SOPRASUN PLUS 3

APP modified waterproofing membrane

March 2024

DESCRIPTION & APPLICATION:

SOPRASUN PLUS 3 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 the compound excellent technical characteristics.

The composite reinforcement, made of non-woven polyester in combination with fibreglass, conveys good mechanical characteristics, excellent dimensional stability and elastic performance. The upper surface is sanded. The lower surface is coated with a thermofusible polyolefin film.

CodeMark CMNZ70151

BRANZ Appraised
Appraisal No.819 [2019]

PACKAGING:

Composition	Testing Method	SOPRASUN PLUS 3
Thickness	EN 1849-1 ASTM 5147	3 ± 5% mm
Dimension	-	10 x 1
Top-face	-	Sand
Under-face	-	Torch-off film
Rolls per pallet	-	25
Packing type	-	Pallet + shrink film

TECHNICAL DATA:

Properties	Units	SOPRASUN PLUS 3	Standards
Weight of 1 square metre	kg/m^2	4 ± 5%	EN 1849-1 ASTM 5147
Tensile strength, MD/CD	N\50 mm	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	EN1109 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
Dimension stability	%	± 0.5	EN 1107-1

SYSTÈME QUALITÉ ISO 9001 QUALITY SYSTEM

SYSTÈME ENVIRONNEMENT ISO 14001 ENVIRONMENT SYSTEM

SOPRASUN PLUS 3

APP modified waterproofing membrane

March 2024

TECHNICAL DATA continued:

Properties	Units	SOPRASUN PLUS 3	Standards
Water impermeability watertightness at low pressure	-	Pass at 60 kpa	EN 1928 Method A
Water impermeability watertightness at high pressure	-	Pass at 200 kpa	EN 1928 Method B`
Water absorption	%	< 1	ASTM D5147
Vapour permeability	μ	60,000	EN 1931
Thermal aging in air (in oven 28 days at 70°C)	-	Passed	UNI 8202/26
Aging due to atmospheric agents (UV test weathering)	-	Passed	ASTM G 53 UNI 8202/29
Reaction to fire	Class	E	EN 13501

SCOPE OF USE:
SOPRASUN PLUS 3 is used as a base sheet the SOPREMA range of bitumen membrane systems; primarily the SOPRASUN PLUS Roof & Deck Membrane System and the SOPRATHERM Warm Roof System. The product can be torch-applied over concrete, plywood, cross-laminated timber (CLT), and roof cover board substrates, or mechanically fastened over PIR or mineral wool roofing insulation. Along with a cap sheet the membrane forms a two-layer waterproof membrane designed for roofs, decks, balconies, terraces and podiums. It is suitable for new builds and refurbishments, residential and commercial construction, in any location and wind zone in New Zealand.

Suitable for other waterproofing applications with written approval by Equus Industries Ltd.

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 combustible 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 over concrete or metal surface prime with SOPRADERE QUICK primer at the rate specified in TDS.

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 metre apart.
- As the membrane ply is unrolled, apply heat to the underside of the ply until plastic burn-off 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 the sheet.

SOPRASUN PLUS 3

APP modified waterproofing membrane

March 2024

HEAT WELDING (continued)

- While unrolling and heating the sheet, ensure approximately 6 to 12 mm of hot bitumen flows ahead of the roll, and there is 3-6 mm 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 150 mm 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 and upturn details should be waterproofed as per SOPREMA installation manuals and detail drawings.
- If in doubt, contact your local Equus Representative.

CONDITIONS OF USE:
Written approval is required for this membrane to be used on a substrate or in a waterproofing system not outlined in the standard Equus specifications. The membrane shall always be over laid with a bitumen membrane cap sheet, as out lined in an Equus standard specification.

The product must be installed by a Certified Equus Applicator. Verification of their status can be confirmed by a current applicator certificate or by contacting Equus Industries Ltd. Any installation must be done in accordance with the latest specifications and technical documentation, or with written approval by Equus Industries Ltd.

BUILDING CODE COMPLIANCE:
B2 Durability - B2.3.1 (b), SOPRASUN PLUS 3 has a durability of at least 15 years, when installed with the correct specification, installation and maintenance. See CodeMark CMNZ70151, BRANZ Appraisal 819.

E2 External moisture - E2.3.1, E2.3.2, E2.3.7 Test data, together with in-service history in New Zealand and internationally, of the correctly installed SOPRASUN PLUS 3 membrane over correctly designed and constructed substrates, show that the membrane successfully resists the ingress of moisture. See CodeMark CMNZ70151, BRANZ Appraisal 819.

F2 Hazardous building materials - F2.3.1 Well known experience with the type of materials used together with in-service history, show that SOPRASUN PLUS 3 complies with this performance requirement. Refer to SDS at www.equus.nz

SUPPORTING DOCUMENTATION:
The following additional documentation supports the compliance statements:

Title (type)	Version	URL
CodeMark Certificate CMNZ70151	30 June 2023	https://equus.nz/content/reports/codemark-soprema-waterproofing-membranes.pdf
BRANZ Appraisal No. 819	31 August 2022	https://equus.nz/content/reports/branz-appraisal-soprasun-819.pdf

HEALTH & SAFETY:
SOPRADERE QUICK primer is solvent-based and must be used with adequate ventilation. Remove all naked flames and sources of ignition. Adequate ventilation is required to minimise exposure to bitumen fumes during the torching process. Safety Data Sheet (SDS) must be read and understood prior to use of product.

WARNINGS AND BANS:

Is the building product/building product line subject to warning or ban under section 26 of the Building Act 2004?	No

SOPRASUN PLUS 3

APP modified waterproofing membrane

March 2024

MANUFACTURERS CONTACT DETAILS:

Manufacture location	Italy
Legal and trading name of manufacturer	Soprema New Zealand Limited
Manufacturer address for service	Level 3, Candida Building 4, 61 Constellation Drive, Mairangi Bay, Auckland 0630, New Zealand
Manufacturer website	www.soprema.com.au
Manufacturer email	info@soprema.com.au
Manufacturer phone number	+61 3 9221 6230
Manufacturer NZBN	9429050312962