

2-1 SOPRASMART ISO HD HP

TECHNICAL DATA SHEET 240221SCANE

(supersedes 210325SCANE)



WATERPROOFING
ACCESSORY

APPLICATIONS

ROOFS

DESCRIPTION

2-1 SOPRASMART ISO HD HP is a high performance base sheet panel composed of SBS modified bitumen membrane with a composite reinforcement and a surface covered with a thermofusible plastic film. This membrane is factory-laminated on a high density polyisocyanurate insulation support panel (SOPRA-ISO PLUS HD).

INSTALLATION

BITUMEN

2-1 SOPRASMART ISO HD HP panel is installed in a bed of hot bitumen (SEBS or oxidized) applied with a mop.

ADHESIVE

2-1 SOPRASMART ISO HD HP panel is adhered with DUOTACK adhesives.⁽¹⁾

MECHANICALLY FASTENED

2-1 SOPRASMART ISO HD HP 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 ISO HD HP
Total thickness	15.2 mm (0.6 in)
Thickness of the support panel	12.7 mm (½ in)
Membrane reinforcement	Composite
Support panel dimensions	0.914 x 2.44 m (3 x 8 ft)
Total weight	4.57 kg/m ² (0.94 lb/ft ²)
Selvedge width	90 mm (3.5 in)
Surface	Thermofusible film
Underface	Polyisocyanurate high density

(All values are nominal)



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NOTE: All products manufactured by SOPREMA Inc. comply with the description and properties indicated in the technical data sheet that was current at the date of manufacture.

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WATERPROOFING
COMPLEMENTARY PRODUCT

APPLICATIONS

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PROPERTIES [membrane]

Properties	MEMBRANE		CSA A123.23 Type C, Grade 3 Requirements
	BEFORE Heat Conditioning	AFTER Heat Conditioning	
Thickness of the membrane, min.	2.5 mm (98 mils)		1.8 mm (70 mils)
Selvage thickness, min.	2.5 mm (98 mils)		1.8 mm (70 mils)
Mass per unit area, min.	2.9 kg/m ² (59 lb/100 ft ²)		2.2 kg/m ² (45 lb/100 ft ²)
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)	8/6.5 kN/m (46/37 lbf/in) 8/7 kN/m (46/40 lbf/in)	7/6 kN/m (40/34 lbf/in) 6.5/6 kN/m (37/34 lbf/in)	5.5 kN/m (31 lbf/in) 3.0 kN/m (17 lbf/in)
Peak load, min. MD/XD, at 23 °C ± 2 °C (73.4 °F ± 3.6 °F) at -18 °C ± 2 °C (0 °F ± 3.6 °F)	17/14 kN/m (97/80 lbf/in) 22/19 kN/m (126/108 lbf/in)	18/15 kN/m (103/86 lbf/in) 22/17 kN/m (126/97 lbf/in)	Report value Report value
Elongation at peak load, min. MD/XD, at 23 °C ± 2 °C (73.4 °F ± 3.6 °F) at -18 °C ± 2 °C (0 °F ± 3.6 °F)	55/55% 45/45%	50/50% 35/35%	Report value Report value
Ultimate elongation, MD/XD, at 23 °C ± 2 °C (73.4 °F ± 3.6 °F)	65/65%	55/55%	Report value
Dimensional stability, max. MD/XD	±0.2/±0.2%		0.5%
Low temperature flexibility, max. MD/XD	-27/-27 °C (-17/-17 °F)	-18/-18 °C (-0.4/-0.4 °F)	-18 °C (-0.4 °F)
Compound stability	121/121 °C (250/250 °F)		min. 91 °C (195 °F)
Resistance to puncture	Pass		Pass

(All values are nominal)

PROPERTIES [support panel]

Properties	Standards	HD POLYISOCYANURATE SUPPORT PANEL (SOPRA-ISO PLUS HD)
Thermal resistance, 12.7 mm (0.5 in) thickness, at 24 °C (75 °F)	ASTM C518	RSI 0.44 (R-2.5)
Compressive strength	ASTM D1621	550 to 759 kPa (80 to 110 psi)
Dimensional stability	ASTM D2126	< 0.5% linear change
Water absorption	ASTM C209	< 3% volume
Resistance to mold	ASTM D3273	Pass

(All values are nominal)

STORAGE AND HANDLING

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



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