

SOPRASEAL® LM 203

SOPRASEAL LM 203 is a 74% solids sprayable one-part, liquid applied, air and vapor impermeable membrane used in high performance wall assemblies to control water, air, and vapor diffusion.

SOPRASEAL LM 203 is a non-flammable, water-based, low VOC product used in contact with exterior gypsum wall boards, CMU, poured concrete walls and untreated Exposure I or exterior plywood sheathing (grade C-D or better) and untreated Exposure I OSB.

HEALTH & SAFETY

The contractor shall ensure compliance with OSHA, EPA and other local governing and disposal authorities for project-related safety and environmental requirements. Prior to application, persons handling or applying SOPRASEAL LM 203 membrane should familiarize themselves with the applicable Product Data Sheets (PDS), Safety Data Sheets (SDS), specifications, and application instructions. Refer to product SDS for health, safety, and environment related hazards, and take all necessary measures and precautions to comply with specified exposure limits where required. The applicator is responsible for ensuring conditions are appropriate to proceed and proper application methods are followed.

When applying SOPRASEAL LM 203 membrane typical exposure levels will be below OSHA permissible limits for most outdoor applications. When required, air monitoring should be performed by a qualified person to identify any hazards. If respiratory protection is required, use a NIOSH approved air-purifying respirator.

APPLICATION GUIDELINES

STORAGE & HANDLING

Keep from freezing. Product must be stored indoors in a cool, dry environment. Material should be stored between 40°F (4°C) and 100°F (38°C). At the jobsite protect the product from extreme heat and direct sunlight.

ENVIRONMENTAL CONDITIONS

Environmental conditions such as temperature, dew point, humidity, precipitation, sun, cloud cover, wind, and shade will affect application and cure rate of SOPRASEAL LM 203 membrane. Monitor and confirm all environmental conditions are satisfactory to begin work and remain so during installation of the specified components and materials.

- Do not apply SOPRASEAL LM 203 membrane if precipitation is anticipated 2 hrs. after installation.
- Generally, application may proceed when ambient and surface temperature is minimum 40°F (5°C) and rising providing the substrate is a minimum of 5°F (-15°C) above the dew point temperature, and the substrate is clean and dry.

EQUIPMENT LIST

- 3/4" nap rollers of varying length - 4", 9" or 18"
- Extension handles
- Gloves
- Safety glasses
- Jiffy mixer blade
- Power drill capable low speed mixing (250 - 500rpm)

SOPRASEAL LM 203

SPRAYING SOPRASEAL LM 203

SOPRASEAL LM 203 is a water-based, low to medium viscosity product and can be applied with a number of different sprayer set ups.

SOPRASEAL LM 203 can be spray applied using a Graco brand HTX 2030 air assist sprayer that uses a trigger gun with a #2 tip with B disc at 1000 psi, and with a maximum hose length of 150 feet and maximum ID of 3/4". Other air assisted spray set ups can be used when following similar specifications. SOPRASEAL LM 203 contains a fine silica filler and should not be spray applied using hydraulic spray equipment.

All attempts have been made to ensure the validity of the information contained within this document. However, due to changes in equipment design and to the maintenance and wear involved with equipment, SOPREMA does not warrant the information contained within this document. Proper equipment selection and success of the use of such equipment is the responsibility of the applicator. Equipment not listed here may also provide acceptable performance so please consult the equipment manufacturer for their recommendations and application guidelines.

Spray equipment not evaluated by SOPREMA may also provide acceptable performance. SOPREMA recommends referring to the equipment manufacturer's recommendations for appropriate use and maintenance of all spray equipment and accessories.

LIQUID APPLIED AIR AND VAPOR BARRIER APPLICATION GUIDELINES

Contractor must use his or her own knowledge, experience and judgment when selecting equipment and accessories for application of SOPRASEAL LM 203 and all SOPREMA products.

Prior to starting up spray equipment, ensure that all equipment is clean. Carefully read and follow the equipment manufacturer's operating and safety instructions and familiarize yourself with equipment features. Ensure that all components and accessories have a capacity and pressure rating meeting the pump manufacturer's specifications. When required, apply band type pail heater to maintain product temperature above 70°F (21°C) during application. Always use a test area to adjust spray settings and application distance prior to starting the job. Pressure directly affects the spray pattern and typically requires adjustment to match field conditions. Set the pressure so that the gun provides a clean spray pattern about 16 inches wide at the point of contact with the substrate when sprayed from approximately 2 feet.

Always protect all surfaces that are not to be coated. Mask off sensitive areas (such as windows) and clean off any overspray before SOPRASEAL LM 203 cures.

Always start projects with clean spray equipment and new spray tips remembering that spray tips are a wear and tear item and could need replaced during even a single project.



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LIQUID APPLIED AIR AND VAPOR BARRIER APPLICATION GUIDELINES

MIXING

Separation will occur when SOPRASEAL LM 203 is stored for extended periods of time. Use the jiffy mixer blade and power drill at low speed (250-500rpm) for 3 minutes making sure to stir from the bottom to the top of the pail for a homogeneous mixture prior to application.

SUBSTRATE PREPARATION

Verify substrate conditions before application. Applicators should protect all surfaces that are not to be coated. Mask off sensitive areas such as windows and clean off any drips or over spray before the material hardens using warm soapy water. The substrate must be clean, dry to the touch, free of any voids, pits, bug holes, oxidation, oils, waxes, standing water or concrete form release agents that may interfere with adhesion. Irregular or abraded surfaces are acceptable but must also be clean and sound.

When applying to poured concrete walls or CMU walls refer to ASTM D4258, Standard Practice for Surface Cleaning Concrete for Coating, or D4261, Standard Practice for Surface Cleaning Concrete Masonry Units for Coating.

Concrete should cure a minimum of 14 days depending on ambi-ent conditions, be dry to the touch, and free of standing water.

DETAILING

1. Cracks in exterior sheathing or concrete 1/16" or less can be bridged with the field application of SOPRASEAL LM 203 requiring no additional detailing.
2. Board seams, inside corners, outside corners, and any construction gaps greater than 1/16" but less than 1/8" shall be sealed using a skim coat of SOPRASEAL LM 203 approximately 3" on both sides of the seam or corner, embed SOPREMA's 4" Mesh into the wet detail coat followed by a second skim coat of SOPRASEAL LM 203.
3. Penetrations need to be well secured on both sides of the wall to keep movement to a minimum. For gaps around penetrations greater than 1/4" install properly fitted closed cell backer rod and apply ALSAN COATING AC 401 FLASHING into the joint between the penetration and the wall a minimum 1/4" deep while creating a cove bead a minimum 1/2" onto the penetration and 1/2" on to the face of the wall on both sides of the joint. Backer rod is not required for gaps 1/4" or less.
4. Fasteners such as those used to install brick ties and insulation before or after the application of the SOPRASEAL LM 203 shall be pre-treated with ALSAN COATING AC 401 FLASHING at the shaft of the fastener and then applied to the fastener heads after installation being sure to trowel material into any gaps and then out onto the air barrier at least 2".



7. Rough Openings: Consult www.soprema.us for detail drawings. For job specific details or questions contact your local SOPREMA Representative.

8. Tie-ins to Below-Grade Waterproofing and Roofing: Consult www.soprema.us for detail drawings. For job specific details or questions contact your local SOPREMA Representative.

NOTE: Wet-on-wet application of SOPRASEAL LM 203 is acceptable. Wet-on-cured is also acceptable as long as the cured SOPRASEAL is clean and dry. Allow first coats to skin for 30 minutes at 75F 50% R.H. before proceeding with the next coat.

APPLICATION

1. Spray, brush or roller apply SOPRASEAL LM 203 to the specified thickness to the properly prepared substrate. Applications that require more than 40mils should be applied in two equal lifts leaving time for the first coat to skin well before applying the second to avoid displacing the first coat of material.

2. Spray applications should be done in a cross-hatch pattern using a left right left application followed by an up down up application to ensure quality coverage and obtain a uniform mil thickness over the entire surface.

3. Use a wet film mil gauge for proper application thickness.

4. Allow the finished coats to cure for at least 6 hours at 75°F (24°C) and 50% RH before continuing with any specified insulation, drainage layers or the exterior façade.

5. If SOPRASEAL LM 203 is left exposed to UV for more than 6 months contact your local SOPREMA Representative to inspect the membrane for wear and tear or degradation and repair any areas by cleaning the membrane and recoating as needed with additional material before installing cladding.

SOPRASEAL LM 203 COVERAGE RATES

application thickness (wet)	sq. ft/gal*	dry mil thickness**
20 mils wet	80	14.8
30 mils wet	60	22.2
40 mils wet	40	29.6
60 mils wet	26	44.4

*sq. ft/gal = 1604/desired wet mil thickness

**dry mil thickness of SOPRASEAL LM 203 = wet mil thickness x 74%

DRY TIME

Allow to dry completely, typically 2 to 6 hours at 75°F (24°C) and 50% relative humidity. Protect from rain and from temperatures less than 40°F (4°C) until dry.

CLEANUP

Dispose of containers and unused material in a safe manner in accordance with local, regional and federal regulations and avoid release to the environment.

Before material cures, clean all tools and equipment with warm soapy water. Cured material will need to be mechanically removed. Clean skin with warm soapy water and a medium bristled brush as needed.

SPRAY EQUIPMENT CLEANUP

Immediately after use and before material has cured, clean equipment with warm water. Follow the spray equipment manufacturer's cleaning recommendations. Cured SOPRASEAL LM 203 is difficult to remove and may affect subsequent equipment performance.