## 2-1 SOPRASMART



**APPLICATIONS** 

**ROOFS** 

TECHNICAL DATA SHEET 240220SCANE

### **DESCRIPTION**

2-1 SOPRASMART FB is a high performance base sheet panel composed of SBS modified bitumen membrane with a non-woven polyester reinforcement and a surface covered with a thermofusible plastic film. This membrane is factory-laminated on a high density fire-resistant fibreboard support panel.

## **INSTALLATION**

#### **BITUMEN**

2-1 SOPRASMART FB panel is intalled in a bed of hot bitumen (SEBS or oxidized) applied with a mop.

#### **ADHESIVE**

2-1 SOPRASMART FB panel is adhered with DUOTACK adhesives. (1)

#### MECHANICALLY FASTENED

2-1 SOPRASMART FB panel is mechanically fastened to steel deck with SOPREMA screws and plates according to the required fastening pattern.(1)

On a steel deck, fasteners must be installed on the steel deck top flanges. Install membranes perpendicular to the steel deck ribs.

The side lap joints have a DUO SELVEDGE. The first part is self-adhered and the last part of the joint is sealed with a propane torch.

Align all end laps without offsetting them and cover them with a SOPRALAP membrane centred on the joint.

(1): For more details about the required number of adhesive or mechanical fasteners, consult the Wind Uplift Resistance Testing reports according to Canadian standard CSA A123.21 or publications according to FM 4470 (RoofNav Database) including recommendations for corners and perimeters listed in the PLPDS 1-29 from Factory Mutual.

## FOR COMPLETE INFORMATION ON PRODUCT INSTALLATION, PLEASE CONSULT YOUR SOPREMA REPRESENTATIVE.

#### GENERAL INFORMATION

Specifications	2-1 SOPRASMART FB
Total thickness	14.9 mm (0.6 in)
Thickness of the support panel	12.7 mm (½ in)
Reinforcement of the membrane	Non-woven polyester
Dimensions of the support panel	0.914 x 2.44 m (3 x 8 ft)
Weight	5.9 kg/m² (1.2 lb/ft²)
Selvedge width	90 mm (3.5 in)
Surface	Thermofusible plastic film
Underface	Fire-resistant fibreboard

(All values are nominal)





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(supersedes 231002SCANE)

## PROPERTIES [membrane]

Duanautia	МЕМЕ	CSA A123.23	
Properties	BEFORE Heat Conditioning	AFTER Heat Conditioning	Type B, Grade 3 Requirements
Thickness of the membrane, min.	2.2 mm (85 mils)		2.2 mm (85 mils)
Selvedge thickness, min.	2.2 mm (85 mils)		2.2 mm (85 mils)
Mass per unit area, min.	2.6 kg/m² (53 lb/100 ft²)		2.6 kg/m² (53 lb/100 ft²)
Strain energy, min. MD/XD, at 23 °C ± 2 °C (73.4 °F ± 3.6 °F) at -18 °C ± 2 °C (0 °F ± 3.6 °F)	6.5/6.5 kN/m (37/37 lbf/in) 8.0/4.0 kN/m (46/23 lbf/in)	5.5/5.5 kN/m (31/31 lbf/in) 3.1/3.1 kN/m (18/18 lbf/in)	5.5 kN/m (31 lbf/in) 3.0 kN/m (17 lbf/in)
Peak load, min. MD/XD, at 23 °C $\pm$ 2 °C (73.4 °F $\pm$ 3.6 °F) at -18 °C $\pm$ 2 °C (0 °F $\pm$ 3.6 °F)	15/11 kN/m (86/63 lbf/in) 22/17 kN/m (126/97 lbf/in)	14/10 kN/m (80/57 lbf/in) 19/11 kN/m (108/63 lbf/in)	Report value Report value
Elongation at peak load, min. MD/XD, at 23 °C $\pm$ 2 °C (73.4 °F $\pm$ 3.6 °F) at -18 °C $\pm$ 2 °C (0 °F $\pm$ 3.6 °F)	50/60% 30/30%	15/50% 7/21%	Report value Report value
Ultimate elongation, MD/XD, at 23 °C $\pm$ 2 °C (73.4 °F $\pm$ 3.6 °F)	55/70%	45/45%	Report value
Dimensional stability, max. MD/XD	±0.5/±0.1%		1.0%
Low temperature flexibility, max. MD/XD	-18/-18 °C (-0.4/-0.4 °F)	-18/-18 °C (-0.4/-0.4 °F)	-18 °C (-0.4 °F)
Compound stability	121/121 °C (250/250 °F)		min. 102 °C (215 °F)
Resistance to puncture	Pass		Pass

(All values are nominal)





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## PROPERTIES [support panel]

2-1 SOPRASMART FB panel meets the requirements of ANSI/UL 790 and CAN/ULC-S107 standards.

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Properties	Standards	HD FIBREBOARD
Specific Gravity	ASTM D1037	256 kg/m³ (16 lb/ft³)
Transverse Strength	ASTM C209	67 N (15 lb)
Tensile Strength Perpendicular to Surface, min.	ASTM C209	36.5 kPa (761 lb/ft²)
Tensile Strength Parallel to Surface, min.	ASTM C209	1.3 MPa (187 lb/in²)
Water Absorption	ASTM C209	< 6% of the volume
Linear Expansion	ASTM C209	0.10%
Compresive Resistance, min. (10%)	ASTM C165	2.4 kg/cm² (34.8 lb/in²)
Thermal Resistance (R-Value/in)	ASTM C518	RSI 0.53 (R-3)

(All values are nominal)

## STORAGE AND HANDLING

2-1 SOPRASMART FB base sheet panels must be stored on a flat substrate and sheltered form inclement weather. If the products are stored outdoors, cover them with an opaque protection cover.



