

### SOPRASEAL® LM 203

SOPRASEAL LM 203 is a 74% solids sprayable one-part, liquid applied, non-flammable, air and vapor barrier used in high performance wall assemblies to control water, air, and moisture flow.

SOPRASEAL LM 203 is a non-flammable, water-based, low VOC air and vapor impermeable membrane used on vertical masonry, concrete, exterior gypsum sheathing, treated and untreated exterior plywood sheathing (grade C-D or better) and untreated OSB and metal.

#### 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 the 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 hours after installation.
- Generally, application may proceed when ambient and surface temperature is minimum 40°F (5°C) and the substrate is clean and dry.

#### EQUIPMENT LIST

- 3/8" nap roller w/ roller cage
- Extension handle
- Gloves
- Safety glasses
- Jiffy mixer blade
- Power drill capable of low speed mixing (250 - 500 rpm)

# APPLICATION GUIDELINES

### SPRAYING SOPRASEAL LM 203

SOPRASEAL LM 203 is a textured, water-based, low to medium viscosity product and can be applied using spray equipment such as the Apla-Tech, Inc., WRB or T-Series Spray Pump with 50' Textured Line and Pistol Gun. Hydraulic spray equipment is not recommended.

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.

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 a 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, doors and building finishes) and clean off any overspray before SOPRASEAL LM 203 cures.

### 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 (250-500 rpm) 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, doors and building finishes, and clean off any drips or overspray before the material hardens using warm, soapy water. The substrate must be clean, dry to the touch, free of any voids, pits, bug holes, fins, protrusions, 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 for a minimum of 7 days, depending on ambient conditions, and be dry to the touch.



## APPLICATION GUIDELINES

## DETAILING

**Joints**

Fill exterior sheathing joints that are greater than 1/4" with properly fitted closed cell backer rod and seal with SOPRASEAL LIQUID FLASHING or SOPRASEAL SEALANT, a minimum 1/4" deep over center of backer rod. Apply more SOPRASEAL LIQUID FLASHING or SOPRASEAL SEALANT in a zigzag pattern across the joint and trowel the material smooth, so that it overlaps onto the face of the sheathing at least 2" on both sides of the joint. Backer rod is not required for joints 1/4" or less.

**Voids/Bug Holes**

Fill voids and bug holes larger than 1/8" diameter and 1/8" deep with SOPRASEAL LIQUID FLASHING or SOPRASEAL SEALANT and immediately tool flush with the surface. A cementitious parge coat can also be used for large uneven areas or areas needing repair.

**Penetrations**

All 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 SOPRASEAL LIQUID FLASHING or SOPRASEAL SEALANT into the joint between the penetration and the wall a minimum 1/4" deep, while creating a 3/4" face cant bead. Backer rod is not required for gaps 1/4" or less.

**Corners**

Inside and outside corners may be flashed with SOPRASEAL STICK 1100T, SOPRASOLIN HD, SOPRASEAL STICK FLASHPRO, a minimum 6" wide centered over the corner, or pretreated with SOPRASEAL LIQUID FLASHING or SOPRASEAL SEALANT with a 3/4" cant bead for inside corners, and a minimum 2" on either side of an outside corner. SOPRASEAL STICK 1100T and SOPRASOLIN HD require ELASTOCOL STICK primer.

NOTE: When the sheathing does meet evenly at an outside corner, fill the space with SOPRASEAL LIQUID FLASHING or SOPRASEAL SEALANT prior to flashing the corner.

**Brick Ties**

Brick ties that are attached with fasteners can be treated with SOPRASEAL LIQUID FLASHING or SOPRASEAL SEALANT around the fastener. After brick tie is installed, butter the fastener heads and metal tie at the wall with SOPRASEAL LIQUID FLASHING or SOPRASEAL SEALANT, being sure to trowel material into any gaps and then out onto the air barrier at least 2". Refer to SOPREMA standard flashing details for wall system applications found on our website at [www.soprema.us](http://www.soprema.us), and allow SOPRASEAL LIQUID FLASHING or SOPRASEAL SEALANT to skin over before proceeding with the application of SOPRASEAL LM 203.

**Rough Openings**

Rough openings may be flashed with a minimum 6" wide SOPRASEAL STICK 1100T, SOPRASOLIN HD, or SOPRASEAL STICK FLASHPRO centered over the corner, or apply SOPRASEAL LIQUID FLASHING or SOPRASEAL SEALANT extending a minimum of 3" into the rough opening, and a minimum of 2" out onto wall. SOPRASEAL STICK 1100T and SOPRASOLIN HD require ELASTOCOL STICK primer.

**Below-Grade and Roofing Tie-Ins**

Consult [www.soprema.us](http://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 over before proceeding with the next coat.

# APPLICATION GUIDELINES

## APPLICATION

1. Spray, brush or roller apply SOPRASEAL LM 203 to the specified thickness to the properly prepared substrate.
2. Spray applications should be done in a crosshatch 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 to ensure proper application thickness.
4. Allow finished coats to cure at least 6 hours at 75°F and 50% relative humidity before the installation of subsequent materials.
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

Wet Film Application Thickness	ft <sup>2</sup> /gal	Dry Mil Thickness
10 mil	160	7.4
20 mil	80	14.8

## 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 and following the spray equipment manufacturer's cleaning recommendations. Cured SOPRASEAL LM 203 is difficult to remove and may affect subsequent use of the spray equipment.