

WATERPROOFING MEMBRANE

COLPHENE® LM BARR

COLPHENE LM BARR is a liquid-applied waterproofing membrane available in a standard grade and a spray grade. It can be applied using a roller, squeegee or trowel and is ideal for vertical and horizontal non-exposed concrete waterproofing.

For spray waterproofing applications of COLPHENE LM BARR, please refer to our application guidelines for COLPHENE LM BARR Spray.

HEALTH AND 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 COLPHENE LM BARR 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. SOPRADRAIN drainage panels can be installed in rows or columns, with the fabric side facing the soil. Each method has its advantages, depending on the criteria of the project.

When applying COLPHENE LM BARR 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.

STORAGE AND HANDLING

Containers should be stored unopened until ready for use. Store material above 60°F (16°C) but less than 95°F (35°C) for optimum shelf life. Storage outside of the recommended guidelines for extended time could affect the performance of the material. Store away from any sparks or open flames.

APPLICATION GUIDELINES

EQUIPMENT LIST

- 3/8" to 3/4" nap rollers of varying lengths
- Properly sized flat squeegee
- Extension handles
- Mil thickness gauges
- Gloves
- Safety glasses
- Jiffy mixer paddle
- High power corded drill capable low speed mixing (250 - 500rpm)
- Spiked shoes
- Blower and/or brooms

ENVIRONMENTAL CONDITIONS

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

- Do not apply COLPHENE LM BARR if precipitation is anticipated 2 hrs. after application.
- Generally, application may proceed when ambient and surface temperature is minimum 40°F (4°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.

MIXING

Both the regular and spray grade of COLPHENE LM BARR should be mixed prior to application using a Jiffy mixing paddle and a high powered 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

All substrates must be clean and dry to the touch, as well as free from gross irregularities, loose, unsound or foreign material such as dirt, ice, snow, water, grease, oil, release agents, lacquers, or any other condition that would be detrimental to adhesion of resin materials to the substrate. Release agents and curing compounds must be removed prior to application of COLPHENE LM BARR.

Concrete Surface Profile should be CSP-3 to CSP- 4. All CMU must have flush joints with no voids. Any concrete protrusion should be struck flush. Voids need to be filled in with an approved SOPREMA'S material to be flush with surface.

TYPICAL COVERAGE RATES FOR CONCRETE

MIL THICKNESS	FT ² /GALLON
60	26
90	17.5
120	13
180	8.5

DETAILING

- Cracks 1/16" or less shall be pretreated prior to placement of COLPHENE LM BARR. Apply a 60 mil detail coat COLPHENE LM BARR or COLPHENE LM BARR FLASHING a minimum of 6" to each side of the crack. Allow detail coat to cure enough to not be displaced during application of the COLPHENE LM BARR.
- Cracks greater than 1/16" wide shall be routed to a min. 1/4" wide by 1/4" deep. Place bond breaker tape on the bottom of the routed crack and fill with COLPHENE LM BARR FLASHING. Allow COLPHENE LM BARR FLASHING to cure overnight. Apply detail coat of properly mixed COLPHENE LM BARR at 60 mils a minimum of 6" to each side of the routed crack. Allow detail coat to cure enough to not be displaced during application of the COLPHENE LM BARR.
- For all expansion joints, consult your SOPREMA Representative.
- Vertical to horizontal junctures install a 1" fillet bead of COLPHENE LM BARR FLASHING. Allow COLPHENE LM BARR FLASHING to cure overnight. Install a 60-mil detail coat of COLPHENE LM BARR minimum of 8" onto the vertical and 4" onto the horizontal. Allow detail coat to cure enough to not be displaced during application of the COLPHENE LM BARR.
- Inside corners 1" fillet bead of COLPHENE LM BARR FLASHING. Allow COLPHENE LM BARR FLASHING to cure overnight. Apply detail coat of properly mixed base coat at 60 mils a minimum of 6" to each side of the corner. Allow detail coat to cure enough to not be displaced during application of the COLPHENE LM BARR.
- Penetrations such as pipes through the deck shall be rigidly fastened on both sides of the deck whenever possible. Mechanically abrade penetrations to ensure a clean and dry substrate. Seal with COLPHENE LM BARR FLASHING creating a cove bead around the base of the pipe with a minimum of 1" onto the penetration and the deck. Allow the COLPHENE LM BARR FLASHING to cure overnight. Apply detail coating at 60 mils over the cove bead 8" onto the vertical and 4" onto the horizontal. Allow detail coat to cure enough to not be displaced during application of the COLPHENE LM BARR.
- Drains shall be operational and recessed with the deck sloped to drain. Drains to be detailed with COLPHENE LM BARR FLASHING creating a seal between the deck and the drain. Block drain and apply 60 mils of COLPHENE LM BARR down into the drain a minimum of 3" and onto deck a minimum of 12". Allow detail coat to cure enough to not be displaced during subsequent applications of the COLPHENE LM BARR.

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WATERPROOFING MEMBRANE APPLICATION GUIDELINES

8. Stops and starts – All prior day material terminations should be free of contaminants and overlapped a minimum of 6" with the new day's application of material. Where COLPHENE LM BARR has been left exposed for more than 72 hours, or has become dirty, clean the existing COLPHENE LM BARR surface using a clean cloth and xylene solvent.

VERTICAL APPLICATION

Roller or brush apply COLPHENE LM BARR in a single pass. Terminate a minimum of 6" above the grade line unless membrane will be exposed then terminate a maximum of 3" below grade line. At the footer, terminate COLPHENE LM BARR over the 1" fillet bead of COLPHENE LM BARR FLASHING and detail coat of COLPHENE LM BARR onto the base of the footer.

For tie-ins to COLPHENE BSW pre-applied waterproofing products, or air barrier SOPRASEAL products refer to the appropriate tie-in details on our website at www.soprema.us.

SOPRA-XPS insulation may be installed using adhesive backed insulation pins adhered to the cured COLPHENE LM BARR. Adhesive backed pins are recommended to avoid penetrating the waterproofing membrane.

SOPRADRAIN 100 series prefabricated drainage may be installed over the insulation or directly over the COLPHENE LM BARR. SOPRADRAIN 100 series products can be hung using a termination bar at the top of the wall where the fasteners will not penetrate the waterproofing membrane. SOPRADRAIN may also be held in place until back filled with a spot application of COLPHENE LM BARR FLASHING.

HORIZONTAL APPLICATION

Single lift applications up to 120 mils of COLPHENE LM BARR can be applied in a single pass with a squeegee.

When reinforcement is required, apply the first lift with a squeegee and immediately install either SOPRAFLASH R or POLYFLEECE directly into the wet membrane. Allow the first lift with reinforcement to set up about 1 hour then apply a second lift of COLPHENE LM BARR to encapsulate the SOPRAFLASH R or POLYFLEECE.

For tie-ins to other COLPHENE waterproofing products, or air barrier SOPRASEAL products refer to the appropriate tie-in details on our website at www.soprema.us.

SOPRA-XPS insulation or other protection course may be installed over the cured COLPHENE LM BARR.

SOPRADRAIN 104 prefabricated drainage may be installed over the insulation or protection course, or directly over the COLPHENE LM BARR. SOPRADRAIN 104 can be loose laid over horizontal waterproofing membranes.

CURING

Product cure time will vary from minutes to hours depending upon applied film thickness, temperature and relative humidity (RH). Typical cure is 3 hours per 30 mils at 70°F (21°C) and 50% RH and an overnight cure is recommended before backfilling at these temperatures. The wait time may be longer in lower temperatures and humidity.

CLEANUP

Tools and uncured material can be cleaned with cleaning solvents such as Soprema's ALSAN RS Cleaner or an alcohol like IPA. Cured material must be mechanically removed.