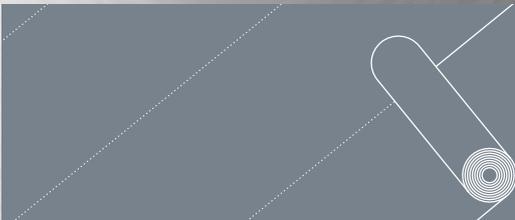


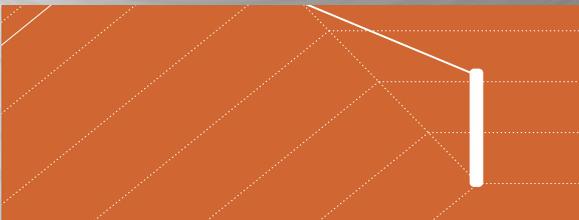
OFFICINE RASERA



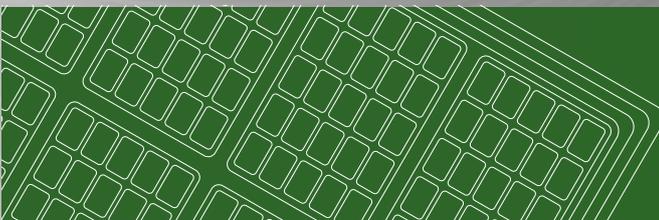
ROOF ACCESSORIES



ROOF UNDERLAYMENTS



FALL ARRESTER SOLUTIONS

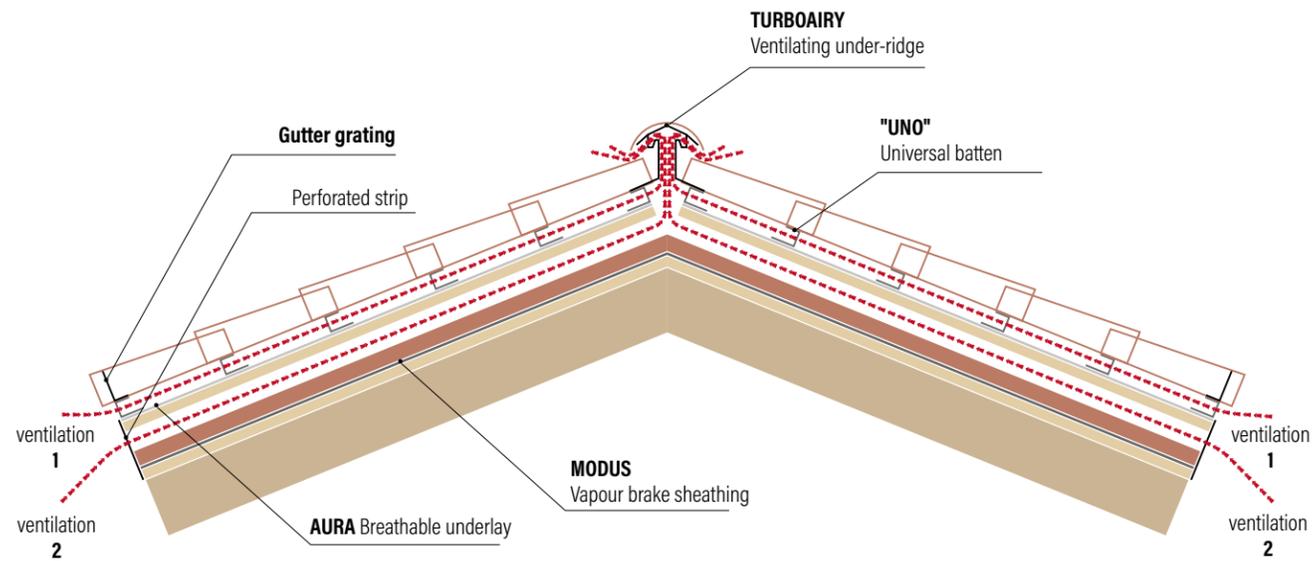


PV PANEL FASTENERS

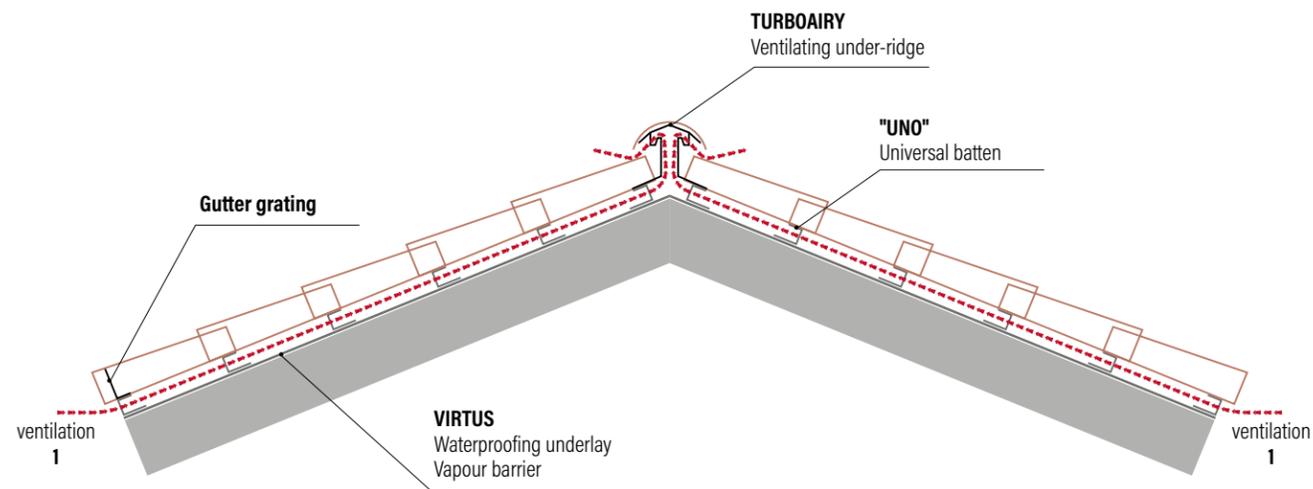


VENTILATION PROTECTION SAFETY SUPPORTS

VENTILATED ROOF WITH TWO CHAMBERS



VENTILATED ROOF WITH ONE CHAMBER



anin
ACCESSORIES FOR VENTILATED ROOFS



nabun
ROOF UNDERLAYS

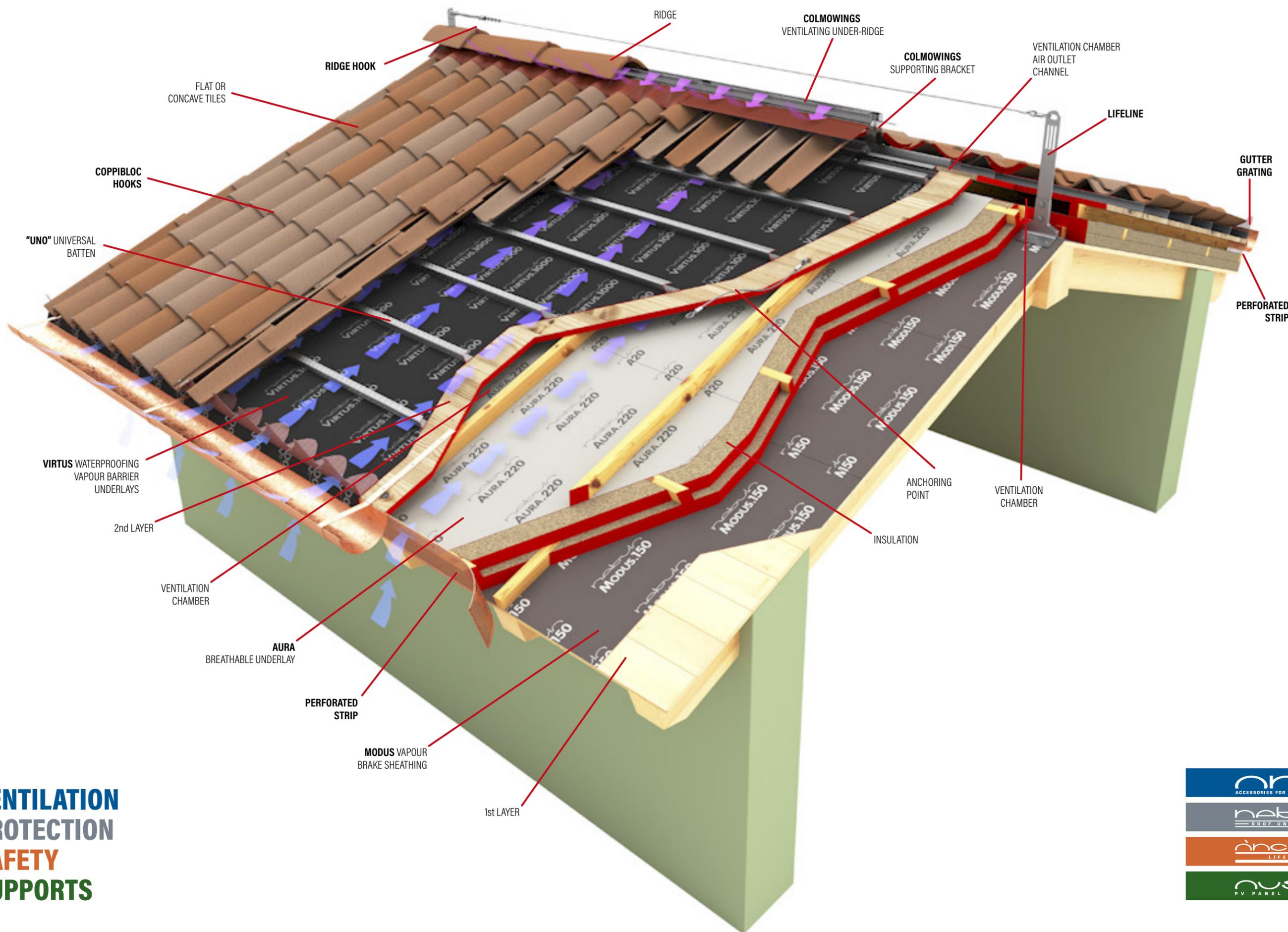


ancora
LIFELINE



nusilio
PV PANEL FASTENERS





**VENTILATION
PROTECTION
SAFETY
SUPPORTS**



TABLE OF CONTENTS



GUTTER GRATINGS	9
COMBS	17
PERFORATED BANDS	19
ISOSTOP	21
BATTENS	23
VENTILATING UNDER-RIDGES	25
COPPIBLOC	37
ADHESIVE BANDS	47
SNOW STOP	49
PIGEON BARRIERS	53
ANCHORS FOR BRICKS	55
STACKS	57
VALLEYS	61



BREATHABLE UNDERLAYS	65
VAPOUR BRAKE SHEATHING	75
VAPOUR BARRIER UNDERLAYS	81
NON-COMBUSTIBLE UNDERLAYS	87
ACCESSORIES SEALANTS	89



ANCHORING DEVICE TYPE A	93
ANCHORING DEVICE TYPE B	95
SAFE EASYLINE LIFELINE TYPE C	97
LIFELINE TYPE C	99
ANCHORING ON SHEET METAL TYPE A-C	103
ACCESSORIES TYPE A-C and C	105
LADDERS	107
WALKWAYS	109
SAFETY RAILS	111



STANDARD KITS	115
FASTENING BRACKETS	117
ACCESSORIES	121
KITS IN ALUMINIUM	123
INDIVIDUAL COMPONENTS	125

PERSONAL NOTES	127
----------------	-----



ario
ACCESSORIES FOR VENTILATED ROOFS

ARIA

Thanks to modern research techniques and the most pioneering planning and production technologies, **Officine Rasera** has fine-tuned a line of products and solutions for **ventilating and protecting roofs**. **Aria** is an easy, practical and efficient system that provides the **maximum amount of ventilation for every type of roof** and all degrees of slope **while speeding up the installation phase to the utmost**.

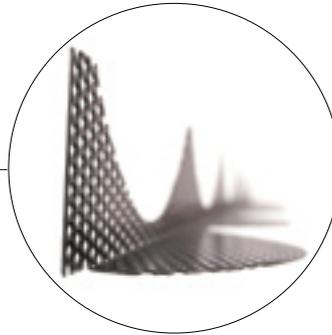
The Aria system encourages the **natural convective motion** of the hot currents that form in the under-roof and ventilation chamber of the roof, allowing them to flow **from the inlet towards the outlet without being throttled in any way**.

The Aria system provides the following **advantages**:

- **Longer-lasting** roof cladding and increased frost resistance
- Improved **preservation** of the wooden, brickwork and hollow-core concrete structures
- Improved **thermal insulation** of the roof in both summer and winter
- **Lower energy consumption**
- **Prevents** the formation of **mould and condensation**
- Increased **stability** of the roof components
- **Lowers the temperature** in the under-roof by up to **6°C** compared to a roof without ventilation system

Air inflow

Gutter grating or, alternatively, combs



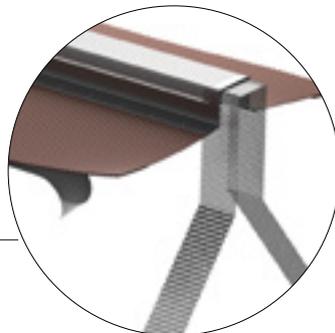
Air flows through

Universal batten



Air outflow

Ventilating under-ridge



Combined use of all three modules of the Aria system guarantees maximum roof ventilation.

BIRD BARRIER VENTILATION GRATING FOR CONCAVE AND FLAT TILES

Ventilation gratings allow a **generous amount of air to enter** the entire gutter line while **preventing birds from entering** the under-roof. **They also make concave and flat tiles easier** to install on the roof. They enable 50 mm COPPIBLOC initial hooks to be anchored for the first row of concave tiles. Use intermediate hooks for the following rows.

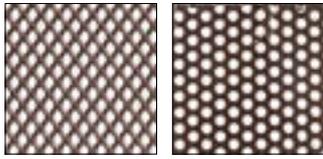
- Available in various sizes and types.
- Perfectly camouflaging.
- Durable.



Technical data sheets
GUTTER GRATINGS



MATERIALS



Flattened sheet metal

Perforated sheet metal

RELATED PRODUCTS



"UNO" batten

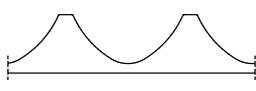
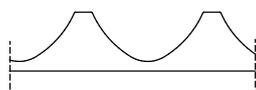
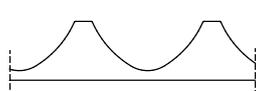
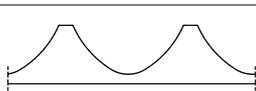
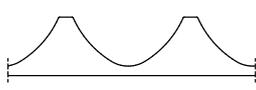
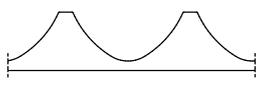
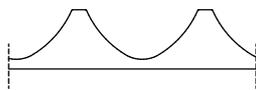
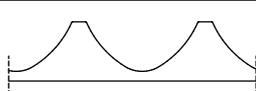
Initial hooks

SPECIFICATION

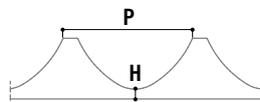
Bird barrier ventilation grating:

Modular ventilation and bird barrier element for the gutter line of the roof. Made of perforated or flattened sheet metal coated with RAL 8017 brown polyester powder paint for outdoor environments. UV-resistant. Available in lengths from 70 to 100 cm. Shaped for all types of concave or plain roof tiles.

GRATINGS FOR CONCAVE TILES

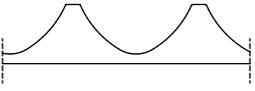
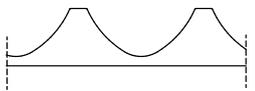
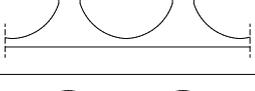
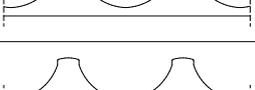
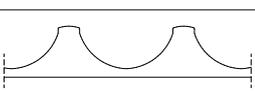
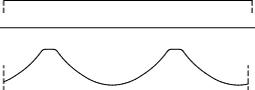
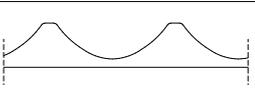
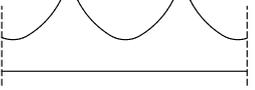
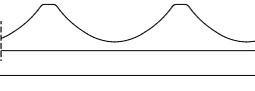
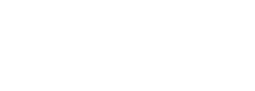
MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	L cm	T mm	H mm	P mm
	GCM1515	Grating for Concave tiles H15	Perforated sheet metal	Brown RAL 8017	975	1.5	15	19.5
	GCM15P20	Grating for Concave tiles H15 P20	Perforated sheet metal	Brown RAL 8017	100	1.5	15	20
	GCM15P20ST	Grating for Concave tiles H15 P20	Flattened sheet metal	Brown RAL 8017	100	2	15	20
	GCM1515ST	Grating for Concave tiles H15	Flattened sheet metal	Brown RAL 8017	975	2	15	19.5
	GCM1515ST	Grating for Onduline tiles p190	Flattened sheet metal	Brown RAL 8017	975	2	15	19.5
	GCM1515ST	Grating for Coppo Veneto SML concave tiles	Flattened sheet metal	Brown RAL 8017	975	2	15	19.5
	GCM2015	Grating for Concave tiles H15	Perforated sheet metal	Brown RAL 8017	975	2	15	19.5
	GCM2015	Grating for FBM small concave tiles	Perforated sheet metal	Brown RAL 8017	975	2	15	19.5

PACKAGE: PACKS OF 10 PCS.
OTHER VERSIONS AVAILABLE ON REQUEST

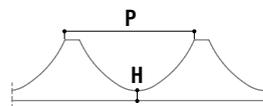


L=Length. T=Thickness. H=Height. P=Pitch

GRATINGS FOR CONCAVE TILES

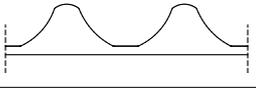
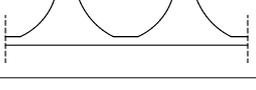
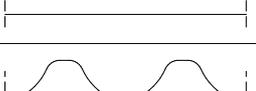
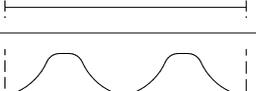
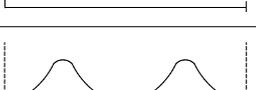
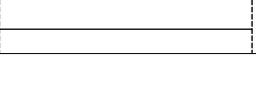
MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	L cm	T mm	H mm	P mm
	GCM2015	Grating for Coppo Veneto SML concave tiles	Perforated sheet metal	Brown RAL 8017	975	2	15	19.5
	GCM20P20	Grating for Concave tiles P20	Perforated sheet metal	Brown RAL 8017	100	2	15	20
	GCM1517ST	Grating for Concave tiles H17	Flattened sheet metal	Brown RAL 8017	92	2	17	23
	GCM1517ST	Grating for Coppo San Michele concave tiles	Flattened sheet metal	Brown RAL 8017	92	2	17	23
	GCM1517ST	Grating for Coppo Siciliano "Migliore" concave tiles	Flattened sheet metal	Brown RAL 8017	92	2	17	23
	GCM1517ST	Grating for FBM large concave tiles	Flattened sheet metal	Brown RAL 8017	92	2	17	23
	GCM2017	Grating for Concave tiles H17	Perforated sheet metal	Brown RAL 8017	92	2	17	23
	GCM2017	Grating for Coppo San Michele concave tiles	Perforated sheet metal	Brown RAL 8017	92	2	17	23
	GCM2017	Grating for Grande FBM concave tiles	Perforated sheet metal	Brown RAL 8017	92	2	17	23
	GCM2040	Grating for Concave tiles H40 on LIS25 batten	Perforated sheet metal	Brown RAL 8017	975	1.5	40	19.5
	GCM20P20H40	Grating for Concave tiles pitch 20 H40 on LIS25 batten	Perforated sheet metal	Brown RAL 8017	100	1.5	40	20
	GCM2055	Grating for Concave tiles H55 on "UNO" batten	Perforated sheet metal	Brown RAL 8017	975	1.5	55	19.5
	GCM2055P20 only to order minimum lot 100 pcs	Grating for Concave tiles H55 P20 on "UNO" batten	Perforated sheet metal	Brown RAL 8017	100	1.5	55	20
	GDCM	Diagonal grating for Concave tiles	Perforated sheet metal	Brown RAL 8017	83	2	-	-

PACKAGE: PACKS OF 10 PCS.
OTHER VERSIONS AVAILABLE ON REQUEST

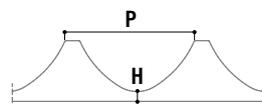


L=Length. T=Thickness. H=Height. P=Pitch

GRATINGS FOR BICOPPO DOUBLE CONCAVE/DOUBLE PIEMONTE CONCAVE TILES

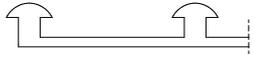
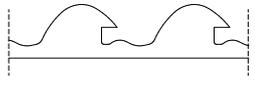
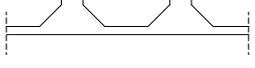
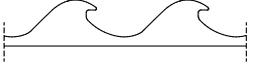
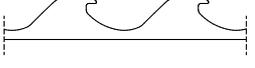
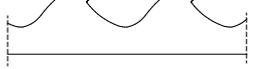
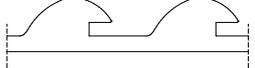
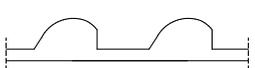
MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	L cm	T mm	H mm	P mm
	GBIC15	Grating for Double Concave tiles H15 on double wooden battening	Perforated sheet metal	Brown RAL 8017	82	1.5	15	20.5
	GBIC15ST	Grating for H15 double concave tiles on double wooden battening	Flattened sheet metal	Brown RAL 8017	82	1.5	15	20.5
	GBIC30	Grating for Double Concave tiles H30 on sill or sill with LIS10	Perforated sheet metal	Brown RAL 8017	82	1.5	30	20.5
	GBIC30ST	Grating for Double Concave tiles H30 on sill or sill with LIS10	Perforated sheet metal	Brown RAL 8017	82	1.5	30	20.5
	GBIC40	Grating for Double Concave tiles H40 on LIS25 batten	Perforated sheet metal	Brown RAL 8017	82	1.5	40	20.5
	GBIC40ST	Grating for H40 Double Concave tiles on LIS25 batten	Flattened sheet metal	Brown RAL 8017	82	1.5	40	20.5
	GBIC55	Grating for Double Concave tiles H55 on "UNO" batten	Perforated sheet metal	Brown RAL 8017	82	1.5	55	20.5
	GBIC55ST	Grating for H55 Double Concave tiles on "UNO" batten"	Flattened sheet metal	Brown RAL 8017	82	1.5	55	20.5
	GBICP15ST	Grating for H15 Piemonte Double Concave tiles on double wooden battening	Flattened sheet metal	Brown RAL 8017	88	1.5	15	22
	GBICP30ST	Grating for Piemonte Double Concave tiles on LIS10 or sill	Flattened sheet metal	Brown RAL 8017	88	1.5	30	22
	GBICP40ST	Grating for H40 Piemonte Double Concave tiles on LIS25 batten	Flattened sheet metal	Brown RAL 8017	88	1.5	40	22
	GBICP55ST	Grating for H55 Piemonte Double Concave tiles on UNO batten	Flattened sheet metal	Brown RAL 8017	88	1.5	55	22
	GDCPSMLST	Grating for Piemonte Double Concave tiles	Flattened sheet metal	Brown RAL 8017	82	2	15	20.5
	GDCPSML40ST	Grating for Piemonte Double Concave tiles on LIS25	Flattened sheet metal	Brown RAL 8017	82	2	40	20.5
	GDCPSML55ST	Grating for Piemonte Double Concave tiles on "UNO" Batten	Flattened sheet metal	Brown RAL 8017	82	2	55	20.5

PACKAGE: PACKS OF 10 PCS.
OTHER VERSIONS AVAILABLE ON REQUEST

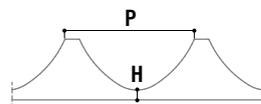


L=Length. T=Thickness. H=Height. P=Pitch

GRATINGS FOR COTTO TILES

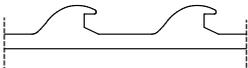
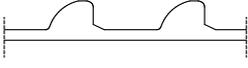
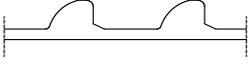
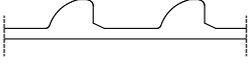
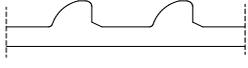
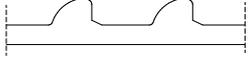
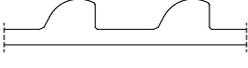
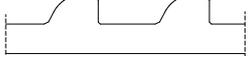
MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	L cm	T mm	H mm	P mm
	GCEFBM	Grating for FBM Plain Roofing tiles or San Michele Plain Roofing tiles (if tile is cone-shaped at eaves)	Flattened sheet metal	Brown RAL 8017	71.5	2	20	34.5
	GCPFBMST	Grating for Coppo Più FBM concave tiles	Flattened sheet metal	Brown RAL 8017	95	1.5	20	23
	GCMVL	Grating for Coppo VL ICP concave tiles	Perforated sheet metal	Brown RAL 8017	90	1.5	17	22.5
	GCESML	Grating for Coppo Evo concave tiles on sill or LIS10	Flattened sheet metal	Brown RAL 8017	90.8	1.5	20	22.7
	GCESMLFO	Grating for Coppo Evo concave tiles on sill or LIS10	Perforated sheet metal	Brown RAL 8017	90.8	1.5	20	22.7
	GCESML40ST	Grating for H40 Coppo Evo concave tiles on LIS25	Flattened sheet metal	Brown RAL 8017	90.8	2	40	22.7
	GCESML55ST	Grating for H55 Coppo Evo concave tiles on "UNO" batten	Flattened sheet metal	Brown RAL 8017	90.8	2	55	22.7
	GTMUNIEXST	Grating for Unicoppo Extra Winter tiles on sill	Flattened sheet metal	Brown RAL 8017	83	1.5	17	20.7
	GTMUNIEXFO	Grating for Unicoppo Extra Winter tiles on sill	Perforated sheet metal	Brown RAL 8017	83	1.5	17	20.7
	GTMUNIEX40ST	Grating for H40 Unicoppo Extra Winter tiles on LIS25 batten	Flattened sheet metal	Brown RAL 8017	83	1.5	40	20.7
	GTMUNIEX55ST	Grating for Unicoppo Extra Winter tiles on "UNO" batten	Flattened sheet metal	Brown RAL 8017	83	1.5	55	20.7
	GCMDOCST	Grating for Coppo DOC concave tiles	Flattened sheet metal	Brown RAL 8017	84	1.5	27	21
	GTMFBMST	Grating for Tegola Portoghese FBM tiles	Flattened sheet metal	Brown RAL 8017	87	1.5	22	21.7
	GTMPICA	Grating for Tegola Portoghese PICA tiles Portoghese I.B.L. tiles	Flattened sheet metal	Brown RAL 8017	82	1.5	25	20.5

PACKAGE: PACKS OF 10 PCS.
OTHER VERSIONS AVAILABLE ON REQUEST

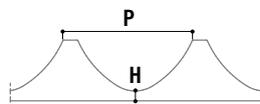


L=Length. T=Thickness. H=Height. P=Pitch

GRATINGS FOR COTTO TILES

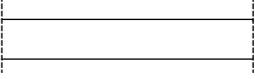
MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	L cm	T mm	H mm	P mm
	GTMPICA	Grating for Tegola Portoghese Rosata C.F. tiles	Flattened sheet metal	Brown RAL 8017	82	1.5	25	20.5
	GTMPORST	Grating for Tegola Portoghese tiles	Flattened sheet metal	Brown RAL 8017	100	1.5	19	20
	GTMPORST	Grating for Tegola Portoghese SML tiles	Flattened sheet metal	Brown RAL 8017	100	1.5	19	20
	GTMPORST	Grating for Port. Cotto Senese tiles	Flattened sheet metal	Brown RAL 8017	100	1.5	19	20
	GTMPOR40ST	Grating for Tegola Portoghese tiles on LIS25 batten	Flattened sheet metal	Brown RAL 8017	100	1.5	40	20
	GTMPOR55ST	Grating for Tegola Portoghese tiles on "UNO" batten	Flattened sheet metal	Brown RAL 8017	100	1.5	55	20
	GTMS10	Grating for Tegola S10 SML tiles	Flattened sheet metal	Brown RAL 8017	77	1.5	22	25.5
	GTMTESST	Grating for Tegola TE.SI. ICP Winter tiles	Flattened sheet metal	Brown RAL 8017	88	1.5	30	22
	GTMTESFO	Grating for Tegola TE.SI. ICP Winter tiles	Perforated sheet metal	Brown RAL 8017	88	1.5	30	22
	GTMTES50ST	Grating for Tegola TE.SI. ICP Winter tiles on LIS25 batten	Flattened sheet metal	Brown RAL 8017	88	1.5	50	22
	GTMTES60ST	Grating for Tegola TE.SI. ICP Winter tiles on "UNO" batten	Flattened sheet metal	Brown RAL 8017	88	1.5	60	22
	GCMSML	Grating for Coppo San Marco Novo Coppo PICA concave tiles	Flattened sheet metal	Brown RAL 8017	90	1.5	20	22.5
	GTFRCST	Grating for Tegola Francigena tiles (Cotto Senese)	Flattened sheet metal	Brown RAL 8017	97.5	2	22	19.5

PACKAGE: PACKS OF 10 PCS.
OTHER VERSIONS AVAILABLE ON REQUEST

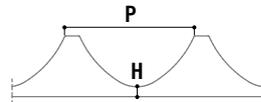


L=Length. **T**=Thickness. **H**=Height. **P**=Pitch

GRATINGS FOR COTTO TILES

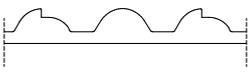
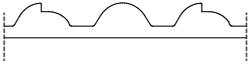
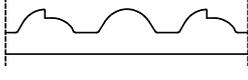
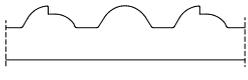
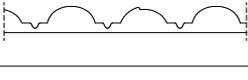
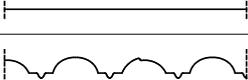
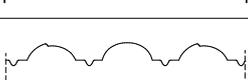
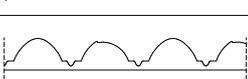
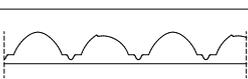
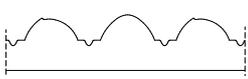
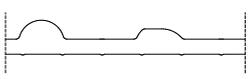
MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	L cm	T mm	H mm	P mm
	GTMAR5060ST	Grating for 50x60 Marsigliese tiles usable in the following combinations: <ul style="list-style-type: none"> - Vario5 on LIS25 (50mm side), on "UNO" batten (60mm side); - Terreal on LIS25 (150mm side), on "UNO" batten (60mm side); - Creaton on LIS25 (60mm side); - Erlus "gross falz" on LIS25 (60mm side). 	Flattened sheet metal	Brown RAL 8017	100	1.5	50/60	
	GTMAR4075ST	Grating for 40x75 Marsigliese tiles usable in the following combinations: <ul style="list-style-type: none"> - Vario5 on sill (40mm side); - Terreal on sill (40mm side); - Creaton on sill (40mm side), on "UNO" batten (75mm side); - Erlus "gross falz" on sill (40mm side), on "UNO" batten (75mm side). 	Flattened sheet metal	Brown RAL 8017	100	1.5	40/75	

PACKAGE: PACKS OF 10 PCS.
OTHER VERSIONS AVAILABLE ON REQUEST

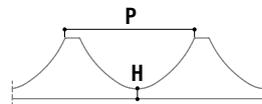


L=Length. **T**=Thickness. **H**=Height. **P**=Pitch

GUTTER GRATINGS FOR CEMENT TILES

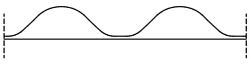
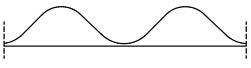
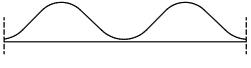
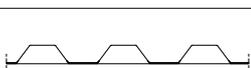
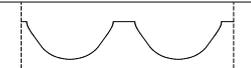
MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	L cm	T mm	H mm	P mm
	GTMSUPCED	Grating for Tegola Ceda Tegolaia Supercoppo tiles	Flattened sheet metal	Brown RAL 8017	90	1.5	22	30
	GTMSUPCEDFO	Grating for Tegola Ceda Tegolaia Supercoppo tiles	Perforated sheet metal	Brown RAL 8017	90	1.5	22	30
	GTMSUPCED50ST	Grating for Tegola Ceda Supercoppo Tegolaia H50 tiles on LIS25 batten	Flattened sheet metal	Brown RAL 8017	90	1.5	50	30
	GTMSUPCED65ST	Grating for Tegola Ceda or Supercoppo Tegolaia tiles on "UNO" batten	Flattened sheet metal	Brown RAL 8017	90	1.5	65	30
	GCM15F	Grating for Coppo di Francia cement tiles	Flattened sheet metal	Brown RAL 8017	90	1.5	20	30
	GCM15FFO	Grating for Coppo di Francia cement tiles	Perforated sheet metal	Brown RAL 8017	90	1.5	20	30
	GCM15F50	Grating for H50 Coppo di Francia cement tiles on LIS25 batten	Flattened sheet metal	Brown RAL 8017	90	1.5	50	30
	GCM15F50FO	Grating for H50 Coppo di Francia cement tiles on LIS25 batten	Perforated sheet metal	Brown RAL 8017	90	1.5	50	30
	GCM15F60ST	Grating for Coppo di Francia cement tiles on "UNO" batten	Flattened sheet metal	Brown RAL 8017	90	1.5	60	30
	GCM15G	Grating for Coppo di Grecia cement tiles	Flattened sheet metal	Brown RAL 8017	90	1.5	20	30
	GCM15GFO	Grating for Coppo di Grecia cement tiles	Perforated sheet metal	Brown RAL 8017	90	1.5	20	30
	GCM15G50	Grating for H50 Coppo di Grecia cement tiles on LIS25 batten	Flattened sheet metal	Brown RAL 8017	90	1.5	50	30
	GCM15G50FO	Grating for H50 Coppo di Grecia cement tiles on LIS25 batten	Perforated sheet metal	Brown RAL 8017	90	1.5	50	30
	GCM15G60ST	Grating for Coppo Grecia cement tiles on "UNO" batten	Flattened sheet metal	Brown RAL 8017	90	1.5	60	30
	GCMDO20ST	Grating for Tegola Dolomiten Tegolaia - H20	Flattened sheet metal	Brown RAL 8017	90	1.5	20	30

PACKAGE: PACKS OF 10 PCS.
OTHER VERSIONS AVAILABLE ON REQUEST

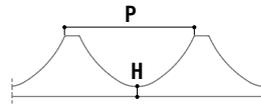


L=Length. T=Thickness. H=Height. P=Pitch

GUTTER GRATINGS FOR SHEET METAL ROOFING

MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	L cm	T mm	H mm	P mm
	GLMLANST	Grating for Landini Onda Band 200.5 slabs	Flattened sheet metal	Brown RAL 8017	80	1.5	5	20.1
	GLMTEGFBR	Grating for Edilfibro Tegolit 200 slabs	Flattened sheet metal	Brown RAL 8017	100	1.5	5	20
	GLMGUTST	Grating for Gutta slabs	Flattened sheet metal	Brown RAL 8017	96	2	18	24
	GCM1518ST	Grating for Onduline	Flattened sheet metal	Brown RAL 8017	89.2	2	18	22.3
	GLMALU only to order minimum lot 100 pcs	Grating for Alubel 28 corrugated sheet	Flattened sheet metal	Brown RAL 8017	89.5	1.5	25.8	11.2
	GLMTEGFBR23530	Grating for Edilfibro Tegolit 235 slabs H 35mm	Flattened sheet metal	Brown RAL 8017	98.1	1.5	35	23.2
	GCM30P24ST	Grating for Onduline P24	Flattened sheet metal	Brown RAL 8017	96	2	30	24

PACKAGE: PACKS OF 10 PCS.
OTHER VERSIONS AVAILABLE ON REQUEST



L=Length. T=Thickness. H=Height. P=Pitch

OMNIBLOCK: VENTILATING AND BIRD BARRIER COMBS

OMNIBLOCK is the comb for gutter lines and valleys that features two staggered rows of perforated teeth.

- The combs provide great **resistance against intruding birds and prevent insects from entering.**
- They allow a **generous amount of air to enter** and improve the ventilating action thanks to the slotted holes in each tooth.
- The combs are made of **polypropylene. They are UV-resistant and able to withstand thermal shock.**
- Thanks to their flexible teeth, the combs **can adapt to all types of concave or flat tiles.**
- Available **with and without batten.**



DETAIL

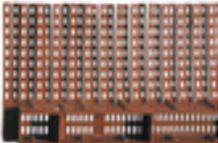


OMNIBLOCK is an OFFICINE RASERA trademark

SPECIFICATION

Omniblock:

Modular ventilating and bird barrier element for the gutter line of the roof. Made of brick red or dark brown coloured polypropylene, with a double row of perforated teeth. Length 100 cm, height 7 or 11 cm. Can be adapted to all types of concave or plain tiles.

MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	L cm	combs H1 cm	batten H2 cm	pack. pieces
	OB70	Omniblock 7	Polypropylene	Brick red	100	7	-	100
	OB70TM	Omniblock 7	Polypropylene	Dark brown	100	7	-	100
	OB70LI	Omniblock 7 with batten	Polypropylene	Brick red	100	7	2.5	35
	OB110	Omniblock 11	Polypropylene	Brick red	100	11	-	60
	OB110TM	Omniblock 11	Polypropylene	Dark brown	100	11	-	60
	OB110LI	Omniblock 11 with batten	Polypropylene	Brick red	100	11	2.5	25



L=Length. H1=Comb height. H2=Batten height



Technical data sheet
OMNIBLOCK
with batten



Technical data sheet
OMNIBLOCK
without batten

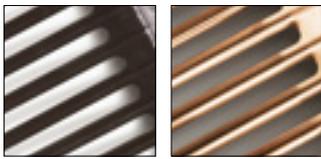
BIRD BARRIER COMBS

Conventional bird barrier combs that ensure under-roof ventilation while preventing birds from entering. Thanks to their flexible teeth, they can adapt to all types of concave or flat tiles.

- Available in **pre-painted sheet metal** or **copper**.



MATERIALS



Prepainted sheet metal

Copper

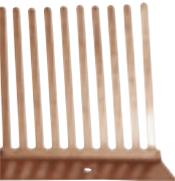
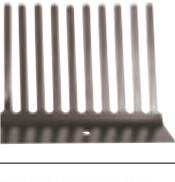
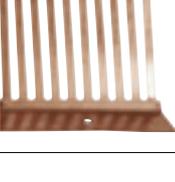


Technical data sheet
CONVENTIONAL COMBS

SPECIFICATION

Bird barrier combs:

Modular ventilation and bird barrier element for the gutter line of the roof. Made of brown prepainted sheet metal or copper. Length 100 cm, thickness 0.5 mm. Can be adapted to all types of concave or flat tiles.

MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	L cm	H cm	T mm	pack. pieces
	PEM	Bird barrier combs	Prepainted sheet metal	Brown RAL 8017	100	10	0.5	50
	PER	Bird barrier combs	Copper	-	100	10	0.5	50
	PEM6	Bird barrier combs	Prepainted sheet metal	Brown RAL 8017	100	6	0.5	50
	PER6	Bird barrier combs	Copper	-	100	6	0.5	50

L=Length. H=Comb height. T=Thickness

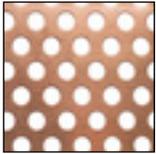
PERFORATED BIRD BARRIER BAND

Perforated bird barrier bands with a generous ventilating capacity. Ideal for finishing gutter lines with ventilation chambers.

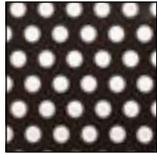
- Available in different heights and materials.
- Prevents birds and insects from entering.



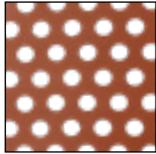
MATERIALS



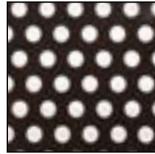
Copper



Painted aluminium
Dark brown



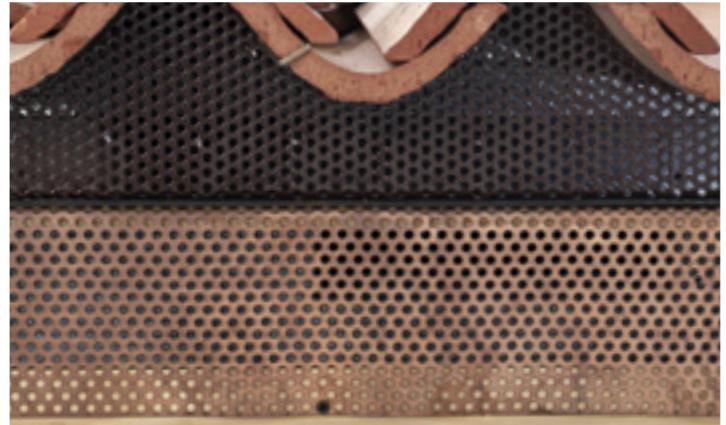
Painted aluminium
Brick red



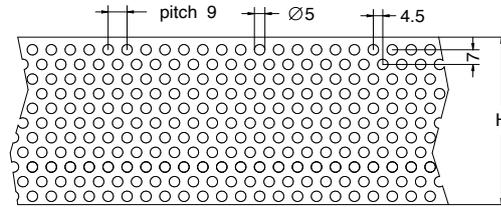
Prepainted
sheet metal
Dark brown



Technical data sheet
PERFORATED BAND



DETAIL

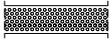
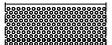
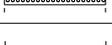
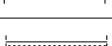


SPECIFICATION

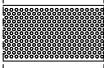
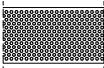
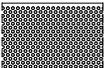
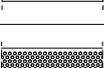
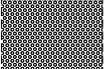
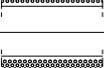
Perforated bird barrier band:

Continuous perforated band made of copper, painted aluminium or pre-painted sheet metal for ventilation purposes and to ward off insects and birds in ventilated roofs.

Heights: 5, 8, 10, 15, 20, 25 cm, thickness 0.6 mm. Can be adapted to all types of concave or flat tiles.

MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	H mm	T mm	pack. meters
	RP50	Perforated bird barrier band	Copper	-	50	0.6	25
	RP80	Perforated bird barrier band	Copper	-	80	0.6	25
	RP100	Perforated bird barrier band	Copper	-	100	0.6	25
	RP150	Perforated bird barrier band	Copper	-	150	0.6	25
	RP200	Perforated bird barrier band	Copper	-	200	0.6	25
	RP250	Perforated bird barrier band	Copper	-	250	0.6	25
	RPA80	Perforated bird barrier band	Painted aluminium	Brick red	80	0.6	25
	RPA80TM	Perforated bird barrier band	Painted aluminium	Dark brown	80	0.6	25

H=Comb height. T=Thickness

MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	H mm	T mm	pack. meters
	RPA100	Perforated bird barrier band	Painted aluminium	Brick red	100	0.6	25
	RPA100TM	Perforated bird barrier band	Painted aluminium	Dark brown	100	0.6	25
	RPA150	Perforated bird barrier band	Painted aluminium	Brick red	150	0.6	25
	RPA150TM	Perforated bird barrier band	Painted aluminium	Dark brown	150	0.6	25
	RPA200	Perforated bird barrier band	Painted aluminium	Brick red	200	0.6	25
	RPA200TM	Perforated bird barrier band	Painted aluminium	Dark brown	200	0.6	25
	RPA250	Perforated bird barrier band	Painted aluminium	Brick red	250	0.6	25
	RPA250TM	Perforated bird barrier band	Painted aluminium	Dark brown	250	0.6	25
	RPM100	Perforated bird barrier band	Prepainted sheet metal	Dark brown	100	0.6	25
	RPM150	Perforated bird barrier band	Prepainted sheet metal	Dark brown	150	0.6	25
	RPM200	Perforated bird barrier band	Prepainted sheet metal	Dark brown	200	0.6	25

H=Comb height. T=Thickness

INSULATION BRACKET FOR THE GUTTER LINE AND RIDGE

ISOSTOP consists of two angular elements with 4x11.5 cm profile that allow **air to pass through the ventilated panels**, thereby preventing water and condensation from remaining there. Provides a solid **base for fastening ventilation materials** on the **gutter line and ridge line**.

- **Adjustable in height** from 5 to 20 cm.

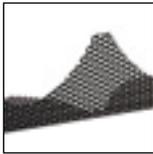


MATERIALS



Flattened sheet metal

RELATED PRODUCTS



Gratings



Ridges



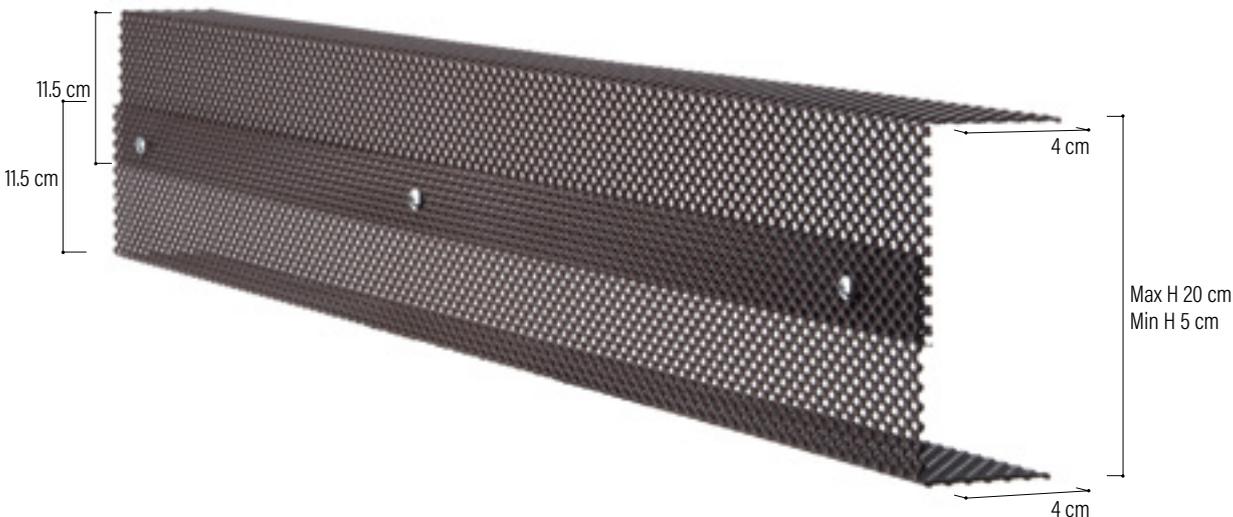
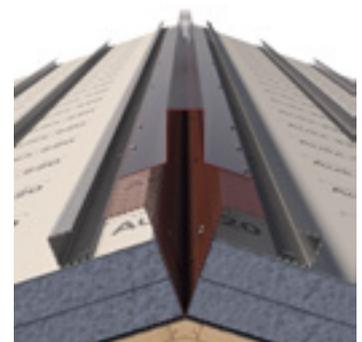
Technical data sheet
ISOSTOP



Instructions
ISOSTOP

SPECIFICATION

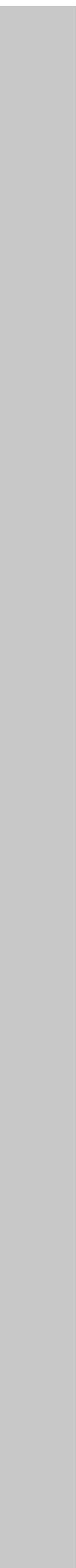
Isostop:
Element adjustable in height from 5 to 20 cm. Made of flattened perforated sheet metal coated with brown RAL 8017 polyester powder paint for outdoor use. UV-resistant. "C" shaped. Formed by 2 "L" shaped angular pieces with 11.5x4 cm profile fastened together by 3 galvanized self-threading screws.



CODE	DESCRIPTION	MATERIAL	COLOUR	L cm	T mm
ISO100	Bracket for holding insulation in place and for fixing ventilation elements	Painted flattened sheet metal	Brown RAL 8017	100	2

**SUPPLIED WITH 3 GALVANIZED SELF-THREADING
Ø 6.3x13 mm SCREWS PER LINEAR METER.**

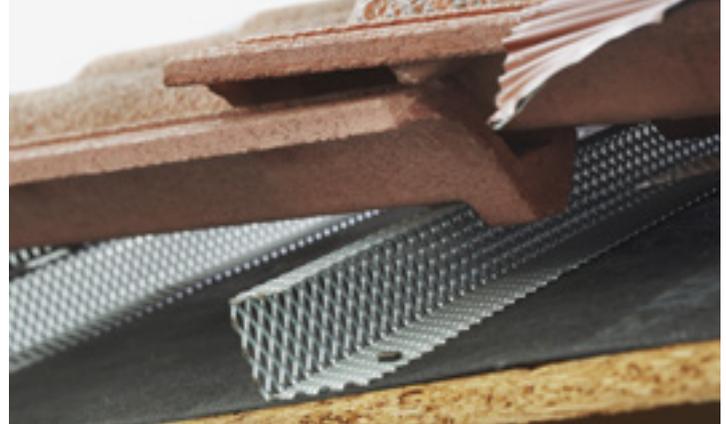
L=Length. T=Thickness



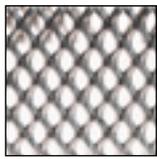
UNIVERSAL VENTILATING AND FASTENING BATTEN

"UNO" is a **ventilating and fastening batten** for fitting **concave tiles, flat tiles and accessories**. It can be **applied to pitches, gutter lines, ridge lines, valleys and hips**, on roofs in hollow-core concrete, wood, corrugated slabs and insulating panels.

- Provides **ventilation under concave or plain tiles** with an air flow cross-section of over 200 cm²/m².
- Substitutes classic wooden battening (vertical and horizontal) with a solution installed in a **single direction** (horizontal).
- Allows concave tiles (with or without tooth) and flat tiles to be installed using various anchoring and fastening methods (hooks or screws).

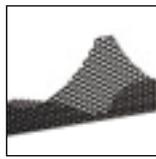


MATERIALS



Galvanized flattened sheet metal

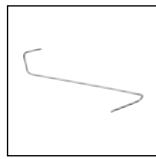
RELATED PRODUCTS



Gratings



Under-ridge ventilation



COPPIBLOC

SPECIFICATION

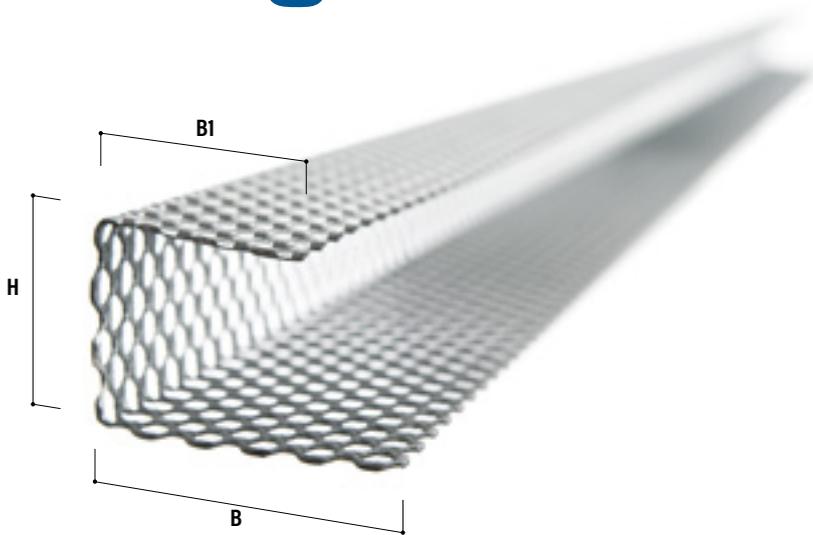
Universal batten:

Multifunctional "U" shaped element in galvanized flattened sheet metal. Used for anchoring concave tiles or plain tiles. Allows air to flow under the roofing, along the pitch from the eaves to the ridge line. Dimensions 2.5x4.5x4 cm, length 200 cm.



Technical data sheet
 "UNO" BATTEN

Uno "UNO" is an OFFICINE RASERA trademark



The "UNO" batten has been subjected to **two years of tests** at the **Teknehub laboratory of the University of Ferrara**, performed by professors and researchers from the Department of Architecture. The studies conducted during the tests highlighted the **superior characteristics of the "ARIA" SYSTEM** as to ventilation performance and consequent energy savings. The "UNO" batten ensures a higher airflow rate than the minimum values required by standard UNI 9460



READ MORE

CODE	DESCRIPTION	MATERIAL	L cm	B1 cm	B cm	H cm	T mm
UNOZ200	"UNO" batten for flat and concave tiles	Galvanized flattened sheet metal	200	2.5	4.5	4	2

Quantity per square meter of roof:
 2.7 meters of battens using concave tiles;
 2.8 meters of battens using flat tiles in cotto;
 3 meters of battens using flat tiles in cement;

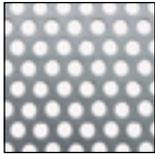
L=Length. H=Height. T=Thickness

PACKS CONTAINING 126 PCS

ANGULAR BATTEN FOR ANCHORING TILES

The batten **anchors the tiles** to hollow-core concrete or wooden roofs, preventing them from slipping even on strongly sloping surfaces.

MATERIALS



Perforated sheet metal



Technical data sheet
ANGULAR BATTEN



WA=Width A
L=Length. H=Height. T=Thickness



SPECIFICATION

Angular batten:
"L" shaped element measuring 2x1 cm, length 200 cm, in galvanized perforated sheet metal for anchoring tiles.

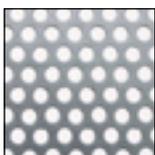
CODE	DESCRIPTION	MATERIAL	WA mm	L cm	H cm	T mm
ANG1020	Angular batten for anchoring tiles (min 250 pcs) *	Galvanized perforated sheet metal	2	200	1	1

FASTENING AND VENTILATING BATTEN FOR CONCAVE AND PLAIN TILES

Fastening and ventilating batten for **anchoring concave and plain tiles**. Can be applied to pitches, valleys and hips, on hollow-core concrete and wooden roofs.

- Guarantees **under-tile ventilation**.

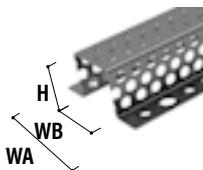
MATERIALS



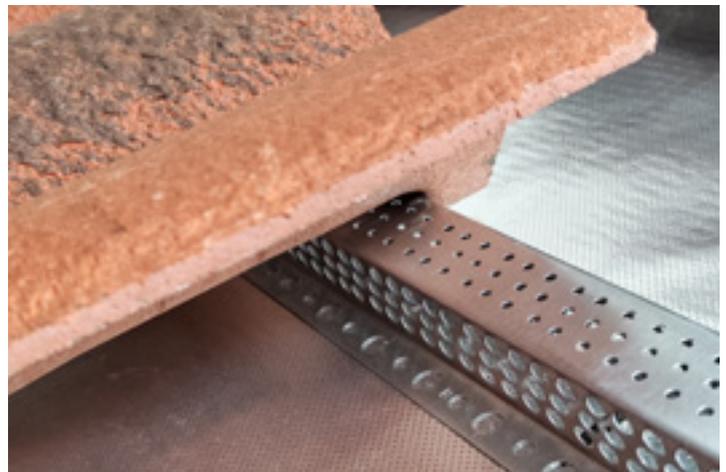
Perforated sheet metal



Technical data sheet
LIS25 and LIS10



WA=Width A . WB=Width B
L=Length. H=Height. T=Thickness



SPECIFICATION

Fastening batten:
200 cm in length, made of perforated zinc-magnesium sheet metal. Prevents slipping and provides for ventilation under the roofing surface.

CODE	DESCRIPTION	MATERIAL	WA mm	WB cm	L cm	H cm	T mm
LIS25	Fastening and ventilating batten (min 250 pcs) *	Perforated zinc-magnesium sheet metal	6.1	3.1	200	2.5	0.6
LIS10	Fastening and ventilating batten (min 250 pcs) *	Perforated zinc-magnesium sheet metal	5.7	2.2	200	1	0.6
LIS25CF25	Fastening and ventilating batten (pack. 25 pcs - min 10 packages)*	Perforated zinc-magnesium sheet metal	6.1	3.1	200	2.5	0.6
LIS10CF25	Fastening and ventilating batten (pack. 25 pcs - min 10 packages)*	Perforated zinc-magnesium sheet metal	5.7	2.2	200	1	0.6

* Quantity per square meter of roof:

2.7 meters of battens using concave tiles;

2.8 meters of battens using flat tiles in cotto;

3 meters of battens using flat tiles in cement;

PACKAGES CONTAINING 250 PCS

UNDER-RIDGE VENTILATION

TURBOAIRFLY is an advanced **ridge ventilation element**.

It is a **universal module for concave and flat tiles** of all shapes and sizes on **horizontal and sloping ridges** (diagonal). Simple **and quick to install**.

- Features an **air outlet cross section of over 400 cm²/m** to guarantee **maximum ventilation**.
- It has **adhesive "wings"** made of pleated and painted aluminium that adhere perfectly to the roof, **preventing water driven by the wind from infiltrating** into the under-roof layer.
- It consists of two separate parts (support and cover) that **allow the height to be adjusted** so as to **adapt to different types of concave and plain tiles**.
- It makes cutting and positioning the roofing components easier, particularly on hipped roofs, since the cover is applied during a successive phase.



RELATED PRODUCTS



Copfly



"UNO" batten



Self-perforating screws



Technical data sheet
TURBOAIRFLY



Instructions
TURBOAIRFLY

SPECIFICATION

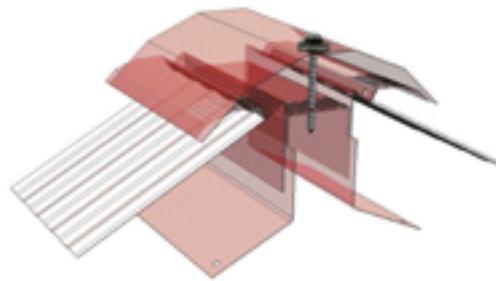
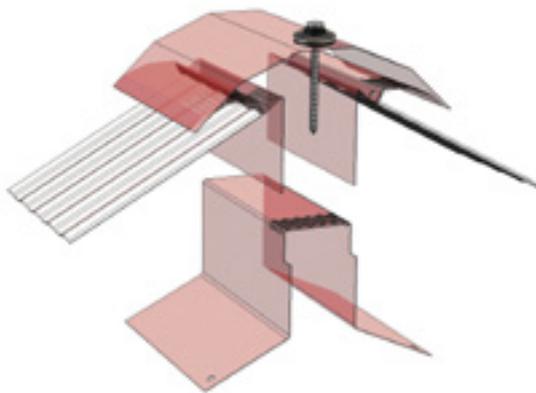
TurboAirFly:

Ventilation module for the horizontal or sloping (diagonal) ridge line in ventilated roofs (air outlet over 400 cm²/m) in galvanized sheet metal coated with RAL 8017 brown polyester powder paint for outdoor use. UV-resistant, length 100 cm. Formed by two elements (support and cover) to allow for height adjustments from 70 mm to 120 mm. The cover has two pleated aluminium bands painted brick red, with 50mm butyl adhesive.



"TURBOAIRFLY" ensures a far superior air flow than the minimum values required by standard **UNI 9460**.

with 50mm BUTYL ADHESIVE



CONTINUES

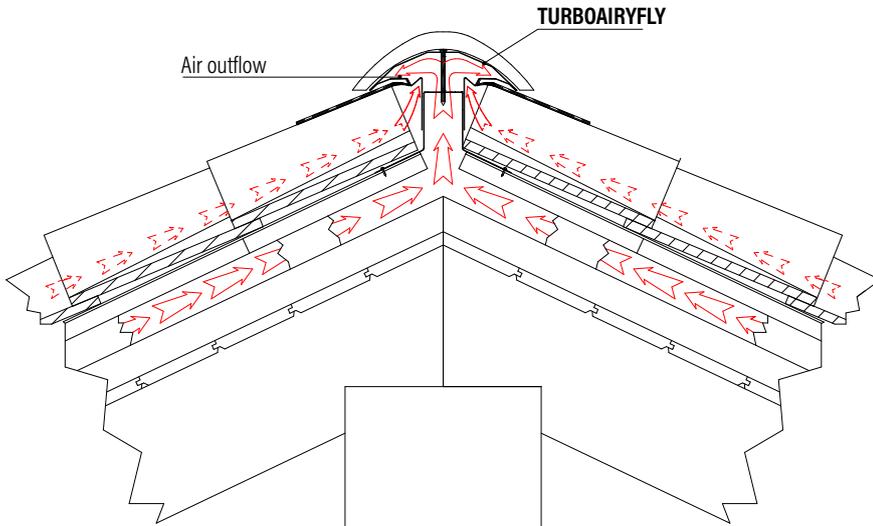


DIAGRAM OF AIR OUTFLOW
IN WOODEN ROOFS

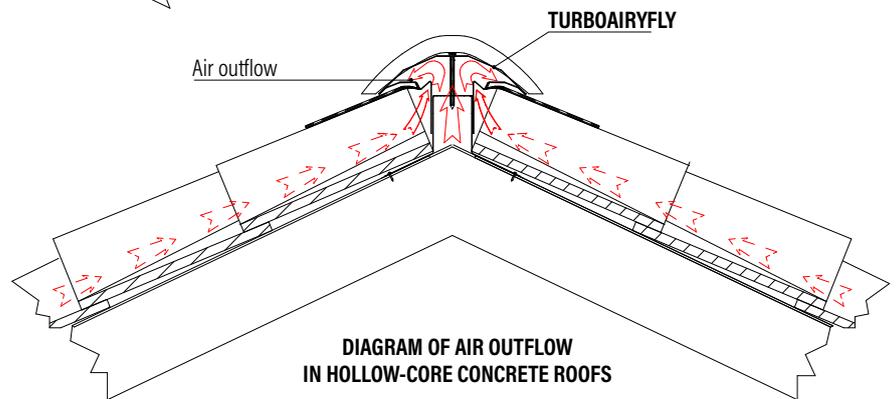


DIAGRAM OF AIR OUTFLOW
IN HOLLOW-CORE CONCRETE ROOFS

VENTILATING
UNDER-RIDGES

CODE	DESCRIPTION	MATERIAL	COLOUR	L cm	pack. pieces
TFLYM	TURBOAIRYFLY	Painted galvanized sheet metal	Brown RAL 8017	100	18

SUPPLIED WITH 4 (FOUR) Ø 4.8x80 mm SELF-PERFORATING SCREWS WITH STEEL/RUBBER SEALING WASHER TO FASTEN COVER TO SUPPORT.

L=Length



END COVER FOR TURBOAIRYFLY

CODE	DESCRIPTION	MATERIAL	COLOUR
COPFLY	Cover for the end of TURBOAIRYFLY	Painted galvanized sheet metal	Brown RAL 8017

UNDER-RIDGE VENTILATION

TURBOAIRY is a ventilation module for horizontal and sloping (diagonals) ridges. Available in a single piece 100 cm in length for quick and simple installation.

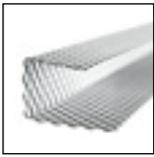
- It fits easily into the next element thanks to the 2 cm overlap.
- Prevents water from infiltrating into the ventilation chamber.
- It blends in with any kind of roof, with both new and old concave tiles, flat cotto and cement tiles, corrugated slabs, etc.
- The air outlet cross-section measures over 400 cm²/m and guarantees the maximum degree of ventilation.
- Ideal in wooden roofs with double ventilation.
- Long lasting and maintenance-free.
- Simple and rapid to install.



RELATED PRODUCTS



Cop Turbo



"UNO" batten



Self-perforating screws

SPECIFICATION

TurboAiry:

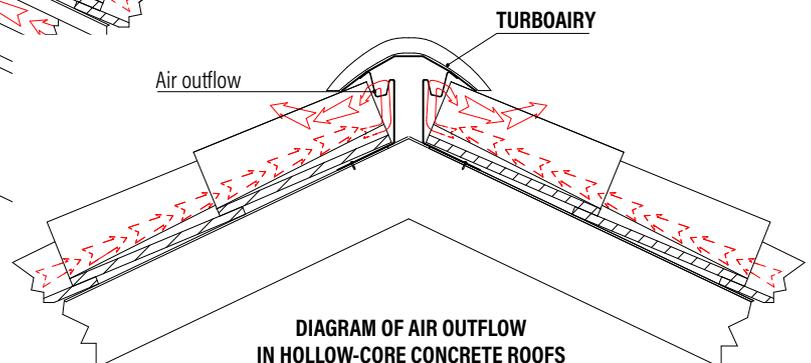
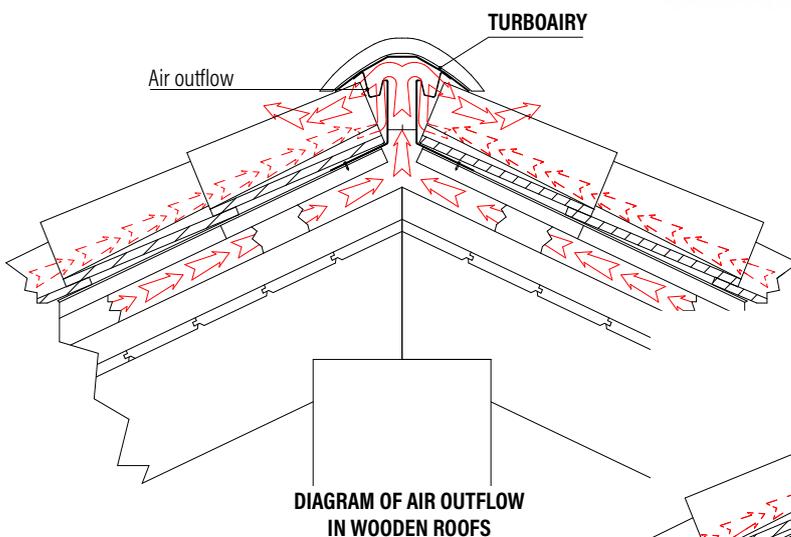
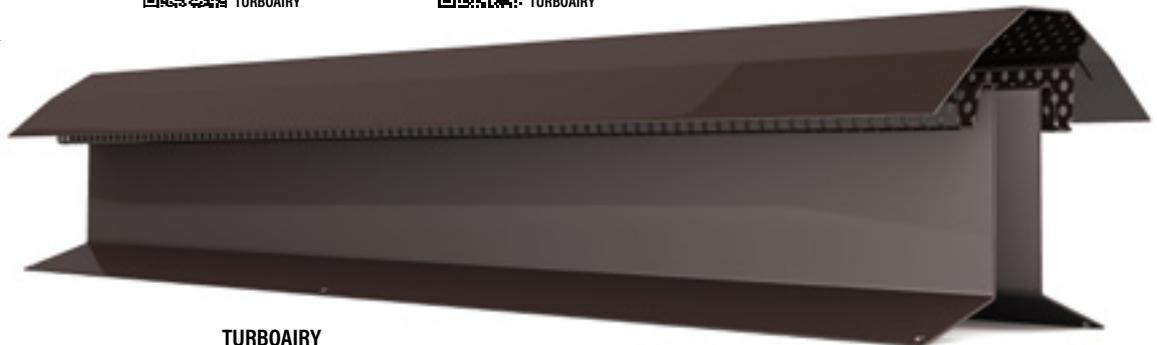
Ventilation module for the horizontal or sloping (diagonal) ridge line in ventilated roofs (air outlet over 400 cm²/m) in a single element 100 cm in length. Available in galvanized sheet metal coated with UV-resistant RAL 8017 brown polyester powder paint for outdoor use and in pre-painted sheet metal.



Technical data sheet
TURBOAIRY

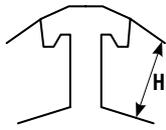


Instructions
TURBOAIRY



"TURBOAIRY" ensures a far superior air flow than the minimum values required by **standard UNI 9460**.

CONTINUES



H79 - for the following types of concave and flat tiles:

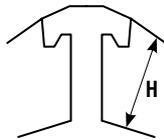
Tegola Portoghese tiles (Cotto Senese)
Tegola Portoghese tiles
Wierer cement tiles

Coppo di Grecia tiles
Coppo di Francia tiles
CEDA "Coppo Tiepolo" tiles
All CEDA tiles

Tegola Portoghese Tognana tiles
Tegolaia Supercoppo tiles
Portoghese Ceprano tiles (if ridge is straight)

CODE	DESCRIPTION	MATERIAL	COLOUR	H mm	L cm	PACK. PIECES
T79M	TURBOAIRY	Painted galvanized sheet metal	Brown RAL 8017	79	100	25
T79PM	TURBOAIRY	Prepainted sheet metal	Brown RAL 8017	79	100	25

H=opening for inserting concave or plain tiles . L=Length



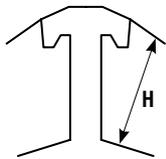
H91 - for the following types of concave and flat tiles:

Single Concave tiles (Cotto Roofing Tile)
Coppo Max Castiglion Fiorentino

Te.Si for horizontal ridges
Tegola Portoghese Briziarelli tiles - horizontal ridge

CODE	DESCRIPTION	MATERIAL	COLOUR	H mm	L cm	PACK. PIECES
T91M	TURBOAIRY	Painted galvanized sheet metal	Brown RAL 8017	91	100	20
T91PM	TURBOAIRY	Prepainted sheet metal	Brown RAL 8017	91	100	20

H=opening for inserting concave or plain tiles . L=Length



H110 - for the following types of concave and flat tiles:

Concave tiles
Francigena tiles (Cotto Senese)
Roman-style (Concave tiles+Plain Roofing tiles) or Tuscan roof
Coppo Briziarelli Più Concave tiles
Unicoppo (ICP)

Bicoppo - Te.Si for diagonal ridges
Tile S10 SML - Coppo San Marco concave tiles
Tegola Portoghese Briziarelli tiles with diagonals
Temax (ICP)

CODE	DESCRIPTION	MATERIAL	COLOUR	H mm	L cm	PACK. PIECES
T110M	TURBOAIRY	Painted galvanized sheet metal	Brown RAL 8017	110	100	20
T110PM	TURBOAIRY	Prepainted sheet metal	Brown RAL 8017	110	100	20

H=opening for inserting concave or plain tiles . L=Length



END COVER FOR TURBOAIRY

CODE	DESCRIPTION	MATERIAL	COLOUR
COPTURBO	Cover for the end of TURBOAIRY	Painted galvanized sheet metal	Brown RAL 8017

UNDER-RIDGE VENTILATION

COLMOWINGS is a **ridge ventilation module**.

It consists of a galvanized or stainless steel perforated sheet metal element fitted with special "wings" made of pleated and painted aluminium with 50mm butyl adhesive, allowing it to **adhere perfectly to the roofing, thereby preventing water**, blown by the wind, **from infiltrating** into the under-roof layer.

- **Universally** suitable for concave and plain tiles of all shapes and sizes, **for horizontal and sloping (diagonal) roof ridges**.
- **Simple and quick to install**.
- Over **500 cm²/m air outlet cross-section**.
- Guarantees **the maximum degree of ventilation** and maintains its **functional characteristics over time**.
- Special bendable supports 23 cm in height allow the elements to be adjusted as required **and to adapt to the different types of tiles and insulation**.
- 100 cm in length.



RELATED PRODUCTS



"UNO" batten



Self-perforating screws



COLMOWINGS is an OFFICINE RASERA trademark

SPECIFICATION

Colmowings:

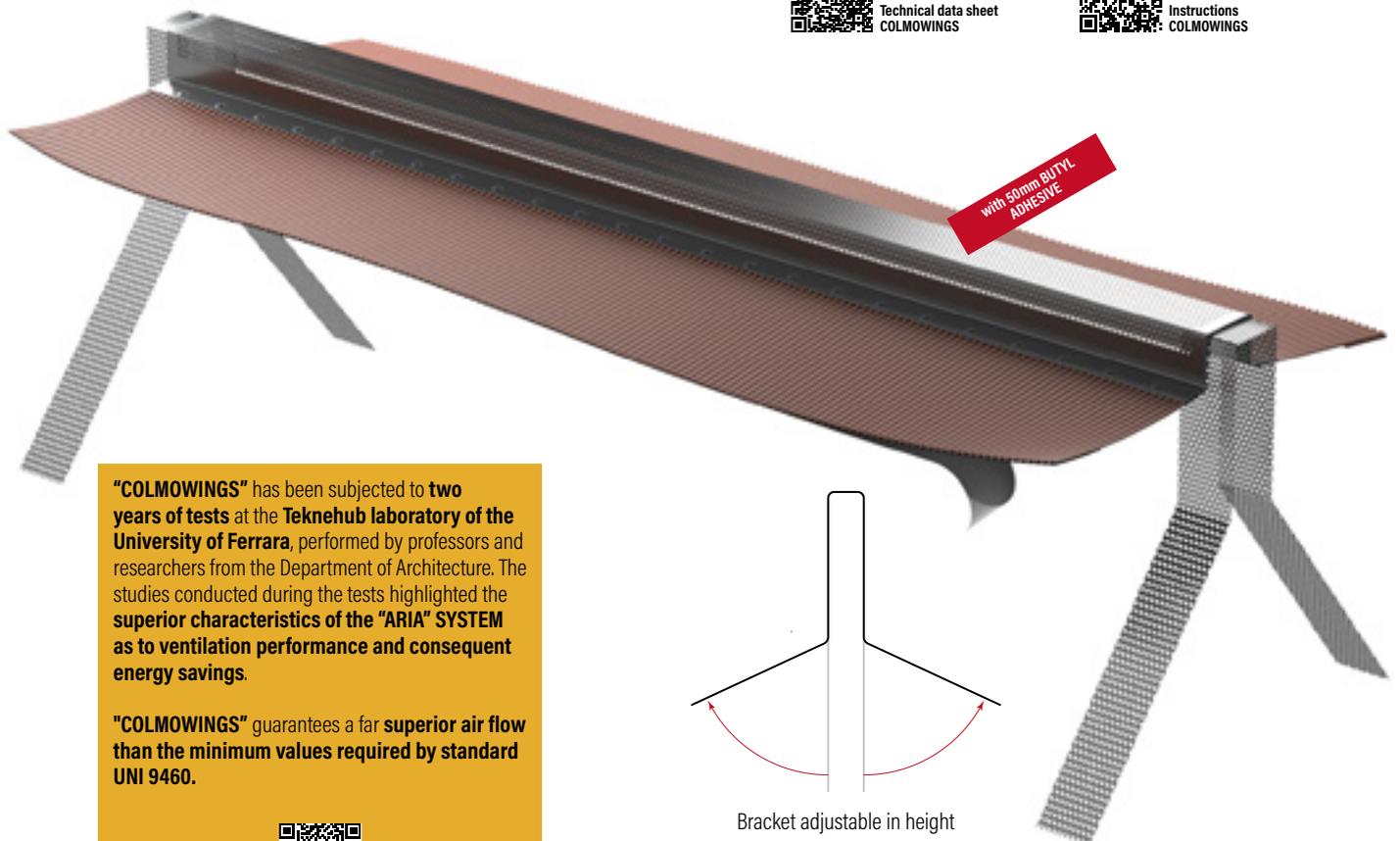
Ventilation module for the horizontal or sloping (diagonal) ridge line in ventilated roofs (air outlet over 500 cm²/m) in stainless steel sheet 100 cm in length. Consists of two elements (Colmowings and adjustable bearing bracket) to allow for height adjustments. Colmowings has two aluminium bands, pleated and painted brick red, black, speckled pink, with 50 mm butyl adhesive.



Technical data sheet
COLMOWINGS



Instructions
COLMOWINGS



Bracket adjustable in height

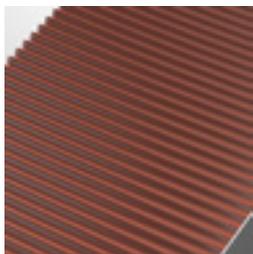
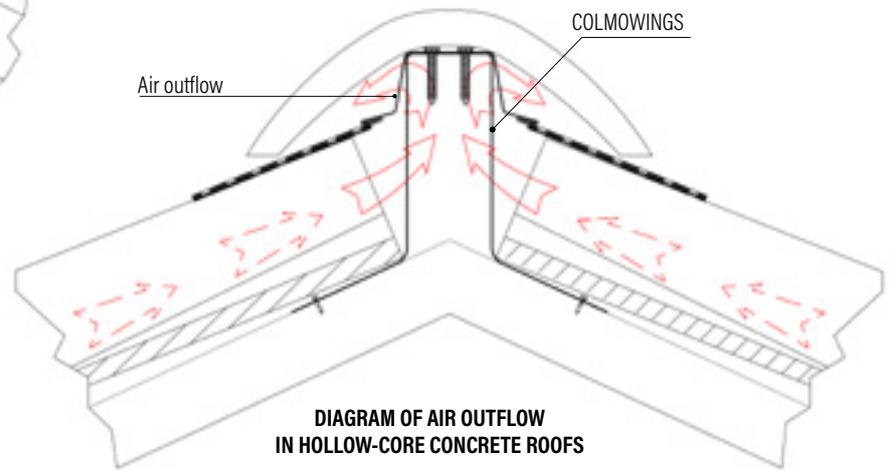
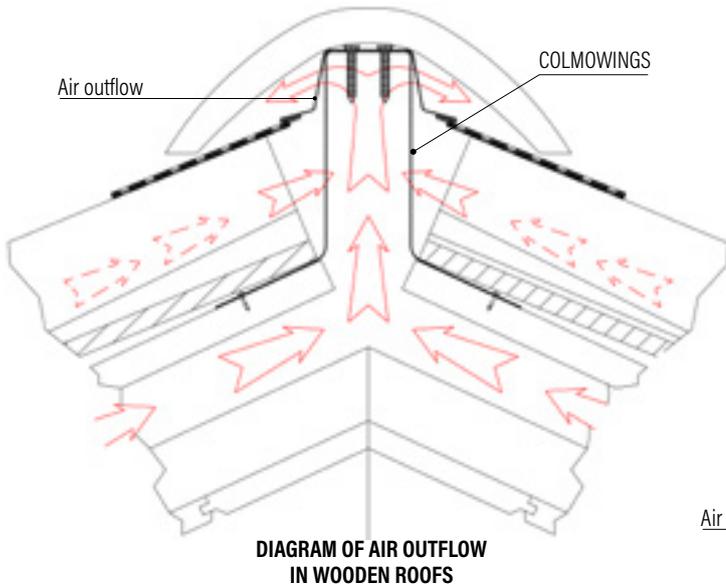
"COLMOWINGS" has been subjected to **two years of tests** at the **Teknehub laboratory of the University of Ferrara**, performed by professors and researchers from the Department of Architecture. The studies conducted during the tests highlighted the **superior characteristics of the "ARIA" SYSTEM** as to **ventilation performance and consequent energy savings**.

"COLMOWINGS" guarantees a far **superior air flow** than the minimum values required by standard **UNI 9460**.

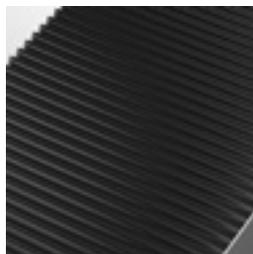


READ MORE

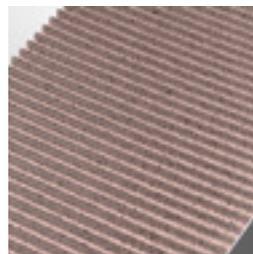
CONTINUES



Brick Red



Black



Speckled pink

CODE	DESCRIPTION	MATERIAL	COLOUR	BAND	L cm	T mm	PACK. PIECES
CWINXRO	COLMOWINGS	Stainless steel	-	Speckled pink	100	0.7	10
CWINXRM	COLMOWINGS	Stainless steel	-	Brick Red	100	0.7	10
CWINXNE	COLMOWINGS	Stainless steel	-	Black	100	0.7	10
SUPW230X	Bearing bracket	Stainless steel	-	-	23	0.8	-
SUPW380X	Bearing bracket	Stainless steel	-	-	38	0.8	-

SUPPLIED WITH 4 (FOUR) Ø 6.3x13 mm SELF-THREADING SCREWS PER LINEAR METER FOR FASTENING COLMOWINGS TO THE BEARING BRACKETS.

L=Length. T=Thickness

As many bearing brackets as there are linear meters of roof ridge must be used to install the elements, with the addition of an initial bearing bracket

VENTILATING RIDGE SINGLE-PITCH ROOFS

TURBOFLAT is a ventilation module for single-pitch roofs in a single piece, 100 cm in length.

Enables ventilation in pitches against vertical walls.

It has a wing in pleated, painted aluminium with butyl adhesive that adheres perfectly to the roof, preventing water driven by the wind from infiltrating into the under-roof.



"TURBOFLAT"
ensures a superior airflow than the
minimum values required by standard
UNI 9460



SPECIFICATION

TURBOFLAT:

Ventilation module for the horizontal ridge line in single-pitch roofs. Consists of a single element 100 cm in length made of galvanized sheet metal coated with RAL 8017 brown polyester powder paint for outdoor use. UV-resistant. TURBOFLAT has a pleated aluminium band painted brick red with 50mm butyl adhesive.

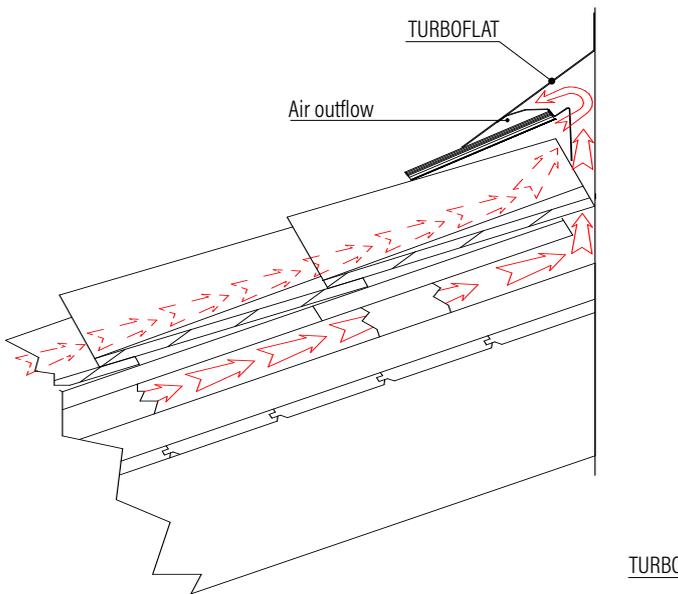


DIAGRAM OF AIR OUTFLOW
IN WOODEN ROOFS

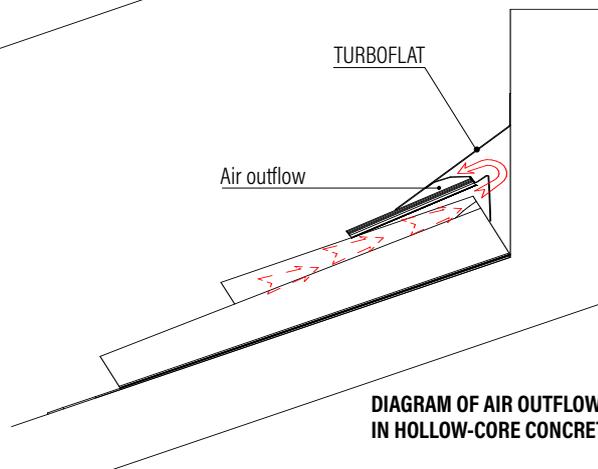
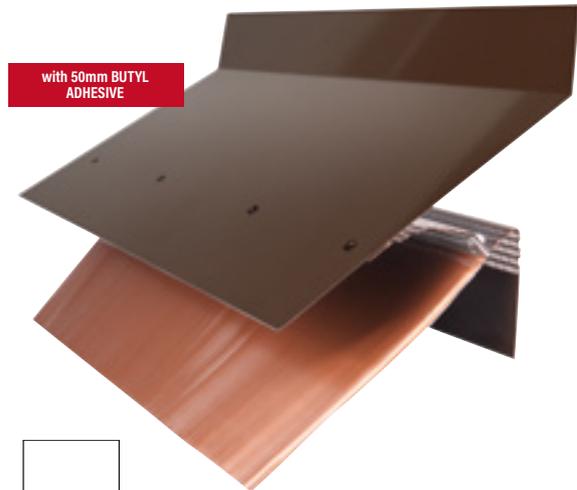


DIAGRAM OF AIR OUTFLOW
IN HOLLOW-CORE CONCRETE ROOFS



Technical data sheet
TURBOFLAT



Instructions
TURBOFLAT

CODE	DESCRIPTION	MATERIAL	COLOUR	L cm
TUF	TURBOFLAT	Painted galvanized sheet metal	Brown RAL 8017	100

L=Length

SELF-PERFORATING SCREWS

Self-perforating screw for fixing concave and ridge tiles.

RELATED PRODUCTS



TurboAiryFly



TurboAiry



Colmowings



CODE	DESCRIPTION	MATERIAL	Ø mm	L mm
VIAF	Ø 4.8x70 mm self-perforating screw	Galvanized steel	4.8	70
VIAFIX6,3X13	Ø 6.3x13 mm Win screw	Galvanized steel	6.3	13
R016X6,7XFLY	Ø 16x6.7 mm galvanized steel/rubber washer	Galvanized steel + rubber	16	-

2.5 screws are required for concave tile roofs.

3 screws are required for plain tile roofs.

Ø=Diameter . L=Length

UNDER-RIDGE VENTILATION

MICROTECMIX is a band made of pleated aluminium in conjunction with **breathable polypropylene fabric** for **microventilation in the roof ridge**.

- It is **universally** suitable for concave and plain tiles of all shapes and sizes, for horizontal and sloping (diagonal) roof ridges.
- It is fixed to a wooden batten (5x4 cm cross-section), supported every 80 cm or so by an adjustable batten holder in galvanized steel.
- After this, it is shaped and made to **adhere to the roof covering** by means of **bands of pleated painted aluminium with butyl adhesive**.



RELATED PRODUCTS



Batten holders



Technical data sheet
MICROTEC MIX



Instructions
MICROTEC MIX

MICROTECMIX

MICROTECMIX is an
OFFICINE RASERA trademark

SPECIFICATION

MicrotecMix

Band in pleated aluminium and breathable polypropylene (PP) fabric for microventilation in the roof ridge, with strips of butyl adhesive.

MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	L1 m	L2 mm	PACKAGE
	MT310X	Under-ridge MICROTECMIX310 with two strips of butyl adhesive width 20 mm	Painted pleated aluminium with polypropylene fabric	Brick red	5	310	Box 4 rolls
	MT310XTM	Under-ridge MICROTECMIX310 with two strips of butyl adhesive width 20 mm	Painted pleated aluminium with polypropylene fabric	Dark brown	5	310	Box 4 rolls
	MT310XNE	Under-ridge MICROTECMIX310 with two strips of butyl adhesive width 20 mm	Painted pleated aluminium with polypropylene fabric	Black	5	310	Box 4 rolls
	MT360X	Under-ridge MICROTECMIX360 with two strips of butyl adhesive width 20 mm	Painted pleated aluminium with polypropylene fabric	Brick red	5	360	Box 4 rolls
	MT360XTM	Under-ridge MICROTECMIX360 with two strips of butyl adhesive width 20 mm	Painted pleated aluminium with polypropylene fabric	Dark brown	5	360	Box 4 rolls

L1=Length. L2=Width

MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	L1 m	L2 mm	PACKAGE
	MT400X	Under-ridge MICROTECMIX400 with two strips of butyl adhesive width 20 mm	Painted pleated aluminium with polypropylene fabric	Brick red	5	400	Box 4 rolls
	MT400XTM	Under-ridge MICROTECMIX400 with two strips of butyl adhesive width 20 mm	Painted pleated aluminium with polypropylene fabric	Dark brown	5	400	Box 4 rolls
	MT400XNE	Under-ridge MICROTECMIX400 with two strips of butyl adhesive width 20 mm	Painted pleated aluminium with polypropylene fabric	Black	5	400	Box 4 rolls
	MT400X40	Under-ridge MICROTECMIX400 with two strips of butyl adhesive width 40 mm	Painted pleated aluminium with polypropylene fabric	Brick red	5	400	Box 4 rolls
	MT400XTM40	Under-ridge MICROTECMIX400 with two strips of butyl adhesive width 40 mm	Painted pleated aluminium with polypropylene fabric	Dark brown	5	400	Box 4 rolls
	MT400XNE40	Under-ridge MICROTECMIX400 with two strips of butyl adhesive width 40 mm	Painted pleated aluminium with polypropylene fabric	Black	5	400	Box 4 rolls
	MT400X25R	Under-ridge reinforced in the central part with adhesive netting, for extra strength in the fixing point MICROTECMIX400 with two strips of butyl adhesive width 25mm	Painted pleated aluminium with polypropylene fabric	Brick red	5	400	Box 4 rolls
	MT400XTM25R	Under-ridge reinforced in the central part with adhesive netting, for extra strength in the fixing point MICROTECMIX400 with two strips of butyl adhesive width 25 mm	Painted pleated aluminium with polypropylene fabric	Dark brown	5	400	Box 4 rolls
	MT400XNE25R	Under-ridge reinforced in the central part with adhesive netting, for extra strength in the fixing point MICROTECMIX400 with two strips of butyl adhesive width 25 mm	Painted pleated aluminium with polypropylene fabric	Black	5	400	Box 4 rolls

L=Length. L2=Width

UNDER-RIDGE VENTILATION

MICROTEC is a pleated, perforated, painted aluminium band for microventilation in the roof ridge.

- It is **universally** suitable for concave and plain tiles of all shapes and sizes, for horizontal and sloping (diagonal) roof ridges.
- Provides **ridge ventilation** thanks to an **air outlet cross-section of over 160 cm²/m**.
- It is fixed to a wooden batten (5x4 cm cross-section), supported every 80 cm or so by an adjustable batten holder in galvanized steel.
- After this, it is shaped and made to **adhere to the roof covering** by means of **bands of pleated, perforated, painted aluminium with butyl adhesive**.



RELATED PRODUCTS



Batten holders



Technical data sheet
MICROTEC



Instructions
MICROTEC

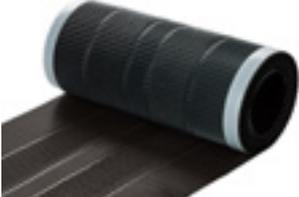
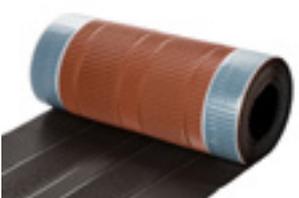
MICROTEC

MICROTEC is an
OFFICINE RASERA trademark

SPECIFICATION

Microtec

Pleated, perforated, painted aluminium band for microventilation in the roof ridge, with strips of butyl adhesive. 160 cm²/m air outlet cross-section.

MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	L1 m	L2 mm	PACKAGE
	MT400	Under-ridge MICROTEC400 with two strips of butyl adhesive width 20 mm	Pleated, perforated painted aluminium	Brick red	5	400	Box 4 rolls
	MT400TM	Under-ridge MICROTEC400 with two strips of butyl adhesive width 20 mm	Pleated, perforated painted aluminium	Dark brown	5	400	Box 4 rolls
	MT40050	Under-ridge MICROTEC400/50 with two strips of butyl adhesive width 50 mm	Pleated, perforated painted aluminium	Brick red	5	400	Box 4 rolls
	MT40050TM	Under-ridge MICROTEC400/50 with two strips of butyl adhesive width 50 mm	Pleated, perforated painted aluminium	Dark brown	5	400	Box 4 rolls
	MT40050NE	Under-ridge MICROTEC400/50 with two strips of butyl adhesive width 50 mm	Pleated, perforated painted aluminium	Black	5	400	Box 4 rolls

L1=Length. L2=Width

BATTEN HOLDER

Universal batten holder in galvanized steel for ridge and/or hip, for wooden battens 50 mm in width.

MATERIALS



Galvanized steel

RELATED PRODUCTS



MicrotecMix



Microtec

SPECIFICATION

Batten holder:

Element made of galvanized sheet metal, shaped to house a wooden batten and fix it in the upper part. The lower part has two perforated, bendable bands for fixing to the ridge line at the base of the roof.

MODEL	CODE	DESCRIPTION	L mm	H mm	PACKAGE PCS.	Technical data sheet
	POLI50	Universal batten holder in galvanized steel	50	195	50	
	POLI50C	Nail-shaft batten holder in galvanized steel	50	260	100	
	POLI50R	Adjustable batten holder in galvanized steel	50	180/225	100	

Recommended quantity 1 piece every 80 cm.

L=Length. H=Height

TILE HOOKS

“S” shaped **COPPIBLOC** tile hooks designed to **fasten concave tiles** together, guaranteeing **stability in any condition**. COPPIBLOC tile hooks **are used instead of mortar and polyurethane foam** for fixing roof coverings.

Available in the following types of material:

- Burnished stainless steel flat wire
- 10x0.8 mm section T.M. prepainted band
- 11x0.8 mm section R.S. band prepainted RAL 3009
- 12x1 mm section copper band
- 8x0.8 mm section copper-plated stainless steel band

For concave tiles: 14 pcs / m²

For Tegolaia “vecchia” cement tiles 9/10 pcs / m²



COPPIBLOC
COPPIBLOC is an

OFFICINE RASERA trademark

SPECIFICATION

Coppibloc hook:

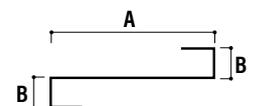
Element made of prepainted sheet metal, stainless steel or copper, bent into a hook or double hook (“S” shaped) and used for anchoring concave tiles.

MODEL	CODE	DESCRIPTION	MATERIAL	A mm	B mm	PACK. pcs
	GA6016PI	60x16 hook	Burnished stainless steel flat wire	60	16	1000
	GA6020PI	60x20 hook	Burnished stainless steel flat wire	60	20	1000
	GA7516PI	75x16 hook	Burnished stainless steel flat wire	75	16	1000
	GA7520PI	75x20 hook	Burnished stainless steel flat wire	75	20	1000
	GA9016PI	90x16 hook	Burnished stainless steel flat wire	90	16	1000
	GA9020PI	90x20 hook	Burnished stainless steel flat wire	90	20	1000
	GA9022PI	90x22 hook	Burnished stainless steel flat wire	90	22	1000
	GA9025PI	90x25 hook	Burnished stainless steel flat wire	90	25	700
	GA10516PI*	105x16 hook	Burnished stainless steel flat wire	105	16	1000
	GA10520PI*	105x20 hook	Burnished stainless steel flat wire	105	20	800
	GA10525PI*	105x25 hook	Burnished stainless steel flat wire	105	25	600
	GA12016PI	120x16 hook	Burnished stainless steel flat wire	120	16	700
	GA12020PI	120x20 hook	Burnished stainless steel flat wire	120	20	700
	GA12025PI	120x25 hook	Burnished stainless steel flat wire	120	25	500

MODEL	CODE	DESCRIPTION	MATERIAL	A mm	B mm	PACK. pcs
	GA9016TM	90x16 hook	Dark brown band 10x0.8 mm	90	16	1000
	GA9020TM	90x20 hook	Dark brown band 10x0.8 mm	90	20	1000
	GA9025TM	90x25 hook	Dark brown band 10x0.8 mm	90	25	700

SUPPLIED IN BAGS CONTAINING 50/100 PCS

* On request



Technical data sheet
STAINLESS STEEL FLAT WIRE HOOKS



Technical data sheet
DARK BROWN HOOKS



MODEL	CODE	DESCRIPTION	MATERIAL	A mm	B mm	PACK. pcs
	GA6016RS	60x16 hook	Siena Red band RAL 3009 11x0.8 mm	60	16	1500
	GA6020RS	60x20 hook	Siena Red band RAL 3009 11x0.8 mm	60	20	1300
	GA6025RS	60x25 hook	Siena Red band RAL 3009 11x0.8 mm	60	25	1000
	GA7516RS*	75x16 hook	Siena Red band RAL 3009 11x0.8 mm	75	16	1000
	GA8016RS	80x16 hook	Siena Red band RAL 3009 11x0.8 mm	80	16	1000
	GA9016RS	90x16 hook	Siena Red band RAL 3009 11x0.8 mm	90	16	1000
	GA9020RS	90x20 hook	Siena Red band RAL 3009 11x0.8 mm	90	20	800
	GA9025RS	90x25 hook	Siena Red band RAL 3009 11x0.8 mm	90	25	700
	GAI0516RS*	105x16 hook	Siena Red band RAL 3009 11x0.8 mm	105	16	800
	GAI0520RS*	105x20 hook	Siena Red band RAL 3009 11x0.8 mm	105	20	800
	GAI2016RS	120x16 hook	Siena Red band RAL 3009 11x0.8 mm	120	16	700
	GAI2020RS	120x20 hook	Siena Red band RAL 3009 11x0.8 mm	120	20	700
	GAI2025RS	120x25 hook	Siena Red band RAL 3009 11x0.8 mm	120	25	500



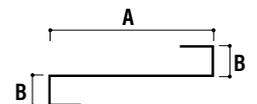
MODEL	CODE	DESCRIPTION	MATERIAL	A mm	B mm	PACK. pcs
	GA9016RA	90x16 hook	Copper band 11x1 mm	90	16	1000
	GA9020RA	90x20 hook	Copper band 11x1 mm	90	20	800
	GA9025RA	90x25 hook	Copper band 11x1 mm	90	25	700



MODEL	CODE	DESCRIPTION	MATERIAL	A mm	B mm	PACK. pcs
	GA9016IR8	90x16 hook	Copper-plated stainless steel band 8x0.8 mm	90	16	1000
	GA9020IR8	90x20 hook	Copper-plated stainless steel band 8x0.8 mm	90	20	1000
	GA9022IR8	90x22 hook	Copper-plated stainless steel band 8x0.8 mm	90	22	1000
	GA9025IR8	90x25 hook	Copper-plated stainless steel band 8x0.8 mm	90	25	1000

SUPPLIED IN BAGS CONTAINING 50/100 PCS

* On request



Technical data sheet
SIENA RED HOOKS



Technical data sheet
COPPER HOOKS



Technical data sheet
COPPER PLATED STAINLESS STEEL HOOKS

INITIAL AND INTERMEDIATE HOOKS

Initial hooks for anchoring concave tiles along the gutter line and at intervals on pitches. The intermediate hooks prevent the thrusting action created by the roof covering from bearing down on the first row of tiles in the gutter line. COPPIBLOC tile hooks **are used instead of mortar and polyurethane foam** for fixing roof coverings. Quantity applicable in relation to the pitch slope.

Available in the following types of material:

- Burnished stainless steel flat wire
- 10x0.8 mm cross-section T.M. pre-painted band
- 11x0.8 mm section R.S. band pre-painted RAL 3009
- 12x1 mm cross-section copper band
- 10x0.8 mm cross-section copper-plated stainless steel band

A row of hooks every 2/3 m of pitch depending on slope



SPECIFICATION

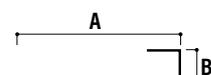
Initial and intermediate hooks:

Element made of pre-painted sheet metal, stainless steel or copper, bent into a hook shape for anchoring concave tiles along the gutter line and/or at intervals on pitches.

CODE	DESCRIPTION	MATERIAL	A mm	B mm	PACK. pcs
					
<p>Technical data sheet CURVED INITIAL HOOK</p>					
GA28016CPI	280x16 curved hook	Burnished stainless steel flat wire	280	16	200
GA28020CPI	280x20 curved hook	Burnished stainless steel flat wire	280	20	200
GA28025CPI	280x25 curved hook	Burnished stainless steel flat wire	280	25	200

CODE	DESCRIPTION	MATERIAL	A mm	B mm	PACK. pcs
					
<p>Technical data sheet FLAT WIRE INITIAL HOOK</p>					
GA28016PI	280x16 hook	Burnished stainless steel flat wire	280	16	200
GA28020PI	280x20 hook	Burnished stainless steel flat wire	280	20	200
GA28025PI	280x25 hook	Burnished stainless steel flat wire	280	25	200

CODE	DESCRIPTION	MATERIAL	A mm	B mm	PACK. pcs
					
<p>Technical data sheet DARK BROWN INITIAL HOOK</p>					
GA20016TM	200x16 hook	Dark brown band 10x0.8 mm	200	16	500
GA20020TM	200x20 hook	Dark brown band 10x0.8 mm	200	20	500
GA20025TM	200x25 hook	Dark brown band 10x0.8 mm	200	25	500
GA28016TM	280x16 hook	Dark brown band 10x0.8 mm	280	16	500
GA28020TM	280x20 hook	Dark brown band 10x0.8 mm	280	20	500
GA28025TM	280x25 hook	Dark brown band 10x0.8 mm	280	25	400



CODE	DESCRIPTION	MATERIAL	A mm	B mm	PACK. pcs
------	-------------	----------	------	------	-----------



Technical data sheet
SIENA RED INITIAL HOOK

GA15016RS	150x16 hook	Siena Red band RAL 3009 11x0.8 mm	150	16	500
GA15020RS	150x20 hook	Siena Red band RAL 3009 11x0.8 mm	150	20	500
GA20016RS	200x16 hook	Siena Red band RAL 3009 11x0.8 mm	200	16	500
GA20020RS	200x20 hook	Siena Red band RAL 3009 11x0.8 mm	200	20	500
GA20025RS	200x25 hook	Siena Red band RAL 3009 11x0.8 mm	200	25	500
GA28016RS	280x16 hook	Siena Red band RAL 3009 11x0.8 mm	280	16	500
GA28020RS	280x20 hook	Siena Red band RAL 3009 11x0.8 mm	280	20	500
GA28025RS	280x25 hook	Siena Red band RAL 3009 11x0.8 mm	280	25	400

CODE	DESCRIPTION	MATERIAL	A mm	B mm	PACK. pcs
------	-------------	----------	------	------	-----------



Technical data sheet
COPPER INITIAL HOOK

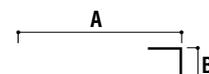
GA20016RA	200x16 hook	Copper band 12x1 mm	200	16	500
GA20020RA	200x20 hook	Copper band 12x1 mm	200	20	500
GA28016RA	280x16 hook	Copper band 12x1 mm	280	16	500
GA28020RA	280x20 hook	Copper band 12x1 mm	280	20	500
GA28025RA	280x25 hook	Copper band 12x1 mm	280	25	400

CODE	DESCRIPTION	MATERIAL	A mm	B mm	PACK. pcs
------	-------------	----------	------	------	-----------



Technical data sheet
COPPER PLATED STAINLESS STEEL INITIAL HOOK

GA20016IR	200x16 hook	Copper-plated stainless steel band 10x0.8 mm	200	16	500
GA20020IR	200x20 hook	Copper-plated stainless steel band 10x0.8 mm	200	20	500
GA20025IR	200x25 hook	Copper-plated stainless steel band 10x0.8 mm	200	25	500
GA28016IR	280x16 hook	Copper-plated stainless steel band 10x0.8 mm	280	16	500
GA28020IR	280x20 hook	Copper-plated stainless steel band 10x0.8 mm	280	20	500
GA28025IR	280x25 hook	Copper-plated stainless steel band 10x0.8 mm	280	25	500



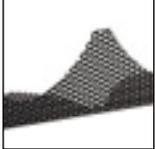
INITIAL HOOKS

Initial hooks for anchoring concave tiles to the gutter grating. To anchor the following rows of concave tiles, it is advisable to apply intermediate hooks at regular intervals, depending on the pitch slope.

Available in the following types of material:
Burnished stainless steel flat wire



RELATED PRODUCTS



Gratings



SPECIFICATION

Initial hook:
Element made of stainless steel, bent into a hook shape for anchoring concave tiles along the gutter line.

MODEL	CODE	DESCRIPTION	MATERIAL	A mm	B mm	PACK. pcs
	GA5016PI	50x16 hook	Burnished stainless steel flat wire	50	16	500
	GA5020PI	50x20 hook	Burnished stainless steel flat wire	50	20	500
	GA5025PI	50x25 hook	Burnished stainless steel flat wire	50	25	500

SUPPLIED IN BAGS CONTAINING 50/100 PCS



Technical data sheet
FLAT WIRE INITIAL HOOKS

PIEMONTE HOOK

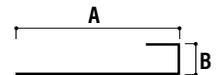
MODEL	CODE	DESCRIPTION	MATERIAL	A mm	B mm	PACK. pcs
	GA19080IR	Piemonte hook	Copper-plated stainless steel band 20x1.2 mm	190	80	100
	GA24580TM	Piemonte hook	Prepainted band Dark brown 25x1.8 mm	245	80	100



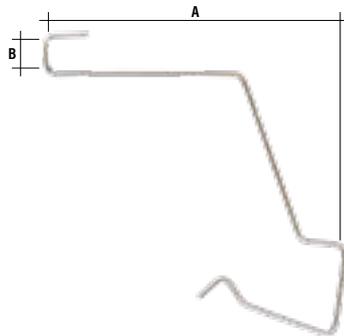
Technical data sheet
COPPER PLATED STAINLESS STEEL PIEMONTE HOOKS



Technical data sheet
PIEMONTE HOOKS IN PREPAINTED BAND



BATTEN-TYPE CONCAVE TILE HOOKS

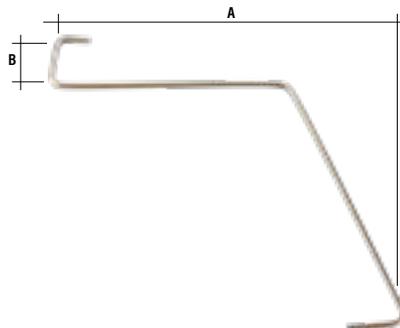


Technical data sheet
WOODEN BATTEN HOOKS



Instructions
WOODEN BATTEN HOOKS

CODE	DESCRIPTION	MATERIAL	A mm	B mm	PACK. pcs
GALISPI	4x5 cm batten-type bracing hook for concave tiles without hole	Burnished stainless steel flat wire	145	18	200
GALISPI4X6	4x6 cm batten-type bracing hook for concave tiles without hole	Burnished stainless steel flat wire	145	18	200
GALISPI3X5	3x5 cm batten-type bracing hook for concave tiles without hole	Burnished stainless steel flat wire	145	18	200

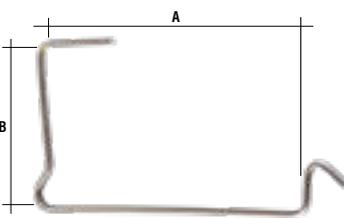


Technical data sheet
METAL BATTEN HOOKS



Instructions
METAL BATTEN HOOKS

CODE	DESCRIPTION	MATERIAL	A mm	B mm	PACK. pcs
GALISMETPI	Metal batten-type bracing hook for concave tiles without hole	Burnished stainless steel flat wire	140	20	200



Technical data sheet
WOODEN BATTEN CHANNEL TILE HOOKS



Instructions
WOODEN BATTEN CHANNEL TILE HOOKS

CODE	DESCRIPTION	MATERIAL	A mm	B mm	PACK. pcs
GACOLI	4x5 cm batten-type bracing concave tile-retaining hook	Burnished stainless steel flat wire	88	50	200

HOOKS FOR CONCAVE TILES WITH HOLE

Wire hooks for anchoring concave tiles with hole. Completely concealed by the tiles themselves. COPPIBLOC tile hooks are used instead of mortar and polyurethane foam for fixing roof coverings.

Available in the following types of material:

- Ø 2.5 mm cross-section stainless steel wire
- Ø 2.5 mm section galvanized wire



Technical data sheet
UNDER-HOOK

CODE	DESCRIPTION	MATERIAL	L mm	PACK. pcs	pcs/m ²
GA134FZ	Under-hook	Ø 2.5 mm galvanized wire	134	1,000 pcs.	15
GA134FI		Ø 2.5 mm stainless steel wire			



Technical data sheet
OVER-HOOK

CODE	DESCRIPTION	MATERIAL	L mm	PACK. pcs	pcs/m ²
GA131FZ	Over-hook	Ø 2.5 mm galvanized wire	131	1,000 pcs.	15
GA131FI		Ø 2.5 mm stainless steel wire			



Technical data sheet
HOOK FOR DOUBLE CONCAVE TILES L125

CODE	DESCRIPTION	MATERIAL	L mm	PACK. pcs	pcs/m ²
GA125FZ	Hook for Double Concave tiles L125	Ø 2.5 mm galvanized wire	125	1,500 pcs.	15
GA125FI		Ø 2.5 mm stainless steel wire			

SUPPLIED IN BAGS CONTAINING 50 pcs.

L=Length

HOOK FOR CONCAVE TILES WITHOUT HOLE, ON BICOPPO DOUBLE CONCAVE TILES

Wire hooks for preventing Bicoppo double concave tiles from slipping off the roof.



Technical data sheet
BICOPPO DOUBLE CONCAVE TILE WITHOUT HOLE

CODE	DESCRIPTION	MATERIAL	L mm	PACK. pcs	pcs/m ²
GABI190FZ	Retainer for concave tiles without hole	Ø 2.5 mm galvanized wire	190	800 pcs.	14-15
GABI190FI		Ø 2.5 mm stainless steel wire			

SUPPLIED IN BAGS CONTAINING 50 pcs.

L=Length

FAST HOOKING ELEMENT FOR FOR CONCAVE TILES WITHOUT HOLE, PIEMONTE AND BICOPPO DOUBLE CONCAVE TILES

Wire hooks for preventing double Piemonte or Bicoppo double concave tiles without hole from slipping off the roof.



Instructions
HOOK FOR DOUBLE PIEMONTE
AND BICOPPO TILES WITHOUT HOLE



Technical data sheet
HOOK FOR DOUBLE PIEMONTE
AND BICOPPO TILES WITHOUT HOLE



Application on Bicoppo double concave tile

Application on Double Piemonte tile



CODE	DESCRIPTION	MATERIAL	L mm	PACK. pcs	pcs/m ²
GADS20FZ	Hook for concave tiles without hole	Ø 2.5 mm galvanized wire	198	1,000 pcs.	14-15
GADS20FI		Ø 2.5 mm stainless steel wire			

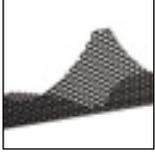
SUPPLIED IN BAGS CONTAINING 25 pcs.

L=Length

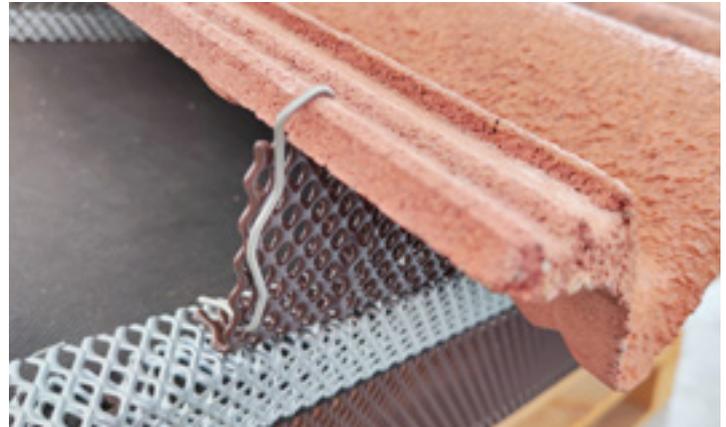
TILE RETAINER HOOK

Stainless steel tile retainer hook for fixing tiles to the ventilation grating along the gutter line.

RELATED PRODUCTS



Gratings



MODEL	CODE	DESCRIPTION	MATERIAL	L mm	PACK. pcs
	GAFT62	Tile retainer hook	Ø 2 mm stainless steel wire	62	1000

SUPPLIED IN BAGS CONTAINING 50 pcs.

L=Length



Technical data sheet
TILE RETAINER HOOK

TILE LOCKING HOOK

Hook made of galvanized steel wire. Prevents the tiles from overturning in the presence of wind. The hooks are fastened at the sides and top so as to hold the tile anchoring batten in place.

USE OF 4x5 WOODEN BATTEN IS RECOMMENDED



MODEL	CODE	DESCRIPTION	MATERIAL	L mm	PACK. pcs
	GAFT200	Tile locking hook	Ø 2 mm section galvanized wire	195	200

SUPPLIED IN BAGS CONTAINING 50 pcs.

L=Length



Technical data sheet
TILE LOCKING HOOK

RIDGE HOOKS

Hook made of prepainted aluminium for anchoring half tiles or ridge tiles.

RELATED PRODUCTS



COPPIBLOC
COPPIBLOC is an

OFFICINE RASERA trademark



Self-perforating screws



Technical data sheet
RIDGE HOOK FOR CEMENT TILES



Technical data sheet
RIDGE HOOK FOR CONCAVE TILES



Technical data sheet
RIDGE HOOK FOR COTTO TILES



SPECIFICATION

Ridge hook:

Element made of prepainted aluminium bent in a hook shape and used for anchoring half tiles or ridge tiles.

MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	T mm	Pieces m	PACK. pcs
	GFTCETE	Ridge hook for cement tiles h.30 mm	Prepainted aluminium	Siena red RAL 3009	1.8	2.5	200
	GFTCETENE	Ridge hook for cement tiles h.30 mm	Prepainted aluminium	Black RAL 9005	1.8	2.5	200
	GFCO	Ridge hook for concave tiles (half tiles)	Prepainted aluminium	Siena red RAL 3009	1.8	2.5	250
	GFCOTM	Ridge hook for concave tiles (half tiles)	Prepainted aluminium	Dark brown	1.8	2.5	250
	GFCONE	Ridge hook for concave tiles (half tiles)	Prepainted aluminium	Black RAL 9005	1.8	2.5	250
	GFTCE	Ridge hook for cement tiles	Prepainted aluminium	Siena red RAL 3009	1.8	3	250
	GFTCETM	Ridge hook for cement tiles	Prepainted aluminium	Dark brown	1.8	3	250
	GFTCENE	Ridge hook for cement tiles	Prepainted aluminium	Black RAL 9005	1.8	3	250
	GFTCO	Ridge hook for cotto tiles	Prepainted aluminium	Siena red RAL 3009	1.8	3	250
	GFTCOTM	Ridge hook for cotto tiles	Prepainted aluminium	Dark brown	1.8	3	250
	GFTCONE	Ridge hook for cotto tiles	Prepainted aluminium	Black RAL 9005	1.8	3	250

T=Thickness

WATERPROOFING BANDS IN COLD-APPLIED SELF-ADHESIVE ALUMINIUM

Adhesive bands formed by a layer of butyl adhesive and a top surface in UV-resistant painted aluminium.

Ideal for sealing the critical points between different roof components.

SPECIFICATION

Adhesive band:
Aluminium element painted brick red/brown with butyl adhesive for sealing.

MODEL	CODE	DESCRIPTION	COLOUR	L m	H cm	PACK. pcs	Technical data sheet
	NEBLE100	LENTUS Aluminium band with butyl adhesive	Aluminium	10	10	6 rolls per box	
	NEBLE200				20	4 rolls per box	
	ADE150	Embossed adhesive band in painted aluminium	Brick red	5	15	1 roll per box	
	ADE300	Adhesive band in smooth painted aluminium	Brick red	10	30	2 rolls per box	
	ADEB300	Embossed adhesive band in painted aluminium	Brick red	5	30	1 roll per box	
	ADEB300NE	Embossed adhesive band in painted aluminium	Black	5	30	1 roll per box	

L=Length. H=Height

MODEL	CODE	DESCRIPTION	COLOUR	L m	H cm	PACK. pcs	Technical data sheet
	ADEB300TM	Embossed adhesive band in painted aluminium	Dark brown	5	30	1 roll per box	
	ADEF300	Adhesive band in extensible painted aluminium 	Brick red	5	30	2 rolls per box	
	ADEF300NE		Black				
	ADE4002F	Adhesive band in pleated painted aluminium with 2 adhesive strips	Brick red	5	40	4 rolls per box	
	ADEB400	Embossed adhesive band in painted aluminium	Brick red	5	40	1 roll per box	
	ADEB400TM	Embossed adhesive band in painted aluminium	Dark brown	5	40	1 roll per box	

L=Length. H=Height

ADHESIVE BANDS

SNOW STOP FOR TILES

Snow stops **prevent snow from slipping off the roof and carrying the roof surface with it**, thereby avoiding the need for costly maintenance work.

- Available in **different shapes and sizes**
- **Simple and quick to apply**
- Couples directly to the roof surface
- Positioning and installation compliant with standard **UNI-EN 9460-2023**

SPECIFICATION

Snow stop for plain and concave tiles:
Element made of **prepainted sheet metal, copper or copper-plated stainless steel**, shaped to suit the various types of concave and plain tiles. Prevents the snow from slipping off roofs with sloping pitches.



Available in the following versions:



MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	L1 mm	L2 mm	H mm	T mm	PACK. pcs.	Technical data sheet
	FNTCM	Snow stop for: - Cement tiles;	Prepainted sheet metal	Brown	280	28	65	1.5	40	
	FNTCMRM	- Coppo Francia tiles;	Prepainted sheet metal	Brick red						
	FNTCMAN	- Coppo Più FBM concave tiles; - Maxima Cotto Possagno tiles;	Prepainted sheet metal	Anthracite						
	FNTCR	- Variable pitch Marsigliese tiles (ICP, FBM and Terreal); - M1 Terreal tiles; - Vario 5BMI tiles	Copper	Copper						
	FNTCM8AN	Snow stop for: - Cement tiles;	Prepainted sheet metal	Anthracite	325	28	85	1.5	40	
	FNTCM8	- Coppo Francia tiles;		Brown						
	FNTCM8RM	- Coppo Più FBM concave tiles; - Maxima Cotto Possagno tiles; - Variable pitch Marsigliese tiles (ICP, FBM and Terreal); - M1 Terreal tiles; - Vario 5BMI tiles - Coppo di Grecia tiles		Brick Red						
	FNTMM	Snow stop for: - Fixed pitch Tegola Marsigliese tiles	Prepainted sheet metal	Brown	285	28	65	1.5	40	
	FNTMRM		Prepainted sheet metal	Brick red						
	FNTMR		Copper	Copper						
	FNTPM	Snow stop for: - Tegola Portoghese tiles; - Tegola TESI tiles - Portoghese PICA tiles; - Coppo Max Terreal tiles	Prepainted sheet metal	Brown	285	28	65	1.5	40	
	FNTPMRM		Prepainted sheet metal	Brick red						
	FNTPR		Copper	Copper						
	FNTPM8	Snow stop for: - Tegola Portoghese tiles; - Tegola TESI tiles	Prepainted sheet metal	Brown	330	28	85	1.5	40	
	FNTPM8RM			Brick red						
	FNTPFTM	Snow stop for: - Portoghese Flexa	Prepainted sheet metal	Brown	280	30	65	1.5	40	

L=Length. L2=Width. H=Height. T=Thickness

MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	L1 mm	L2 mm	H mm	T mm	PACK. pcs.	Technical data sheet
	FNDCl	Snow stop for: - Unicoppo (remove under-channel spike); - Gambale double concave tile	Prepainted sheet metal	Brown	315	23	80	1.8	50	
	FNTCD	Snow stop for: - Canadian shingles	Prepainted sheet metal	Brown	280	28	65	1.5	40	
	FNTCD8	Snow stop for: - Canadian shingles	Prepainted sheet metal	Brown	365	28	85	1.5	40	
	FNTEGTM	Snow stop for: - Erlus Großfalzziegel tiles; - Variable pitch Marsigliese tiles (ICP, FBM and Terreal); - M1 Terreal tiles; - Vario 5.	Prepainted sheet metal	Brown	310	28	65	1.5	40	
	FNTEGRM			Brick red						
	FNTEMTM	Snow stop for: - Tegola Erlus Monaco tiles; - Olandese PICA tiles; - Romain Evolution Terreal tiles; - S10 Terreal tiles.	Prepainted sheet metal	Brown	275	28	65	1.5	40	
	FNTMMC	Snow stop for: - Marsigliese Creaton Rustico tiles; - Monocoppo Tech BMI tiles; - Omega 10 Edilians.	Prepainted sheet metal	Brown	275	28	65	15	40	
	FNTMMCRM			Brick red						
	FERINOX (on request)	Snow stop for: - Slate tiles.	Stainless steel	Steel	380	50	50	4	80	
	FNTP8	Snow stop for: - H8 - L36.5 flat tile	Prepainted sheet metal	Brown	365	28	85	1.5	40	
	FNTP8RM			Brick red						

L=Length, L2=Width, H=Height, T=Thickness

SNOW STOP FOR TILES

Snow stops **prevent snow from slipping off the roof and carrying the roof surface with it**, thereby avoiding the need for costly maintenance work.

- Available in **different shapes and sizes**
- **Simple and quick to apply**
- Couples directly to the roof surface
- Positioning and installation compliant with standard **UNI-EN 9460-2023**

SPECIFICATION

Snow stop for plain and concave tiles:
Element made of prepainted sheet metal, copper or copper-plated stainless steel, shaped to suit the various types of concave and plain tiles. Prevents the snow from slipping off roofs with sloping pitches.

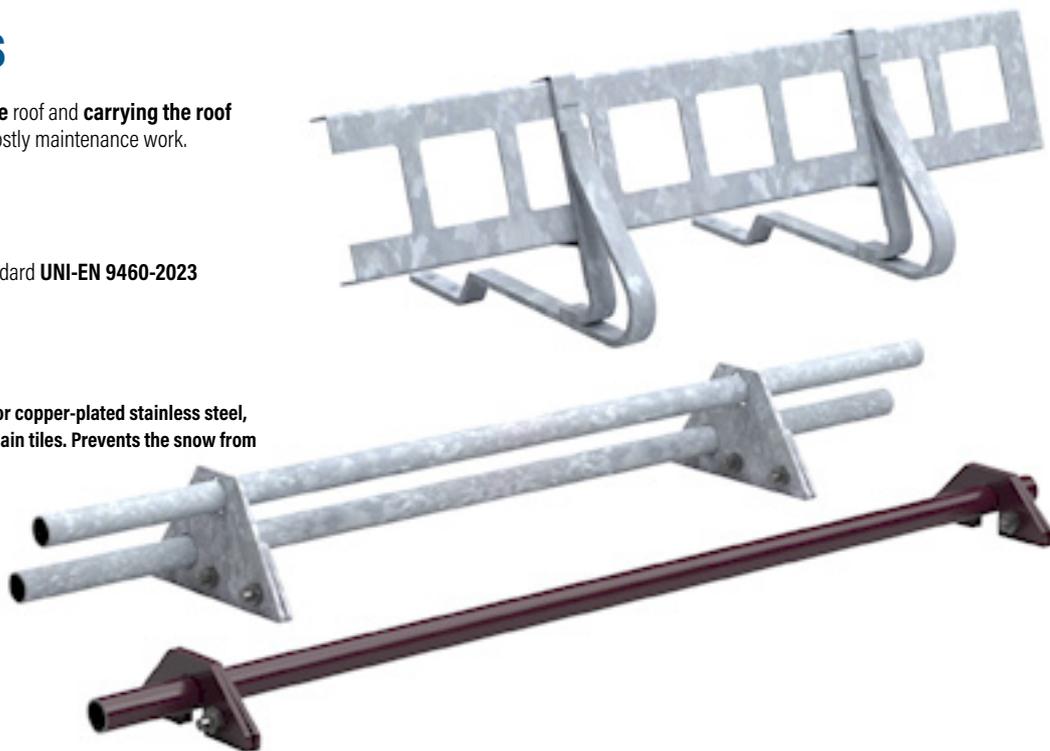
Available in the following versions:

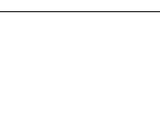


Brown
RAL 8017



Galvanized



MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	L1 mm	H mm	PACK. pcs.	Technical data sheet
	FNRSBZ	Low bracket for snow stop net	Galvanized sheet metal	-	-	-	-	
	FNRSAZ	High bracket for snow stop net		-	-	-	-	
	FNRSZ15	H15 galvanized snow stop net	Galvanized sheet metal	-	3,000	150	-	
	FNRGZ	Joint for snow stop net	Galvanized	-	-	-	-	
	FNS1FTM	Bracket for snow stop tube 1 hole	Sheet metal	Brown	-	-	-	
	FNS1FZ			Galvanized	-	-	-	
	FNS2FTM	Bracket for snow stop tube 2 holes	Sheet metal	Brown	-	-	-	
	FNS2FZ			Galvanized	-	-	-	
	FNT28TM	28x2.5 mm tube - 6 m length	Prepainted sheet metal	Brown	6,000	-	-	
	FNT28Z			Galvanized				
	FNGTZ	Tube joint	Galvanized	-	-	-	-	

SNOW STOP FOR CONCAVE TILES

Snow stops **prevent snow from slipping off the roof and carrying the roof surface with it**, thereby avoiding the need for costly maintenance work.

- Available in **in different shapes and sizes**.
- **Simple and quick to apply**.
- Couples directly to the roof surface.
- Positioning and installation compliant with standard **UNI-EN 9460-2023**.

SPECIFICATION

Snow stop for plain and concave tiles:

Element made of **prepainted sheet metal, copper or copper-plated stainless steel**, shaped to suit the various types of concave and plain tiles. Prevents the snow from slipping off roofs with sloping pitches.



Available in the following versions:



MODEL	CODE	DESCRIPTION	MATERIAL	COLOUR	L1 mm	L2 mm	H mm	T mm	PACK. pcs	Technical data sheet
	FNCM	Snow stop for concave tiles	Prepainted sheet metal	Brown	120	40	60	1.5	70	
	FNCR		Copper	Copper						
	FNCIR		Copper plated stainless steel	Copper						
	FNCAM	Snow stop for Concave tiles with hook	Prepainted sheet metal	Brown	320	28	65	1.5	40	

L1=Length. L2=Width. H=Height. T=Thickness

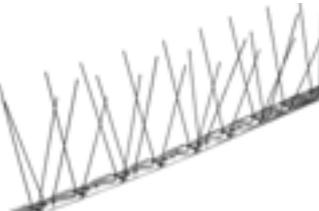
PIGEON BARRIERS

These barriers **prevent birds from perching on eaves and gutters.**

SPECIFICATION

Pigeon barrier:

Element consisting of a base made of steel or polycarbonate, 50 or 100 cm in length, with stainless steel spikes fixed perpendicularly to the base to prevent birds from landing.

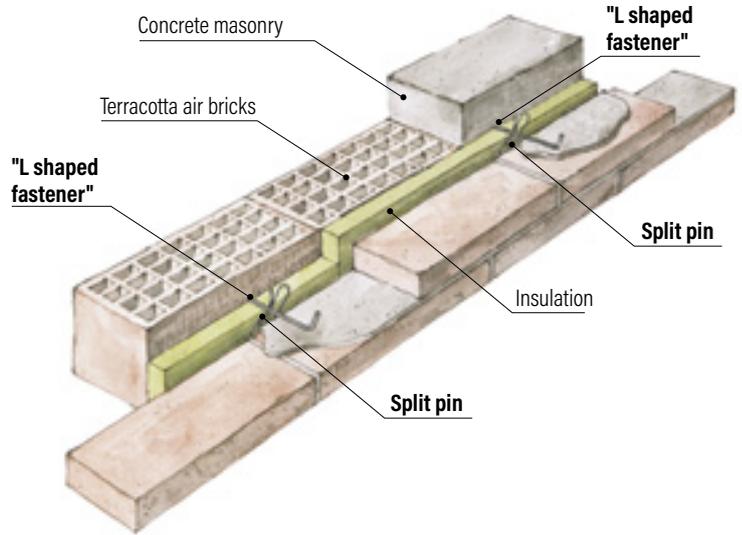
MODEL	CODE	DESCRIPTION	MATERIAL	ROWS	SPIKES	L cm	PACK. pcs	Technical data sheet
	DP80	Pigeon barrier	Base UV-resistant polycarbonate	3	80	50	100	
	DP54	Pigeon barrier	Base stainless steel	3	60	100	25	
	DP60F	Flexible pigeon barrier	Base stainless steel	3	60	100	25	

L=Length

FASTENERS FOR ANCHORING FAIR-FACED BRICKS

These clips for anchoring fair-faced bricks can be applied to ventilated and insulated cavity walls. They are ideal for cladding masonry in terracotta air bricks or concrete bricks.

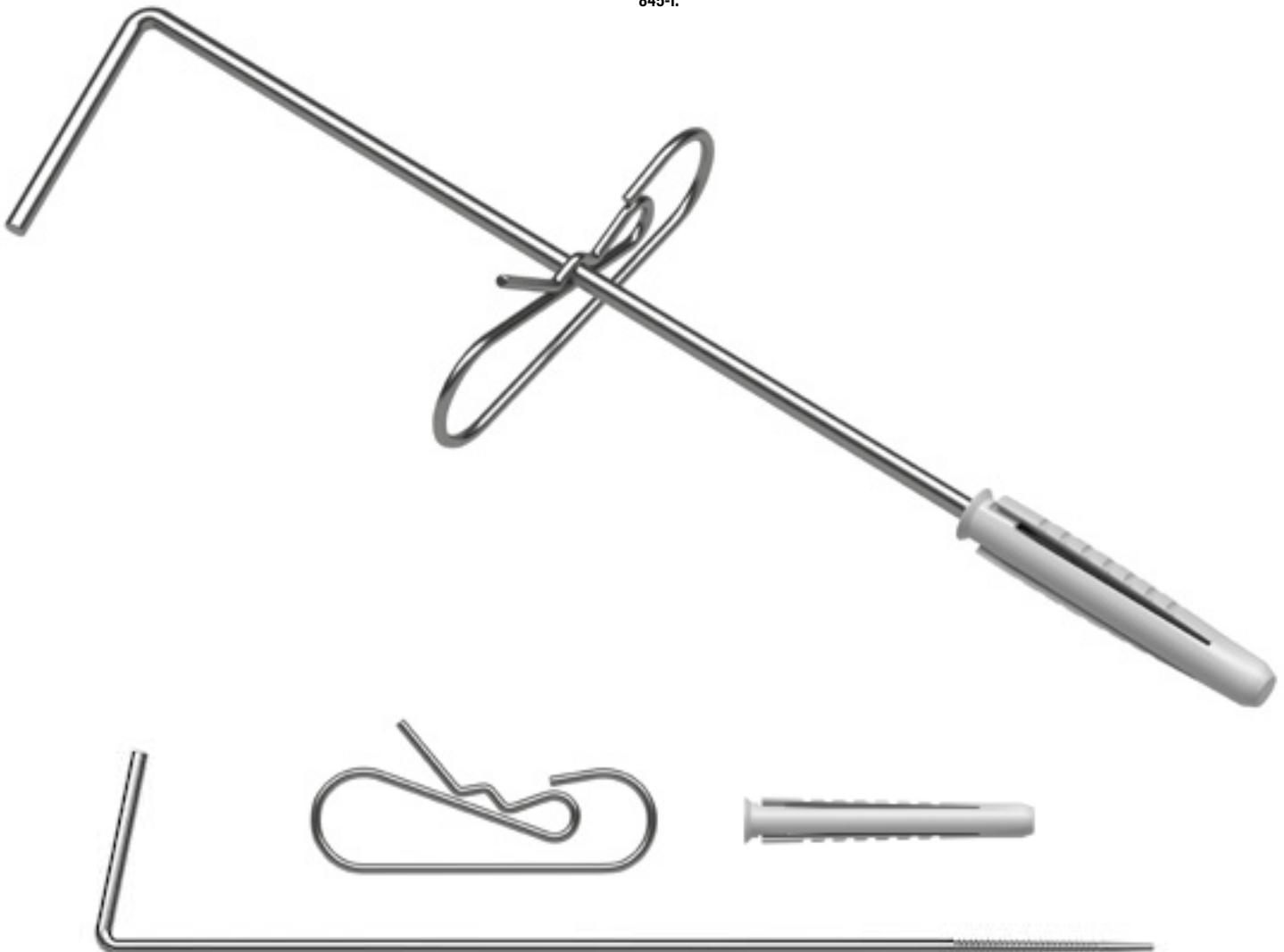
- Facilitate and speed up the cladding operations.
- CE certificate in compliance with **UNI-EN 845-1**.
- Indicative quantity 4/5 pieces per m². Check with Structural Engineer.



SPECIFICATION

Fasteners for anchoring bricks:

Element made of stainless steel wire bent in an "L" shape, with fixing plugs, for anchoring fair-faced brick cladding to the bearing wall. CE certificate in compliance with UNI EN 845-1.



FASTENERS WITH PLUG

MODEL	CODE	DESCRIPTION	MATERIAL	Ø mm	L mm	PACK. pcs	D.O.P.
	GAMAL150F	150 mm "L" shaped threaded fastener with Ø 6x50 nylon plug for terracotta air bricks or concrete bricks code TAS6X50	Stainless steel	3.3	150	300	
	GAMAL200F	200mm "L" shaped threaded fastener with Ø 6x50 nylon plug for terracotta air bricks or concrete bricks code TAS6X50	Stainless steel	3.3	200	200	
	GAMAL250F	250mm "L" shaped threaded fastener with Ø 6x50 nylon plug for terracotta air bricks or concrete bricks code TAS6X50	Stainless steel	3.3	250	200	
	GAMAL300F	300mm "L" shaped threaded fastener with Ø 6x50 nylon plug for terracotta air bricks or concrete bricks code TAS6X50	Stainless steel	3.3	300	200	
	GAMAL400F	400mm "L" shaped threaded fastener with Ø 6x50 nylon plug for terracotta air bricks or concrete bricks code TAS6X50	Stainless steel	3.3	400	300	
	GAMAL450F*	450mm "L" shaped threaded fastener with Ø 6x50 nylon plug for terracotta air bricks or concrete bricks code TAS6X50	Stainless steel	3.3	450	300	

* on request

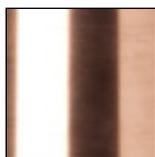
L=Length. Ø=Diameter

FASTENER ACCESSORIES

MODEL	CODE	DESCRIPTION	MATERIAL	Ø mm
	COPOIS	Split pin for positioning insulation	Stainless steel	2.0

EXHAUST STACKS IN COPPER

MATERIALS



Copper

SPECIFICATION

Stacks:

Cylindrical shaped terminal components of stacks made of copper, stainless steel, aluminium and prepainted sheet metal.

Available with the following finishes:



Natural

Copper stacks with collars and netting

MODEL	CODE	DESCRIPTION	Ø mm	H cm
	CAMARRA80	Copper exhaust stack with collars and netting	80	45
	CAMARRA100	Copper exhaust stack with collars and netting	100	45
	CAMARRA120	Copper exhaust stack with collars and netting	120	45
	CAMARRA140	Copper exhaust stack with collars and netting	140	45
	CAMARRA160	Copper exhaust stack with collars and netting	160	45
	CAMARRA180	Copper exhaust stack with collars and netting	180	45
	CAMARRA200	Copper exhaust stack with collars and netting	200	45
	CAMARRA220	Copper exhaust stack with collars and netting	220	45
	CAMARRA250	Copper exhaust stack with collars and netting	250	45
	CAMARRA300	Copper exhaust stack with collars and netting	300	45
	CAMARRA350	Copper exhaust stack with collars and netting	350	45

Copper stacks with collars

MODEL	CODE	DESCRIPTION	Ø mm	H cm
	CAMARA80	Copper exhaust stack with collars	80	45
	CAMARA100	Copper exhaust stack with collars	100	45
	CAMARA120	Copper exhaust stack with collars	120	45
	CAMARA140	Copper exhaust stack with collars	140	45
	CAMARA160	Copper exhaust stack with collars	160	45
	CAMARA180	Copper exhaust stack with collars	180	45
	CAMARA200	Copper exhaust stack with collars	200	45
	CAMARA220	Copper exhaust stack with collars	220	45
	CAMARA250	Copper exhaust stack with collars	250	45
	CAMARA300	Copper exhaust stack with collars	300	45
	CAMARA350	Copper exhaust stack with collars	350	45

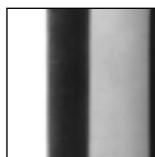
Copper stacks with netting

MODEL	CODE	DESCRIPTION	Ø mm	H cm
	CAMRRA80	Copper exhaust stack with netting	80	40
	CAMRRA100	Copper exhaust stack with netting	100	40
	CAMRRA120	Copper exhaust stack with netting	120	40
	CAMRRA140	Copper exhaust stack with netting	140	40
	CAMRRA160	Copper exhaust stack with netting	160	40
	CAMRRA180	Copper exhaust stack with netting	180	40
	CAMRRA200	Copper exhaust stack with netting	200	40
	CAMRRA220	Copper exhaust stack with netting	220	40
	CAMRRA250	Copper exhaust stack with netting	250	40
	CAMRRA300	Copper exhaust stack with netting	300	40

Ø=Diameter . H=Cylinder height

EXHAUST STACKS IN STAINLESS STEEL

MATERIALS



Stainless steel

SPECIFICATION

Stacks:

Cylindrical shaped terminal components of stacks made of copper, stainless steel, aluminum and prepainted sheet metal.

Available with the following finishes:



Natural

Stainless steel stacks with collars and netting

MODEL	CODE	DESCRIPTION	Ø mm	H cm
	CAMARIN80	Stainless steel exhaust stack with collars and netting	80	45
	CAMARIN100	Stainless steel exhaust stack with collars and netting	100	45
	CAMARIN120	Stainless steel exhaust stack with collars and netting	120	45
	CAMARIN140	Stainless steel exhaust stack with collars and netting	140	45
	CAMARIN160	Stainless steel exhaust stack with collars and netting	160	45
	CAMARIN180	Stainless steel exhaust stack with collars and netting	180	45
	CAMARIN200	Stainless steel exhaust stack with collars and netting	200	45
	CAMARIN220	Stainless steel exhaust stack with collars and netting	220	45
	CAMARIN250	Stainless steel exhaust stack with collars and netting	250	45
	CAMARIN300	Stainless steel exhaust stack with collars and netting	300	45
	CAMARIN350	Stainless steel exhaust stack with collars and netting	350	45

Stainless steel stacks with collars

MODEL	CODE	DESCRIPTION	Ø mm	H cm
	CAMAIN80	Stainless steel exhaust stack with collars	80	45
	CAMAIN100	Stainless steel exhaust stack with collars	100	45
	CAMAIN120	Stainless steel exhaust stack with collars	120	45
	CAMAIN140	Stainless steel exhaust stack with collars	140	45
	CAMAIN160	Stainless steel exhaust stack with collars	160	45
	CAMAIN180	Stainless steel exhaust stack with collars	180	45
	CAMAIN200	Stainless steel exhaust stack with collars	200	45
	CAMAIN220	Stainless steel exhaust stack with collars	220	45
	CAMAIN250	Stainless steel exhaust stack with collars	250	45
	CAMAIN300	Stainless steel exhaust stack with collars	300	45
	CAMAIN350	Stainless steel exhaust stack with collars	350	45

Stainless steel with netting

MODEL	CODE	DESCRIPTION	Ø mm	H cm
	CAMRIN80	Stainless steel exhaust stack with netting	80	40
	CAMRIN100	Stainless steel exhaust stack with netting	100	40
	CAMRIN120	Stainless steel exhaust stack with netting	120	40
	CAMRIN140	Stainless steel exhaust stack with netting	140	40
	CAMRIN160	Stainless steel exhaust stack with netting	160	40
	CAMRIN180	Stainless steel exhaust stack with netting	180	40
	CAMRIN200	Stainless steel exhaust stack with netting	200	40
	CAMRIN220	Stainless steel exhaust stack with netting	220	40
	CAMRIN250	Stainless steel exhaust stack with netting	250	40
	CAMRIN300	Stainless steel exhaust stack with netting	300	40

Ø=Diameter . H=Cylinder height

EXHAUST STACKS IN ALUMINIUM

MATERIALS



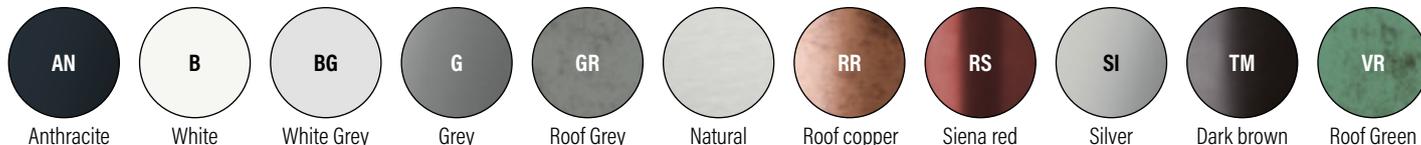
Aluminium

SPECIFICATION

Stacks:

Cylindrical shaped terminal components of stacks made of copper, stainless steel, aluminium and prepainted sheet metal.

Available with the following finishes:



Aluminium stacks with collars and netting

MODEL	CODE	DESCRIPTION	Ø mm	H cm
	CAMARAL_80	Aluminium exhaust stack with collars and netting	80	45
	CAMARAL_100	Aluminium exhaust stack with collars and netting	100	45
	CAMARAL_120	Aluminium exhaust stack with collars and netting	120	45
	CAMARAL_140	Aluminium exhaust stack with collars and netting	140	45
	CAMARAL_160	Aluminium exhaust stack with collars and netting	160	45
	CAMARAL_180	Aluminium exhaust stack with collars and netting	180	45
	CAMARAL_200	Aluminium exhaust stack with collars and netting	200	45
	CAMARAL_220	Aluminium exhaust stack with collars and netting	220	45
	CAMARAL_250	Aluminium exhaust stack with collars and netting	250	45
	CAMARAL_300	Aluminium exhaust stack with collars and netting	300	45
CAMARAL_350	Aluminium exhaust stack with collars and netting	350	45	

Aluminium stacks with collars

MODEL	CODE	DESCRIPTION	Ø mm	H cm
	CAMAAL_80	Aluminium exhaust stack with collars	80	45
	CAMAAL_100	Aluminium exhaust stack with collars	100	45
	CAMAAL_120	Aluminium exhaust stack with collars	120	45
	CAMAAL_140	Aluminium exhaust stack with collars	140	45
	CAMAAL_160	Aluminium exhaust stack with collars	160	45
	CAMAAL_180	Aluminium exhaust stack with collars	180	45
	CAMAAL_200	Aluminium exhaust stack with collars	200	45
	CAMAAL_220	Aluminium exhaust stack with collars	220	45
	CAMAAL_250	Aluminium exhaust stack with collars	250	45
	CAMAAL_300	Aluminium exhaust stack with collars	300	45
CAMAAL_350	Aluminium exhaust stack with collars	350	45	

Aluminium stacks with netting

MODEL	CODE	DESCRIPTION	Ø mm	H cm
	CAMRAL_80	Aluminium exhaust stack with netting	80	40
	CAMRAL_100	Aluminium exhaust stack with netting	100	40
	CAMRAL_120	Aluminium exhaust stack with netting	120	40
	CAMRAL_140	Aluminium exhaust stack with netting	140	40
	CAMRAL_160	Aluminium exhaust stack with netting	160	40
	CAMRAL_180	Aluminium exhaust stack with netting	180	40
	CAMRAL_200	Aluminium exhaust stack with netting	200	40
	CAMRAL_220	Aluminium exhaust stack with netting	220	40
	CAMRAL_250	Aluminium exhaust stack with netting	250	40
	CAMRAL_300	Aluminium exhaust stack with netting	300	40

Form the code by entering the initials of the required finish in place of " _ " (e.g. CAMRAL_300 Siena Red = CAMRALRS300)

Ø=Diameter . H=Cylinder height

EXHAUST STACKS IN PREPAINTED SHEET METAL

MATERIALS



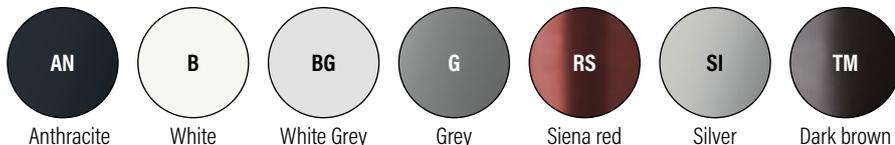
Prepainted sheet metal

SPECIFICATION

Stacks:

Cylindrical shaped terminal components in stacks made of copper, stainless steel, aluminium and prepainted sheet metal.

Available with the following finishes:



Prepainted sheet metal stacks with collars and netting

MODEL	CODE	DESCRIPTION	Ø mm	H cm
	CAMARLP_80	Prepainted sheet metal exhaust stack with collars and netting	80	45
	CAMARLP_100	Prepainted sheet metal exhaust stack with collars and netting	100	45
	CAMARLP_120	Prepainted sheet metal exhaust stack with collars and netting	120	45
	CAMARLP_140	Prepainted sheet metal exhaust stack with collars and netting	140	45
	CAMARLP_160	Prepainted sheet metal exhaust stack with collars and netting	160	45
	CAMARLP_180	Prepainted sheet metal exhaust stack with collars and netting	180	45
	CAMARLP_200	Prepainted sheet metal exhaust stack with collars and netting	200	45
	CAMARLP_220	Prepainted sheet metal exhaust stack with collars and netting	220	45
	CAMARLP_250	Prepainted sheet metal exhaust stack with collars and netting	250	45
	CAMARLP_300	Prepainted sheet metal exhaust stack with collars and netting	300	45
	CAMARLP_350	Prepainted sheet metal exhaust stack with collars and netting	350	45

Prepainted sheet metal stacks with collars

MODEL	CODE	DESCRIPTION	Ø mm	H cm
	CAMALP_80	Prepainted sheet metal exhaust stack with collars	80	45
	CAMALP_100	Prepainted sheet metal exhaust stack with collars	100	45
	CAMALP_120	Prepainted sheet metal exhaust stack with collars	120	45
	CAMALP_140	Prepainted sheet metal exhaust stack with collars	140	45
	CAMALP_160	Prepainted sheet metal exhaust stack with collars	160	45
	CAMALP_180	Prepainted sheet metal exhaust stack with collars	180	45
	CAMALP_200	Prepainted sheet metal exhaust stack with collars	200	45
	CAMALP_220	Prepainted sheet metal exhaust stack with collars	220	45
	CAMALP_250	Prepainted sheet metal exhaust stack with collars	250	45
	CAMALP_300	Prepainted sheet metal exhaust stack with collars	300	45
	CAMALP_350	Prepainted sheet metal exhaust stack with collars	350	45

Prepainted sheet metal stacks with netting

MODEL	CODE	DESCRIPTION	Ø mm	H cm
	CAMRLP_80	Prepainted sheet metal exhaust stack with netting	80	40
	CAMRLP_100	Prepainted sheet metal exhaust stack with netting	100	40
	CAMRLP_120	Prepainted sheet metal exhaust stack with netting	120	40
	CAMRLP_140	Prepainted sheet metal exhaust stack with netting	140	40
	CAMRLP_160	Prepainted sheet metal exhaust stack with netting	160	40
	CAMRLP_180	Prepainted sheet metal exhaust stack with netting	180	40
	CAMRLP_200	Prepainted sheet metal exhaust stack with netting	200	40
	CAMRLP_220	Prepainted sheet metal exhaust stack with netting	220	40
	CAMRLP_250	Prepainted sheet metal exhaust stack with netting	250	40
	CAMRLP_300	Prepainted sheet metal exhaust stack with netting	300	40

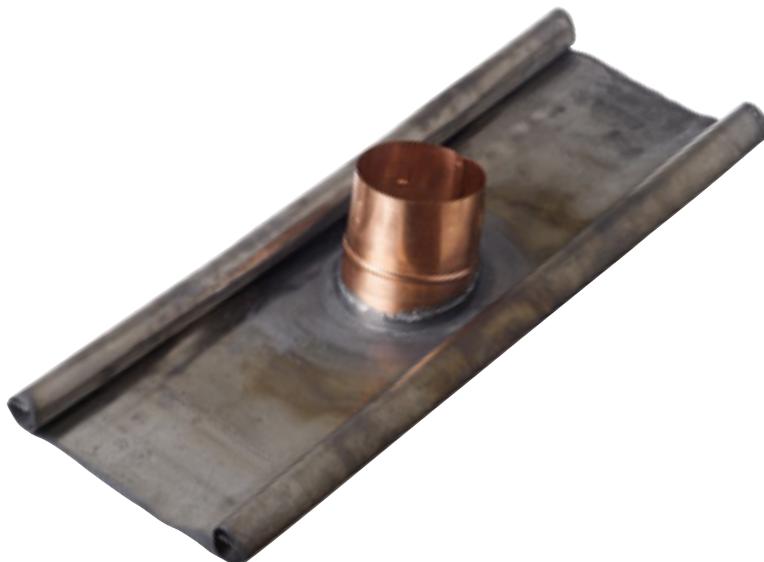
Form the code by entering the initials of the required finish in place of " _ " (e.g. CAMRAL_300 Siena Red = CAMRALRS300)

Ø=Diameter . H=Cylinder height

VALLEYS FOR CYLINDRICAL STACKS

Valleys in lead and copper or lead and stainless steel for cylindrical stacks, with 600x700 mm lead dimensions and thickness 1.2 mm.

Note: always use steel valleys in conjunction with aluminium or steel. Do not use aluminium and copper together.



SPECIFICATION

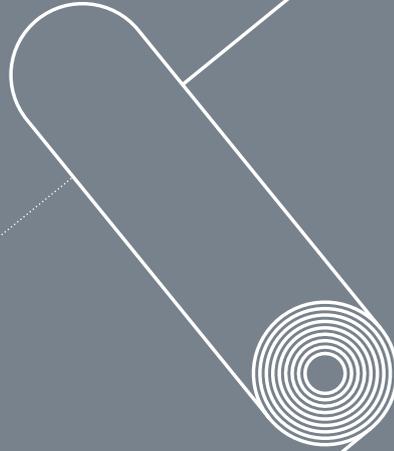
Valley:

Joining element in lead and copper or lead and stainless steel for stack ends.

CODE	DESCRIPTION	MATERIAL	Ø mm
CONRA80	Valley for cylindrical stacks	Lead and copper	80
CONRA100	Valley for cylindrical stacks	Lead and copper	100
CONRA120	Valley for cylindrical stacks	Lead and copper	120
CONRA140	Valley for cylindrical stacks	Lead and copper	140
CONRA160	Valley for cylindrical stacks	Lead and copper	160
CONRA180	Valley for cylindrical stacks	Lead and copper	180
CONRA200	Valley for cylindrical stacks	Lead and copper	200
CONRA220	Valley for cylindrical stacks	Lead and copper	220
CONRA250	Valley for cylindrical stacks	Lead and copper	250
CONRA300	Valley for cylindrical stacks	Lead and copper	300
CONRA350	Valley for cylindrical stacks	Lead and copper	350

CODE	DESCRIPTION	MATERIAL	Ø mm
CONIN80	Valley for cylindrical stacks	Lead and stainless steel	80
CONIN100	Valley for cylindrical stacks	Lead and stainless steel	100
CONIN120	Valley for cylindrical stacks	Lead and stainless steel	120
CONIN140	Valley for cylindrical stacks	Lead and stainless steel	140
CONIN160	Valley for cylindrical stacks	Lead and stainless steel	160
CONIN180	Valley for cylindrical stacks	Lead and stainless steel	180
CONIN200	Valley for cylindrical stacks	Lead and stainless steel	200
CONIN220	Valley for cylindrical stacks	Lead and stainless steel	220
CONIN250	Valley for cylindrical stacks	Lead and stainless steel	250
CONIN300	Valley for cylindrical stacks	Lead and stainless steel	300
CONIN350	Valley for cylindrical stacks	Lead and stainless steel	350

Ø=Diameter



nebula®
— ROOF UNDERLAYS —

NEBULA

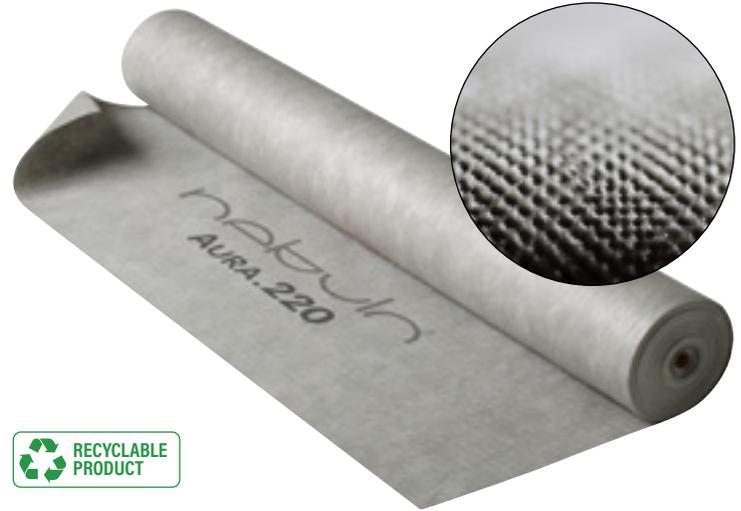
BREATHABLE UNDERLAY

AURA is a **three-ply underlay in polypropylene bonded by means of an ultrasound-based process**, without the use of additives or solvents in total respect for the environment

Applied to wooden roofs on top of the insulation, **this underlay allows excess moisture to rapidly escape while maintaining** the thermal performance of the insulation intact.

Completely Made in Italy. Produced with ultrasound technology. Possesses high mechanical performance, non-slip properties and is fully recyclable.

• Available in 150, 180 and 220 g/m² versions.



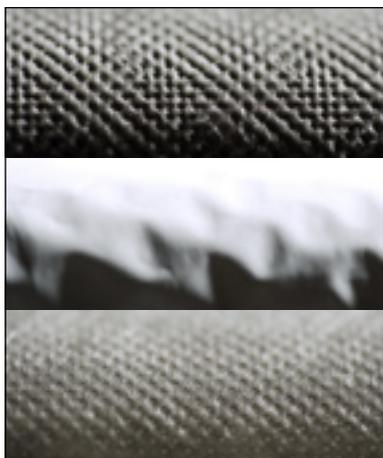
MODEL	CODE	DESCRIPTION	DIMENSIONS m	WEIGHT kg	ROLLS per PALLET	WEIGHT of PALLET kg	m ² per PALLET	Technical data sheet
	NEBA150	Breathable underlay AURA.150	1.50x50	11.30	30	340	2.250	
	NEBA150T	Breathable underlay with adhesive band AURA.150T	1.5x50	11.30	30	340	2.250	
	NEBA180	Breathable underlay AURA.180	1.5x50	14	25	360	1.875	
	NEBA220	Breathable underlay AURA.220 Ideal for laying on concrete	1.5x50	17	20	340	1.500	
	NEBA220T	Breathable underlay with adhesive band AURA.220 Ideal for laying on concrete	1.5x50	17	20	340	1.500	

SPECIFICATIONS

DESCRIPTION	STANDARD	UNIT of MEASURE- MENT	Aura.150/150T	Aura.180	Aura.220/220T
Weight	EN 13859-1 - UNI 11470	g/m ² - class	150 - B	180 - B	220 - A
Thickness	EN 1849-2	mm	0.7±15%	0.8±15%	0.95±15%
Longitudinal tear strength	EN 13859-1 - UNI 11470	N - class	160 - R2	180 - R2	240 - R3
Transverse tear strength	EN 13859-1 - UNI 11470	N - class	180 - R2	190 - R2	240 - R3
Longitudinal tensile strength	EN 13859-1 - UNI 11470	N/5 cm - class	300 - R2	300 - R2	370 - R3
Transverse tensile strength	EN 13859-1 - UNI 11470	N/5 cm - class	210 - R2	270 - R2	340 - R3
Longitudinal elongation	EN 13859-1	%	65-85	50-70	45-65
Transverse elongation	EN 13859-1	%	80-100	50-70	60-80
UV resistance	-	months	4	4	4
Resistance to the passage of water	EN 13859-1	class	W1	W1	W1
Vapour transfer properties WDD	EN 13859-1	g/m ² x24h	2000	1800	1820
Vapour transfer properties Sd	EN 13859-1	m	0.02	0.03	0.03
Highly breathable membrane	UNI 11470				
Fire resistance	EN 13859-1	class	E	E	E
Flexibility at low temperatures	EN 13859-1	°C	-40	-40	-40
Weight of roll	-	kg	11.3	14	17
Roll dimensions	-	m	1.50x50	1.50x50	1.50x50
Rolls per pallet	-	pcs	30	25	20
Meters per pallet	-	m ²	2.250	1.875	1.500
Weight of pallet	-	kg	340	350	340
Vapour permeability	-	μ	28	37	31
Thermal conductivity	-	W/mK	0.22	0.22	0.22

Product subject to CE marking in accordance with Standard EN 13859-1/EN 13859-2.

COMPOSITION



TOP PLY:

Heavy non-woven polypropylene fabric with anti-UV and grip treatment. Abrasion and tread resistant. Absorbs mechanical stress (tensile, shearing stress).

REINFORCEMENT:

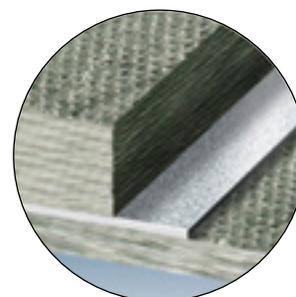
Waterproof, highly breathable microporous polypropylene film with anti-UV treatment.

BOTTOM PLY:

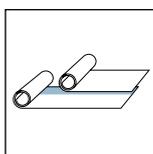
Light non-woven polypropylene fabric with anti-UV and grip treatment. Withstands abrasion of wooden support. Contributes towards the mechanical strength of the entire product.

ULTRASONIC LAMINATION:

The three layers are spot welded together to ensure greater mechanical strength and enhanced breathability.



OVERLAP WHEN LAYING



At least 15 cm

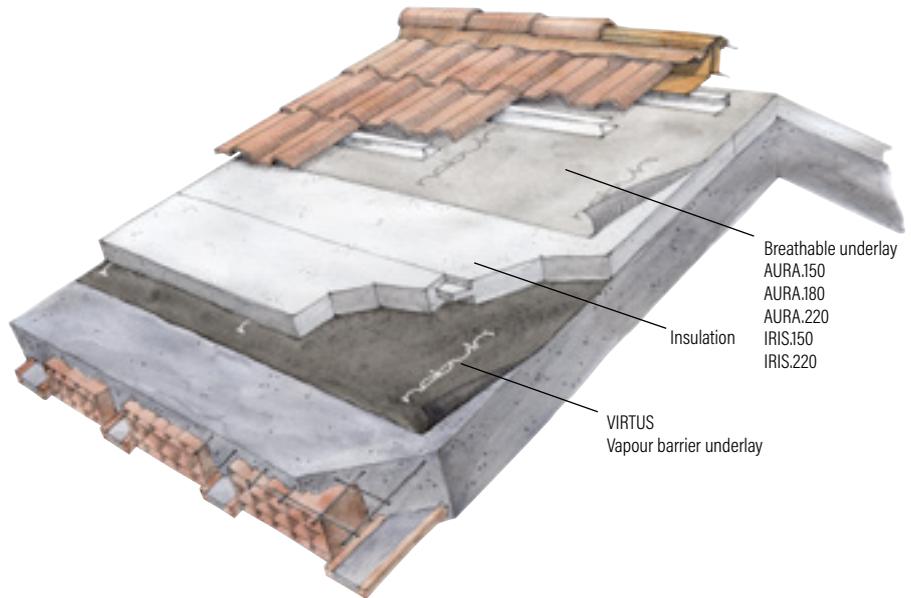
RELATED PRODUCTS



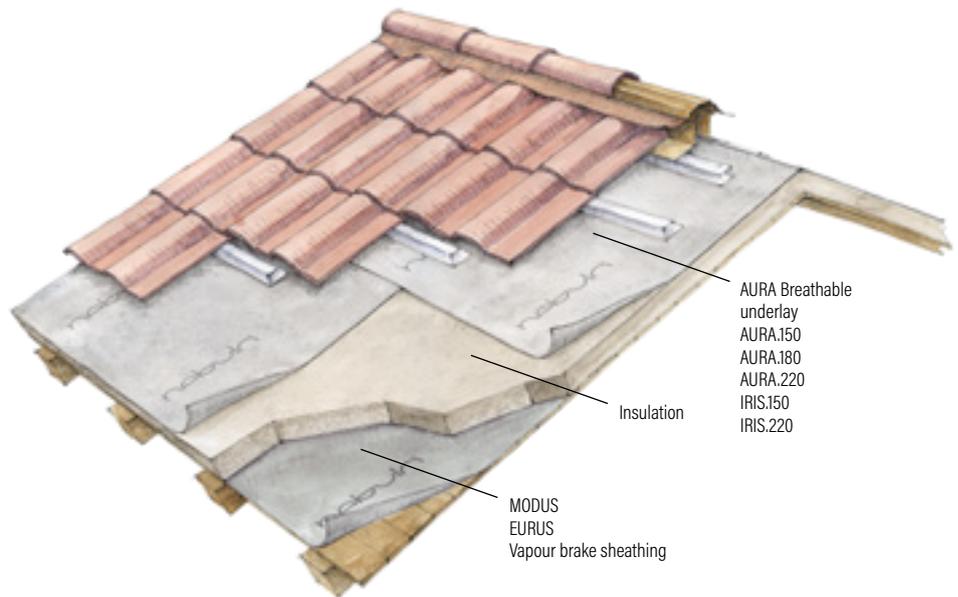
Adhesive sealants

LAYER STRUCTURES

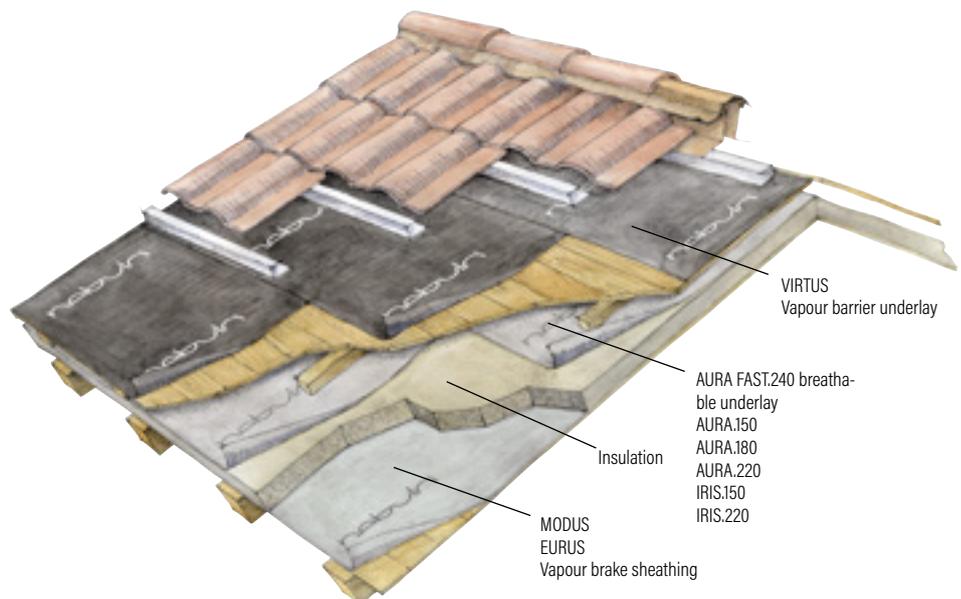
**HOLLOW-CORE CONCRETE ROOF WITH
SINGLE UNDER-TILE VENTILATION CHAMBER**

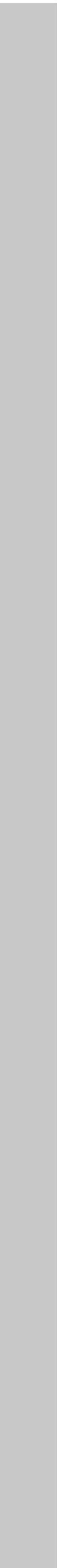


**WOODEN ROOF WITH
SINGLE UNDER-TILE VENTILATION
CHAMBER**



**WOODEN ROOF WITH
DOUBLE UNDER-TILE VENTILATION
CHAMBER**

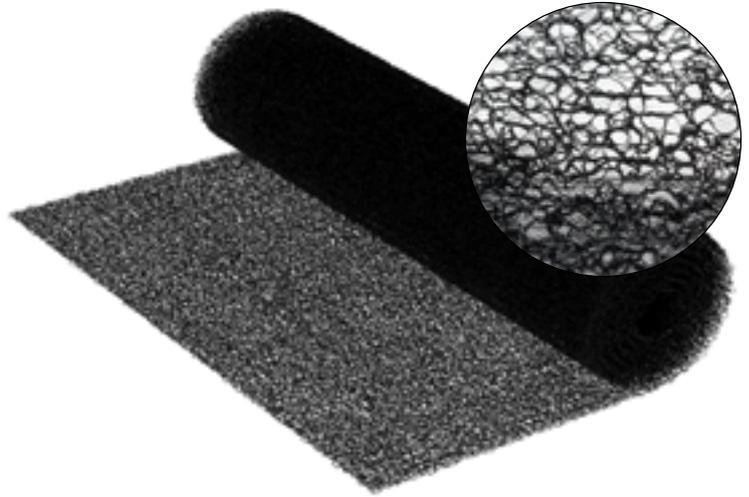




THREE-DIMENSIONAL NETTING FOR METAL ROOFS

This underlay consists of a three-dimensional structure formed by extruded monofilaments of isometric pyramidal morphology. TRINET is the ideal product for ventilating and draining off the condensation from under metal roofs.

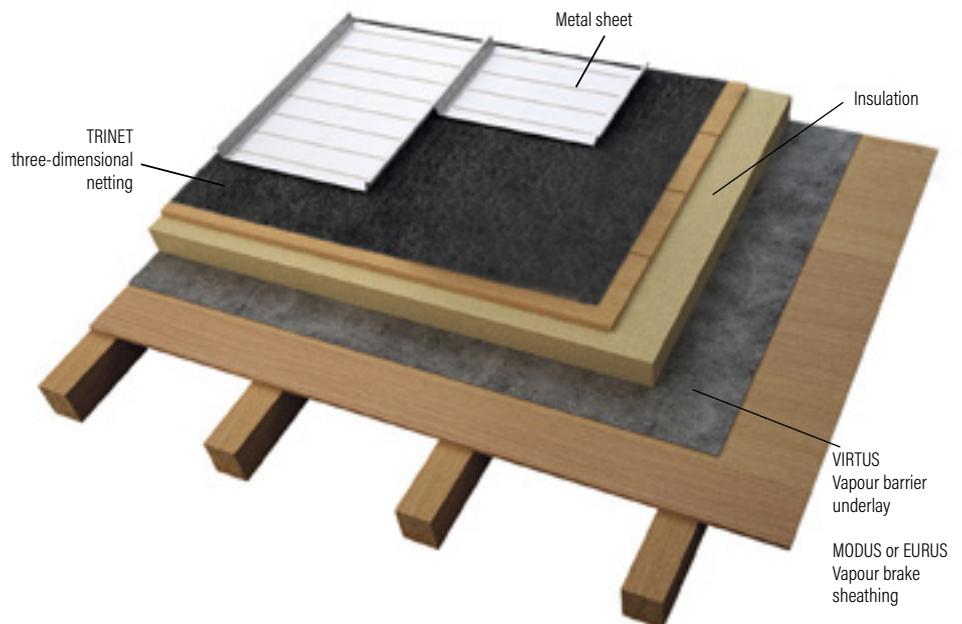
- Mass per unit area of the geocomposite: 350 g/m².
- Thickness: 8 mm.



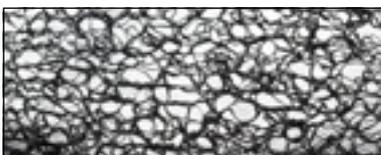
MODEL	CODE	DESCRIPTION	DIMENSIONS m	WEIGHT kg	ROLLS per PALLET	WEIGHT of PALLET kg	m ² per PALLET	Technical data sheet
	NEBT350	Three-dimensional netting TRINET.350	1.25x28	12.25	9	120	315	

LAYER STRUCTURES

METAL ROOF

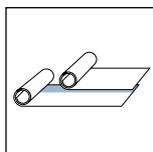


COMPOSITION

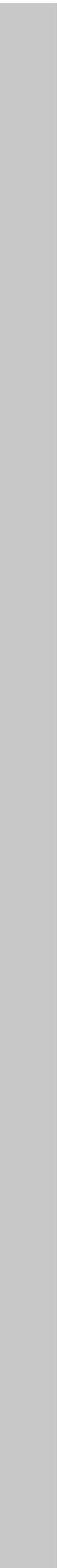


Three-dimensional, micro-ventilating, anti-condensation and noise-absorbing netting.

OVERLAP WHEN LAYING

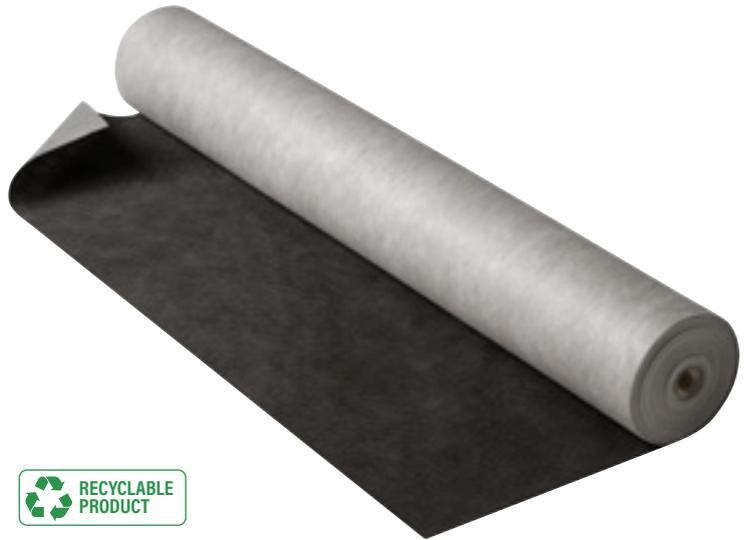


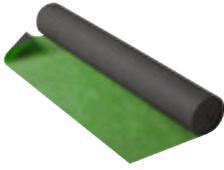
At least 10 cm



BREATHABLE UNDERLAY

IRIS 150 is a **triple-layer breathable underlay for roofing** bonded by means of a **technological thermobonding process**, highly **vapour permeable** and formed by a protective functional film on both sides of non-woven polypropylene fabric. It is **waterproof** and regulates the flow of water vapour through the roof components.



MODEL	CODE	DESCRIPTION	DIMENSIONS m	WEIGHT kg	ROLLS per PALLET	WEIGHT of PALLET kg	m ² per PALLET	Technical data sheet
	IRIS150	Breathable underlay IRIS150	1.5x50	11	24	264	1,800	
	IRIS150T	Breathable underlay with adhesive band IRIS150T	1.5x50	11	24	264	1,800	
	IRIS205	Breathable underlay IRIS205	1.5x50	15	20	300	1,500	

SPECIFICATIONS

DESCRIPTION	STANDARD	UNIT of MEASUREMENT	IRIS.150/IRIS.150T	IRIS.205
Material	-	-	Polypropylene	Polypropylene
Number of ply	-	-	3	3
Mass	EN 1849-2:2010	g/m ²	150 (±10%)	205 (±10%)
Thickness	EN 1849-2:2010	mm	0.5	0.7
Fire resistance	EN ISO11925-2/ AC:2011	Class	E	E
Resistance to water penetration	EN 1928: 2002	Class	W1	W1
Resistance to water penetration artificial ageing method	-	-	-	W1
Vapour transfer properties Sd	EN ISO 12572: 2004 certification EN 1931: 2002	m	0.02 (-0.01/+0.03)	0.07 (-0.03/+0.03)
Longitudinal tensile strength	EN 12311-2:2013	N/50 mm	340 (±30%)	500 (±30%)
Transverse tensile strength	EN 12311-2:2013	N/50 mm	205 (±30%)	270 (±30%)
Longitudinal elongation	EN 12311-2:2013	%	60 (±30%)	60 (±30%)
Transverse elongation	EN 12311-2:2013	%	90 (±30%)	90 (±30%)
Longitudinal tear strength	EN 12310-1:2010	N	160 (±20%)	210 (±20%)
Transverse tear strength	EN 12310-1:2010	N	225 (±20%)	300 (±20%)
Dimensional stability	EN 1107-2:2002	%	<2	<2
Longitudinal tensile strength artificial ageing method	EN 12311-2:2013	N/50 mm	205 (±20%)	50% of initial value
Transverse tensile strength artificial ageing method	EN 12311-2:2013	N/50 mm	125 (±20%)	50% of initial value
Longitudinal elongation artificial ageing method	EN 12311-2:2013	%	60 (±20%)	50% of initial value
Transverse elongation artificial ageing method	EN 12311-2:2013	%	90 (±20%)	50% of initial value
Flexibility at low temperatures	EN 495-5:2013	°C	-40	-40
Temperature resistance	-	°C	-40/+80	-40/+80
Vapour permeability	-	μ	40	100

Product subject to CE marking in accordance with Standard EN 13859-1/EN 13859-2.

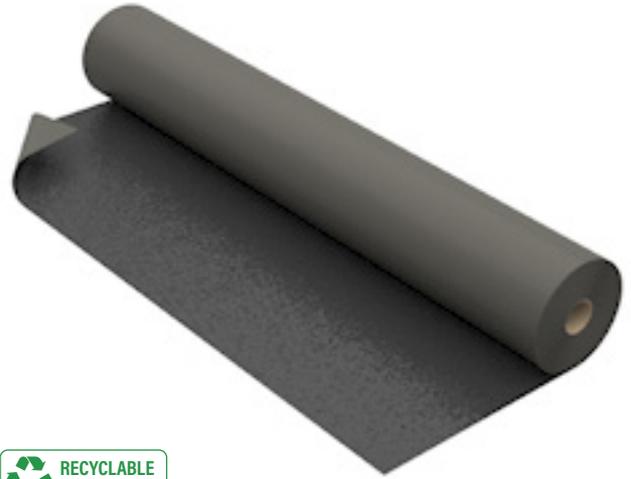
BREATHABLE UNDERLAY

IRIS WIND is a **highly vapour permeable two-ply roofing membrane** featuring **increased UV resistance** and intended as a first waterproofing layer under the external roof covering.

Thanks to its thermoplastic polyurethane layer, **the membrane** is completely waterproof, **protects the external thermal insulation from rain** and is also an **excellent windbreak**.

IRIS WIND is also ideal for **protecting the walls** of frame structure and wooden constructions, residential buildings and industrial sheds.

The product **can be used on all ventilated and non-ventilated roofs**.
Excellent mechanical strength.



MODEL	CODE	DESCRIPTION	DIMENSIONS m	WEIGHT kg	ROLLS per PALLET	WEIGHT of PALLET kg	m ² per PALLET	Technical data sheet
	IRIS180F	IRIS WIND 180 breathable windbreak underlay	1.5x50	15	20	300	1,500	

SPECIFICATIONS

DESCRIPTION	STANDARD	UNIT of MEASUREMENT	IRIS.WIND.180
Material	-	-	Polypropylene
Number of ply	-	-	2
Mass	EN 1849-2:2010	g/m ²	180 (±10%)
Thickness	-	mm	0.7
Fire resistance	EN 13859-1:2010 EN 13859-2:2010	Class	Now being tested
Resistance to water penetration	EN 13859-1:2010 EN 13859-2:2010	Class	W1
Resistance to water penetration artificial ageing method	EN 13859-1:2010 EN 13859-2:2010	Class	W1
Vapour transfer properties Sd	EN 1931: 2002	m	0.15 (-0.03/+0.03)
Longitudinal tensile strength	EN 13859-1:2010 EN 13859-2:2010	N/50 mm	370 (±30%)
Transverse tensile strength	EN 13859-1:2010 EN 13859-2:2010	N/50 mm	400 (±30%)
Longitudinal elongation	EN 13859-1:2010 EN 13859-2:2010	%	60 (±30%)
Transverse elongation	EN 13859-1:2010 EN 13859-2:2010	%	80 (±30%)
Longitudinal tear strength	EN 13859-1:2010 EN 13859-2:2010	N	250 (±20%)
Transverse tear strength	EN 13859-1:2010 EN 13859-2:2010	N	250 (±20%)
Dimensional stability	-	%	<2
Longitudinal tensile strength artificial ageing method	EN 13859-1:2010 EN 13859-2:2010	N/50 mm	330
Transverse tensile strength artificial ageing method	EN 13859-1:2010 EN 13859-2:2010	N/50 mm	360
Longitudinal elongation artificial ageing method	EN 13859-1:2010 EN 13859-2:2010	%	60
Transverse elongation artificial ageing method	EN 13859-1:2010 EN 13859-2:2010	%	80
Temperature resistance	-	°C	-30/+80
Vapour permeability	-	μ	215

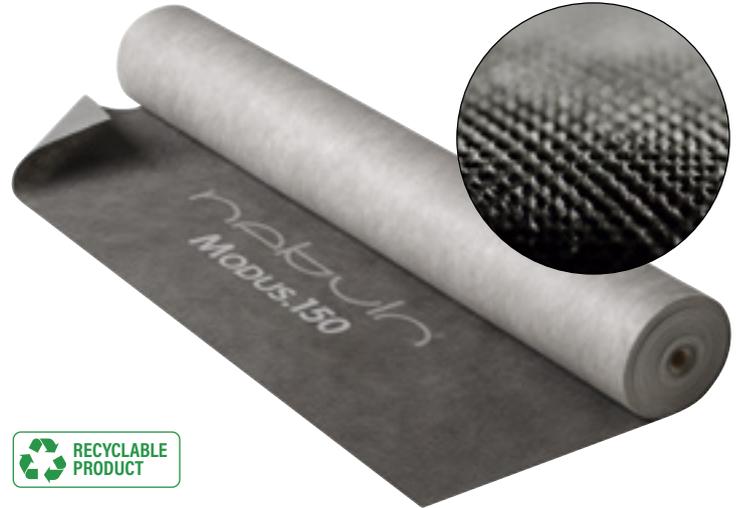
Product subject to CE marking in accordance with Standard EN 13859-1/EN 13859-2.

VAPOUR BRAKE SHEATHING

MODUS is a **three-ply sheathing in polypropylene bonded by means of an ultrasound-based process**, without the use of additives or solvents in total respect for the environment.

It should be laid **underneath the insulation** where it **regulates the passage of vapour**.

Completely Made in Italy. Produced with the use of ultrasound technology. Possesses high mechanical performance, non-slip properties and is fully recyclable.



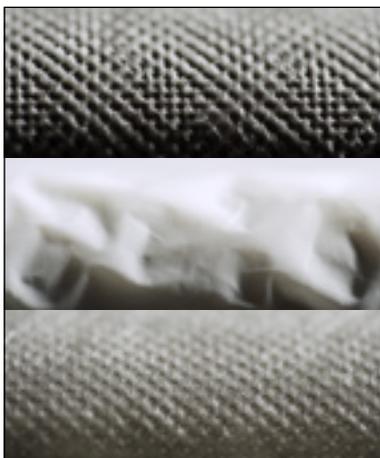
MODEL	CODE	DESCRIPTION	DIMENSIONS m	WEIGHT kg	ROLLS per PALLET	WEIGHT of PALLET kg	m ² per PALLET	Technical data sheet
	NEBM150	Vapour brake sheathing MODUS.150	1.5x50	11	30	330	2,250	
	NEBM150T	MODUS.150T vapour brake sheathing with adhesive band	1.5x50	11	30	330	2,250	

SPECIFICATIONS

DESCRIPTION	STANDARD	UNIT of MEASUREMENT	Modus.150/150T
Weight	EN 13859-1 - UNI 11470	g/m ² - class	150 - B
Thickness	EN 1849-2	mm	0.65
Longitudinal tear strength	EN 13859-1 - UNI 11470	N - class	160 - R2
Transverse tear strength	EN 13859-1 - UNI 11470	N - class	200 - R2
Longitudinal tensile strength	EN 13859-1 - UNI 11470	N/5 cm - class	340 - R2
Transverse tensile strength	EN 13859-1 - UNI 11470	N/5 cm - class	230 - R2
Longitudinal elongation	EN 13859-1	%	75-95
Transverse elongation	EN 13859-1	%	85-105
UV resistance	-	months	6
Resistance to the passage of water	EN 13859-1	class	W1
Watertightness	EN 20811	m	5 (mean value) - minimum value: 3
Vapour transfer properties WDD	EN 13859-1	g/m ² x24h	7.7
Vapour transfer properties Sd	EN 13859-1	m	5.5
Vapour control membrane	UNI 11470		
Fire resistance	EN 13859-1	class	E
Flexibility at low temperatures	EN 13859-1	°C	-40
Weight of roll	-	kg	11
Roll dimensions	-	m	1.50x50
Rolls per pallet	-	pcs	30
Meters per pallet	-	m ²	2.250
Weight of pallet	-	kg	330
Vapour permeability	-	μ	8461
Thermal conductivity	-	W/mK	0.22

Product subject to CE marking in accordance with Standard EN 13859-1/EN 13859-2.

COMPOSITION



TOP LAYER:

Heavy non-woven polypropylene fabric with anti-UV and grip treatment. Abrasion and tread resistant. Absorbs mechanical stress (tensile, shearing stress).

REINFORCEMENT:

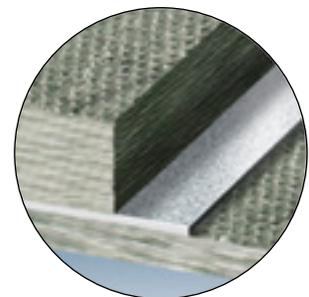
Waterproof polypropylene film that prevents water vapour from spreading, with anti-UV treatment.

BOTTOM LAYER:

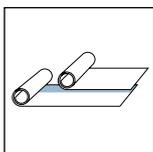
Light non-woven polypropylene fabric with anti-UV and grip treatment. Withstands abrasion of wooden support. Contributes towards the mechanical strength of the entire product.

ULTRASONIC LAMINATION:

The three ply are spot welded together to ensure greater mechanical strength and enhanced breathability.



OVERLAP WHEN LAYING



At least 15 cm

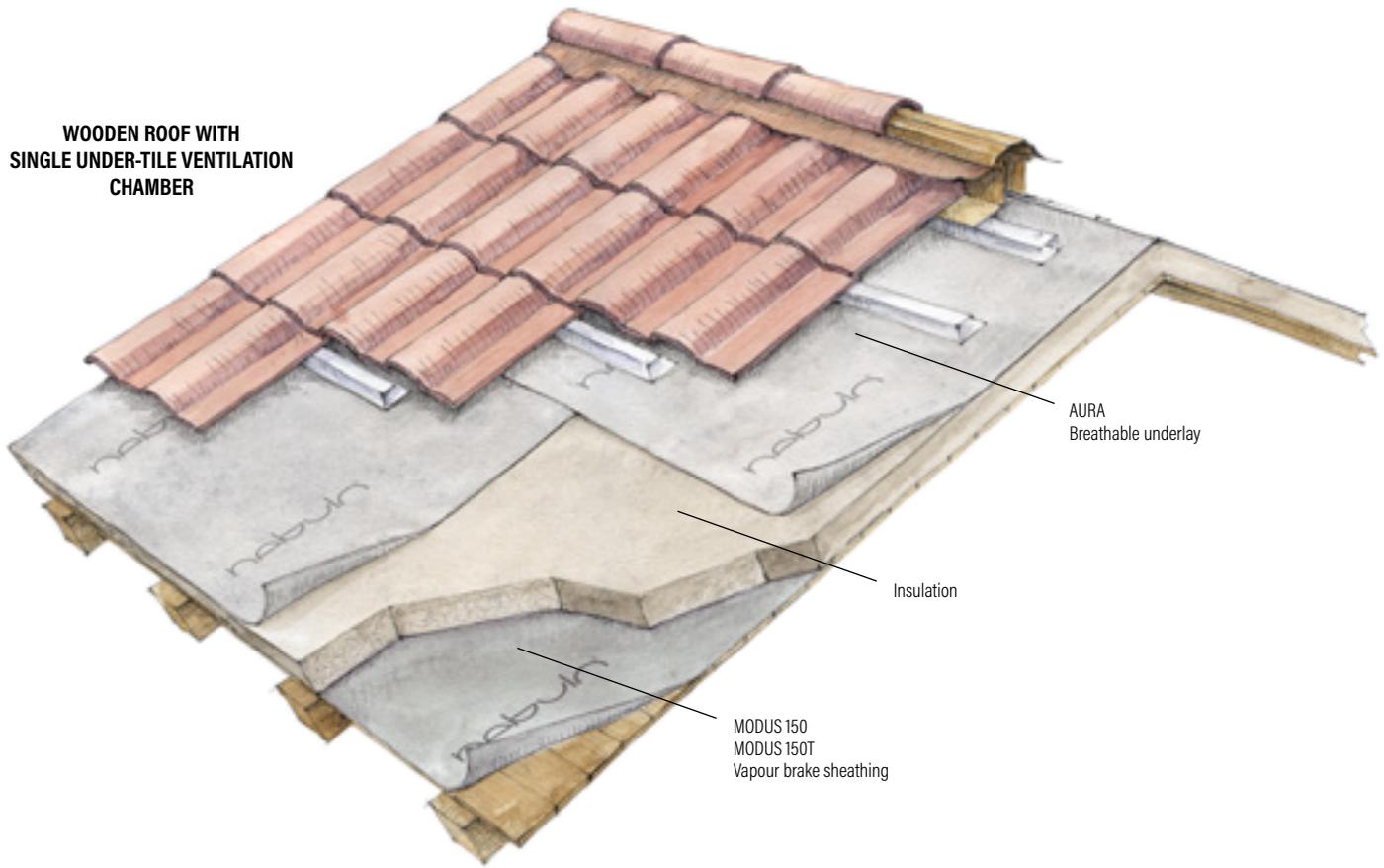
RELATED PRODUCTS



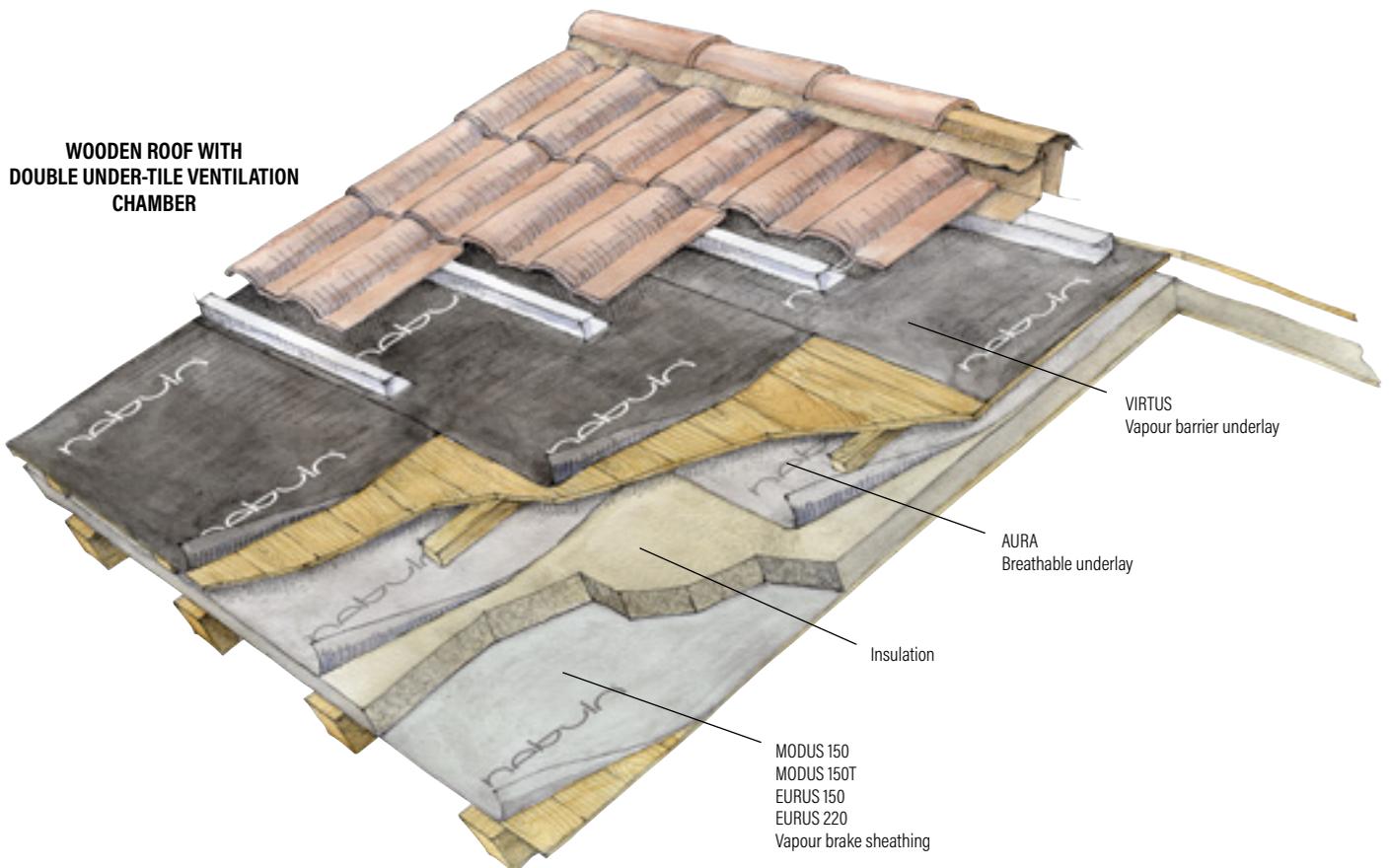
Adhesive sealants

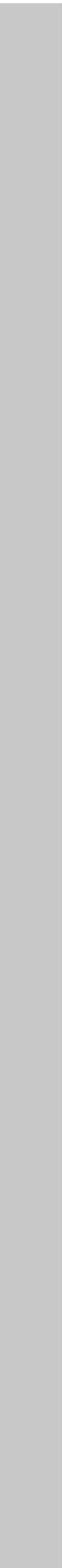
LAYER STRUCTURES

**WOODEN ROOF WITH
SINGLE UNDER-TILE VENTILATION
CHAMBER**



**WOODEN ROOF WITH
DOUBLE UNDER-TILE VENTILATION
CHAMBER**





VAPOUR BRAKE SHEATHING

EURUS is a **three-ply vapour brake sheathing** made of polypropylene non-woven fabric **bonded by means of a thermobonding process**. **Modulates the flow of water vapour**, preventing it from building up excessively between the OSB panel and thermal insulation.

Protects the insulation against the harmful effects of moisture and **regulates the level of vapour in the roof**. Can be used in different structures, such as walls, floors and roofs.



MODEL	CODE	DESCRIPTION	DIMENSIONS m	WEIGHT kg	ROLLS per PALLET	WEIGHT of PALLET kg	m ² per PALLET	Technical data sheet
	EURUS150	Vapour brake sheathing EURUS 220	1.5x50	11	24	264	1,800	
	EURUS150T	Vapour brake sheathing with adhesive band EURUS 150T	1.5x50	11	24	264	1,800	
	EURUS220	Vapour brake sheathing EURUS 220	1.5x50	11	23	380	1,725	

SPECIFICATIONS

DESCRIPTION	STANDARD	UNIT of MEASUREMENT	EURUS.150/150T	EURUS.220
Material			Polypropylene	Polypropylene
Number of ply			3	3
Mass	EN 1849-2:2010	g/m ²	150	220
Thickness	EN 1849-2:2010	mm	0.5	0.7
Linearity <75 mm/10 m	EN 1849-2:2003	mm	Passed	Passed
Visible defects	EN 1849-2:2004	-	Without visible defects	Without visible defects
Fire resistance	EN ISO11925-2/AC:2011	Class	E	E
Water tightness	EN 1928:2002 Method A	kPa	Passed at 2kPa/24h	Passed at 2kPa/24h
Vapour transfer properties Sd	EN 1931: 2002	m	18 (±8m)	20
Vapour resistance	EN 1931: 2002	(M2 x s x Pa)/kg	70*10 ⁹ (±25%)	8*10 ⁹
Longitudinal tensile strength	EN 12311-2:2013	N/50 mm	≥260	≥350
Transverse tensile strength	EN 12311-2:2013	N/50 mm	≥160	≥230
Longitudinal elongation	EN 12311-2:2013	%	≥90	≥65
Transverse elongation	EN 12311-2:2013	%	≥90	≥80
Longitudinal tear strength	EN 12310-1:2010	N	≥130	≥200
Transverse tear strength	EN 12310-1:2010	N	≥160	≥280
Impact resistance	EN 12697	Mn	≥300	-
Vapour resistance after exposure to artificial ageing	EN 1296: 2001 EN 1931: 2002	-	Passed	Passed
Tensile properties after exposure to alkalines	EN 1847:2009 (liquid 2) EN 12311- 2:2013	-	Passed	Passed
Vapour permeability	-	μ	36000	28600

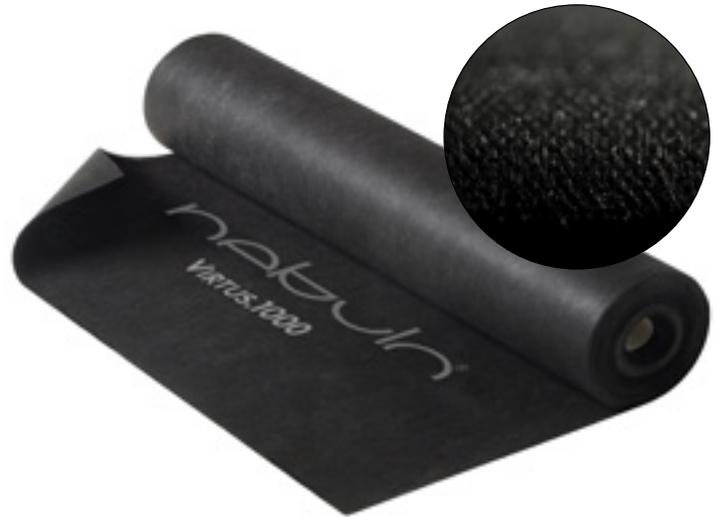
Product subject to CE marking in accordance with Standard EN 13859-1/EN 13859-2.

VAPOUR BARRIER UNDERLAY

Applied on top of the first layer of boards under the insulation, **this underlay totally prevents moisture from passing through** while **maintaining the thermal performance of the insulation**. VIRTUS is a **5 ply** underlay: the internal polyester core is coated on both sides by bituminous compounds. The external finish is in polypropylene non-woven fabric.

VIRTUS possesses high mechanical strength, as well as being non-slip and UV-resistant.

• Available in 380, 700 and 1000 g/m² versions.



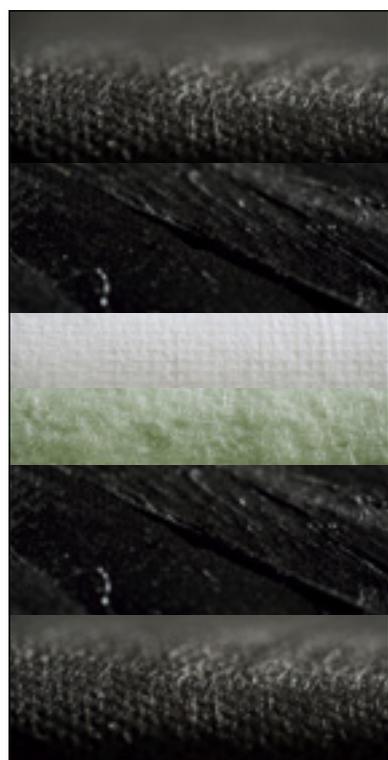
MODEL	CODE	DESCRIPTION	DIMENSIONS m	WEIGHT kg	ROLLS per PALLET	WEIGHT of PALLET kg	m ² per PALLET	Technical data sheet
	NEBV0380	VIRTUS.380 vapour barrier underlay Ideal on concrete	1x50	19.5	30	585	1.500	
	NEBV0700	VIRTUS.700 vapour barrier underlay Ideal for structures such as pavilions, arbours and underneath shingles	1x30	21.5	30	650	900	
	NEBV1000	VIRTUS.1000 vapour barrier underlay Ideal for mountain areas and in the presence of extreme temperature changes	1x25	27.5	30	670	750	

SPECIFICATIONS

DESCRIPTION	STANDARD	UNIT of MEASURE- MENT	Virtus.380	Virtus.700	Virtus.1000
Weight	EN 13859-1	g/m ²	380	700	1000
Thickness	EN 1849-1	mm	0.65±15%	0.95±15%	1.1±15%
Longitudinal tear strength	EN 13859-1	N	150	200	220
Transverse tear strength	EN 13859-1	N	140	200	230
Longitudinal tensile strength	EN 13859-1	N/5 cm	400	650	700
Transverse tensile strength	EN 13859-1	N/5 cm	320	360	440
Longitudinal elongation	EN 13859-1	%	25-45	30-50	35-55
Transverse elongation	EN 13859-1	%	35-55	40-60	45-65
UV resistance	-	months	4	4	4
Resistance to the passage of water	EN 13859-1	class	W1	W1	W1
Vapour transfer properties WDD	EN 13859-1	g/m ² x24h	1	0.45	0.28
Vapour transfer properties Sd	EN 13859-1	m	40	95	152
Vapour control membrane	UNI 11470				
Fire resistance	EN 13859-1	class	E	E	E
Flexibility at low temperatures	EN 13859-1	°C	-45	-45	-45
Weight of roll	-	kg	19.5	21.5	27.5
Roll dimensions	-	m	1x50	1x30	1x25
Rolls per pallet	-	pcs	30	30	30
Meters per pallet	-	m ²	1.500	900	750
Weight of pallet	-	kg	585	650	830
Vapour permeability	-	μ	61538	100000	138181
Thermal conductivity	-	W/mK	0.17	0.17	0.17

Product subject to CE marking in accordance with Standard EN 13859-1/EN 13859-2.

COMPOSITION



TOP FINISH:

Heavy non-woven polypropylene fabric with anti-UV and grip treatment. Abrasion and tread resistant. Absorbs mechanical stress (tensile, shearing stress).

TOP INTERNAL PLY:

Bituminous compound

REINFORCEMENT:

Polyester

BOTTOM INTERNAL PLY:

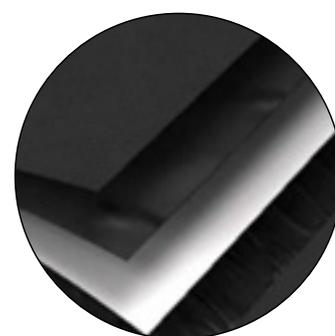
Bituminous compound

UNDERSIDE FINISH:

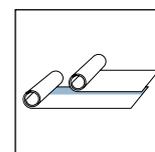
Light non-woven polypropylene fabric with anti-UV and grip treatment. Withstands abrasion of wooden support. Contributes towards the mechanical strength of the entire product.

BITUMINOUS MEMBRANES:

Bonded tarred polyester.



**OVERLAP
WHEN LAYING**



At least 10 cm

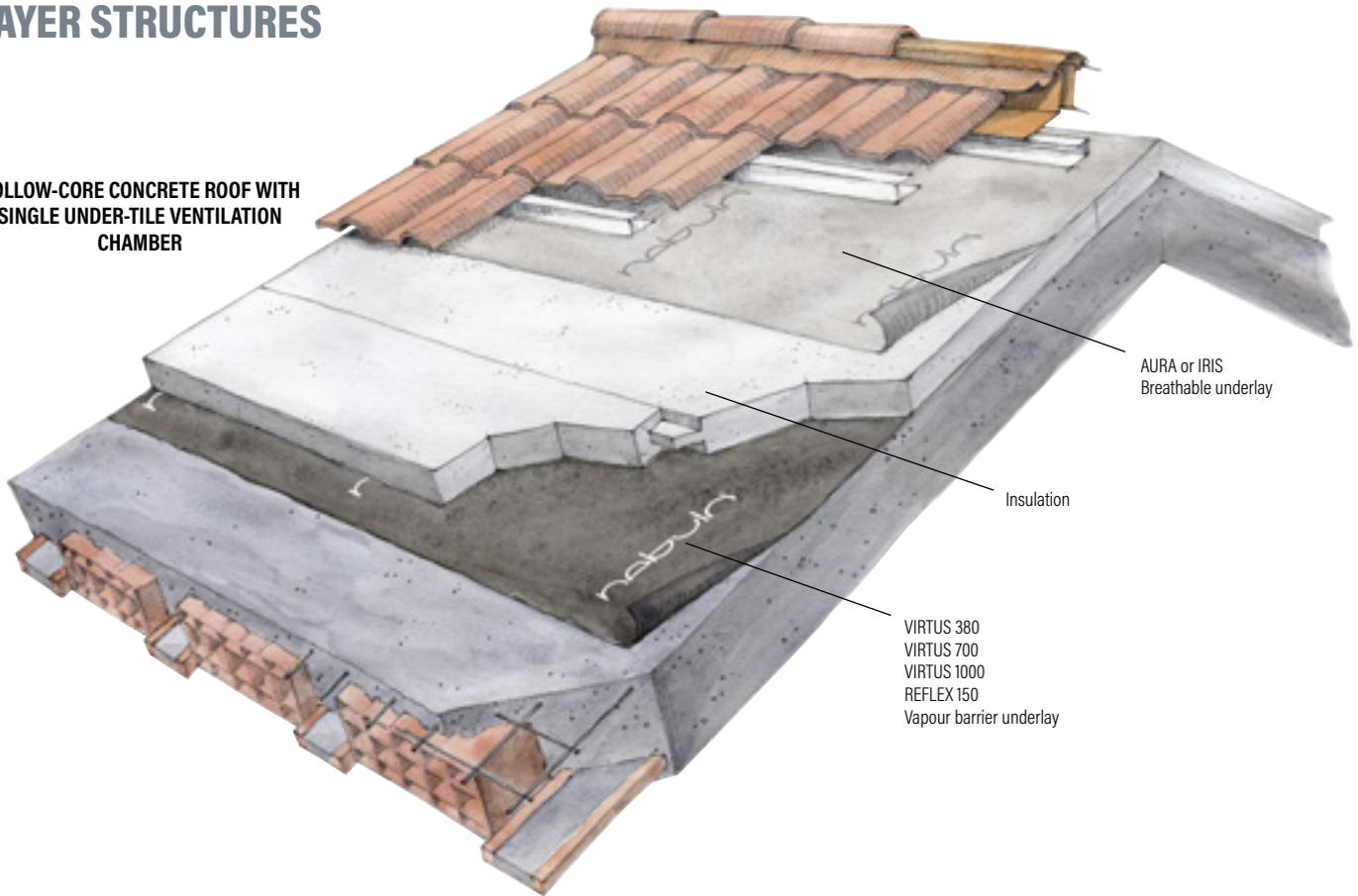
**RELATED
PRODUCTS**



Adhesive sealants

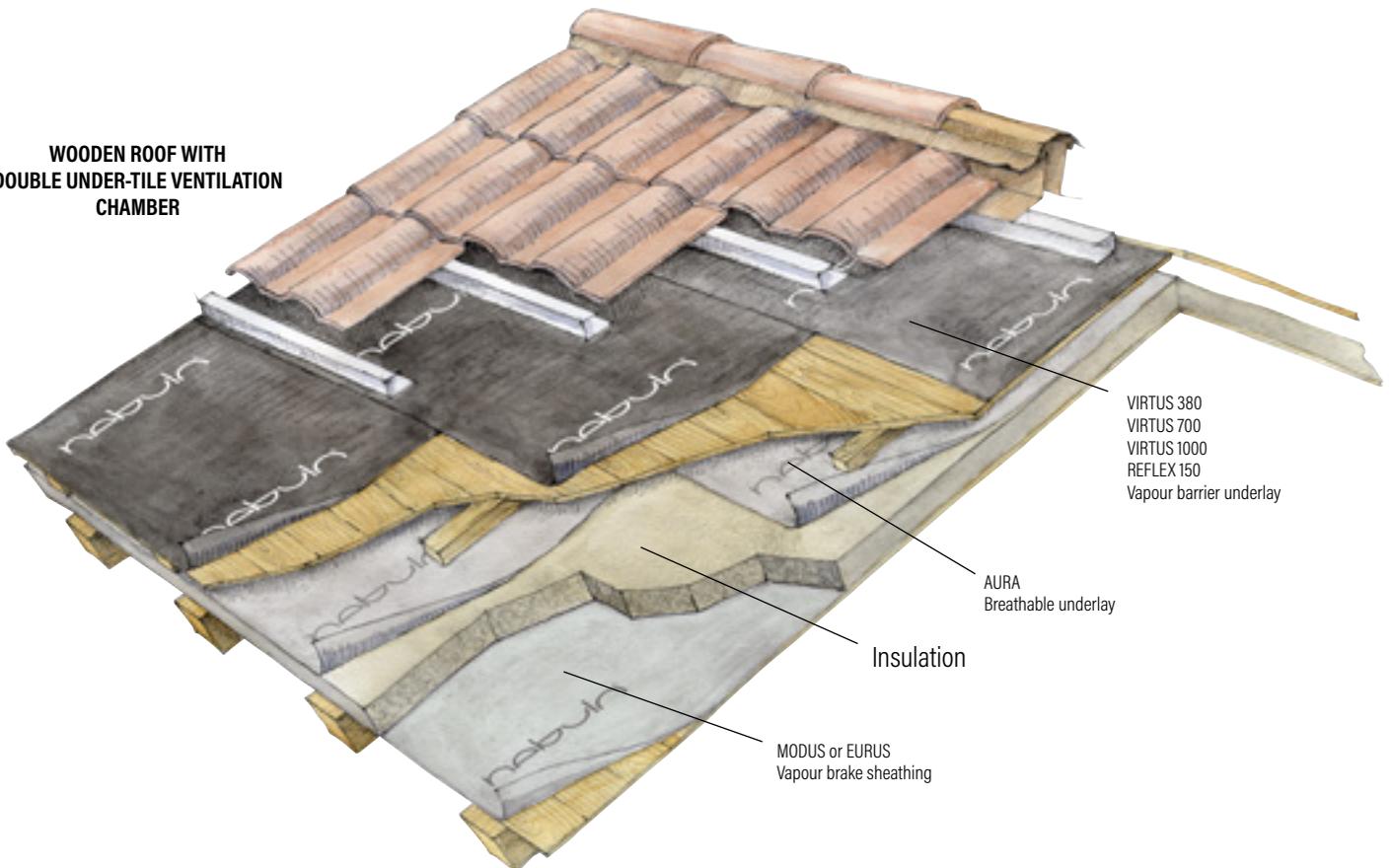
LAYER STRUCTURES

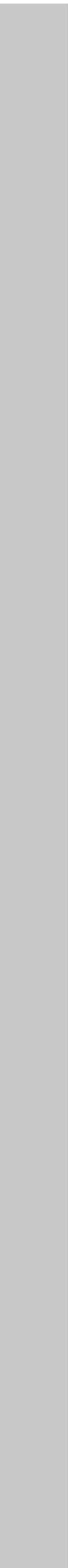
**HOLLOW-CORE CONCRETE ROOF WITH
SINGLE UNDER-TILE VENTILATION
CHAMBER**



VAPOUR BARRIER UNDERLAYS

**WOODEN ROOF WITH
DOUBLE UNDER-TILE VENTILATION
CHAMBER**



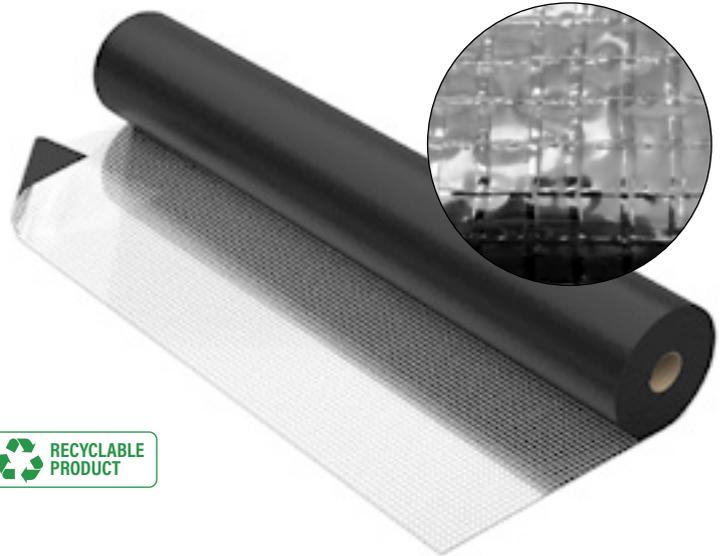


REFLECTING VAPOUR BARRIER UNDERLAY

Two-ply vapour barrier underlay bonded by means of a thermobonding process; non-woven polypropylene fabric base with reflecting top layer. Can be used on **roofs, walls and floors** as a **vapour permeability regulator**. Creates an active vapour barrier and prevents mould and mildew from forming. **REFLEX vapour barrier is complete with a special reflecting aluminium layer which reduces thermal radiation by 60%.**

REFLEX possesses high mechanical strength, as well as being non-slip and UV-resistant.

• Available in the 150 g/m² version



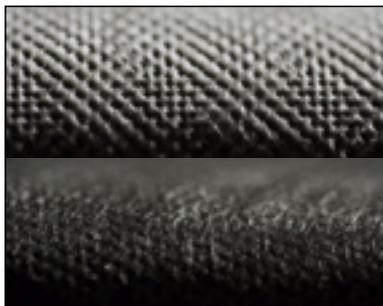
MODEL	CODE	DESCRIPTION	DIMENSIONS m	WEIGHT kg	ROLLS per PALLET	WEIGHT of PALLET kg	m ² per PALLET	Technical data sheet
	NEBV0150	REFLEX reflecting vapour barrier underlay	1,5x50	8,7	30	285	2,250	

SPECIFICATIONS

DESCRIPTION	STANDARD	UNIT of MEASUREMENT	Reflex
Weight	EN 13984: 2013	g/m ²	150±10%
Thickness	EN 13984: 2013	mm	0.26
Longitudinal tear strength	EN 13984: 2013	N	≥ 150
Transverse tear strength	EN 13984: 2013	N	≥ 150
Longitudinal tensile strength	EN 13984: 2013	N/5 cm	260
Transverse tensile strength	EN 13984: 2013	N/5 cm	170
Longitudinal elongation	EN 13984: 2013	%	≥ 12
Transverse elongation	EN 13984: 2013	%	≥ 7
UV resistance	EN 13984: 2013	months	3
Resistance to the passage of water	EN 13984: 2013	class	requirement fulfilled
Vapour transfer properties Sd	EN 13984: 2013	m	70
Fire resistance	EN 13984: 2013	class	E
Weight of roll	-	kg	8.7
Roll dimensions	-	m	1.50x50
Rolls per pallet	-	pcs	30
Meters per pallet	-	m ²	2,250
Weight of pallet	-	kg	285
Vapour permeability	-	μ	269230
Thermal conductivity	-	W/mK	0.22

Product subject to CE marking in accordance with Standard EN 13984: 2013 -2

COMPOSITION



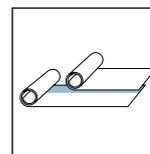
TOP PLY:

Sheet of metallized polypropylene coated in PETc to protect the reflecting layer.

UNDERSIDE FINISH:

Light non-woven polypropylene fabric with anti-UV and grip treatment. Withstands abrasion of wooden support. Contributes towards the mechanical strength of the entire product.

OVERLAP WHEN LAYING



At least 10 cm

RELATED PRODUCTS



Adhesive sealants

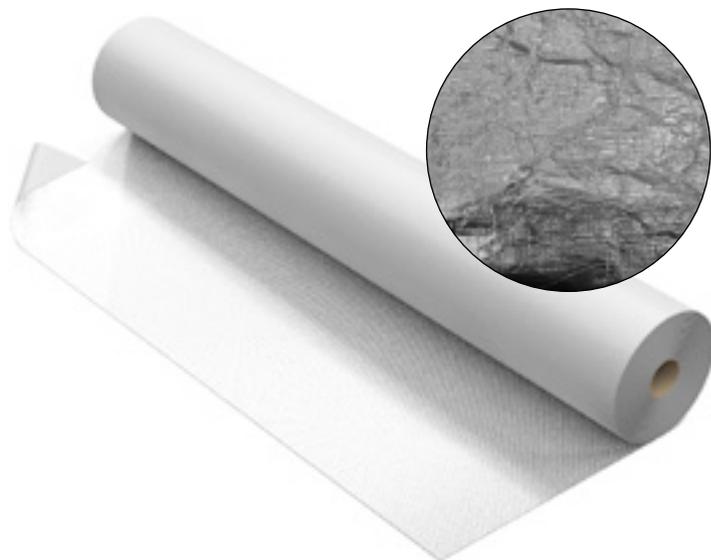
VAPOUR BARRIER UNDERLAY

REFLEX 195 is a two-ply underlay formed by a sheet of aluminium and a layer of glass fiber fabric.

It is a **non-combustible underlay** (A2-s1, d0 in accordance with Standard EN 13501-1).

Its key features include **extremely high reflectivity**, **remarkable resistance to vapour** while being **very easy to lay**

10-year warranty


 NON-COMBUSTIBLE
UNDERLAYS

MODEL	CODE	DESCRIPTION	DIMENSIONS m	WEIGHT kg	ROLLS per PALLET	WEIGHT of PALLET kg	m ² per PALLET	Technical data sheet
	REFLEX195	REFLEX195 Vapour barrier underlay	1.2x50	12	64	720	3,840	

SPECIFICATIONS

DESCRIPTION	STANDARD	UNIT of MEASUREMENT	REFLEX.195
Thickness	-	mm	0,1
Mass	-	g/m ²	195
Fire resistance	EN 13501-1	class	A2 - s1, d0
Vapour transfer properties Sd	EN 12572	m	>2,000
Resistance to the penetration of vapour	EN 12572	MN.s/g	>1,000
Vapour permeability	EN 12572	μ	20,000,000
Airtightness	EN 12114	m ³ /(hxm ² x50Pa)	0
UV resistance (without coating)	-	months	9
UV resistance (50% and 50 mm)	-	Permanent - hours tested	5,000
Temperature range	-	°C	-36 / +180
Longitudinal tear strength	EN 12310-1	N	150
Transverse tear strength	EN 12310-1	N	150
Longitudinal tensile strength	EN 12311-1	N/5 cm	960± 400
Transverse tensile strength	EN 12311-1	N/5 cm	950± 400
Longitudinal elongation	EN 12311-1	%	4
Transverse elongation	EN 12311-1	%	4

Product subject to CE marking in accordance with Standard EN 13859-1/EN 13859-2

BREATHABLE UNDERLAY

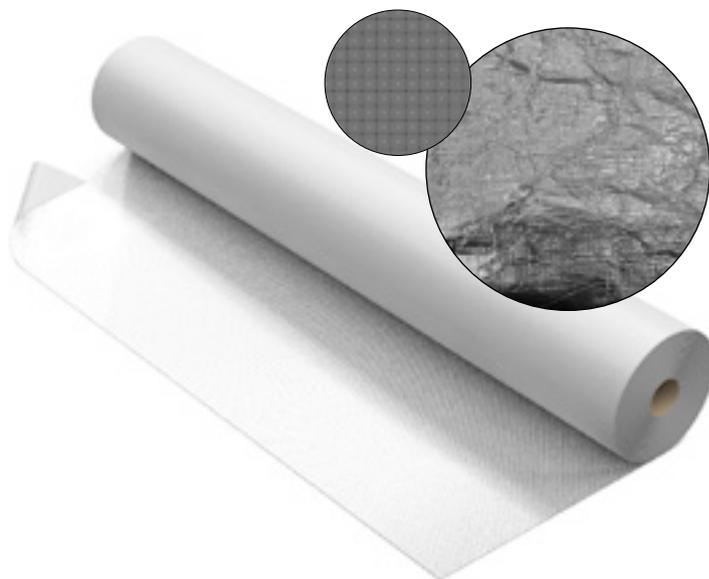
REFLEX 430 is a three-ply underlay formed by a sheet or micro-perforated aluminium, functional film and a layer of glass fiber fabric.

It is a **highly breathable, non-combustible underlay** (A2-s1, d0 in accordance with Standard EN 13501-1).

It provides **remarkably comfortable conditions in summer, excellent mechanical strength** while being also **easy to cut and shape for laying**.

Complete with two adhesive bands.

10-year warranty

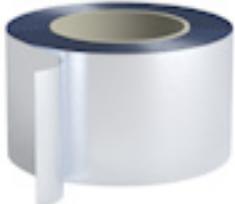


MODEL	CODE	DESCRIPTION	DIMENSIONS m	WEIGHT kg	ROLLS per PALLET	WEIGHT of PALLET kg	m ² per PALLET	Technical data sheet
	REFLEX430	REFLEX430 Breathable underlay	1.2x35	19	42	798	1764	

SPECIFICATIONS

DESCRIPTION	STANDARD	UNIT of MEASUREMENT	REFLEX.195
Thickness	-	mm	0.43
Mass	-	g/m ²	430
Permeability	EN 1928	class	W1
Fire resistance	EN 13501-1	class	A2 - s1, d0
Vapour transfer properties Sd	EN 12572	m	0.08
Resistance to penetration of vapour	EN 12572	MN.s/g	0.44
Vapour permeability	EN 12572	μ	235
Reflectivity	EN 16012	%	95
Airtightness	EN 12114	m ³ /(hxm ² x50Pa)	0.093
UV resistance (without coating)	-	months	9
UV resistance (50% and 50 mm)	-	Permanent - hours tested	5,000
Temperature range	-	°C	-36 / + 90
Longitudinal tear strength	EN 12310-1	N	580 ± 75
Transverse tear strength	EN 12310-1	N	450 ± 75
Longitudinal tensile strength	EN 12311-1	N/5 cm	3000 ± 400
Transverse tensile strength	EN 12311-1	N/5 cm	3200 ± 400
Longitudinal elongation	EN 12311-1	%	6 ± 2
Transverse elongation	EN 12311-1	%	5 ± 2

Product subject to CE marking in accordance with Standard EN 13859-1/EN 13859-2

MODEL	CODE	DESCRIPTION	WIDTH mm	LENGTH m	ROLLS per box	Technical data sheet
CLAUDO.50						
	NEBCL50	<p>CLAUDO.50 sealing tape adhesive on one side</p> <p>To be applied under the battens, on a level with each nail or screw. Ensures that the roof is really waterproof.</p>	50	10	12	
TENAX.60						
	NEBTE60	<p>TENAX.60 acrylic adhesive tape with polypropylene upper surface finish</p> <p>Used for sealing synthetic underlay overlaps so as to achieve a more watertight finish. Also ideal for mending small holes or tears.</p>	60	25	10	
NAPE.60						
	NEBPE60	<p>NAPE.60 acrylic adhesive tape made of low density polyethylene (LDPE)</p> <p>Used for sealing synthetic underlay overlaps so as to achieve a more watertight finish. Also ideal for mending small holes or tears.</p>	60	25	10	
NEBRAL.50						
	NEBRAL50	<p>Adhesive tape in Reflex Aluminium NEBRAL.50</p> <p>Used for sealing reflecting underlay overlaps so as to achieve a more watertight finish. Also ideal for mending small holes or tears.</p>	50	50	6	
NAREF.75						
	NAREF75	<p>Adhesive tape in non-combustible Aluminium NAREF.75</p> <p>Used for sealing non-combustible underlays and reflecting underlay overlaps so as to achieve a more watertight finish. Also ideal for mending small holes or tears.</p>	75	25	16	

Quantity per square meter of roof:
0.75 linear meters of sealing tape, considering a 15 cm overlap between sheets of underlay

LAYING ADVICE

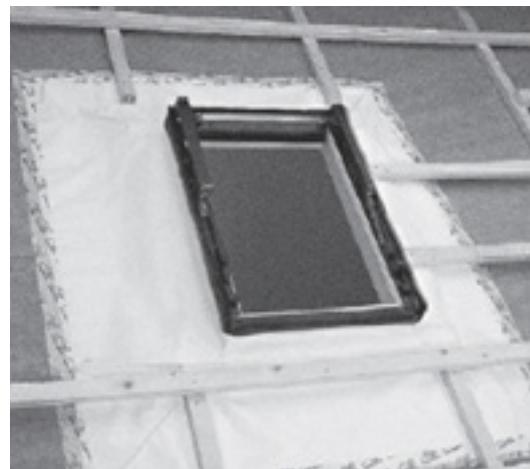
Lay the product by **beginning from the gutter line** and applying the successive layers **parallel to it. Overlap the different sheets of underlay as indicated** for each product.

Fix the layers in place using **clips or broad-headed nails**. For the best result it is advisable to seal **each nail using CLAUDO** sealing tape.

The underlay must be laid smoothly, without hollows or areas where water could collect. It must not be too taut, as this would impair its mechanical characteristics.

It is advisable to apply TENAX or NAPE tape where the layers overlap, so as to make the joins **more watertight**.

Once it has been laid, the underlay must be covered within the shortest possible time, in accordance with the UV resistance data in the technical data sheet.



CRITICAL POINTS

OPENINGS IN THE STRUCTURE

1. Using a cutter, make an "X" or "I" shaped cut on a level with the opening and fold back the resulting four flaps.
2. Now apply a suitable sealant, either from a roll or using an applicator. Make sure the drainage is channelled onto the surface of the waterproof membrane.

NAILS

3. Apply a strip of butyl under the battens so as to prevent thermal bridges or small infiltrations from forming.

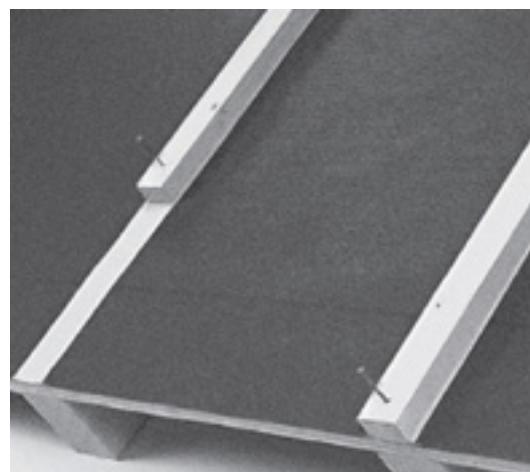


NOTE:

Only by correctly laying the roof elements can the soundness of the entire roof system be guaranteed.

Underlay must not be considered as the ultimate protection of an exposed roof.

The underlay must be covered as soon as possible so as to become an integral part of the roof system.





àncora
LIFELINE

ÀNCORA

PERMANENT ANCHORING DEVICE TYPE A

Standard UNI EN 795:2012

Standard CEN/TS 16415:13

Standard UNI 11578:2015

Anchor points in stainless steel or hot-dip galvanized steel. Designed for fastening to vertical, horizontal and slanting surfaces.

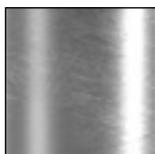
- Corrosion protection in accordance with 4.4 of standard EN 362:1992.



MATERIALS



Galvanized steel

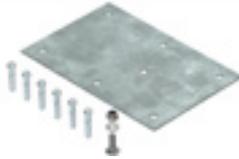


Stainless steel



Manual
PERMANENT ANCHORING DEVICE TYPE A

MODEL	CODE	DESCRIPTION	MATERIAL	Technical data sheet
	ANC0100A12	WING anchor point	Stainless steel	
	ANC0400A12	WING anchor point on slate	Stainless steel	
	ANC0200A02	Lanyard anchor point L = 700 mm	Stainless steel	
	ANC0900A02	Anchor point on rope to use with cable clamp ANC0005C11, connector ANC0061C02 and 5 or 10-meter cable (ANC0010C02 or ANC0011C02)	Stainless steel	
	ANC0800A12	Deformable anchor device, adjustable in height 230x80 mm - H from 320 to 480 mm	Stainless steel	
	ANC0500A02	Ring anchor point 60x40x3 mm	Stainless steel	
	ANC0700A02	Anchor point with double fixing points 130x60 mm - H 60 mm	Stainless steel	

MODEL	CODE	DESCRIPTION	MATERIAL	Technical data sheet
	ANC0600A12	Swivel WING in stainless steel 156x60 mm to be used in conjunction with the post	Stainless steel	
	ANC0001A13	Pack. 5 plates - multiple anchor adjuster 175x55x4 mm	Galvanized steel	
	ANC0010A13	Pack. 5 pcs galvanized steel adjuster plate over insulation 200x180x2 mm	Galvanized steel	
	ANC0002A13	Pack. 5 pcs. bracket adjustable from 70 to 80 mm	Galvanized steel	
	ANC0003A13	Pack. 5 pcs. bracket adjustable from 100 to 115 mm	Galvanized steel	
	ANC0004A13	Pack. 5 pcs. bracket adjustable from 115 to 135 mm	Galvanized steel	
	ANC0005A13	Pack. 5 pcs. bracket adjustable from 135 to 160 mm	Galvanized steel	
	ANC0006A13	Pack. 5 pcs. bracket adjustable from 185 to 210 mm	Galvanized steel	
	ANC0007A13	Pack. 5 pcs. bracket adjustable from 210 to 240 mm	Galvanized steel	
	ANC0008A03	Bolt-around tie-back anchor kit 225/325x50x8 mm 2 threaded bars 12x350 mm	Galvanized steel	
	ANC0009A03	Plate for fixing anchor point 300x200x3 mm	Galvanized steel	

TEMPORARY ANCHORING DEVICE TYPE B

Standard UNI EN 795: 2012
Standard CEN/TS 16415:13

Anchor device type B with one or more stationary anchor points without the need for structural anchors or elements that fasten it to the structure.

MATERIALS



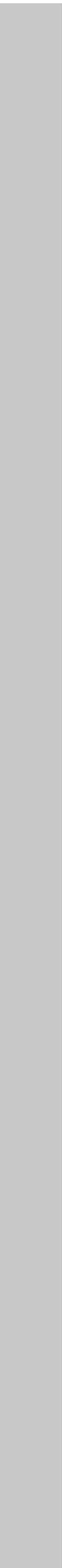
Galvanized steel



Manual
TEMPORARY ANCHORING DEVICE TYPE B



MODEL	CODE	DESCRIPTION	MATERIAL	Technical data sheet
	ANC0400B04	Portable anchor kit for skylights 35/124 cm	Galvanized steel	
	ANC0500B14	Temporary lifeline for 2 workers 20 m	-	
	ANC0600B14	Temporary lifeline for 2 workers 30 m	-	



**SAFE EASYLINE
ANCHOR LINE TYPE C**



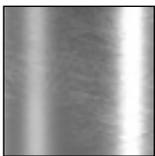
Standard UNI 11578:2015

Safe Easyline deformable anchor line type C conforms to standard UNI 11578:15.

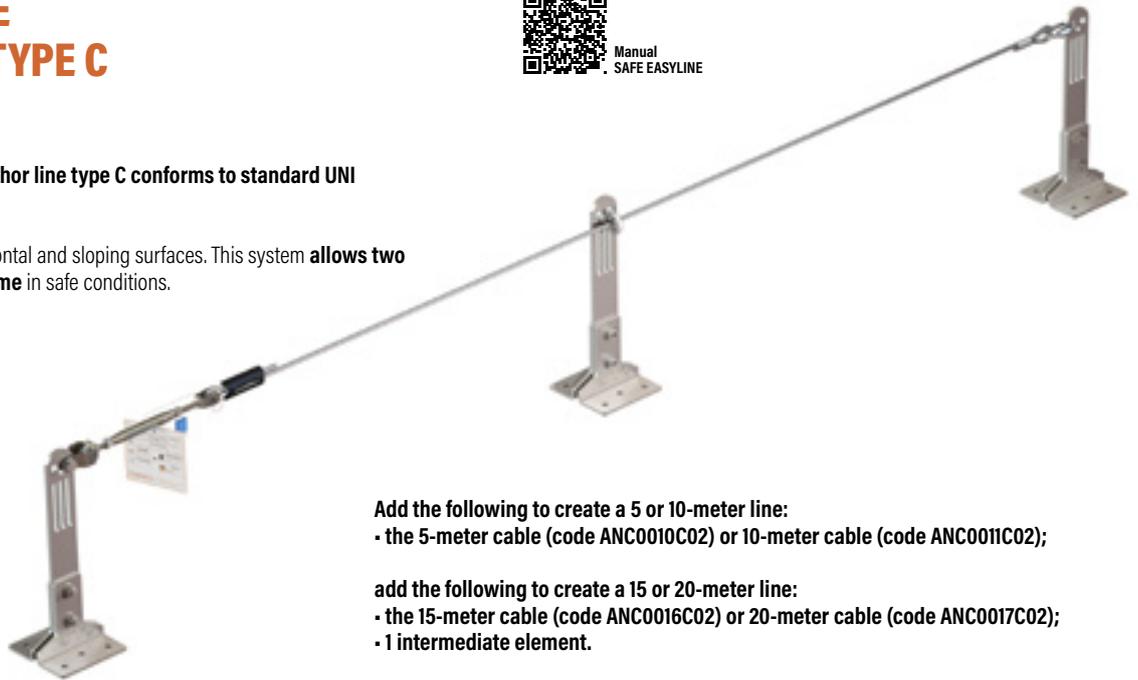
For installations on ridges, horizontal and sloping surfaces. This system **allows two people to work at the same time** in safe conditions.

- Stainless steel components.
- 10 m sections.
- Length from 5 to 20 m MAX.

MATERIALS



Stainless steel



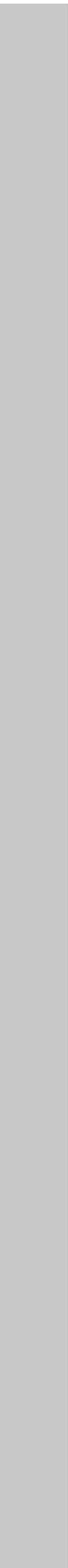
Add the following to create a 5 or 10-meter line:

- the 5-meter cable (code ANC0010C02) or 10-meter cable (code ANC0011C02);

add the following to create a 15 or 20-meter line:

- the 15-meter cable (code ANC0016C02) or 20-meter cable (code ANC0017C02);
- 1 intermediate element.

MODEL	CODE	DESCRIPTION	MATERIAL	Technical data sheet
	ANC0101C02	SAFE EASYLINE kit flat roof base	Stainless steel	
	ANC0201C02	SAFE EASYLINE kit ridge cap base	Stainless steel	
	ANC0301C02	SAFE EASYLINE kit pitch roof base	Stainless steel	
	ANC0401C02	Intermediate element flat base	Stainless steel	
	ANC0501C02	Intermediate element ridge cap base	Stainless steel	
	ANC0601C02	Intermediate element pitch roof base	Stainless steel	



ANCHOR LINE TYPE C

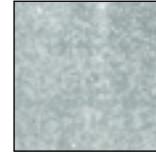
Standard UNI EN 795:2012
Standard CEN/TS 16415:13
Standard UNI 11578:2015

Flexible, horizontal anchor line that allows **4 people to work at the same time in full safety**. Designed for various different applications and configurations with interfacing structural anchor elements. Uses a flexible anchor line, which deviates no more than 15° from the horizontal plane (when measured between the end and intermediate anchors at any point along the length). If a worker falls, the energy absorber will warp and must be replaced after the event.

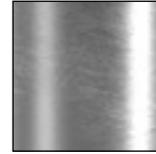
The elements have been designed to resolve **all requirements in every situation and can be used for pitched roofs, flat roofs, wooden roofs, hollow-core concrete roofs, with flat tiles, concave tiles or metal roof cladding.**

- Stainless steel components.
- Corrosion protection in accordance with 4.4 of standard EN 362:2012.
- 20 m sections.

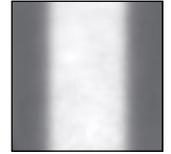
MATERIALS



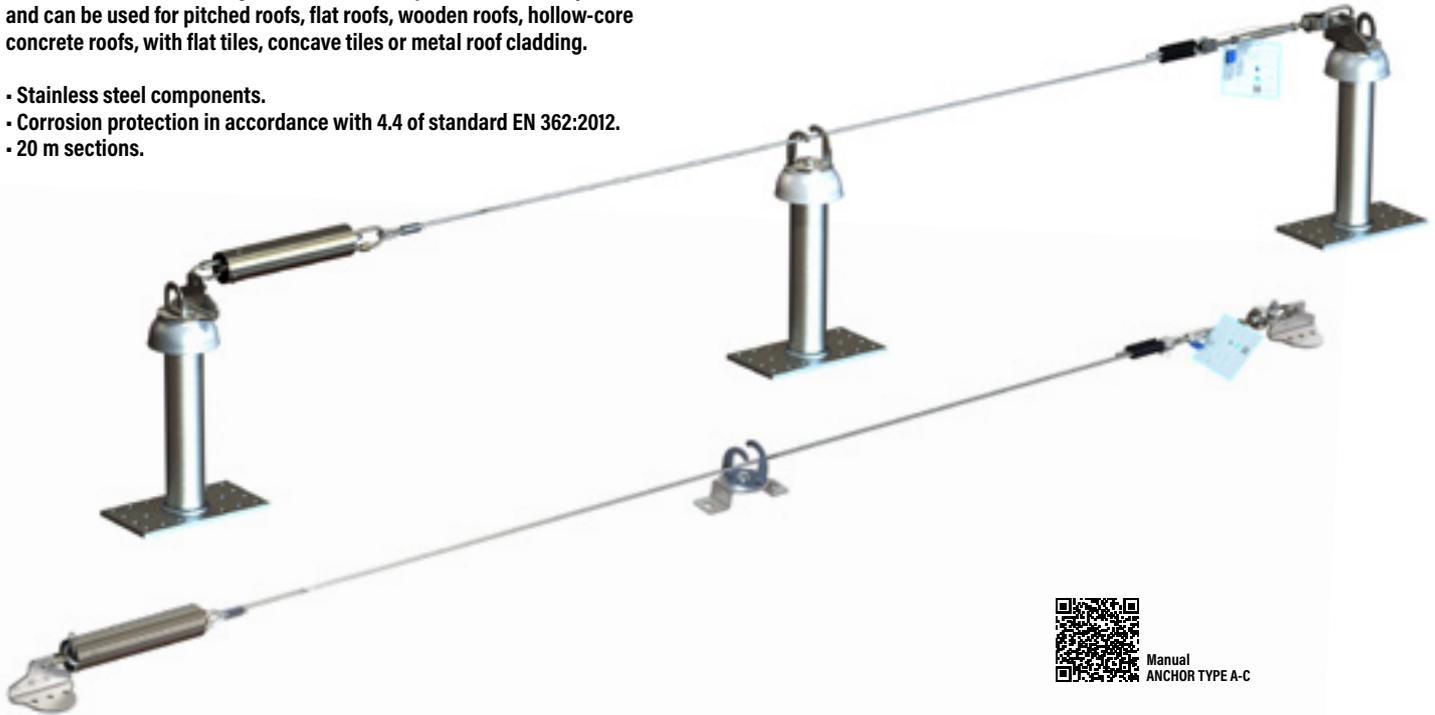
Galvanized steel



Stainless steel



aluminium



Manual
ANCHOR TYPE A-C

MODEL	CODE	DESCRIPTION	MATERIAL	Technical data sheet
	ANC0003C24	Complete kit with tensioner/energy absorber and pair of end pieces	-	
	ANC0002C14	Energy absorber (safeguards the falling user by dissipating the energy produced. Must always be replaced after a fall).	-	
	ANC0038C12	Cable tensioner (complete with mechanism that tightens the cable correctly without the use of measuring instruments)	Stainless steel	

MODEL	CODE	DESCRIPTION	MATERIAL	Technical data sheet
	ANC0005C11	Cable clamp set	Aluminium	
	ANC0040C02	Corner element for posts 156x60 mm	Stainless steel	
	ANC0041C12	Support for internal corner 120x120 mm	Stainless steel	
	ANC0042C12	Support for external corner 120x120 mm	Stainless steel	
	ANC0054C02	Support for upper corner	Stainless steel	
	ANC0004C04	Functional stop	Stainless steel	
	ANC0056C02	H95 intermediate cable gland	Stainless steel	
	ANC0008C12	Intermediate cable gland	Stainless steel	
	ANC0061C02	Connecting link	Stainless steel	
	ANC0010C02	Stainless steel cable Ø 8 mm 7x19 strands L=5 m	Stainless steel	
	ANC0011C02	Stainless steel cable Ø 8 mm 7x19 strands L=10m	Stainless steel	
	ANC0016C02	Stainless steel cable Ø 8 mm 7x19 strands L=15m	Stainless steel	
	ANC0017C02	Stainless steel cable Ø 8 mm 7x19 strands L=20m	Stainless steel	
	ANC0019C02	Stainless steel cable Ø 8 mm 7x19 strands L=30m	Stainless steel	
	ANC0021C02	Stainless steel cable Ø 8 mm 7x19 strands L=40m	Stainless steel	
	ANC0023C02	Stainless steel cable Ø 8 mm 7x19 strands L=50 m	Stainless steel	
	ANC0025C02	Stainless steel cable Ø 8 mm 7x19 strands L=60 m	Stainless steel	
	ANC0027C02	Stainless steel cable Ø 8 mm 7x19 strands L=70 m	Stainless steel	
	ANC0029C02	Stainless steel cable Ø 8 mm 7x19 strands L=80 m	Stainless steel	
	ANC0031C02	Stainless steel cable Ø 8 mm 7x19 strands L=90 m	Stainless steel	
ANC0033C02	Stainless steel cable Ø 8 mm 7x19 strands L=100 m	Stainless steel		

MODEL	CODE	DESCRIPTION	MATERIAL	Technical data sheet
	ANC0700C13	Post with 180x180 mm plate for flat base roof . Height 300 mm - Ø 80 mm.	Galvanized steel	
	ANC0100C13	Post with 300x160 mm plate for flat base roof . Height 500 mm - Ø 80 mm.		
	ANC0800C13	Post with 250x250 mm plate for flat base roof . Height 700 mm - Ø 80 mm.		
	ANC0900C13	Post with 250x250 mm plate for flat base roof . Height 1,000 mm - Ø 80 mm.		
	ANC1000C13	Post with 180x180 mm slanting plate for pitch base roof . Height 300 mm - Ø 80 mm.	Galvanized steel	
	ANC0200C13	Post with 300x160 mm slanting plate for pitch base roof . Height 500 mm - Ø 80 mm.		
	ANC1200C13	Post with 300x160 mm plate for ridge line . Height 300 mm - Ø 80 mm.	Galvanized steel	
	ANC0300C13	Post with 300x160 mm plate for ridge line . Height 500 mm - Ø 80 mm.		
	ANC0400C13	Casting post. Useful height 400mm - Ø 80 mm	Galvanized steel	
	ANC1400C23	Post for under-roof anchorage: Height 2,000 mm with brackets. Bracing ANC0007C13.	Galvanized steel	
	ANC1500C23	Post for under-roof anchorage: Height 3,000 mm with brackets. Bracing ANC0007C13.	Galvanized steel	
	ANC1300C13	Post for mounting on wall. Useful height 500 mm - cross-section 80x80 mm 250x250 mm base plate	Galvanized steel	

POSTS IN OTHER SIZES AND/OR POSTS IN STAINLESS STEEL ARE ALSO AVAILABLE ON REQUEST (consult our manual for the specifications)
POSTS WITH VERTICAL WALL PLATE h 50 cm.

MODEL	CODE	DESCRIPTION	MATERIAL	Technical data sheet
	ANC0002C13	160x300 mm plate for beam fixing brackets With 4 bars 12x350 mm	Galvanized steel	
	ANC0001C13	Kit for fixing post to joists Length 830 mm - cross-section 60x50 mm	Galvanized steel	
	ANC0004C13	Single kit for bolt-around-tie-back clamping with 4 threaded bars 12x350 (L = 430 mm)	Galvanized steel	
	ANC0003C13	Double kit for bolt-around-tie-back post clamping with 4 threaded bars 12x350 (L = 433mm)	Galvanized steel	
	ANC0007C13	Under-roof post bracing	-	

ANCHORING SYSTEMS TYPE A-C FOR SHEET METAL

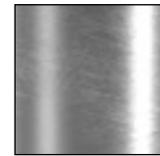
Standard UNI EN 795:2012
Standard UNI 11578:15
Standard CEN/TS 16415:13

Installation on sheet metal and corrugated panels with reduced loads at the ends.
Up to 2 **workers at the same time.**

• 16 m sections.



MATERIALS



Stainless steel



aluminium

MODEL	CODE	DESCRIPTION	MATERIAL	Technical data sheet
	ANC0003L22*	Anchor plate on corrugated sheet metal 530x295x3 mm including 18 rivets	Stainless steel	
	ANC0005L22	Absorber - tensioner kit	Stainless steel	
	ANC0004L12	Cable gland on corrugated sheet H150	Stainless steel	
	ANC1000L02	Anchor point for seamed sheet metal	Stainless steel	

* **NOTE:** consult the technical manual to check compatibility with the various types of panels. Contact the Rasera Technical Office if in doubt.

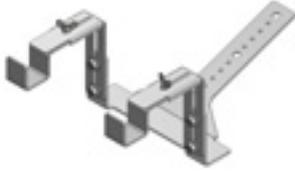
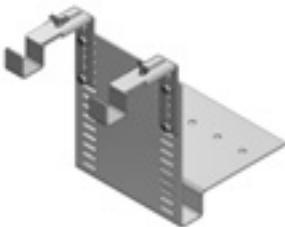
TYPE A-C

MODEL	CODE	DESCRIPTION	MATERIAL	Technical data sheet
	ANC0001L04	Butyl sealing tape L=15m (1 meter per plate)	Butyl	
	ANC0043C02	Stainless steel withdrawable carrier for lifeline	Stainless steel	
	ANC0010C02	Stainless steel cable Ø 8 mm 7x19 strands L=5 m	Stainless steel	
	ANC0011C02	Stainless steel cable Ø 8 mm 7x19 strands L=10m	Stainless steel	
	ANC0016C02	Stainless steel cable Ø 8 mm 7x19 strands L=15m	Stainless steel	
	ANC0017C02	Stainless steel cable Ø 8 mm 7x19 strands L=20m	Stainless steel	
	ANC0019C02	Stainless steel cable Ø 8 mm 7x19 strands L=30m	Stainless steel	
	ANC0021C02	Stainless steel cable Ø 8 mm 7x19 strands L=40m	Stainless steel	
	ANC0023C02	Stainless steel cable Ø 8 mm 7x19 strands L=50 m	Stainless steel	
	ANC0025C02	Stainless steel cable Ø 8 mm 7x19 strands L=60 m	Stainless steel	
	ANC0027C02	Stainless steel cable Ø 8 mm 7x19 strands L=70 m	Stainless steel	
	ANC0029C02	Stainless steel cable Ø 8 mm 7x19 strands L=80 m	Stainless steel	
	ANC0031C02	Stainless steel cable Ø 8 mm 7x19 strands L=90 m	Stainless steel	
ANC0033C02	Stainless steel cable Ø 8 mm 7x19 strands L=100 m	Stainless steel		



ANCHORING ON SHEET METAL TYPE A-C

ACCESSORIES FOR ANCHORING SYSTEMS TYPE A-C

MODEL	CODE	DESCRIPTION	MATERIAL	Technical data sheet
	ANC0001A14	"Anchoring device" data plate Dimensions 90x60 mm	Aluminium	
	ANC0003A14	"Access point" identification plate Dimensions 125x110 mm	Aluminium	
	ANC0003S02	Wall-mounted ladder retainer clip	Stainless steel	
	ANC0004S02	Ladder retainer clip. Adjustable height for channels	Stainless steel	
	ANC0005S02	Ladder retainer clip. Adjustable height for pitches	Stainless steel	



Manual
LADDER RETAINER

ACCESSORIES
TYPE A-C and C

ACCESSORIES FOR ANCHORING SYSTEMS TYPE C

MODEL	CODE	DESCRIPTION	MATERIAL	Technical data sheet
	ANCC8D	Valley with straight collar Ø 80 mm - 50x50 cm	Stainless steel Lead	
	ANCC80C	Waterproofing cover in aluminium with adhesive and metal clamp Ø 80 mm	Aluminium	
	ANCCP8D	Post cover in painted aluminium Ø 80 mm - H 50 cm	Aluminium	

LADDERS

Ladders formed by aluminium sections complete with vertical side rails and non-slip rungs.

When joined together, the different types of sections can be formed into a broad variety of even very complex configurations.

- Designed and made in accordance with art. 113 of Legislative Decree D.Lgs 81/2008
- Maximum bearing capacity: 150 kg distributed over 2 linear meters

CAGE

Cage formed by modular elements in aluminium. Designed to adapt perfectly to the ladders according to the logic by which they were created.

BRACKETS

The brackets for fixing to the wall are made of galvanized steel. They are available in different sizes and lengths ranging from 150 to 1300 mm.

COMPONENTS AND ACCESSORIES

Components and accessories to complete caged ladders, adapt them to all requirements and make them even safer. These components are also designed to integrate perfectly with the other elements in our Ladder System.

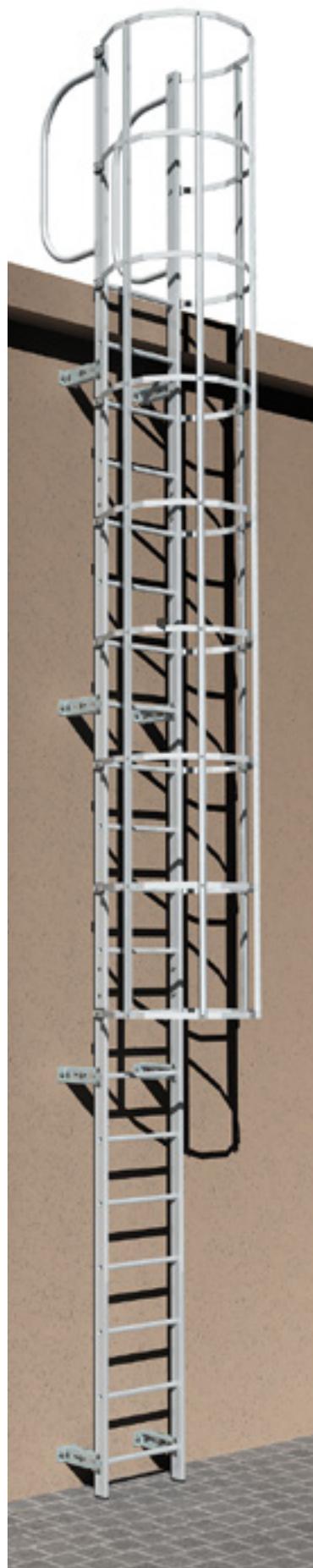
ASSEMBLY

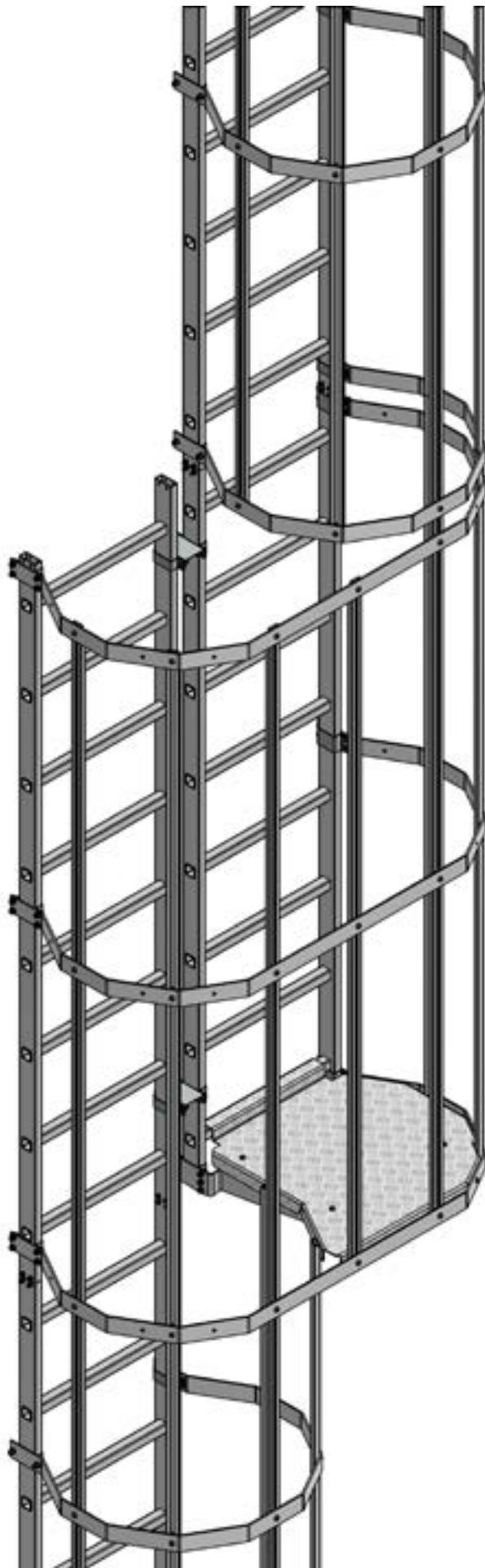
The components need not be drilled when they are assembled. The sections and accessories are already perforated and are designed to facilitate the assembly operations.

Quotations tailored to customer requirements are supplied on request.



Manual
LADDERS WITH AND WITHOUT CAGES





WALKWAYS

Our **walkways** are **completely made of aluminium** and consist of:

- **Side profiles** allowing **sections of up to 8 meters** to be created.
- **Non-slip walkway surfaces** 24 cm in depth and up to 120 cm in width.
- **Safety rails** on one or both sides. Easily assembled using stainless steel nuts and bolts.

The construction of ladders and walkways begins by designing the profiles, which are then assembled and welded together to form modules pre-engineered for easy assembly on site and application of safety rails.

- **The walkways conform to Decree Law D.L. 81, art 113, subsection 2 and to technical standard EN ISO 14122-2/3.**

Quotations tailored to customer requirements are supplied on request.



Instructions
WALKWAYS





WALKWAYS

SAFETY RAILS

The Safety Rails are designed for installation on all types of roofing and for creating Collective Protection Systems. Collective Protection Systems against falling from heights are preferable to anchor devices used with Personal Protective Equipment.

Safety rails can be installed in a great number of configurations: fastened to flat surfaces or walls, or resting on the roof with the use of special counterweights.

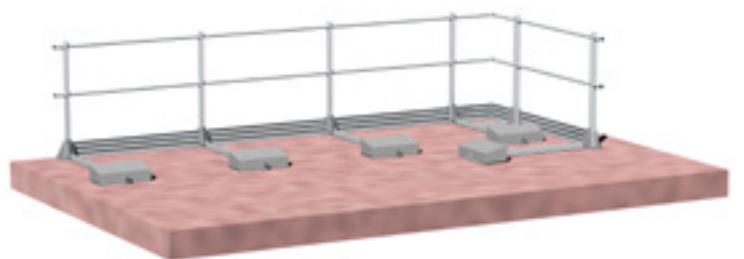
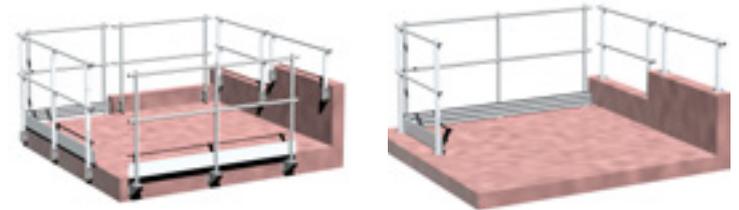
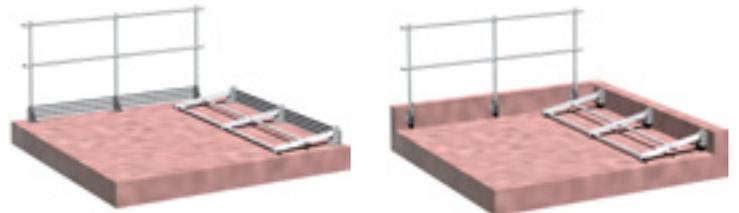
The elements that form the system include extruded aluminium alloy profiles, die-cast aluminium alloy connecting elements, stainless steel supports, nuts and bolts. Use of these materials provides the product with excellent corrosion resistance. The elements can be promptly shipped since they are modular.

The safety rail line has been designed in compliance with standard UNI-EN14422-3 on permanent safety railings.

Safety rails compliant with standard NTC 2018 can be supplied on request.

- The safety rail must be able to support $F_{min}=300N/m$ minimum service load (to be multiplied by the distance in meters between the axes of two successive uprights applied horizontally to the top of the upright and in the least favourable points along the handrail.
- Maximum sag during application of the load must not exceed 30 mm.
- Minimum height: 1100 mm.
- Maximum clear height between rafters: 500 mm.
- Minimum height of foot retainer band: 100 mm.

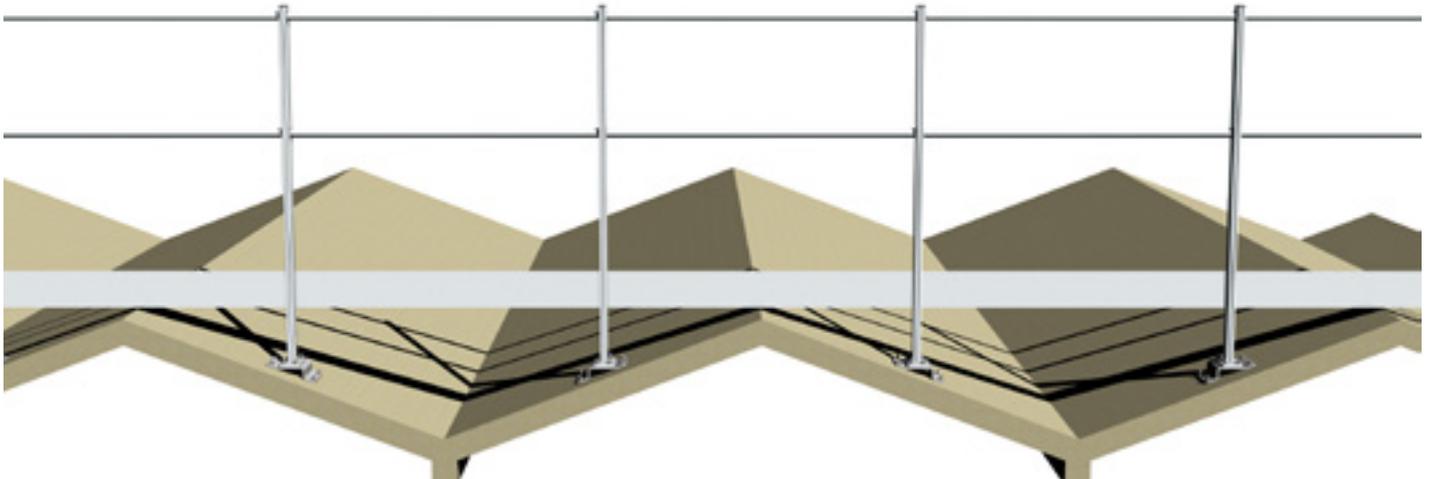
Quotations tailored to customer requirements are supplied on request.



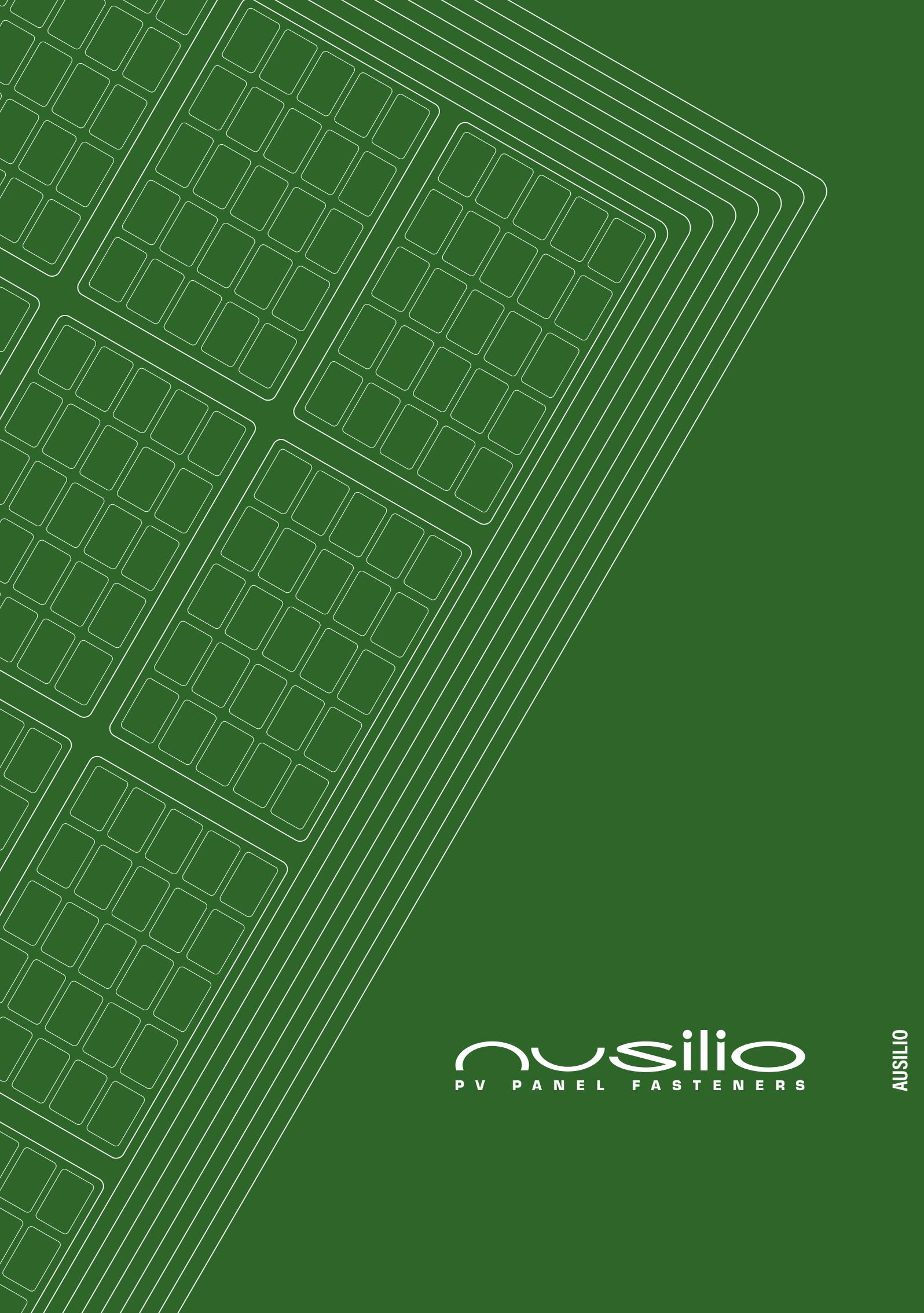
Manual - Safety Rails
COMPLIANT WITH STANDARD NTC 2018



Manual - Safety Rails
COMPLIANT WITH STANDARD UNI-EN14122-3



SAFETY RAILS



nusilio
P V P A N E L F A S T E N E R S

AUSILIO

AUSILIO is the new range of products developed by **Officine Rasera** that focuses on fastenings for photovoltaic panels.

The range includes a **vast assortment of solutions** for installing photovoltaic panels.

AUSILIO comprises a **broad selection of modular components and articles** enabling **panels of all shapes and sizes** to be anchored to **every type of roof without the need to cut or alter** the components.

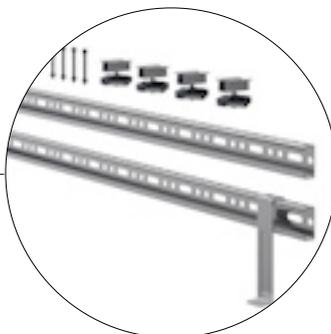
The AUSILIO system guarantees rapid installation and safe anchoring.

THE ADVANTAGES OF THE AUSILIO SYSTEM

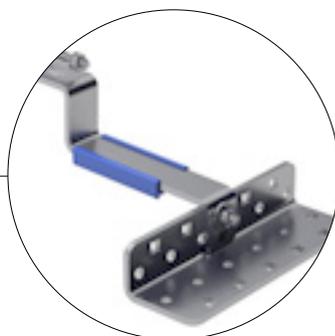
- **main profiles in zinc-magnesium steel (ZM200)**
particularly suitable in harsh surroundings, such as:
high-chlorine, -ammonia or -SO₂ environments;
- **zinc-nickel galvanized supporting profile brackets; brackets on fretted/seamed stainless steel;**
- **stainless steel brackets for fastening photovoltaic panels;**
- **stainless steel nuts, bolts and screws;**
- **load on panel (in case of snow): up to 1 kN/m²;**
- **calculation of wind and snow load on roof: on request;**
- **wind resistance: up to 28 m/s;**
- **simple and intuitive for rapid installation;**
- **adjustable components;**
- **long-lasting;**
- **modular;**
- **materials packaged for easy transport;**
- **tested materials with CE certification on request;**

All fastening kits, for both flat and sloping roofs, are supplied in convenient boxes for easy handling, transport and storage.

STANDARD KIT



FASTENING BRACKETS



SECURING ACCESSORIES



STANDARD KIT

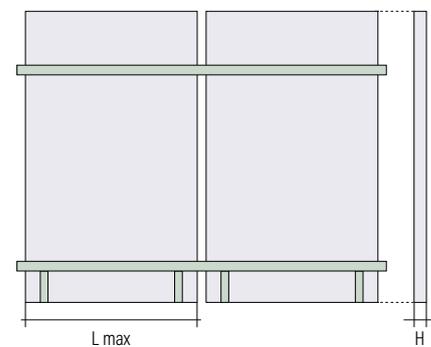
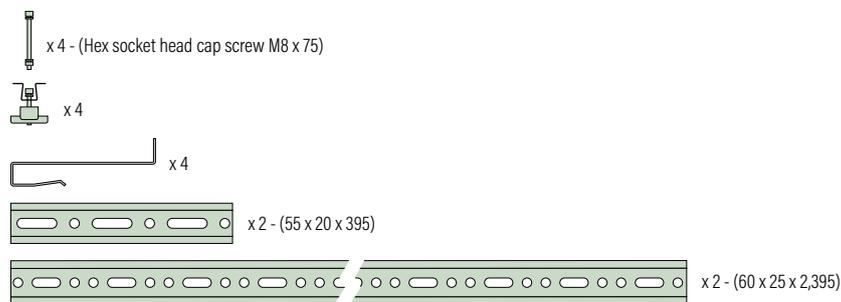
The **AUSILIO system** comprises three standard kits for fixing photovoltaic panels: the **"duo"** system, which can accommodate two panels in the vertical position, the **"mono sky"** and **"mono land"** systems, the former designed for fixing one single panel in the vertical position and in the horizontal position the latter.

All the **AUSILIO kits** are supplied with all the accessories required for fixing the panels.

"DUO" KIT COMPRISING FRAME FOR FIXING TWO VERTICAL PANELS



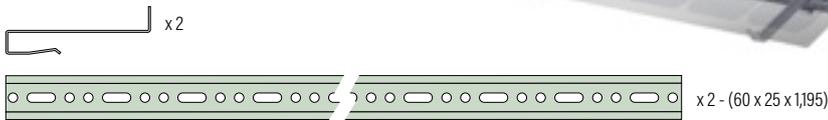
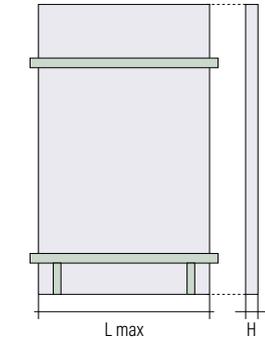
AUSILIO
"DUO"



CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0200K01	Kit for fixing two vertical panels L max. 1,150 mm; H: 30-35 mm (2.4 m)	1	zinc-magnesium

"MONO SKY"

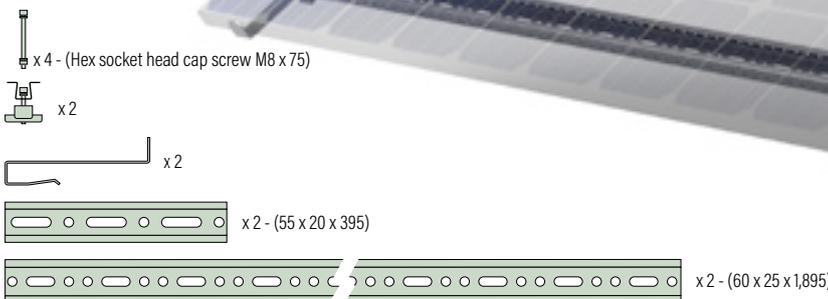
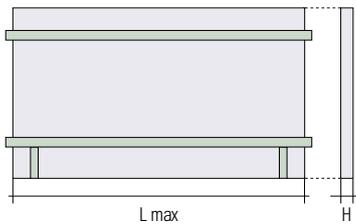
KIT COMPRISING FRAME FOR FIXING ONE VERTICAL PANEL



CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0100K01	Kit for fixing one vertical panel L max. 1,150mm	1	zinc-magnesium

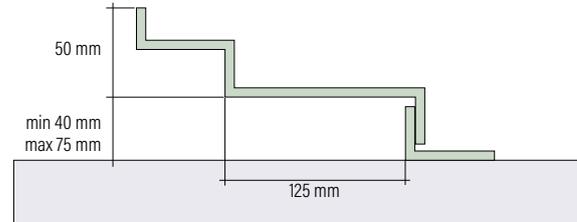
"MONO LAND"

KIT COMPRISING FRAME FOR FIXING ONE HORIZONTAL PANEL



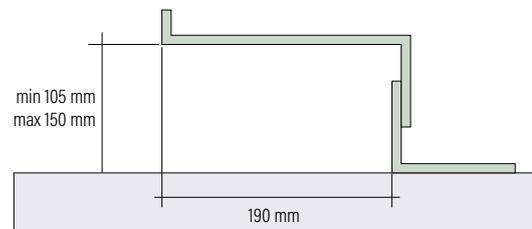
CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0300K01	Kit for fixing one horizontal panel L max. 1,850 mm; H: 30-35 mm (1.9 m)	1	zinc-magnesium

TILE BRACKETS
BRACKETS FOR ROOFS WITH TILES



CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0100S01	Fastening brackets for tiled roofs	2	zinc/nickel galvanizing

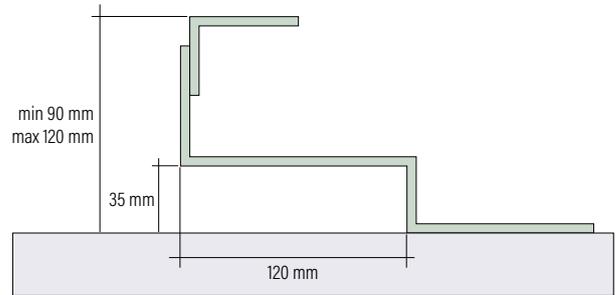
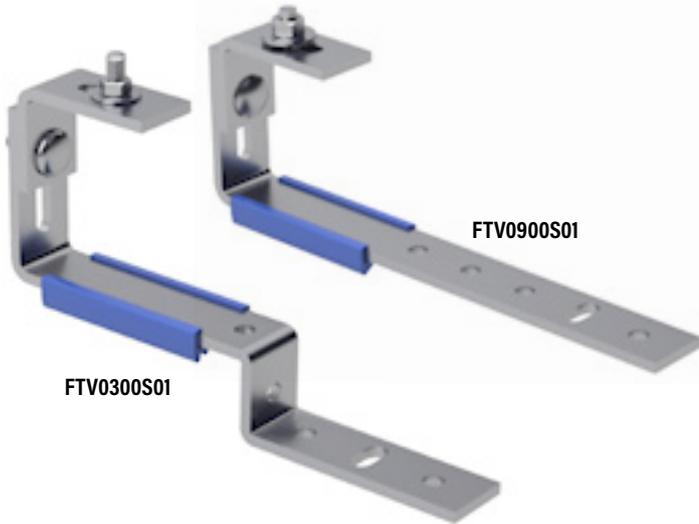
CONCAVE TILE BRACKETS
BRACKETS FOR ROOFS WITH CONCAVE TILES



CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0200S01	Fastening brackets for roofs with concave tiles	2	zinc/nickel galvanizing

BRACKETS FOR SLATE TILES OR CANADIAN SHINGLES

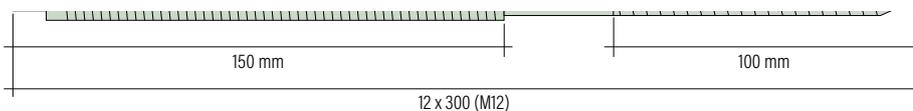
BRACKETS FOR ROOFS WITH SLATE TILES OR CANADIAN SHINGLES



CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0300S01	Fastening brackets for roofs with slate tiles or Canadian shingles	2	zinc/nickel galvanized
FTV0900S01	Fastening brackets for roofs with flat slate tiles or Canadian shingles	2	zinc/nickel galvanized

BRACKETS FOR CORRUGATED OR WOODEN ROOFS

BRACKETS FOR CORRUGATED OR WOODEN ROOFS

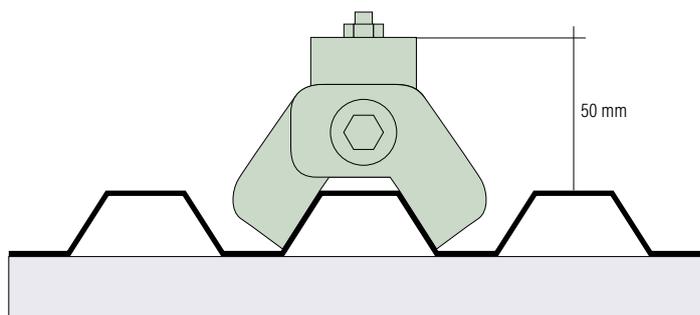


CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0400S02	Fastening brackets for corrugated or wooden roofs	2	stainless steel

BRACKETS FOR FRETTED METAL SHEET
BRACKETS FOR FRETTED METAL SHEET ROOFING

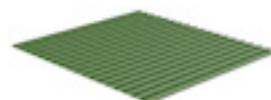


AUSILIO
"BRACKETS FOR FRETTED
METAL SHEET"

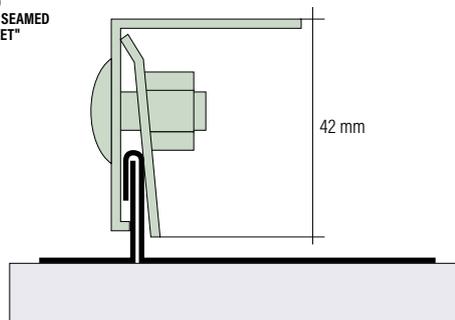


CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0500S02	Fastening brackets for fretted metal sheet roofing	2	stainless steel

BRACKETS FOR SEAMED METAL SHEET
BRACKETS FOR SEAMED METAL SHEET ROOFING



AUSILIO
"BRACKETS FOR SEAMED
METAL SHEET"



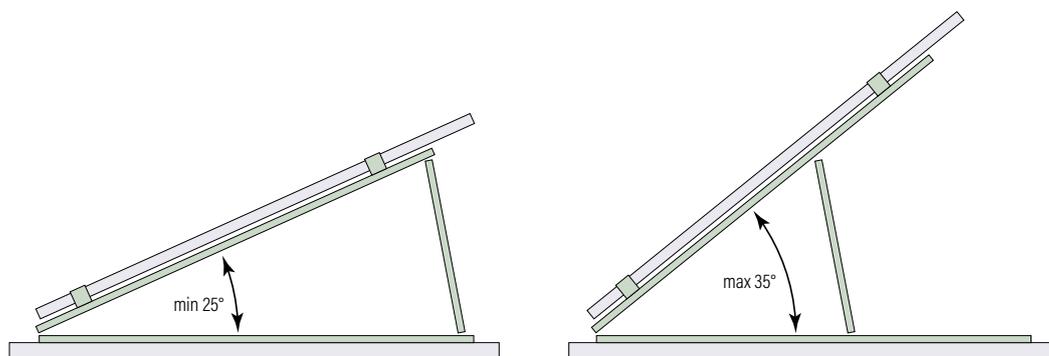
CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0600S02	Fastening brackets for seamed metal sheet roofing	2	stainless steel

BRACKETS FOR FLAT ROOFS

BRACKETS WITH ADJUSTABLE SLOPE FOR FLAT ROOFS



AUSILIO
"BRACKETS FOR FLAT
ROOFS"



CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0800S01	Fastening brackets for flat roofs - L max: 1,495 mm (25°-35°)	1	zinc-magnesium
FTV0700S01	Fastening brackets for flat roofs - L max: 995 mm (25°-35°)	1	zinc-magnesium

TENSION BRACE KIT



STEEL CABLE
Length: 220 cm
ø 5 mm

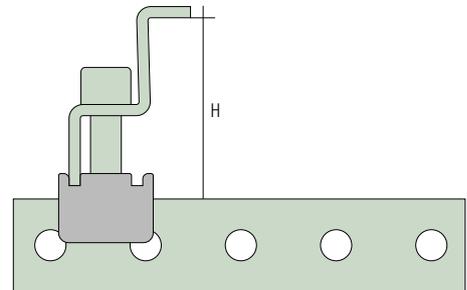
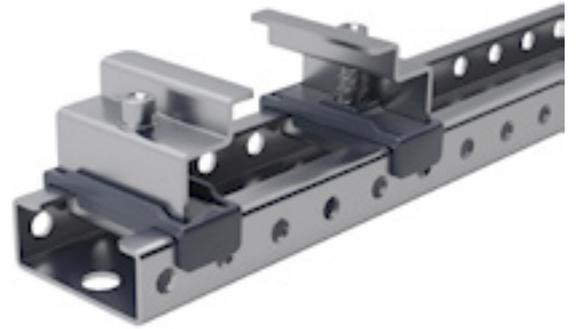


CLAMPS (2 PCS)



CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0001K02	Tension brace kit - Stainless steel - L: 2,200 mm	1	stainless steel

END CLAMPS



CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0002K01	Set of end clamps - H: 30 mm	4	stainless steel
FTV0003K01	Set of end clamps - H: 32 mm	4	stainless steel
FTV0004K01	Set of end clamps - H: 35 mm	4	stainless steel

PROFILE FOR FRETTED SHEET



AUSILIO
"PROFILE FOR FRETTE
SHEET - ALUMINIUM"

CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0001C03	Aluminium supporting profile for fretted sheet metal roofing L = 500mm	1	aluminium
FTV0002C03	Aluminium supporting profile for fretted sheet metal roofing L = 6600mm	1	aluminium

END CLAMP - ALUMINIUM



AUSILIO
"END CLAMP - ALU-
MINIUM"

CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0003C03	End clamp for aluminium - H = 30mm	1	aluminium
FTV0004C03	End clamp for aluminium - H = 32mm	1	aluminium
FTV0005C03	End clamp for aluminium - H = 35mm	1	aluminium

INTERMEDIATE CLAMP - ALUMINIUM

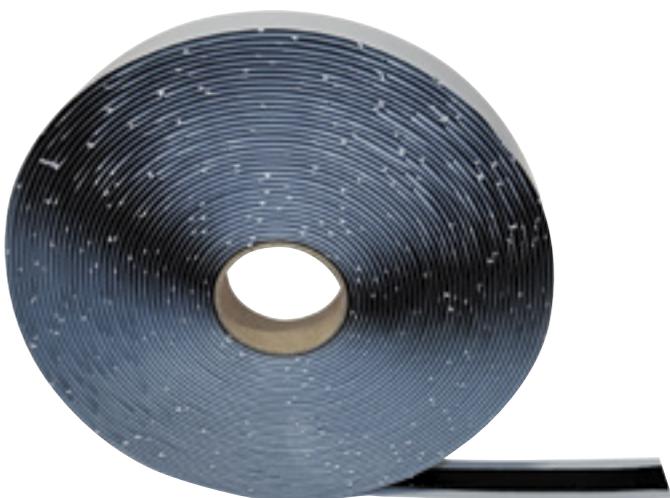


AUSILIO
"INTERMEDIATE CLAMP -
ALUMINIUM"

CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0010C03	Intermediate clamp for aluminium - H = from 30 mm to 35 mm	1	aluminium
FTV0011C03	Intermediate clamp for aluminium - H = from 36 mm to 41 mm	1	aluminium

RIVETS FOR ALUMINIUM PROFILE ON FRETTED SHEET

CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0012C03	Pack of 250 blind rivets 5.2x19	250	aluminium

BUTYL SEALING TAPE

CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0001N05	Butyl tape L = 25m	25	butyl

INDIVIDUAL COMPONENTS

	CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
	FTV0001C01	Profile 60x25 L = 2995 mm zinc-magnesium steel	1	Zinc-magnesium steel
	FTV0002C01	Profile 60x25 L = 2095 mm zinc-magnesium steel	1	Zinc-magnesium steel
	FTV0003C01	Profile 60x25 L = 1795 mm zinc-magnesium steel	1	Zinc-magnesium steel
	FTV0004C01	Profile 60x25 L = 995 mm zinc-magnesium steel	1	Zinc-magnesium steel
	FTV0016C01	Profile 60x25 L = 2395 mm zinc-magnesium steel	1	Zinc-magnesium steel
	FTV0017C01	Profile 60x25 L = 1195 mm zinc-magnesium steel	1	Zinc-magnesium steel
	FTV0018C01	Profile 60x25 L = 1895 mm zinc-magnesium steel	1	Zinc-magnesium steel
	FTV0005C01	Connecting joint 55x20x2 L=295 mm	1	Zinc-magnesium steel
	FTV0001C02	4 x M8 x 75 stainless steel Hex socket head cap screw	1	Stainless steel
	FTV0006C01	H30 end clamp - for zinc-magnesium	1	Stainless steel
	FTV0007C01	H32 end clamp - for zinc-magnesium	1	Stainless steel
	FTV0008C01	H34 end clamp - for zinc-magnesium	1	Stainless steel
	FTV0009C01	H35 end clamp - for zinc-magnesium	1	Stainless steel
	FTV0010C01	H36 end clamp - for zinc-magnesium	1	Stainless steel
	FTV0011C01	H38 end clamp - for zinc-magnesium	1	Stainless steel
	FTV0012C01	H40 end clamp - for zinc-magnesium	1	Stainless steel
	FTV0020C01	H65 end clamp - for zinc-magnesium	1	Stainless steel
	FTV0013C01	M8x35 central clamp (H=30-35 mm)	1	Stainless steel
	FTV0014C01	M8x35 central clamp (H=36-41 mm)	1	Stainless steel
	FTV0015C01	Slip-preventing safety clamp under panel	1	Zinc\nickel galvanized steel
	FTV0019C01	Clevis - Zinc nickel	1	Zinc\nickel galvanized steel

INDIVIDUAL COMPONENTS

	CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
	FTV0001C03	profile in aluminium 60x15 L=500 mm	1	Aluminium
	FTV0002C03	profile in aluminium 60x15 L=6600 mm	1	Aluminium
	FTV0003C03	H 30 mm end clamp - for aluminium	1	Stainless steel
	FTV0004C03	H 32 mm end clamp - for aluminium	1	Stainless steel
	FTV0005C03	H 34 mm end clamp - for aluminium	1	Stainless steel
	FTV0006C03	H 35 mm end clamp - for aluminium	1	Stainless steel
	FTV0007C03	H 36 mm end clamp - for aluminium	1	Stainless steel
	FTV0008C03	H 38 mm end clamp - for aluminium	1	Stainless steel
	FTV0009C03	H 40 mm end clamp - for aluminium	1	Stainless steel
	FTV0010C03	M8x25 central clamp (H=30-35 mm) - for aluminium	1	Stainless steel
	FTV0011C03	M8x35 central clamp (H=36-41 mm) - for aluminium	1	Stainless steel
	FTV0012C03	5.2X19blind rivet (250 pieces/box)	1	Aluminium
	FTV0001C04	Modular ballast 40 x 40 x 6 mm - 18 kg	1	Concrete

**UNI EN ISO 9001:2015
CERTIFIED QUALITY SYSTEM
IATF 16949:2016**

The illustrations, descriptions, dimensions and colours in this catalogue are indicative. OFFICINE RASERA reserves the right to make, at any time and without prior notice, any changes to its products considered useful for the purpose of their improvement or for any construction or commercial requirement. The colours have been reproduced with the accuracy permitted by the printing process.

All the pictures in this catalogue are protected by copyright. Reproduction in whole and in part is prohibited.

www.rasera.com



**OFFICINE
RASERA**

OFFICINE RASERA srl
Via degli Artigiani, 35
CROCETTA del MONTELLO
TV - ITALY

tel +39.0423.639823
info@rasera.com
www.rasera.com

