



CSI Code: 07 14 16

NO. 714-A

MARCH 2010
(Supersedes March 2009)

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 horizontal and vertical seamless waterproofing applications. We have taken the same high quality rubber polymers found in 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.

SPECIFICATIONS

- Complies with all current federal, state, and local maximum allowable VOC requirements, including U.S. EPA, SCAQMD, and OTC.

LEED INFORMATION

May help contribute to LEED credits:

- EA Credit 1: Optimize Energy Performance
- IEQ Credit 3.1: Construction Indoor Air Quality Management Plan: During Construction
- IEQ Credit 4.2: Low-Emitting Materials: Paints & Coatings
- MR Credit 2: Construction Waste Management
- MR Credit 5: Regional Materials

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

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.

CONTINUED ON REVERSE SIDE...

All shrinkage cracks less than 1/16" should be pretreated with a 60-mil coat of MEL-ROL LM 6" (15 cm) wide. All cracks greater than 1/16" should be taped with W. R. MEADOWS DETAIL STRIP 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. 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.

Roller Application ... MEL-ROL LM can be applied directly from the container using a ¾" 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 vertical surfaces at a minimum coverage thickness of 60 mils wet (45 mils dry). A single coat may achieve desired coating thickness. However, if material slumps due to temperature or substrate conditions, two coats (30 mils wet) may be necessary. 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.

Horizontal Application ... Contact your local W. R. MEADOWS sales office for specific recommendations.

Approximate Coverage ... 20-25 ft.²/gal. @ 60 mils. Coverage dependant on substrate type, weather, and application conditions.

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 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). Aromatic solvents, such as xylene or toluene (approx. two gallons), 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 10-mil PERMINATOR from W. R. MEADOWS. Surfaces must be covered within 45 days.

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

SHELF LIFE (TYPICAL)

Six (6) months in unopened container. Store at 40° - 90° F.

PRECAUTIONS

Do not freeze. Do not apply MEL-ROL LM on vertical projects if rainfall is forecast or imminent within 12 hours. Do not apply MEL-ROL LM or primer when air, material and surface temperatures are expected to fall below 40° F 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. There 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.

PHYSICAL PROPERTIES**MEMBRANE**

Color	Black	
Solids	70%	
Total Cure Time	16-24 hrs	
Service Temperature	-20° F - 140° F (-29° C - 60° C)	
Application Temperature	40° F minimum	
Coverage	20 - 25 ft. ² /gal.	
Shore "00" Hardness	Passes	ASTM C 836
Stability	Exceeds	ASTM C 836
Elongation	1500%	ASTM D 412
Water Absorption	0.7%	ASTM D 1970
WVT	0.03 Perms	ASTM E 96, B

Composite (55 Mil Membrane/10 Mil PERMINATOR)

Peel Adhesion	7 lb./in. (125 g/mm)	ASTM C 794
Tensile Strength (Film)	5000 PSI (36 MPa)	ASTM D 412 (Die C)
Elongation	900%	ASTM D 412 (Die C)
Water Vapor Permeability	0.02 Perms	ASTM E 96, B
Water Absorption	0.1%	ASTM D 1970
Resistance to Hydrostatic Head	48 PSI	ASTM D 751
Puncture Resistance	22 lbf. (98 N)	ASTM D 4833





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

The information contained herein is included for illustrative purposes only, and to the best of our knowledge, is accurate and reliable. W. R. MEADOWS, INC. cannot however under any circumstances make any guarantee of results or assume any obligation or liability in connection with the use of this information. As W. R. MEADOWS, INC. has no control over the use to which others may put its product, it is recommended that the products be tested to determine if suitable for specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, application and proper installation of each product. Specifier and user shall determine the suitability of products for specific application and assume all responsibilities in connection therewith.