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(Supersedes November 2013)

MEL-ROL® LM

Single-Component, Water-Based, Polymer-Modified, Cold-Applied,
Waterproofing Membrane

DESCRIPTION

MEL-ROL LM is a single-component, polymer-modified, cold-applied, water-based, liquid waterproofing membrane ideal for below-grade vertical seamless waterproofing applications. We have taken the same high quality rubber polymers found in W. R. MEADOWS' successful MEL-ROL "peel and stick" membrane and converted them into a heavy-bodied, high solids, quick drying liquid membrane.

With MEL-ROL LM, installation time is reduced, utilizing either a spray or roller application. A variety of different protection courses, insulation boards, or drainage boards can be embedded into the membrane to create a superior waterproofing system. With the application of PERMINATOR® vapor barrier over the membrane, a composite system can be created that has the combined advantages of both "peel and stick" and liquid-applied membranes.

USES

MEL-ROL LM can be used on new and remedial waterproofing applications on concrete or masonry block substrates. Since the formula is water-based, MEL-ROL LM can also be used on both ICFs and "green concrete" applications.

FEATURES/BENEFITS

- Waterproof – very low vapor permeability (perm rating).
- Superior elongation – bridges minor cracks; will not become brittle with age.
- Fully bonded – water will not run beneath the membrane.
- High solids, single-component, fast drying formulation – easy to apply; low cost application equipment; eliminates two-component mixing problems.
- Cold-applied/water-based – will not adversely affect insulated forms (ICFs) or various protection board options. Allows for application to damp or "green concrete."

- VOC content is 0.0 g/L. Produces no harmful odors.
- Easy application – no heating necessary. Eliminates fire hazards associated with heating kettles. Apply with roller or airless sprayer.

PACKAGING

5 Gallon (18.93 Liter) Pails
55 Gallon (208.20 Liter) Drums*
*special order only

COVERAGE

20 - 25 ft.²/gal. (0.49 – 0.61 m²/L) @ 60 mils.
Coverage dependent on substrate type, weather, and application conditions.

SHELF LIFE

When stored indoors in original, unopened containers at temperatures between 40 - 90° F (4 - 32° C), shelf life is a minimum of six months from date of manufacture.

SPECIFICATIONS

- Complies with all current federal, state, and local maximum allowable VOC requirements, including National EPA VOC Emission Standard for Architectural Coatings, CARB, LADCO, OTC Phase I and II, and SCAQMD.

CONTINUED ON REVERSE SIDE...

TECHNICAL DATA

Membrane		
Property	Typical Value	Test Method
Color	Black	
Solids	70%	
VOC Content	0 g/L	
Total Cure Time	16 - 24 hours	
Service Temperature	-20° - 140° F (-29° - 60° C)	
Application Temperature	40° F (4.4° C) minimum	
Shore "00" Hardness	Passes	ASTM C836
Stability	Exceeds	ASTM C836
Elongation	1500%	ASTM D412
Water Absorption	0.7%	ASTM D1970
WVT	0.03 Perms	ASTM E96, B
Composite (55 Mil Membrane/10 Mil PERMINATOR)		
Peel Adhesion	7 lb./in. (125 g/mm)	ASTM C794
Tensile Strength (Film)	5000 psi (36 MPa)	ASTM D412 (Die C)
Elongation	900%	ASTM D412 (Die C)
Water Vapor Permeability	0.02 Perms (0.013 g/m ² /24 h)	ASTM E96, B
Water Absorption	0.1%	ASTM D1970
Resistance to Hydrostatic Head	48 psi (0.3 MPa)	ASTM D751
Puncture Resistance	22 lbf. (98 N)	ASTM D4833

APPLICATION

Surface Preparation ... All surfaces must be clean (free of all coatings and curing compounds), free of frost, relatively smooth, and structurally sound. Patch any bug holes, tie holes, large gaps, or cracks with MEADOW-PATCH® 5 or MEADOW-PATCH 20 from W. R. MEADOWS. All loose laitance on the substrates, such as dirt, dust, loose stones, and debris, should be either swept or blown clean. All inside corners should be addressed with a cove of BEM from W. R. MEADOWS prior to application of MEL-ROL LM.

All shrinkage cracks less than 1/16" (1.6 mm) should be pretreated with a 60-mil coat of MEL-ROL LM 6" (152.4 mm) wide. All cracks greater than 1/16" (1.6 mm) should be taped with DETAIL STRIP from W. R. MEADOWS prior to application of the membrane. For specific project recommendations, please contact W. R. MEADOWS technical services.

Mixing ... MEL-ROL LM is designed to be used from the pail or drum with little or no mixing. However, if water appears on the surface, mix thoroughly with a low speed mechanical mixer prior to application.

Priming ... To reduce blistering on concrete surfaces, a thin coat of MEL-ROL LM diluted with water may be required. (Approximate dilution ratio of MEL-ROL LM to water is between 4:1 and 5:1.)

Thoroughly mix primer with a mechanical mixer. Prime the entire concrete surface to be waterproofed by spraying or rolling on a single coat at a coverage rate of 100 - 150 ft.²/gal. (2.45 - 3.68 m²/L). Allow primer to dry (approximately one hour, depending on temperature and conditions).

Detailing ... After surface preparations are complete, detailing should be addressed. The desired thickness of membrane coverage is 120 mils for inside/outside corners and non-moving and hairline cracks, as well as around drains and penetrations. Request and view the W. R. MEADOWS WATERPROOFING CONTRACTORS HANDBOOK for additional information.

Footing Details ... Use DETAIL STRIP from W. R. MEADOWS for impaction sheet coverage. First, fold strips lengthwise and then cut at the fold. Material is then ready to install as 4 ½" (114.3 mm) strips on either side of the rebar. Any excess can be turned down on the face of the footing. Next, fill the voids around rebars in the keyway with BEM. Pour the walls. Install DETAIL STRIP horizontally along the wall where it meets the footing, placing half the material up the wall and the other half onto the footing. Extend the material 4 ½" (114.3 mm) beyond outside corners. Slit extended portion of DETAIL STRIP lengthwise. Place the horizontal flap out onto the footing and bend the vertical flap around the wall. Repeat this procedure in the opposite direction. In high water table applications, install WATERSTOP EC from W. R. MEADOWS directly to the cold joint before application of DETAIL STRIP.

Roller Application ... MEL-ROL LM can be applied directly from the container using a ¾" (19.1 mm) nap roller. Apply in two coats, each 30 mils thick, allowing first coat to reach initial set prior to application of second coat.

Spray Application ... MEL-ROL LM may be sprayed on at a minimum coverage thickness of 60 mils wet (45 mils dry). To obtain 60 mils wet thickness, and to prevent slumping, apply MEL-ROL LM in two coats of 30 wet mils. Apply the second coat after the first coat has dried (approximately one to two hours).

Spraying Equipment ... MEL-ROL LM is most effectively applied by using the Graco HydraMax 350 or the Graco GH833 Big Rig.

The Graco heavy-duty texture gun is recommended for use with the following tips: For best results, use the 0.051" (Graco GHD551) heavy-duty switch tip. For spraying of primer coat, a smaller orifice tip such as the 0.035" (Graco GHD635) can be used. Tips should be reversible types for easy clean out. For more complete spraying equipment information, please view INSTALLATION INSTRUCTIONS: SPRAYER EQUIPMENT GUIDELINES FOR W. R. MEADOWS FLUID-APPLIED MEMBRANES available at www.wrmeadows.com.

Horizontal Application ... For horizontal applications, use HYDRALASTIC 836 from W. R. MEADOWS.

Thickness Control ... Frequently inspect surface area with a wet mil gauge to ensure desired consistent thickness is achieved. Porous substrates or masonry block walls may require additional coats to obtain desired thickness.

Cleanup ... Material should not be left in the pump, lines, or gun when finished spraying. CAUTION: Solvents must not come in contact with MEL-ROL LM in the sprayer, as they will break the emulsion and plug up the entire sprayer system. After spraying, promptly flush water only (no soap) through the system until pump and hose are clear [approx. five gallons (18.9 L)]. Aromatic solvents, such as xylene or toluene [approx. two gallons (7.6 L)], should be used for final flushing after water is flushed through the pump and lines.

Mineral spirits, paint thinner, gasoline, etc., must not be used to flush system. NOTE: Water must be flushed through the machine to remove any solvents prior to spraying of MEL-ROL LM.

Protection ... Cover vertical applications with PROTECTION COURSE, MEL-DRAIN™, or PERMINATOR (10 mil) from W. R. MEADOWS. Surfaces must be covered within 45 days.

Backfilling ... Allow 24 hours for complete cure of membrane prior to backfilling.

PRECAUTIONS

Do not freeze. Do not apply MEL-ROL LM if rainfall is forecast or imminent within 12 hours. For horizontal applications, HYDRALASTIC 836 is recommended. Do not apply MEL-ROL LM or primer when air, material, and surface temperatures are expected to fall below 40° F (4.4° C) within four hours of completed application. Sprayed urethane foams applied over MEL-ROL LM can melt the membrane and cause delamination and failure due to the exothermic reaction that takes place after spraying the foam. These foams should not be sprayed over MEL-ROL LM. The use of MEL-ROL LM does not negate the need for relief of hydrostatic heads. A complete drain tile system should be placed around the exterior of footing and under slabs, as required.

LEED INFORMATION

May help contribute to LEED credits:

- EAp2: Minimum Energy Performance
- EAc2: Optimize Energy Performance
- MRc9: Construction and Demolition Waste Management
- EQc2: Low-Emitting Materials [For Healthcare and Schools (exterior-applied products) ONLY]

For BIM assemblies, CAD details, most recent data sheet, further LEED information, and SDS, visit www.wrmeadows.com.



LIMITED WARRANTY

W. R. MEADOWS, INC. warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order. Read complete warranty. Copy furnished upon request.

Disclaimer

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