MODIFIED BITUMINOUS SHEET AIR / VAPOUR BARRIERS
SELF ADHESIVE

SOPRASEAL STICK 1100 T

FOR A COMPLETE DESCRIPTION OF PRODUCTS AND APPLICABLE STANDARDS, PLEASE REFER TO THE TECHNICAL DATA SHEETS (SOPREMA SPECIFICATIONS MANUAL OR WEB SITE WWW.SOPREMA.CA).

PLEASE CONTACT A SOPREMA REPRESENTATIVE TO ASSIST IN THE DESIGN OF SPECIFICATIONS FOR A PARTICULAR PROJECT.

THE ELECTRONIC VERSION OF SOPREMA’S SPECS IS AVAILABLE ON OUR WEB SITE: WWW.SOPREMA.CA.

This document must be adapted to each project and does not render SOPREMA INC. liable in any way. Please refer to the SOPREMA INC. Manual for any information on its roofing products and their uses.
1 GENERAL

1.1 DESCRIPTION

.1 This section specifies the requirements for the supply and installation of the elements required for air/vapour barrier membrane installation.

.2 Air/vapour barrier system: Self-adhesive SBS modified bitumen membrane.

1.2 RELATED WORK

.1 Division [02 40 00] [Demolition and Structure Moving]

.2 Division [03 00 00] [Concrete]

.3 Division [04 00 00] [Masonry]

.4 Division [07 10 00] [Dampproofing and Waterproofing]

.5 Division [07 21 00] [Thermal Insulation]

.6 Division [07 50 00] [Membrane Roofing]

.7 Division [07 84 00] [Firestopping]

.8 Division [08 10 00] [Doors and Frames]

.9 Division [08 50 00] [Windows]

.10 Division [09 29 00] [Gypsum Board]

.11 Others [ ] [ ]

1.3 COMPLEMENTARY WORK TO BE EXECUTED BY THE SUB-CONTRACTOR

1.4 TECHNICAL DOCUMENTS

.1 Submit two (2) copies of the most current technical data sheets. These documents must describe the physical properties of the material, and explanations about product installation, including installation techniques, restrictions, limitations and other manufacturer recommendations.]

1.5 CONTRACTOR QUALIFICATIONS

.1 Air/vapour barrier work shall be performed only by skilled applicators, employed by an installation contractor operating all adequate and necessary equipment to execute such work in accordance with the manufacturer’s recommendations and recognised standards.

1.6 MANUFACTURER'S REPRESENTATIVE
.1 The air/vapour barrier materials manufacturer may delegate a representative to visit the work site at commencement of work.

.2 At all times, the contractor shall permit and facilitate access to the site by the manufacturer’s representative cited above.

1.7 MATERIALS STORAGE

.1 Handle rolls of materials with care and proper equipment.

.2 Rolls of materials shall be carefully stored and adequately protected in accordance with the manufacturer’s recommendations.

1.8 QUALITY ASSURANCE AND ENVIRONMENTAL MANAGEMENT

.1 The manufacturer of elastomeric bitumen products will provide proof of ISO 9001 and ISO 14001 Certifications.

1.9 WARRANTIES

.1 The product manufacturer shall issue a written and signed document in the name of the owner, certifying the product will meet all the physical characteristic published by the manufacturer, for a period of [ ] years, starting from the date of completion of installation of membranes. No letter amending the manufacturer’s standard warranty will be accepted and the warranty certificate must reflect these requirements.

2 PRODUCTS

2.1 AIR/VAPOUR BARRIER MEMBRANE

.1 Description: Membrane composed of SBS modified bitumen and a Tri-Laminate Woven Polyethylene facer on the top surface; for use on walls, cavities and as a thru wall flashing. The self-adhesive bottom surface is protected by a silicone release sheet. Available in “Summer Grade” for applications between 10°C and 50°C and in “Winter Grade” for applications between at -10°C and 10°C.

.2 Components:

.1 Reinforcement: Tri-Laminate Woven Polyethylene.

.2 Elastomeric bitumen: Mix of selected bitumen and SBS polymer.

.3 Properties:

.1 Thickness: 1.0 mm

.2 Tensile strength (kN/m): (MD) = 13.1 - (XD) = 9.6

.3 Ultimate elongation (%): (MD) = 40.0 - (XD) = 25.0

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.4 Flexibility at cold temperature (°C): -35
.5 Air permeability, 75 Pa (L/sec. m²): < 0.0005
.6 Air leakage resistance: Pass
.7 Air leakage rate classification (CAN/ULC S742): A1
.8 Water vapour permeability (perm): < 0.037
.9 Static puncture (N): 575
.10 Tear resistance (N): (MD) = 535 - (XD) = 245
.11 Lap adhesion (N/m): 2100

.4 Specified products: SOPRASEAL STICK 1100 T by SOPREMA.

2.2 PRIMER FOR SELF-ADHESIVE MEMBRANES
.1 Description: Composed of SBS synthetic rubbers, adhesive enhancing resins and volatile solvents used to prime porous substrates and non-porous substrates such as wood, concrete or metal to enhance the adhesion of self-adhesive membranes at temperatures above -10°C.

.2 Specified product: SOPRASEAL STICK PRIMER by SOPREMA.

[OR]

.3 A water-base polymeric primer that contain no bitumen which is used to enhance adhesion of self-adhesive membranes on most surfaces. For use when solvent based primer are not recommended.

.4 Specified product: ELASTOCOL STICK H₂O by SOPREMA.

2.3 ACCESSORIES

Note: Install a self-adhesive membrane strip beneath upstands and parapets and at wall junctions to ensure vapour barrier continuity, as specified below. For on-site co-ordination, this membrane must be provided by the roofer and installed by a carpenter. Specify the installation of this strip in the Carpentry Section.

.1 ROOF TO WALL TRANSITION MEMBRANE

Note: Specify below only when Roof Vapour Barrier is a self-adhesive membrane.

.1 Specified products: SOPRASEAL STICK 1100 T by SOPREMA

[OR]

Note: Specify below with any type of Roof Vapour Barrier.
.2 Description: Membrane composed of a non-woven polyester and glass grid reinforcement and SBS modified bitumen. A silicone release film covers the self-adhesive underface. The top face is sanded.

.3 Specified product: SOPRALENE STICK ADHESIVE by SOPREMA.

.2 LIQUID APPLIED FLASHING MEMBRANE FOR DETAILS

.1 Description: Liquid applied flashing membrane for detailing around junctions and penetrations shall be a high quality single-component weather resistive polyurethane / bitumen waterproofing resin.

.2 Specified product: ALSAN FLASHING by SOPREMA.

.3 REINFORCEMENT FABRIC FOR LIQUID APPLIED FLASHING

.1 Description: Reinforcement for liquid flashing shall be a polyester stitch-bonded reinforcement fabric.

.2 Specified product: FLASHING REINFORCEMENT by SOPREMA.

.4 WATERPROOFING MASTIC

.1 Description: Waterproofing mastic for detailing around junctions and penetrations shall be a black solvent-based mastic containing SBS modified bitumen, fibres and mineral fillers.

.2 Specified product: SOPRAMASTIC by SOPREMA.

Note: Specify below when insulation is to be glued with adhesive.

.5 INSULATON ADHESIVE

.1 Description: Water based single component, rubberised product used as an insulation adhesive. For trowel applications at temperatures above 20°C only.

.2 Specified product: SOPRASEAL LM 200 T by SOPREMA.

Note:* Cut rolls are available upon request for all tapes around windows.

.6 TAPES AROUND WINDOWS

.1 Specified product: SOPRASEAL STICK 1100 T in pre-cut rolls by SOPREMA.

[OR]

.2 Description: Multi-purpose self-adhesive membrane composed of SBS modified bitumen, self-protected by an aluminium sheet.

.3 Specified product: SOPRASOLIN HD by SOPREMA.
[OR]

.4 Description: Self-adhesive membrane composed of a polymer based adhesive and polyethylene film facer. The underface is covered with a silicone release paper.

.5 Specified product: SOPRASEAL STICK FLASHPRO by SOPREMA.

.7 THROUGH-WALL MEMBRANE

.1 Specified product: SOPRASEAL STICK 1100 T by SOPREMA.

[OR]

.2 Description: Self-adhesive membrane composed of SBS modified bitumen and a strong Tri-Laminate Woven Polyethylene facer. The self-adhesive underface is covered with a silicone release sheet. Application temperatures: Available in “Summer Grade” for applications at temperatures above 10°C and in “Winter Grade” for applications at temperatures between –10°C and 10°C.

.3 Specified product: SOPRASEAL WFM by SOPREMA.

3 EXECUTION

3.1 EXAMINATION AND PREPARATION OF SURFACES

.1 Surface examination and preparation must be completed in conformance with recommendations in the SOPREMA Specifications Manual.

.2 Before waterproofing work begins, the owner's representative and the membrane contractor’s foreman will inspect and approve substrate condition and ensure that related work has been properly executed. If necessary, a non-conformity notice will be issued to the contractor so that required corrections can be made. The start of the membrane application will mean that substrate conditions are acceptable for work completion.

.3 Before commencing work, all surfaces must be smooth, dry, clean and free of ice and debris as per manufacturer’s recommendations.

.4 No materials will be installed during rain or snowfall.

.5 Concrete must be cured a minimum of fourteen (14) days and an adhesion test is recommended before membrane application.

.6 Any gap larger than 6.4 mm (¼ inch) needs solid backing. The gap should be filled in.

.7 At deflection joints, a self-adhesive membrane should be installed as continuous as possible.

3.2 METHOD OF EXECUTION

.1 Work shall be performed on a continuous basis as surface and weather conditions allow.
3.2 Adjoining surfaces shall be protected against any damage that could result from the waterproofing installation.

3.3 EQUIPMENT

3.4 PRIMER APPLICATION

3.5 AIR/VAPOUR BARRIER MEMBRANE INSTALLATION

3.6 THROUGH-WALL FLASHING MEMBRANE INSTALLATION

.2 Adjoining surfaces shall be protected against any damage that could result from the waterproofing installation.

.3 EQUIPMENT

.1 Maintain all equipment and tools in good working order.

.4 PRIMER APPLICATION

.1 Surface where membrane is applied shall receive an SBS synthetic rubber primer coating at the rate of: (porous surfaces: 0.3 to 0.5 L/m², non-porous surfaces: 0.1 to 0.25 L/m²). Primed surfaces must be covered the same day. If not covered the same day, primed surfaces must be re-primed.

.5 AIR/VAPOUR BARRIER MEMBRANE INSTALLATION

.1 Select the proper product according to temperatures during application.

.2 All inside corners should be covered with a 150 mm (6 in.) wide strip of membrane centered on the corner. This membrane must be installed in direct contact with the substrate not leaving any voids under the membrane strip.

.3 Install the membrane onto the primed surface by peeling back the release film on the underside and gluing the membrane to the surface.

.4 All membrane overlaps must be at least 50 mm.

.5 Holes and tears in the membrane must be repaired with air / vapour barrier membrane material. The repair must exceed the affected surface area by a minimum of 100 mm. The membrane piece applied for the repair must be sealed around its edges with mastic.

.6 Use a roller recommended by the manufacturer to apply pressure over the entire surface of the membrane to ensure uniform adhesion to substrate.

.7 The contractor shall inspect membrane installation meticulously at the end of each day of work and also before installation of insulation. The upper edge of the membrane must be sealed with mastic at the end of the day's work when precipitation is anticipated or when the work is expected to be delayed or interrupted by more than one day.

.8 All small protrusions (pipes, etc.) through the waterproofing membrane, should be pre-stripped with a membrane and sealed with mastic.

.9 Insulation should be installed as soon as possible following inspection of the membrane by a professional.

3.6 THROUGH-WALL FLASHING MEMBRANE INSTALLATION

.1 Through-wall flashing membrane should be installed where applicable, as indicated on drawings.
3.7 MEMBRANE INSTALLATION AT OPENINGS (Windows, doors, etc.)

.1 The membrane must be carefully installed around openings in the wall (windows, doors, etc.) in such a manner as to prevent any air leak at these areas (refer to drawings for details). The air/vapour barrier membrane must be installed to create a continuous seal at construction elements such as foundations, roofs and walls, and at junctures of different materials or construction types (curtain wall construction, etc.).

.2 Self-adhesive membranes applied to junctions, window frames, door frames, endings, and on the perimeter of the building, receiving a sprayed insulation, should be mechanically fastened to the substrate with a termination bar.

3.8 INSTALLATION OF INSULATION

.1 Apply adhesive with spots 75 mm (3 in) in diameter, every 300 mm (12 in). Bottom panel should be supported or mechanically fixed. On the top row of insulation, apply a continuous bead of adhesive 25 mm (1 in) wide to the top leading edge of the panels to be glued. This bead will protect the adhesive spots during initial cure by limiting the flow of moisture behind the insulation in case of rain.

Note: SOPREMA INC. may modify the composition and/or utilisation of its products without prior notice. Consequently, orders will be filled according to the latest specifications.

-END OF SECTION-