



Exterior Commercial Hot Rubberized Applied Waterproofing Membrane

Mar-flex ArmorHRA 800

Description

Mar-flex ArmorHRA 800 Hot Rubberized Applied Waterproofing Membrane is a single-component, rubberized asphalt compound that forms a tough, flexible, thick waterproofing membrane. ArmorHRA 800 is comprised of 24% pre-consumer material and can contribute toward LEED® credits in new construction. ArmorHRA 800 adheres to virtually any sound vertical or horizontal surface, to ensure water will not migrate beneath the membrane in the event of physical damage. The fast setup time speeds the completion of the waterproofing. ArmorHRA 800 Hot-Applied Liquid Membrane is applied in a thick, monolithic coating utilizing ArmorHRA 800 Reinforcing Fabric, which allows for a wide variety of substrate conditions. ArmorHRA 800 is used for waterproofing split-slab construction projects and is especially suited as the waterproofing membrane on roof decks using the inverted roof membrane assemblies and green roof systems.

Installation

Surface Preparation: New concrete shall be water cured, with a light, hair-broom finish, and in place for 14 days minimum, 21 days preferred. Surface shall be structurally sound, dry, and free of dust, dirt, frost, laitance, non-approved curing agent and other contamination that may affect adhesion of the membrane.

Remove splatters, fins, ridges or other projections to provide a level surface. Fill holes, honeycombs, rock pockets, spalls or other voids and indentations with approved concrete patching compound.

Grind or fill surface at cold joints where each pour is at a different plane to provide a smooth and level surface.

Detail Work: Mix a polyurethane expansion joint type sealant and apply per Mar-flex standard details. Allow the sealant to cure overnight.

Detail expansion joints and drains per manufacturer's recommendation.

Apply a thin, even coat of the Mar-flex recommended primer or contact adhesive, 6" wide, centered over all non-moving cracks less than 1/16" wide and cold joints. Apply primer at published coverage rate per gallon. Allow primer to dry. Apply a 125-mil-thickness coat of ArmorHRA 800 Hot-Applied Liquid Membrane over the primed crack or cold joint.

Apply a thin, even coat of any Mar-flex recommended primer or contact adhesive, 16" wide, centered over all cracks greater than 1/16" wide, all moving cracks and all previously sealed expansion joints. Allow primer to dry.

Apply 90 mils of ArmorHRA 800 membrane to cover primed areas. Install a 12"-wide strip of Mar-flex ArmorFlash Sheet Membrane Flashing, centered over the cracks and control joints.

Application: Blocks of ArmorHRA 800 shall be melted in a twin wall kettle with continuous agitation. Caution: Do not exceed maximum safe operating temperature of 400°F (for best results, use at 350-375°F).

Apply a thin, even coat of the Mar-flex recommended primer or contact adhesive to the entire surface to receive waterproofing. At the juncture of all vertical sections with the deck surface, such as parapet walls, columns and all projections through the deck, apply a thin, even coat of Mar-flex primer or contact adhesive to the vertical section to the height indicated on the drawings (8" minimum recommended). Apply primer at published coverage rate per gallon. Allow the primer or contact adhesive to fully dry. Note: Membrane will not properly adhere to wet primer.

Penetrations and flashings shall be detailed per manufacturer's published drawings.

Apply ArmorHRA 800 Hot-Applied Membrane to the primed/prepared vertical and horizontal surfaces, including all previously detailed areas. For vertical wall applications of 180 mils, install two coats of ArmorHRA 800 with each coat being applied to achieve 90 mils per coat. While the first coat is still warm and tacky, install ArmorHRA 800 Reinforcing Fabric and then apply second coat of ArmorHRA 800. For horizontal applications of 215 mils, install two coats of ArmorHRA 800 with the first coating being applied to achieve 90 mils and the second coat being applied to achieve 125 mils. While the first coat is still warm and tacky, install ArmorHRA 800 Reinforcing Fabric and then apply second coat of ArmorHRA 800.

Protection Course: The membrane must be protected from damage. Install a Mar-flex ArmorDrain Drainage/Protection Board such as the ArmorDrain400 while the ArmorHRA 800 is still warm and tacky. Mar-flex Protection Board shall be spliced together using ArmorHRA for expanded warranties. Integrity testing can be performed with the board installed.

Repairs: In the event the ArmorHRA 800 Hot-Applied Liquid Membrane is damaged, apply heat to remove Mar-flex Protection Board to expose the ArmorHRA, clean the area with a cloth wet with mineral spirits and apply



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ArmorHRA Hot-Applied Liquid Membrane to the damaged area to match existing system profile.

All fluid-applied product application rates are based on theoretical coverage relative to the percentage of solids in the material. These are minimum application rates to achieve the required dry film thickness for the system and do not account for substrate condition or porosity.

A thicker application of the product may be necessary to achieve the required dry film thickness for system relative to the substrate.

Coverage Rate

The following is a guide to estimate the amount of materials required for various membrane thicknesses. Approx: 11.39 lbs/gallon.

215 mils applied = 1.53 lbs/ft² = 7.5 ft²/gal

125 mils applied = 0.89 lbs/ft² = 13 ft²/gal

90 mils applied = 0.64 lbs/ft² = 18 ft²/gal

Limitations

- Do not use on exposed or wearing surfaces.
- Not recommended over lightweight insulated concrete.
- If metal pan is used for concrete form, the vented metal pan is preferred.
- Consult with Mar-flex's representative before using ArmorHRA on any type of lightweight concrete, concrete with curing compounds or additives or decks that have existing waterproofing materials.
- Do not apply below 0°F or to damp, frosty or contaminated surfaces.

Warnings and Hazards

Use with adequate ventilation. Workers must use proper protection to prevent burns. Refer to the SDS for important warnings and product information.

Packaging

ArmorHRA 800 is packaged in 50-lb. blocks, one block per carton, 48 cartons per pallet. Each block is sealed in a polyethylene bag inside the carton. The block, including the bag, is placed in the kettle, leaving only disposal of the carton.

The HRA 800 Reinforcing Fabric is packaged in rolls of 36"x360'. (1080 sqft). Approximate weight per roll-16lbs. Sold in Cartons of 4 rolls per Carton.

Shelf-Life

When stored at temperatures between 40°- 100° shelf life is 12 months in the original, unopened container.

Standards

- **Canadian Specification CGSB-37.50-M89**



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Typical Properties

Property	Method	Typical Value
Solids Content	ASTM D1353	100%
VOC		0 g/L
Flow	ASTM D5329	Control <3 Post Heating <3
Penetration (1/10 mm)	ASTM D5329	Control @ 77°F=57 Control @ 122°F=183
Flash Point	ASTM D92	539°F (282°C)
Water Vapor Permeance	ASTM E96 (E)	1.1 ng/Pa·s·m ²
Elongation	ASTM D412	>1,094%
Toughness	CGSB-37.50-M89	23.9 J
Ratio of toughness to peak load	CGSB-37.50-M89	0.101
Adhesion	CGSB-37.50-M89	Pass
Viscosity	CGSB-37.50-M89	Control - 6 Post Heating - 4
Water Absorption	CGSB-37.50-M89 max. 0.35g [gain]	0.07g
Pinholing	CGSB-37.50-M89	N/A
Low temperature flexibility	CGSB-37.50-M89	Pass
Low temperature crack bridging	CGSB-37.50-M89	Pass
Heat stability in viscosity, penetration, flow or low temp flexibility after aging	ASTM E 154	Pass
Resiliency	ASTM D3405	>60%
Resistance to mild acids		No effect
Minimum ambient temperature for application		0°F
Acid Resistance	ASTM D896	50% Sulfuric Acid w/o blistering, deterioration, delamination or re-emulsification
Sodium Chloride Resistance	ASTM D896	Passed 20% Sodium Chloride w/o blistering, deterioration, delamination or re-emulsification
Fertilizer Resistance	ASTM D896	Passed 30/10/10 Fertilizer w/o blistering, deterioration, delamination or re-emulsification

Limited Warranty

Mar-flex Waterproofing & Building Products warrants this product to be free of defects in workmanship and materials only at the time of shipment from our factory. If any Mar-flex materials prove to contain manufacturing defects that substantially affect their performance, Mar-flex will, at its option, replace the materials or refund its purchase price. This limited warranty is the only warranty extended by Mar-flex with respect to its materials. There are no other warranties, including the implied warranties or merchantability & fitness for a particular purpose. Mar-flex specifically disclaims liability for any incidental, consequential, or other damages, including but not limited to, loss of profits or damages to a structure or its contents, arising under any theory of law whatsoever. The dollar value of Mar-flex's liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the Mar-flex material in question.

HEALTH AND SAFETY INFORMATION IS GIVEN IN THE SAFETY DATA SHEET AND THE PRODUCT DATA SHEET AVAILABLE FOR THIS PRODUCT. THESE SHOULD BE READ AND UNDERSTOOD BEFORE USING THIS PRODUCT.

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