

GUIDE SPECIFICATION FOR MEL-ROL® LM: LIQUID-APPLIED WATERPROOFING MEMBRANE

SECTION 07 14 16

COLD-FLUID APPLIED WATERPROOFING

Specifier Notes: This guide specification is written according to the Construction Specifications Institute (CSI) format. The section must be carefully reviewed and edited by the architect or engineer to meet the requirements of the project. Coordinate this section with other specification sections and the drawings.

Specifier Notes: MEL-ROL LM waterproofing system is a single-component, polymer-modified, cold-applied, liquid waterproofing membrane ideal for vertical waterproofing applications. This heavy bodied, liquid membrane is ideal for immediate application to newly stripped, below-grade concrete walls and for use with insulated concrete forms. It is also suitable for below-grade masonry block walls.

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Surface preparation.
- B. Application of single-component, cold-applied, liquid waterproofing membrane.

1.02 RELATED SECTIONS

Specifier Notes: Edit the list of related sections as required for the project. List other sections dealing with work directly related to this section.

- A. Section 03 30 00 – Cast-in-Place Concrete.
- B. Section 04 20 00 – Unit Masonry.
- C. Section 07 13 26 – Self-Adhering Sheet Waterproofing.
- D. Section 07 21 00 – Thermal Insulation.
- E. Section 07 60 00 – Flashing and Sheet Metal.
- F. Section 07 92 00 – Joint Sealants.
- G. Section 33 46 13 - Foundation Drainage.

1.03 REFERENCES

- A. ASTM D146-97 - Standard Test Methods for Sampling and Testing Bitumen-Saturated Felts and Fabrics Used in Roofing and Waterproofing.
- B. ASTM D412-98a(2002)e1 - Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers -Tension.
- C. ASTM E96-00e1 (Method B) - Standard Test Methods for Water Vapor Transmission of Materials.
- D. ASTM D1228 - Methods of Testing Asphalt Insulating Siding Surfaced with Mineral Granules.

- E. ASTM C836 - Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course.
- F. ASTM D1970-01 - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.

1.04 SUBMITTALS

- A. Comply with Section 01 33 00 - Submittal Procedures.
- B. Submit manufacturer's product data and application instructions.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Store materials in a clean, dry area in accordance with manufacturer's instructions.
- C. Store adhesives and primers at temperatures of 40° F (5° C) and above to facilitate handling.
- D. Do not store at temperatures above 90° F (32° C) for extended periods.
- E. Protect materials during handling and application to prevent damage or contamination.

1.06 ENVIRONMENTAL REQUIREMENTS

- A. Product not intended for uses subject to abuse or permanent exposure to the elements.
- B. Do not apply membrane when air, material, or surface temperatures are expected to fall below 30° F (-1° C) within four hours of completed application.
- C. Do not apply membrane if rainfall is forecast or imminent within 12 hours.
- D. Do not apply to frozen concrete.
- E. Membrane can be applied to green concrete.

PART 2 PRODUCTS

2.01 MANUFACTURER

- A. W. R. MEADOWS®, INC., PO Box 338, Hampshire, Illinois 60140-0338. (800) 342-5976. (847) 683-4500. Fax (847) 683-4544. Web Site www.wrmeadows.com.

2.02 MATERIALS

- A. Waterproofing Membrane: single-component, polymer-modified, cold-applied, liquid waterproofing membrane.
 - 1. Performance Based Spec: Waterproofing membrane shall have the following properties as determined by laboratory testing:
 - a. Color: Black
 - b. Solids: 70%
 - c. Total Cure Time: 16-24 hours
 - d. Shore "00" Hardness, ASTM C836: Passes
 - e. Adhesion to Concrete, ASTM C836: Exceeds
 - f. Low Temperature Flex and Crack Bridging, ASTM C836: Passes
 - g. Stability, ASTM C836: Exceeds
 - h. Elongation, ASTM D412: 1500%

- i. Water Absorption, ASTM D1970: 0.7%
- j. Water Vapor Transmission, ASTM E96 (Method B): 0.03 perms

2. Proprietary Based Spec:

- a. MEL-ROL LM Waterproofing System by W. R. MEADOWS.

2.03 ACCESSORIES

- A. Concrete Repair Materials: MEADOW-PATCH™ 5 and 20 Concrete Repair Mortars.
- B. Waterproofing Protection Course: PERMINATOR™ 10 mil.
- C. Rolled Matrix Drainage System: MEL-DRAIN™.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine surfaces to receive membrane. Notify architect if surfaces are not acceptable. Do not begin surface preparation or application until unacceptable conditions have been corrected.

3.02 SURFACE PREPARATION

- A. Protect adjacent surfaces not designated to receive waterproofing.
- B. Clean and prepare surfaces to receive waterproofing in accordance with manufacturer's instructions.
- C. Do not apply waterproofing to surfaces unacceptable to manufacturer.
- D. Concrete surfaces must be clean, relatively smooth, and free of standing water.
- E. Patch all holes and voids and smooth out any surface misalignments.
- F. Remove and patch all concrete form ties.
- G. Apply primer coat of membrane diluted 4:1 with water if necessary to reduce blistering on concrete surfaces at a coverage rate of 100-150 ft.²/U.S. gal (13.9 m²/3.78 L) by spraying or rolling.
- H. Allow primer coat to dry before proceeding to membrane application.

3.03 APPLICATION

- A. Apply waterproofing membrane system in accordance with manufacturer's instructions.
- B. Thoroughly mechanically mix membrane prior to application.
- C. Apply membrane by spray, roller, or brush at a minimum coverage rate of 20-25 ft.²/U.S. gal (1.9-2.3 m²/3.78L) providing a thickness of 60 wet mils.
- D. Frequently inspect surface area with a wet mil gauge to ensure consistent thickness.
- E. Work material into any fluted rib forming indentations.
- F. Cured thickness of membrane should be 45 mils dry.
- G. Avoid use of products that contain tars, solvents, pitches, polysulfide polymers, or PVC materials that may come into contact with waterproofing membrane system.

3.04 PROTECTION

- A. Protect membrane with application of waterproofing protection course, drainage board, or other approved material.
- B. Backfill immediately using care to avoid damaging waterproofing membrane system.

END OF SECTION