



WATERPROOFING

APPLICATIONS

ROOFING

SOPRASUN PLUS 4,5KG MINERAL

TECHNICAL DATA SHEET APTDS-E-03-05

DESCRIPTION

SOPRASUN PLUS 4.5KG MINERAL is a plastomeric modified bitumen waterproofing membrane (APP), manufactured by impregnation of the reinforcement with the waterproofing compound based on distilled bitumen modified with polyolefin polymers, which gives to the compound excellent technical characteristics.

The composite reinforcement, made of nonwoven polyester in combination with fiberglass, conveys good mechanical characteristics, excellent dimensional stability and elastic performance.

The upper surface is coated with coloured slate chips and selvedge edge is slate free at one side.

The lower surface is coated with a thermo-fusible polyolefin film.

USE - APPLICATION

- Top layer in multilayer roofing and waterproofing systems,
- Single layer roofing and waterproofing membrane,
- Can be used in both exposed and protected systems,
- To be fully heat welded with propane torch.

APPLICATION PROCEDURE

SUBSTRATE

- No work should be started until all surfaces are smooth, dry, and free of ice, snow or any other substance that may prevent the membrane from adhering properly,
- Substrate must have minimum 1% fall to ensure that water drains to drainage outlets,
- Do not install heat welded membranes directly onto combustable substrate,
- Concrete substrate must be fully cured before application of the membrane,
- Concrete substrate must have a Concrete Surface Profile (CSP) between 3 and 6 (As per International Concrete Repair Institute),
- Adhesion test is recommended prior to installation of membrane,
- Commencement of installation shall be taken as acceptance of the substrate by the Applicator.

PRIMER

- When installed as top layer over base sheet membrane, primer is not required,
- When installed over concrete or metal surface prime with primer.

HEAT WELDING

- Unroll membrane sheets onto the roof surface and allow time to relax prior to heat welding.
- Starting at the low point of the roof, lay out the membrane to ensure the plies are installed perpendicular to the roof slope, shingled to prevent back-water laps.
- Ensure specified side-laps and end-laps are maintained. End-laps should be staggered 1 meter apart.
- As the membrane ply is unrolled, apply heat to the underside of the ply until plastic burnoff film melts away sufficiently for full adhesion to the substrate, and full adhesion between plies.
- For hand-held roof torches, continuously move the torch side-to-side across the underside of the roll to melt the bitumen while continuously unrolling sheet.
- While unrolling and heating the sheet, ensure approximately 6 to 12mm of hot bitumen flows ahead of the roll, and there is 3 to 6mm bleed out at all laps. Ensure all side-laps are fully adhered and sealed watertight.
- Adjust application methods to accommodate varying environmental conditions as necessary to achieve the desired results.
- At the 150mm end-laps ensure a fully adhered watertight seal. Melt the plastic burn-off film or embed granules and remove other membrane surfacing, where present, using a torch or hot-air welder.
- All penetrations und upturn details should be waterproof as per Soprema installation manuals and detail drawings.





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PACKAGING

Composition	Testing method	SOPRASUN PLUS 4,5KG MINERAL
Thickness	EN 1849-1 ASTM 5147	3.6 ± 10% (Mineral area) 2.6 ± 10% (Overlap area)
Dimension	-	10 × 1 m
Top Face	-	Slates Grey
Underface	-	Torch-off film
Rolls per pallet	-	23
Packing type	-	pallet+shrink film

PROPERTIES

Properties	Unit	SOPRASUN PLUS 4,5KG MINERAL	Standards
Weight of 1 square meter	kg/m ²	4.5 ± 5%	EN 1849-1 ASTM 5147
Tensile strength, MD/CD	N\50mm	800/550 ±20%	EN 12311-1 ASTM 5147
Elongation, MD/CD	%	30/35± 15% EN 45/45 ±15% ASTM	EN 12311-1 ASTM 5147
Nail tear strength	N	275/275 ±20%	EN 12310-1
Flexibility	°c	-5	EN 1109 ASTM 5147
Heat resistance	°c	120	EN 1110 ASTM 5147
Ring & Ball	°c	Min. 150	EN 12691-A
Resistance to static loading	Kg	15	EN 12730 Method A
Dynamic puncturing (impact resistance)	mm	600	EN 12691 Method B
Dimensional stability	%	± 0.5	EN 1107-1
Water impermeability watertightness at low pressure	-	Pass at 60kpa	EN 1928 Method A
Water impermeability watertightness at high pressure	-	Pass at 200kpa	EN 1928 Method B
Water absorption	%	< 1	ASTM D5147
Vapour permeability	μ	60,000	EN 1931
Thermal ageing in air (in oven 28 days at 70 °C)	-	Passed	UNI 8202 / 26
Ageing due to atmospheric agents (U.V test weathering)	-	Passed	ASTM G 53 UNI 8202 / 29
Reaction to fire	class	E	EN 13501-1

