

COPPERSUN

BITUMINOUS MEMBRANE SELF-PROTECTED WITH EMBOSSED COPPER FOIL

DESCRIPTION

COPPERSUN is an SBS-modified bitumen and elastomer based membrane, reinforced with glass fabric, of which the upper face is self-protected with copper foil. It has an overlap strip at the side without any metal foil so that the joints can be sealed. The metal foil, right before the bitumen coating, is embossed in line with an exclusive pattern designed to compensate for expansions in the metal and to prevent the foil from detaching over time. The bottom face of the membrane is lined with a hot-melt film and both are produced in France by a company with extensive experience in this field.

APPLICATION FIELDS

COPPERSUN is bonded by heating the bottom face of the sheet and the overlap zones with a propane gas torch. It is used to coat roof coverings that remain visible, to which it is able to confer a high degree of protection against ageing and fire.

METHOD OF USE

The **COPPERSUN** membranes are to be laid on roofs without any stagnated water, on pitches of no less than 5%. For pitches greater than 20%, the ends of the sheets are to be secured mechanically. For pitches greater than 20%, the sheets must never be laid whole; the maximum length for pitches between 20% and 100% will be shorter than 5 m and on pitches of

≥100% the sheets laid must never be longer than 2.5 m. It is not advisable to lay on thermal polyurethane or polystyrene foam insulation, whereas it can be laid on high density mineral wool and perlite foam (Fesco) with upper bitumen face. At the time of consignment, there may already be dark oxide stains on the metal foil, but this will not affect the duration and holding resistance of the foil or the product; it simply anticipates natural oxidation that forms on the foil when exposed to the outdoors, which represents its protective layer and preserves it over time. Store the rolls standing upright and out of the sun; do not stack pallets on top of each other. Further technical information concerning correct laying, transport and storage procedures of the materials can be consulted in the technical publications of INDEX.

PRECAUTIONS

- To avoid the formation of bubbles and/or detachment of the foil, apply on a perfectly dry and smooth laying surface.
- Arrange the sheets along the pitch line.
- Do not cross the sheets over those of the underlayer.
- Offset the end overlaps from one another by at least 50 cm and at least 30 cm as opposed to those of the underlayer.
- To ensure correct adhesion to the underlayer membrane and to avoid secretion, direct the flame so that it heats both the underlayer and the self-protected membrane.
- Avoid overheating the membrane, which could cause detachment of the metal foil.
- The lengthwise overlap shall cover the foil by

at least 1 cm beyond the special pre-arranged overlap strip.

- For pitches between 5% and 20%, 10 cm of foil shall be removed from the end overlap and the membrane shall be overlapped by at least 1 cm beyond the bare zone for a total of 11 cm.
- For pitches greater than 20%, the ends of the sheets must always be mechanically secured with at least 4 nails, arranged 5 cm between the edge of the membrane and the centre line of the nail.
- The nails shall have a stainless steel washer with diameter of 40 mm or small stainless steel plates of 40x40 mm. The nails shall also go through the foil part, which does not have to be removed.
- Before sealing the end overlap, paint the zone to be overlapped, including the nails, with INDEVER primer; paint a strip of 13 cm, which will then be sealed.



INTENDED USE OF "CE" MARKING SPECIFIED ACCORDING TO THE AISPEC-MBP GUIDELINES

EN 13707 - REINFORCED BITUMEN SHEETS FOR ROOF WATERPROOFING

- Upper layer in multi-layer systems without permanent heavy surface protection

METHOD OF USE



TORCH APPLICATION



NAILING

TECHNICAL CHARACTERISTICS

COPPERSUN		
	T	
Weight (EN 1849-1)	±10%	4,0 kg/m ²
Roll size (EN 1848-1)	≥	1x10 m
Reinforcement		Glass fabric
Watertightness (EN 1928 B method)	≥	10 kPa
Peel resistance of joints (EN 12316-1)	-20 N	NPD
Shear resistance of joints (EN 12317-1)	-20%	NPD
Maximum tensile strength Long./Transv. (EN 12311-1)	-20%	900/900 N/50 mm
Elongation (EN 12311-1)	-15 V.A.	8/8%
Resistance to impact (EN 12691 A method)		NPD
Resistance to static loading (EN 12730)		NPD
Resistance to tearing - nail shank (EN 12310-1)	-20%	NPD
Dimensional stability (1107-1)		NPD
Cold-state flexibility (EN 1109)	≤	-20°C
• after ageing at high temperatures (EN 1296-1109)	+10°C	NPD
Flow resistance at high temperature (EN 1110)	≥	80°C
• after ageing at high temperatures (EN 1296-1109)	-10°C	NPD
UV resistance (EN 1297)		-
Reaction to fire (EN 13501-1)		Euroclass F
External fire performance (EN 13501-5)		F _{roof}

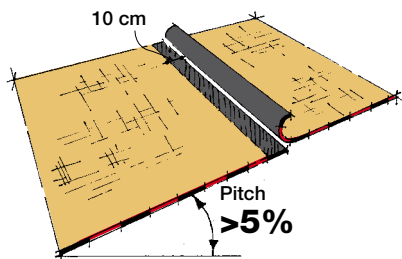
COPPERSUN

METHOD OF USE

ROOF PITCHES

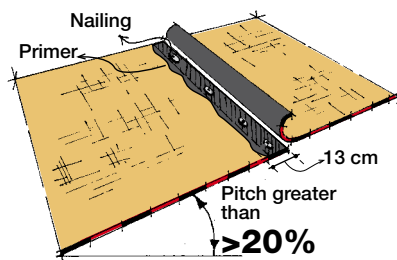
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Minimum pitch **5%**



The membranes are to be laid on roofs without any stagnated water, removing about 10 cm of the metal foil on the end joints. The overlap should then be 11 cm.

Pitch **>20%**

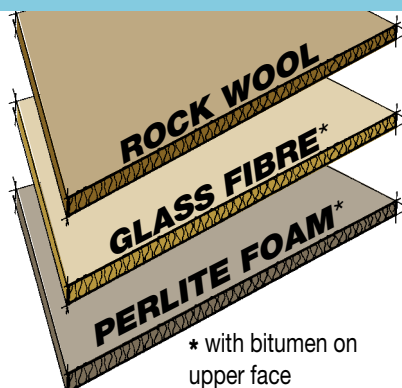


On pitches **GREATER THAN 20%**, the ends of the sheets are to be mechanically secured without removing the metal foil and after applying primer over approximately 13 cm.

LAYING ON THERMAL INSULATION

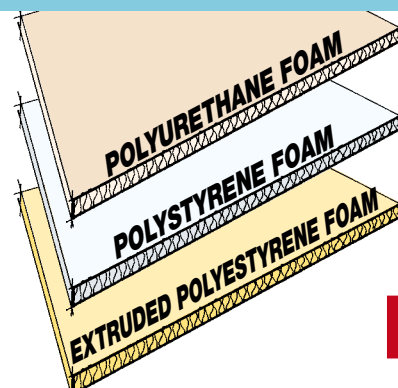
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ADMITTED INSULATION



Yes

UNADMITTED INSULATION

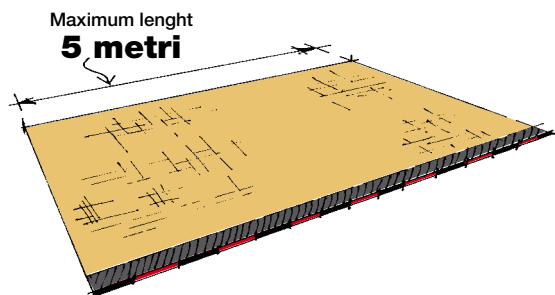


No

SHEET LENGTHS

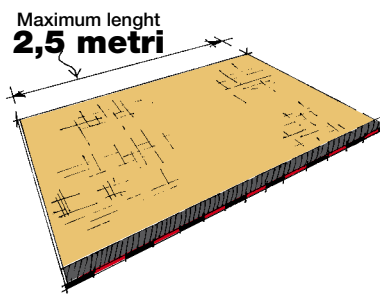
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Roof with pitch of 20%÷100%
Max. length: 5 meters



The end overlaps shall be offset when laying the sheets

Roof with pitch of $\geq 100\%$
Max. length: 2,5 m



The end overlaps shall be offset when laying the sheets

WARNINGS

- **Oxide stains.** The feasible presence of dark oxide stains does not affect the duration of the metal foil or the product. It is merely an anticipation of normal oxidation that will form on the foil when exposed to the outdoors and that represents the protective layer.

of the product in use. Considering the many possible uses and the possible interference of elements that are not under our control, we accept no responsibility for the results. The Purchaser is responsible for establishing the suitability of the product for the use envisaged.

The data reported is approximate and refers to current production. It may be changed and updated by INDEX S.p.A. at any time without prior notification, as desired. The technical information and suggestions provided represent our best knowledge of the properties

• FOR DETAILS REGARDING THE CORRECT USE OF OUR PRODUCTS, PLEASE CONSULT THE INDEX TECHNICAL SPECIFICATIONS • FOR FURTHER INFORMATION OR SPECIAL USES, PLEASE CONTACT OUR TECHNICAL OFFICE •

index
Construction Systems and Products

Via G. Rossini, 22 - 37060 Castel D'Azzano (VR) - Italy - C.P.67 - Tel. (+39)045.8546201 - Fax (+39)045.518390

Internet: www.indexspa.it
email Technical & Sales Info: tecom@indexspa.it
email Administration Offices: index@indexspa.it
e-mail Index Export Dept.: index.export@indexspa.it

