

SENTINEL P150

TECHNICAL DATA SHEET 220506SCANE

(supersedes 220401SCANE)



WATERPROOFING

APPLICATIONS

ROOFS

DESCRIPTION

SENTINEL P150 is a membrane composed of thermoplastic polyvinyl chloride (PVC) and a polyester reinforcement. SENTINEL P150 is installed on single-ply roofing systems. It is available in white and grey.

INSTALLATION

MECHANICALLY FASTENED

- SENTINEL P150 is mechanically fastened to the structural deck⁽¹⁾ with screws and 2.4 in plates specially made for membrane fastening.
- Preliminary mechanical fasteners need to be installed on insulation boards at a rate of four fasteners per 1.2 × 1.2 m (4 × 4 ft) boards and six fasteners per 1.2 × 2.4 m (4 × 8 ft) boards. More fasteners may be needed depending on the wind uplift test results⁽²⁾.

Install the mechanical fasteners in the 152 mm (6 in) side lap, 51 mm (2 in) from the edge of the sheet to the centre of the fastener. The last 38 mm (1.5 in) of every side and end lap must be sealed using a hot air welder. The use of an automatic hot air welder will increase the speed and quality of the seal⁽³⁾.

INDUCTION WELDED

Install the induction plates to the structural deck⁽¹⁾ following the fastening patterns according to the wind uplift requirements⁽²⁾. Position the SENTINEL P150 membrane over the plates and use the compatible induction machine to weld the membrane to the plates.

Use an electric hot air welder to weld all side and end laps to a minimum width of 38 mm (1.5 in). The use of an automatic hot air welder will increase the speed and quality of the seal⁽³⁾.

ADHESIVE

SENTINEL P150 is fully bonded with SENTINEL S BONDING ADHESIVE making sure to leave 38 mm (1.5 in) without adhesive along every side and end lap so they can be properly sealed using a hot air welder.

PRECAUTION

SENTINEL P150 PVC membranes are incompatible with all asphalt-based products, coal tar pitch, as well as uncoated extruded and expanded polystyrene.

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

SOLAR RATING as per Cool Roof Rating Council (CRRC)

MEMBRANE COLOUR	SOLAR REFLECTANCE		THERMAL EMITTANCE		SRI	
	Initial	3 years	Initial	3 years	Initial	3 years
White	0.85	0.73	0.89	0.88	108	90
Grey	0.46	0.38	0.89	0.89	53	42

(All values are nominal)

NOTES:

(1) : On a steel deck, fasteners must be installed on the upper part of the ribs. Install membranes perpendicular to the ribs.

(2) : For more details about the required number of mechanical fasteners, consult the Wind Uplift Test 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.

(3) : The automatic hot-air welder must be dedicated to PVC only and must not have been used for asphalt-based membranes.



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PACKAGING

Specifications	SENTINEL P150		
Thickness	1.5 mm (60 mils)		
Reinforcement	Polyester		
Underface	Bare-backed		
Available width	152 mm (6 in)*	1.5 m (5 ft)	3 m (10 ft)
Length	30.5 m (100 ft)		
Coverage	4.65 m ² (50 ft ²)	46.5 m ² (500 ft ²)	92.9 m ² (1,000 ft ²)
Weight	1.7 kg/m ² (0.3 lb/ft ²)		
Qty/pal	20	10	

*Available in white only.
(All values are nominal)

PROPERTIES

Properties	Standards	SENTINEL P150
Thickness over scrim	ASTM D4434	0.76 mm (30 mils)
Breaking strength, MD/XD	ASTM D751	74/48 kN/m (425/275 lbf/in)
Elongation at break	ASTM D751	30%
Seam strength (min. 75% of breaking strength)	ASTM D751	Pass
Tearing strength, MD/XD	ASTM D751 (Procedure B)	512/267 N (115/60 lbf)
Trapezoidal tear, MD/XD	ASTM D751	601/400 N (135/90 lbf)
Low temperature bend at -40 °C (-40 °F)	ASTM D2136	Pass
Linear dimensional change	ASTM D1204	< 0.1%
Change in weight after immersion in water	ASTM D570	< 3
Static puncture resistance at ≥ 15 kg (33 lbf) min.	ASTM D5602	Pass
Dynamic puncture resistance at 10 J (min.)	ASTM D5635	Pass

(All values are nominal)

STORAGE AND HANDLING

SENTINEL P150 rolls must be stored lengthwise on a pallet in a clean and dry location, covered with tarps.



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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.

TDS-SENTINEL-P150-Soprema-en.indd