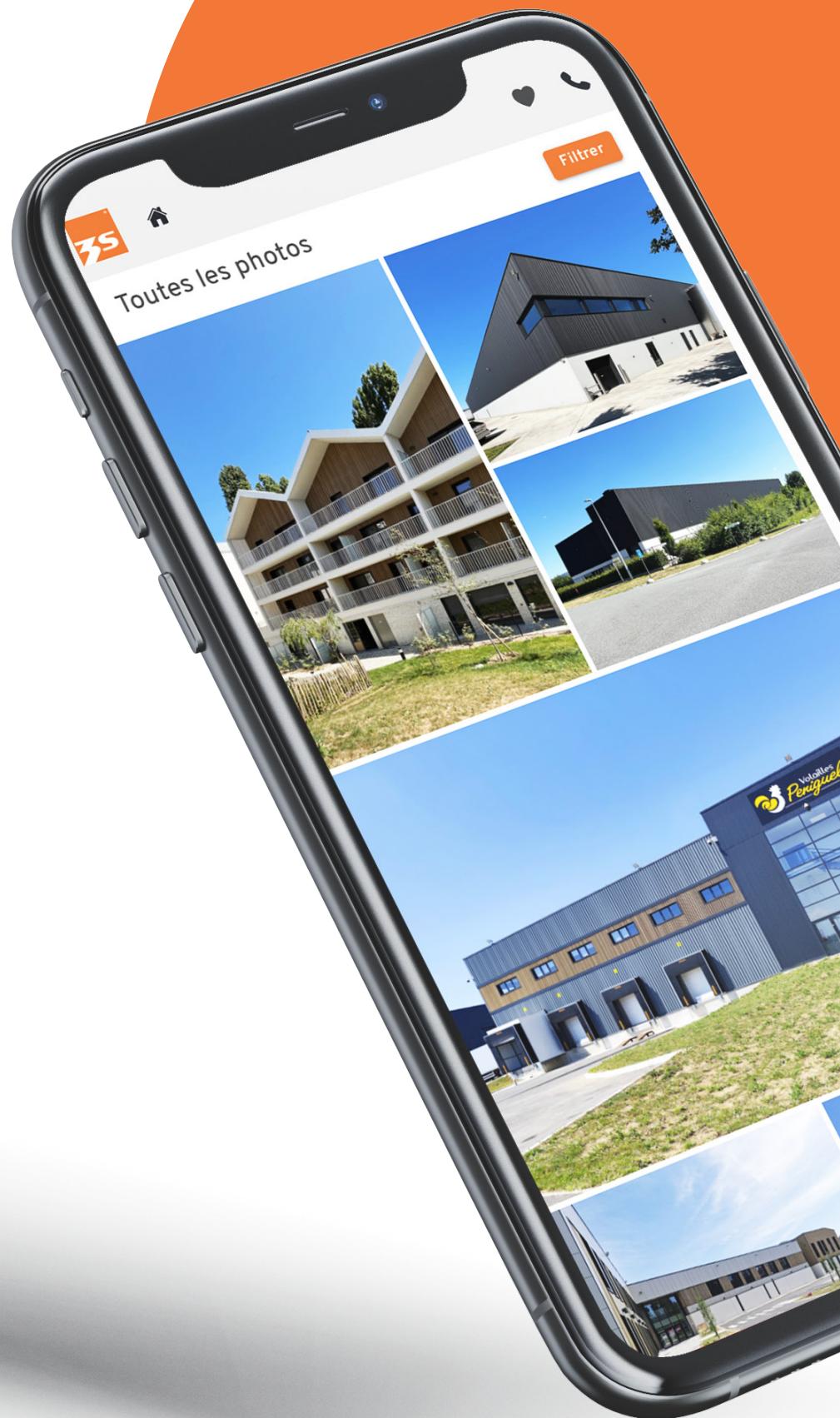
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PRODUCTS LIST

PROFILE	ARTICLE CODE	COLOUR	EFFECTIVE WIDTH	LENGTH (MM)	QUANTITY
PARISIENNE 1000 HLE XCARB RRP Low Carbon War. 30year - 0,63 coated 50µm	PARISIENNE-HLE	0101 VOLCANO 0102 AZURO 0103 GALEO 0104 NERRO 0105 BIANCO 0106 VINO	1000		

SCREWS	ARTICLE CODE	COLOUR	USE	QTY
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SCREW WITHOUT SADDLE WASHER - RODEO ELYSÉE

Elysée RODEO Screw Thin Steel 5,5x75	ELYSEE-MINCE							Metal	
Elysée RODEO Screw Wood 6,5x100	ELYSEE-BOIS							Wood	
Seam Screw 4.8x20								Seam	

SCREW WITH SADDLE WASHER

Roof Fixing Steel 5,5x75	FIXCOU-5.5-75							Metal	
Roof Fixing Wood 6,5x100	FIXCOU-BOIS							Wood	
Triomphe Saddle washer	TRIOMPHE							Saddle washer	

AUTRE

Bridge bracket for Parisienne profile	PONTET-PARISIENNE							Bridge bracket	
Snow stop for Parisienne profile	STOPNEIGE-PAR							Snow stop	

FINISHING PROFILES	ARTICLE CODE	COLOUR					DEVE- LOP- PED WIDTH	LENGTH (MM)	QTY
		0101 VOLCANO	0102 AZURO	0103 GALEO	0104 NERRO	0105 BIANCO			
RIDGE CAPS									
Double ridge cap non-ventilated (toothed)	FAITIERE-DC						400	2100	
Double ridge cap ventilated (straight)	FAITIERE-DP						400	2100	
Single ridge cap non-ventilated (toothed)	FAITIERE-SC						400	2100	
Single ridge cap ventilated (straight)	FAITIERE-SP						400	2100	
Wall ridge cap non-ventilated (toothed)	FAITIERE-CMC						400	2100	
Wall ridge cap ventilated (straight)	FAITIERE-CMP						400	2100	
Half-round ridge cap non-ventilated (toothed)	FAITIERE-BC						300	2100	
Half-round ridge cap ventilated (straight)	FAITIERE-BP						300	2100	
Perforated closer Nerro Colour	CLOSOIR-PERF-104						85	1995	
EAVES									
Eave flashing	BANDEDERIVE						400	2100	
Eave flashing against wall	RIVE-CONTRE-MUR						300	2100	
Drain flashing									
Drain flashing	CLOSOIR-BP						300	2100	



COLOR CHART

Colours and materials used

ORIGINAL

Exclusive, ultra resistant colours that meet the requirements of the 3S® range.

METALLIC



METAL 0207 35µm



PEARL 0208 35µm



PLATINUM 0206 35µm



INTENSE GOLD 6995 35µm



COPPER 0603 35µm

SATIN



COTTON 0201 35µm



DUVET 0202 35µm



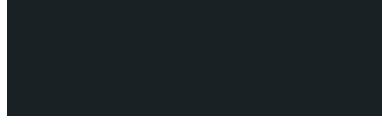
POWDER 0203 35µm



RAL 7037 35µm



RAL 7016 - ANTHRACITE GREY 35µm



RAL 7021 - BLACK GREY 25µm



RAL 5008 - OCEAN 25µm



RAL 7032 - SILEC GREY 35µm



RAL 7022 - EGGSHELL 35µm



POP 0204 35µm



SPRING 0205 35µm



Please contact us for further information on our RAL colour chart and our special custom-designed textured coatings.

Colours and materials used

MATERIALS

Coatings that are as fabulous as the materials.



OXYDE 0602 35µm



DARK BRONZE 0604 50µm



INTENSE GOLD 6995 35µm



COPPER 0603 35µm

ZINC SPIRIT

Deep matte and very fine texture for a true-to-life zinc effect.



NERRO 0104 50µm



VINO 0106 50µm



GALEO 0103 50µm



VOLCANO 0101 50µm



AZURO 0102 50µm



BIANCO 0105 50µm

ROUGH

Reveal the nobility of raw materials.



STAINLESS STEEL 0302
Shiny



SURFACE GRAIN 0301
Galvanized steel with high-precision grain

ONWOOD

True-to-life matte wood texture. Available in all wood finish or with optional black strips "Colorigami® Process".



SILVER TECK (BLACK BANDS) 0409 47µm



SILVER TECK (ALL WOOD) 0408 47µm



NATURAL OAK (BLACK BANDS) 0406 47µm
0416 (MIN)
0426 (MAX)



NATURAL OAK (ALL WOOD) 0403 47µm



HAZELNUT OAK (BLACK BANDS) 0405 47µm



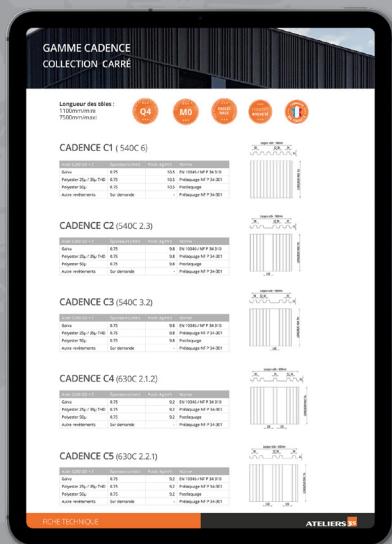
HAZELNUT OAK (ALL WOOD) 0402 47µm



COFFEE OAK (BLACK BANDS) 0407 47µm



COFFEE OAK (ALL WOOD) 0404 47µm



- TECHNICAL DATASHEETS
- INSTALLATION INSTRUCTIONS
- GUIDES TO FINISHING FOLDS
- CCTP (SPECIAL TECHNICAL SPECIFICATIONS)
- FILES DWG, BIM, SKETCHUP
- ETC.

Find us at:
www.ateliers3s.com

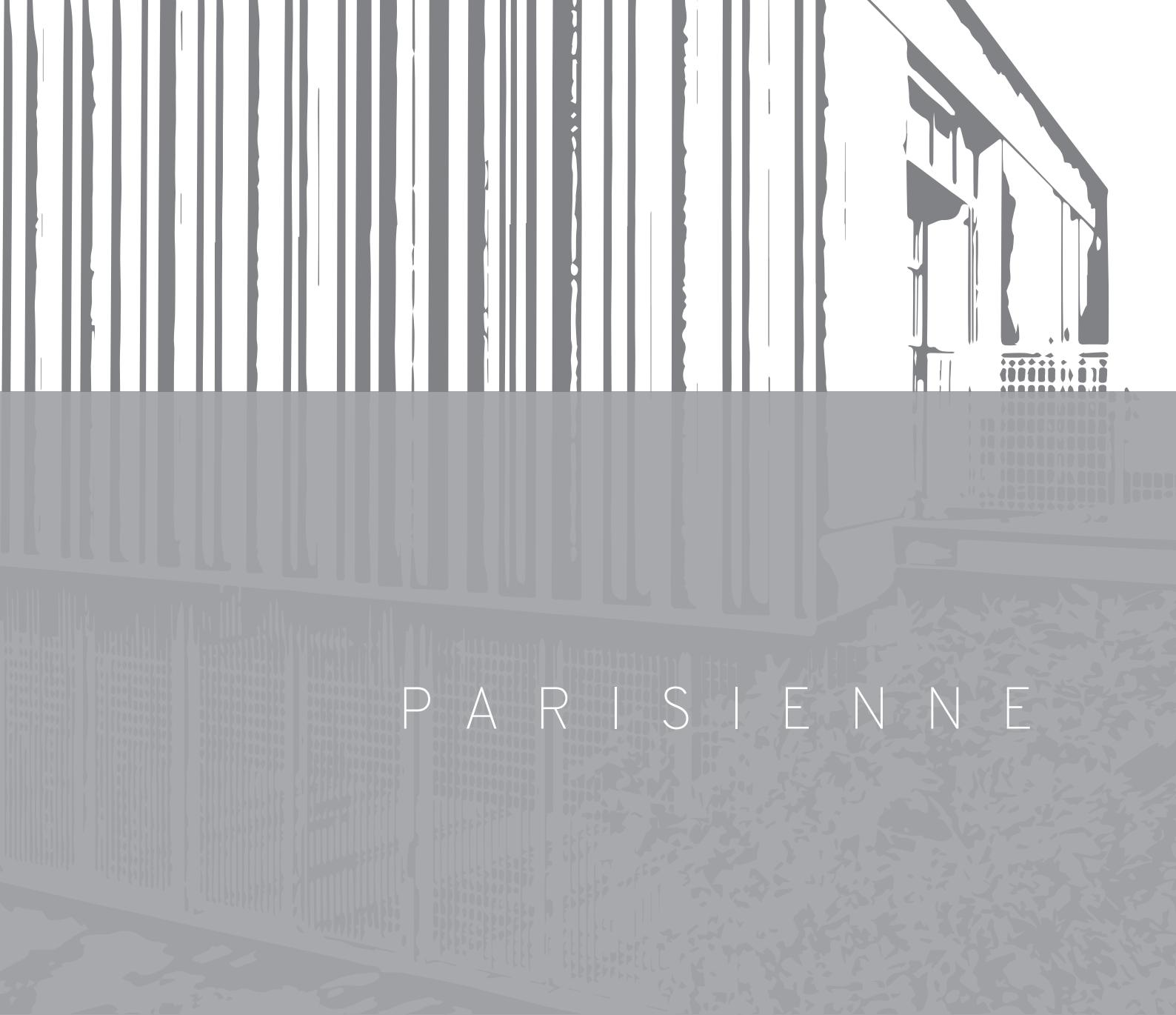


SCREW IT OUR SHOWROOM

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GROUPE

FIMAVI



PARISIENNE



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