

SOPRALENE FLAM 180 AR / AR Fe

Description

SOPRALENE FLAM 180 AR / AR Fe are flexible SBS elastomeric bitumen waterproofing membranes with a non-woven polyester reinforcement. The topside is protected by slate chippings and the underside by a thermofusible film.

SOPRALENE FLAM 180 AR Fe contains fire resistant additives for better fire resistance.

Composition

| SOPRALENE FLAM 180 AR/AR Fe | |
|-----------------------------|--|
| Reinforcement | Non-woven polyester (180g/m ²) |
| Binder | Elastomeric bitumen*: blend of selected bitumen and SBS thermoplastic polymers |
| Thickness | 3.1 mm ±0.2 on overlap 3.8 mm on slates |
| Weight | about 4,9 kg/m ² |
| Topside | Slate chippings |
| Underside | Thermofusible film |
| Overlap | 6 cm with a thermofusible film |

*According to UEAtc directives concerning the normalization of waterproof elastomeric SBS bitumen coverings.

Characteristics

| | SOPRALENE FLAM 180 AR/AR Fe | |
|--|------------------------------|------------------------------|
| | MDV ¹ | MLV ² |
| Tensile Strength (EN 12311-1) | | |
| -longitudinal | 800 N/ 5cm | 550 N/ 5cm |
| -transversal | 650 N/ 5cm | 500 N/ 5cm |
| Elongation (EN 12311-1) | | |
| -longitudinal | 40 % | 30 % |
| -transversal | 45 % | 35 % |
| Low temperature flexibility (EN 1109) | No observed cracks at - 20°C | No observed cracks at - 16°C |
| Flow resistance at high temperature (EN 1110) | 105°C | 100°C |
| Dimensional stability (EN 1107-1) | 0,3 % | 0,5 % |
| Static puncture resistance (NF P 84-352) with ELASTOHENE (FLAM) 25 | 25 kg (L4) | |
| Dynamic Puncture resistance (NF P 84-353) with ELASTOPHENE (FLAM) 25 | 20 kg (D3) | |

⁽¹⁾MDV = Manufacturer's determined value: An arithmetic mean value of a minimum number of independent measurements.

⁽²⁾MLV = Manufacturer's limiting value: Minimum or maximum value as started by the manufacturer to be met during testing of type, internal quality control or external supervision with a confidence level of 95 %.

Packaging

| SOPRALENE FLAM 180 AR / AR Fe | |
|--------------------------------------|---|
| Roll dimensions | 8 m x 1 m |
| Roll weight | about 39 kg |
| Standard colours | Black, Grey, Matisse brown, Gauguin red, Veronese green, Cézanne sienna, Chagall grey or Van Gogh ochre |
| Storage | Upright on pallets with plastic shrink wrapping |

Roll lengths are given with a tolerance of $\leq 1\%$. Roll can be cut in two parts. In this case, the shortest length is 3 meters and the total length is equal to the nominal length.
Width of roll is given with a tolerance of 1% (UEAtc).
Rolls must be stored upright on flat ground. Pallets may be stacked to a maximum of two high with separating layer.
During storage, protect the rolls against moisture. In cold weather, we recommend that the rolls be kept at a minimum temperature of $+ 2^{\circ}\text{C}$ ($+ 36^{\circ}\text{F}$) for at least 5 hours before installation.

User application

SOPRALENE FLAM 180 AR / AR Fe is to be used as a finishing layer in all two-ply elastomeric bitumen waterproofing system.

All applications are described in French Standards DTU, Technical Guideline or Technical Approvals. For further details refer to specific technical instructions.

Installation

SOPRALENE FLAM 180 AR / AR Fe must be applied only by heat welding or torch-on techniques. Hot bitumen must not be used in the bonding process.

Special indications

Hygiene, health and environment:

The product does not contain any substance likely to be detrimental to health or to environment and complies with generally admitted Health and Safety Requirements. For further information, please refer to relevant Safety Data Sheet.

Quality control:


SOPREMA has always attached the highest importance to Quality Control.
For this reason, we operate an independently monitored Quality Assurance System in compliance with **BS EN ISO 9001:2000**, certified by **BSI Management System**.



CE Marking

SOPRALENE FLAM 180 AR / AR Fe is a flexible membrane for roof waterproofing and complies with EN 13707, thereby bearing the CE standard marking.

General information concerning the CE marking, expressed in MLV, can be found below. For more information, please refer to the relevant Declaration of Conformity.


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|  CSTB 0679 | |
| <p><u>SOPRALENE FLAM 180 AR / AR Fe</u> SOPREMA S.A.S. B.P. 60121 – 14, rue de St-Nazaire 67025 STRASBOURG CEDEX 1 06 Certificate of Factory Production Control 0679-CPD-0130, 0133, 0343*, 0393*</p> | |
| <p><u>EN 13707</u> Membrane composed of modified elastomeric bitumen and a non-woven polyester reinforcement. Topside is protected with slate chippings and underside is covered with a thermofusible film. Dimensions : 8 m x 1 m x 3.8 mm.</p> <p>Membrane is not to be used for single layer application. Must not be applied with hot bitumen.</p> <p>Membrane is a cap sheet, cannot be used for green roofs.</p> <p>*SOPRALENE FLAM 180 AR Fe is not made in these factories.</p> | |
| Classification for external fire exposure (EN 13501-5) | B ROOF (t3), according to PV from CSTB |
| Reaction to fire (EN 13501-1) | E |
| Tensile Strength in longitudinal direction (EN 12311-1) | 550 N/ 5cm |
| Tensile Strength in transversal direction (EN 12311-1) | 500 N/ 5cm |
| Elongation in longitudinal direction (EN 12311-1) | 30 % |
| Elongation in transversal direction (EN 12311-1) | 30 % |
| Low temperature flexibility (EN 1109) | - 16 °C |
| Flow resistance at high temperature (EN 1110) | 100 °C |
| Watertightness (EN 1928) | Conform |

SOPRALENE FLAM 180 AR / AR Fe also meet CE requirements according to ATE 06/0033.

**CE Marking
annexe
According to ATE
06/0033. In compliance
with ETAG 006**

SOPRALENE FLAM 180 AR / AR Fe is a flexible SBS elastomeric bitumen membrane roof waterproofing, and complies with EN 13707, thereby bearing the CE standard marking. Being used in the mechanically fastened waterproof kit, SOPRAFIX BICOUCHE (double layer), this sheet complies with ETAG 006 as bears the CE mark in accordance with ATE 06/0033 which approves the use of these sheets for their given purpose in roof work.

General information concerning the CE marking, expressed in MLV, can be found below. For more information, please refer to the relevant Declaration of Conformity.

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|--|--|
|  CSTB 0679 | |
| <p><u>SOPRALENE FLAM 180 AR / AR Fe</u> SOPREMA S.A.S. B.P. 60121 – 14, rue de St-Nazaire 67025 STRASBOURG CEDEX 1 06 Certificate of Factory Production Control 0679-CPD-0167, 0168, 0169, 0170</p> | |
| <p><u>ATE 06/0033</u> Membrane composed of modified elastomeric bitumen and a non-woven polyester reinforcement. Topside is protected with slate chippings and underside is covered with a thermofusible film. Dimensions : 8m x 1m x 3.8 mm.</p> <p>Membrane is not to be used for single layer application. Must not be applied with hot bitumen.</p> <p>Membrane is a cap sheet, cannot be used for green roofs.</p> | |
| Classification for external fire exposure (EN 13501-5) | B ROOF (t3), according to PV from CSTB |
| Reaction to fire (EN 13501-1) | Euroclasse F |
| Tensile Strength in longitudinal direction (EN 12311-1) | 550 N/ 5cm |
| Tensile Strength in transversal direction (EN 12311-1) | 300 N/ 5cm |
| Elongation in longitudinal direction (EN 12311-1) | 30 % |
| Elongation in transversal direction (EN 12311-1) | 30 % |
| Low temperature flexibility (EN 1109) | - 16 °C |
| Flow resistance at high temperature (EN 1110) | 100 °C |
| Flexibility (EN 1109), after ageing (EN 1296) | 0°C |
| Heat resistance (EN 1110), after ageing (EN 1296) | 90°C |
| Watertightness (EN 1928) | Conform |