

APPLICATION INSTRUCTIONS

COLPHENE® LM BARR SPRAY APPLICATION INSTRUCTIONS

COLPHENE LM BARR SPRAY

COLPHENE LM BARR SPRAY is a polyether based, solvent free, single component moisture curing elastomeric product designed for positive-side waterproofing applications over a variety of substrates. COLPHENE LM BARR Spray is spray applied, but is also available in both squeegee grade and flashing grade. This technical data sheet describes spray application techniques, considerations and limitations. Also, environmental conditions such as temperature, humidity, wind and sun will affect application and should be considered before spraying any material.

SELECTING SPRAY EQUIPMENT

COLPHENE LM BARR Spray is a low to medium viscosity product for use with high-pressure & volume spray equipment designed to handle high solids materials. COLPHENE LM BARR Spray can be applied with any spray systems meeting the following criteria:

Pump Pressure PSI (BAR)	Up to 4000 (276)
Gallon (L) / minute	4.0 (15.1)
Tip Orifice In (mm)	0.041 (1 mm)
Tip Flow Rate GPM (LPM)	1.8 (6.83)
Fan Width @ 24" (mm)	16 - 18 (406 - 457)
Pressure @ Point of Delivery (PSI)	2500 Min.
Hose Length & ID	Up to 150 feet, Max. ½" ID

Band type drum heaters designed for 50 gallon drums should be used to pre-condition and maintain product at or above the recommended minimum temperature of 70 °F (21.1 °C) for optimum application.

The system listed below has been field tested and approved for use with COLPHENE LM BARR Spray:

Model	GRACO @ GH 833*
Gun	GRACO Flow Gun
Tip	XHD RAC Spray Tip #841
Pressure (PSI)	Up to 4000
Hose Length & ID	Max 150 feet ½" ID

*Whip Hose, Gun Swivel, 30 in Tip Extension, 180° Tip Swivel and 50-gallon drum direct immersion kit recommended for ease of application and pumping direct from supplied product drums.

Spray equipment not evaluated by SOPREMA may also provide acceptable performance. Please consult the equipment manufacturer for their recommendations and application guidelines. SOPREMA recommends referring to the equipment manufacturer recommendations for appropriate use and maintenance of all spray equipment and accessories.

Contractor must use his or her own knowledge, experience and judgement when selecting equipment and accessories for application of COLPHENE LM BARR Spray and all SOPREMA products.

ENVIRONMENTAL CONSIDERATIONS

Monitor weather during the application of materials including ambient temperature, moisture, sun, cloud cover, wind, humidity and shade. Ensure conditions are satisfactory to begin work and ensure conditions remain satisfactory during the installation of specified materials. Ensure all materials and substrates remain above the dew point temperature as required to prevent condensation. Do not apply materials to frozen or frost covered surfaces. Ensure ambient temperature is at or above 35°F (2°C) during application of all materials and until dry. Product temperature should be maintained at no less than 70°F (21°C) during application.

PRODUCT PREPARATION

COLPHENE LM BARR Spray is suitable for spray application direct from the supplied drum or tote packaging without mixing and MUST NOT be mixed or thinned with solvents, water or foreign material. COLPHENE LM BARR Spray in 5 gallon pails should be stirred for 30 seconds with a hand mixer or low speed mechanical mixer being sure not to create a vortex on the surface that could introduce unneeded air to the material.

EQUIPMENT START-UP

Prior to starting up 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. Insert siphon hose/immersion tube into supply drum bung and seal around hose/tube with plastic or other acceptable material to reduce exposure to air. When required, apply band type drum heater to maintain product temperature during application. Select a test area and begin to spray. 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 a distance of 12 to 24 inches.

SUBSTRATE PREPARATION

Verify substrate condition before spray application. Applicators should protect all surfaces that are not to be coated. Mask off sensitive areas (such as windows) and clean off any COLPHENE LM BARR Spray overspray before the material hardens using alcohol or a water-free solvent. The substrate bonding surface must be clean, free of any voids, oxidation, oils, wax and other release agents that may interfere with adhesion and standing water. Irregular or abraded surfaces are acceptable but must be clean and sound. For "green concrete" applications, concrete should cure a minimum of 3 to 7 days depending on ambient conditions, be dry to the touch and free of standing water.

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PRIMER

In most applications, pre-priming is NOT required with COLPHENE LM BARR materials. However, certain applications or substrates may require priming to ensure adequate long-term bond and should be determined by the applicator prior to startup of work.

Adhesion should be confirmed for all substrates, especially with applications over existing or in-situ materials. Do NOT use asphalt based primers. Consult SOPREMA for an appropriate primer when required.

CRACKS, CORNERS, JOINTS & FASTENERS

Where required, apply COLPHENE LM BARR Spray or COLPHENE BARR Flashing material at joints, corners, cracks and penetrations to achieve a monolithic flashing membrane at a minimum of 60 mils free of voids and pinholes. When required, spray corners and joints and embed minimum 4" wide Polyfleece Flashing Scrim reinforcement in COLPHENE LM BARR material. Precut minimum 4" wide Polyfleece Flashing Scrim reinforcement to convenient lengths before spraying. When applying COLPHENE LM BARR Spray product to corners and joints, turn the air pressure down slightly to narrow the spray pattern. This will reduce the amount of material flowing through the spray gun. Next, direct the spray gun at a corner or joint, holding the gun as close to a 90° angle to the substrate as possible, about 12 to 24 inches away from the wall. Spray COLPHENE LM BARR in the target areas around corners and joints that require Polyfleece Flashing Scrim. Immediately embed precut minimum 4" wide Polyfleece Flashing Scrim into the wet COLPHENE LM BARR material using a new, clean and dry 3/4" nap roller. Embed the Polyfleece Flashing Scrim rolling outward toward its edges. Never roll in the reverse direction (i.e., back and forth); this could cause the fabric to spool onto your paint roller. Ensure that all Polyfleece Flashing Scrim lays flat against the substrate, without blisters, bubbles or fish mouths. Optionally, a trowel can be used to embed Polyfleece Flashing Scrim into the wet COLPHENE LM BARR material. Spot all fasteners in the field of sheathing with COLPHENE LM BARR Flashing material. Once all corner and joints have been treated with Polyfleece Flashing Scrim and fasteners spotted, proceed with the overall application of COLPHENE LM BARR Spray application. Re-adjust the pump pressure and begin spraying the substrate. Wet-on-wet spray application over joints and corners Polyfleece Flashing Scrim and fastener spotting is acceptable.

GENERAL SPRAYING GUIDELINES

Verify the substrate condition before spray application. Applicators should protect all surfaces that are not to be coated. Clean off any COLPHENE LM BARR Spray overspray before the material hardens using alcohol or a water-free solvent.

On rough, porous substrates, spray sufficient material to complete a void- and pinhole-free application of COLPHENE LM BARR Spray. The amount of COLPHENE LM BARR material will vary with substrate roughness and porosity.

If required, substrate imperfections can be pre-treated with COLPHENE LM BARR Flashing material to reduce the amount of material needed for adequate substrate coverage.

COLPHENE LM BARR Spray may be applied in single or multi-coat applications. Typically two coat applications are recommended to minimize and/or eliminate the possibility of pinholes. On vertical substrates, apply two coats at a minimum of 30-mil wet film thickness for a total 60-mil thickness of COLPHENE LM BARR Spray. On horizontal substrates, apply two coats at a minimum 60-mil wet film thickness for a total 120-mil thickness of COLPHENE LM BARR material. Ensure that the COLPHENE LM BARR forms a continuous, void and pinhole-free membrane. Repair any voids or pinholes as necessary. Verify application of all coats using a wet-film mil gauge.

TABLE 2.2B COLPHENE LM BARR
WARRANTY TERM & MEMBRANE THICKNESS

SOPREMA Warranty	Warranty Term	Minimum Thickness	Approximate Coverage Rate	Flashings
Standard Below Grade Waterproofing Warranty, Form BG100	5 years	60 mils unreinforced	3.7 gals/100 ft ²	All flashings reinforced per details: 60 mil base layer/ POLYFLEECE/ 60 mil top coat, totaling 120 mils. (2 layers @ 3.7 gals/100 ft ² totaling 7.4 gals/100 ft ²)
Standard Below Grade Waterproofing Warranty, Form BG100	10 years	120 mils unreinforced	7.4 gals/100 ft ²	All flashings reinforced per details: 60 mil base layer/ POLYFLEECE/ 60 mil top coat, totaling 120 mils. (2 layers @ 3.7 gals/100 ft ² totaling 7.4 gals/100 ft ²)
Standard Below Grade Waterproofing Warranty, Form BG100	10 years*	120 mils: 60 mil base layer/ POLYFLEECE/ 60 mil top coat	7.4 gals/100 ft ²	All flashings reinforced per details: 60 mil base layer/ POLYFLEECE/ 60 mil top coat, totaling 120 mils. (2 layers @ 3.7 gals/100 ft ² totaling 7.4 gals/100 ft ²)
Limited Product Replacement Warranty, Form LPR100	5 years	60 mils unreinforced	3.7 gals/100 ft ²	Reinforcement is optional for flashing at transitions, terminations and corners. COLPHENE LM BARR FLASHING "45 degree cant" is applied at inside corners.

*Contact SOPREMA® for additional warranty terms.

When spraying, continue to keep the spray gun as close to a 90° angle to the substrate as possible, ensuring full coverage of the substrate and overlap spray patterns to ensure uniform coverage, free from pinholes. In multi-coat applications and with repairs, for best results apply additional coats as soon as the first coat is firm.

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CONSUMPTION/COVERAGE RATES

COLPHENE LM BARR SPRAY APPROXIMATE CONSUMPTION & COVERAGE RATES					
Substrate	# Coats	Thickness Mils (mm)	Consumption gal/ft ² (L/m ²)	Consumption ft ² /gal (m ² /L)	50 gal (L) Drum Coverage ft ² (m ²)
Smooth	1	30 (0.76)	0.018 (0.73)	54 (1.3)	2700 (250)
	1	45 (1.14)	0.028 (1.14)	36 (0.8)	1800 (167)
	1	60 (1.52)	0.037 (1.50)	27 (0.66)	1350 (125)
	1	120 (3.05)	0.074 (3.0)	13.5 (0.33)	675 (62)

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 for 30 mil application at 70°F (21°C) and 50% RH. Note: Cold and dry conditions will slow curing, while hot and wet conditions will accelerate curing. All supplemental coats and repairs should be performed within 72 hours of the initial application.

SPRAY EQUIPMENT CLEANUP

Follow the spray equipment manufacturer's cleaning recommendations. It is important to clean spray equipment after use using xylene. Cured COLPHENE LM BARR is difficult to remove and will affect subsequent equipment performance.

DISCLAIMER

Do not leave COLPHENE LM BARR exposed to UV for longer than 90 days. The applicator is responsible for ensuring conditions are appropriate to proceed with proper application methods. Refer to SOPREMA product, specifications and guides for additional information. Materials and methods should be adjusted as necessary to accommodate varying project conditions. Materials should not be installed when conditions are unacceptable to achieve the specified results.

