

GUIDE SPECIFICATION FOR HYDRALASTIC™ 836: LIQUID-APPLIED WATERPROOFING MEMBRANE

SECTION 07 14 16

COLD-FLUID APPLIED WATERPROOFING

Revision Date: February 20, 2020

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: HYDRALASTIC 836 is a cold-applied, solvent-free, single-component waterproofing compound. It does not shrink, has a low volatile organic compound (VOC) content, and has a very low odor. It will not crack in extreme cold or slump due to softening at high temperatures.

HYDRALASTIC 836 can be used on interior or exterior concrete surfaces, where protection from water intrusion is desired. The product can be used for both above-grade and below-grade applications. HYDRALASTIC 836 is excellent for horizontal and vertical applications, such as waterproofing plaza decks, planter boxes, and sealing parapets. The product is ideal for positive-side waterproofing for foundations and also in between-slab applications. HYDRALASTIC 836 can also be used in vertical applications.

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 C1250 – Standard Test Method for Nonvolatile Content of Cold Liquid-Applied Elastomeric Waterproofing Membranes.
- B. ASTM C836 - Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course.

- C. ASTM D412 - Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers – Tension.
- D. ASTM D2240 - Standard Test Method for Rubber Property—Durometer Hardness.
- E. ASTM D2369 - Standard Test Method for Volatile Content of Coatings
- A. ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials.

1.04 SUBMITTALS

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

1.05 QUALITY ASSURANCE

- A. Installer Qualifications:
 - a. Use an experienced installer and adequate number of skilled personnel who are thoroughly trained and experienced in the application of fluid applied waterproofing membranes.
- B. Obtain waterproofing materials from a single manufacturer regularly engaged in manufacturing the product.
- C. Provide products which comply with all state and local regulations controlling use of volatile organic compounds (VOCs).

1.06 PRECONSTRUCTION MEETING

- A. Preconstruction Meeting: Convene [one] [_____] week prior to commencing work of this section, in accordance with Section [XX XX XX] - Project Meetings.

1.07 MOCK-UPS

- A. Prior to installation of waterproofing membrane, apply waterproofing membrane to 100 ft.² of deck or wall to demonstrate surface preparation, crack and joint treatment, corner treatment, thickness, and to demonstrate tie-ins with adjoining construction, and other termination conditions, as well as qualities of materials and execution.
- B. Cooperate and coordinate with the owner's inspection and testing agency. Do not cover any installed waterproofing membrane unless it has been inspected, tested and approved.

1.08 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 at temperatures between 40° - 70° F (4° - 21° C).
- D. Protect materials during handling and application to prevent damage or contamination.

1.09 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 waterproofing membrane to any surfaces containing frost.
- E. Consult manufacturer for applications 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. Website: www.wrmeadows.com.

2.02 MATERIALS

- A. Waterproofing Membrane: single-component, cold-applied, solvent-free, non-shrink, liquid waterproofing membrane.
 - 1. Performance Based Spec: Waterproofing membrane shall have the following properties as determined by laboratory testing:
 - a. Solids content by weight, ASTM C1250: 98%.
 - b. Tensile Strength, ASTM D412: 100 psi.
 - c. Elongation at break, ASTM D412: 425%.
 - d. Water Vapor Transmission, ASTM E96 (Method BW): 0.1 perms.
 - e. Shore 00 Hardness, ASTM D2240: 57.
 - f. VOC, ASTM D2369: 36 g/L
 - 2. Proprietary Based Spec:
 - a. HYDRALASTIC 836 Waterproofing Membrane by W. R. MEADOWS.

2.03 ACCESSORIES

- A. Joint Tape: 6" (150 mm) wide reinforcing fabric for corners, crack, and joint treatment.
 - 1. REINFORCING FABRIC HCR by W. R. MEADOWS.
- B. Reinforcing Fabric for High Build Applications: REINFORCING FABRIC HCR by W. R. MEADOWS.
- C. Reinforced Joint Tape for outside corners subject to backfill.
 - 1. PRECON® FABRIC TAPE by W. R. MEADOWS.
- D. Epoxy Primer: REZI-WELD™ LV or REZI-WELD LV STATE by W. R. MEADOWS.
- E. Detailing Membrane: BEM by W. R. MEADOWS
- F. Concrete Repair Materials: MEADOW-PATCH® 5 and 20 Concrete Repair Mortars.
- G. Waterproofing Protection Course: PERMINATOR® or PROTECTION COURSE.
- H. 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. Clean concrete surfaces so they are free of all coatings, dirt, oil, paints and any other contaminants.
- E. Patch all holes and voids and smooth out any surface misalignments.
- F. Remove and patch all concrete form ties.
- G. Priming

Specifier Notes: For porous substrates where air and/or moisture release may cause pinhole or blister problems to occur in the applied membrane, priming the substrate prior to application of HYDRALASTIC 836 is recommended. Contact a W. R. MEADOWS representative for priming recommendations. Priming is recommended to remove trapped air/vapor from the substrate and promote a better bond with the substrate. The REZI-WELD LV or REZI-WELD LV STATE can be used as the epoxy primer and depending on air and surface temperatures, requires about 2 - 4 hours to become tack-free. If a primer is not necessary, then delete this section.

- 1. Apply the low viscosity epoxy with a nap roller or squeegee at a coverage rate of 150 - 200 ft.² per gallon (3.75 - 5.0 m²/L) providing a uniform coverage over the substrate.
 - 2. Allow the epoxy primer to become tack-free prior to the application of the fluid applied waterproofing membrane.
- H. Treatment of Existing Cracks and All Non-Structural Joints
- 1. Identify and install detailing membrane in all cracks and all non-structural joints.
 - 2. Apply a 30 wet mil coat of the fluid applied membrane ensuring that there is a minimum of 3" (75 mm) of membrane extending onto the wall in all directions.
 - 3. Embed the non-woven reinforcing fabric over the entire area of this membrane and work in using trowel.
 - 4. Completely cover the glass mesh with a second coat of the fluid applied membrane at 30 wet mils while the first coat is still wet, again extending 3" onto the wall in all directions.
- I. Treatment of Inside & Outside Corners
- 1. Install detailing membrane to create a minimum ¾" (25.4 mm) fillet in all inside corners.
 - 2. Apply a 30 wet mil coat of the fluid applied membrane ensuring that there is a minimum of 3" (75 mm) of membrane extending onto the wall in all directions.
 - 3. Embed the non-woven reinforcing fabric over the entire area of this membrane and work in using trowel.
 - 4. Completely cover the glass mesh with a second coat of fluid applied membrane at 30 wet mils while the first coat is still wet, again extending 3" (75 mm) onto the wall in all directions.
 - 5. On outside corners subject to backfilling, install reinforced joint tape in lieu of fabric joint tape following the same procedure.

3.03 APPLICATION

Specifier Notes: HYDRALASTIC 836 does not shrink and should be installed at a minimum thickness of 60 mil. However, thicker applications may be achieved and or required depending on project conditions. Typical installations for vertical applications are 60 mil, and for horizontal applications, a 60 mil, 90 mil or 120 mil high-build system with REINFORCING FABRIC HCR throughout. Please contact your local W. R. MEADOWS representative to discuss specific project requirements.

- A. Apply waterproofing membrane system in accordance with manufacturer's instructions.
- B. Gently mix membrane prior to application.
- C. Apply membrane by trowel, flat-blade squeegee, or roller, at a minimum coverage rate of 25 ft.²/U.S. gal (2.3 m²/3.78 L), providing a thickness of 60 wet mils.
- D. If a two-coat application is required, apply second coat as soon as possible with no more than eight hours between coats providing a minimum total thickness of 60 wet mils. Fully embed the reinforcing fabric into the first coat of material.
- E. Frequently inspect surface area to ensure proper adhesion and consistent thickness is achieved.
- F. Work material into any fluted rib forming indentations.
- G. Provide minimum cured membrane thickness of 60 mils dry.

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