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NOVEMBER 2022
(Supersedes April 2019)

HRM 714

Hot-Applied Rubberized Waterproofing Membrane

DESCRIPTION

HRM 714 hot-applied rubberized asphalt waterproofing membrane is a 100% solids blend of asphalts, synthetic rubber polymers, and fillers formulated to provide toughness with flexibility and low moisture vapor permeance.

USES

HRM 714 is hot-applied to form a continuous elastomeric membrane. It is ideal for use on plaza and outdoor amenity spaces, protected membrane roofing assemblies (PMRA), split-slab and parking decks, tunnels and bridge decks, and similar types of construction where a monolithic waterproofing membrane is desirable.

FEATURES/BENEFITS

- Excellent combination of toughness and low temperature flexibility.
- Very low water absorption and vapor permeance.
- 0 g/L VOC
- Resistant to chemicals, acid, fertilizer, and salt water.
- Minimum application temperature of 0° F (-17.8° C)

PACKAGING

50 Lb. (22.7 kg) Cartons (two 25 lb. cakes)

COVERAGE

Thickness (Mils)	Application Rate
125	0.72 lb./ft.^{2} (3.5 kg/m^2)
215	1.23 lb./ ft.^{2} (6 kg/m^2)

Coverage is expressed as an average and is dependent upon surface conditions.

SHELF LIFE

Five years in unopened container.

SPECIFICATIONS/STANDARDS

- LA Research Report RR 26213

TECHNICAL DATA

PROPERTY	TYPICAL TEST RESULT	TEST METHOD
Solids Content	100%	ASTM D1353
Typical Application Thickness	Fabric Reinforced Assembly: 215 mils total (90 mils/125 mils)	
Water Resistance	No delamination, blistering, emulsification, or deterioration	CGSB-37.50-M89
Low Temperature Crack Bridging Capability	Pass at >0° F (-17.8° C)	CGSB-37.50-M89
Heat Stability	Pass	CGSB-37.50-M89
Pull off Strength, lbf	108	ASTM D4541
Flow	0.2 cm	ASTM D1191, CGSB-37.50-M89
Penetration @ 32° F (0° C) @ 77° F (25° C) @ 122° F (50° C)	 25 mm 55 mm 160 mm	ASTM D1191 CGSB-37.50-M89
VOC Content	0	ASTM D2369
Water Absorption	0.20 g weight gain	CGSB-37.50-M89
Viscosity	5.0 to 7.0 seconds	CGSB-37.50-M89
Adhesion to Concrete	Pass	ASTM D3408, CGSB-37.50-M89
Softening Point	200° F (93° C)	ASTM D36
Elongation	1,500%	ASTM D1191
Tensile Strength, psi (MPa)	26 (0.17)	ASTM D412
Acid Resistance	50% Sulfuric Acid w/o blistering, deterioration, delamination or re-emulsification	ASTM D896 Procedure 7.1 (N-8)
Salt Water Resistance (20% sodium carbonate and calcium chloride)	Passed 20% Sodium Chloride w/o blistering, deterioration, delamination or re-emulsification	ASTM D896 similar
Fertilizer Resistance (undiluted 15/5/5 nitrogen /phosphorus/potash)	Passed 30/10/10 Fertilizer w/o blistering, deterioration, delamination or re-emulsification	ASTM D896 similar
Animal Waste Resistance, 3 year exposure	No deterioration	

CONTINUED ON REVERSE SIDE ...

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TECHNICAL DATA (continued)

PROPERTY	TYPICAL TEST RESULT	TEST METHOD
Bond to Concrete @ 0° F, (18° C)	Pass	ASTM D3408
Water Vapor Transmission	1.7 ng/Pa*s*m^2 maximum	ASTM E96 Procedure E
Asphalt Compatibility	Pass	ASTM D5329

APPLICATION

Surface Preparation ... Prior to commencement of the waterproofing application, the following preparation may be necessary:

Chip or grind off concrete spills from subsequent pours to create a flat, uniformly smooth surface. Fill depressions in the concrete left by form boards, footprints, screed rail chairs, etc. with MEADOW-PATCH® 5 from W. R. MEADOWS. Remove areas of heavy laitance with a grinder, brush hammer, scabbler, or similar device.

Grind off sharp projections, fishtails, and sharp corners. Patch honeycombed or bug-hole areas with MEADOW-PATCH 5.

On existing structures, remove old waterproofing. Remove lightly scaled concrete down to sound concrete and restore to proper cross section and grade with a Portland cement mixture. Where scaled and spalled concrete exposes reinforcing steel, remove concrete to below exposed steel and replace with MEADOW-CRETE® GPS from W. R. MEADOWS.

Do not use hot-mix patching to level up a deck prior to waterproofing.

Concrete surface suitable for membrane application should be wood-float finish or broom finish and be clean and free of oil, grease, curing compounds, dampness, frost, dust, or loose particles that can impair bond of the HRM 714 system to substrates. Sand-blasting and vacuuming are recommended after which no traffic should be permitted in the area.

For proper surface conditioning application and techniques, contact W. R. MEADOWS technical services.

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Cracks, Joints, Other Discontinuities ... Cracks and construction joints that are 1/16" (1.6 mm) and 1/8" (3.2 mm) shall be coated with a 125-mil application of HRM 714. Immediately embed a 6" (150 mm) wide strip of REINFORCING FABRIC HCR into membrane while hot. Brush to ensure full contact of fabric with membrane including all side and end laps and eliminating any wrinkles. Lap all ends of fabric a minimum of 2" (50.8 mm) with hot-applied membrane. 1/8" (3.2 mm) to ½" (12.7 mm) cracks and construction joints shall be coated with 125-mil application of HRM 714. Immediately embed a 6" (150 mm) wide strip of NEOPRENE FLASHING MEMBRANE or acceptable sand/sand modified asphalt flashing. Ensure full contact of flashing while membrane is still warm and tacky. Lap all ends of neoprene or modified flashings a minimum of 6" (150 mm) with hot-applied membrane. Cracks and joints less than 1/16" (1.6 mm) do not require reinforcement. Reinforce static inside and outside corners with a 125-mil coating HRM 714 and immediately embed a 6" (150 mm) strip of REINFORCING FABRIC HCR centered on the apex of the corner. Brush to ensure full contact of fabric with membrane including all side and end laps and eliminating any wrinkles.

Expansion Joints ... For expansion joints 1/2" - 2" (12.7 - 50.8 mm), apply a 125-mil (3 mm) thick coating of HRM 714 8" (203.2 mm) wide to both sides of joint. Immediately embed 6" (152.4 mm) of NEOPRENE FLASHING MEMBRANE onto each side of joint into hot membrane. Drape flashing into joint to a depth of 1.5" (38.1 mm) or enough to accommodate movement.

For expansion joints greater than 2" (51 mm), a waterproofing expansion joint system is recommended.

Surface Conditioning ... Apply MEL-PRIME™ solvent-based adhesive from W. R. MEADOWS to all surfaces to receive HRM 714 hot-applied waterproofing at a coverage rate of 250 - 300 $ft.^2$/gal (6.14 - 7.37 m^2/L). Ensure adhesive is tack-free before application of HRM 714.

Flashing ... Clean all metal surfaces to receive hot-applied membrane, including flashings, vents, drains, etc., with solvent, dry with clean cloths, and condition with MEL-PRIME solvent-based adhesive. Allow MEL-PRIME to dry before applying HRM 714 membrane.

NEOPRENE FLASHING MEMBRANE from W. R. MEADOWS is used for flashing of drains, curbs, transitions, penetrations, and expansion joints as an accessory to HRM 714 hot-applied rubberized asphalt waterproofing membrane. NEOPRENE FLASHING MEMBRANE is intended for exposed conditions in waterproofing and roofing applications.

Vertical Surfaces ... Apply a 125-mil (3 mm) coating 8" (200 mm) vertically, or as required, and 3" (75 mm) horizontally onto the structural deck. Immediately embed REINFORCING FABRIC HCR into membrane while still hot, ensuring the correct 2" (51 mm) minimum overlaps. Brush fabric reinforcement to eliminate wrinkles. Apply the second 90-mil (2.3 mm) application of HRM 714 onto reinforcement fabric. Terminate the vertically-applied 2-ply reinforced hot-applied membrane system into TERMINATION BAR by W. R. MEADOWS or into a reglet as required and in accordance with W. R. MEADOWS standard typical details.

Drains ... With drain installed, coat drain flange flush with the deck with 125 mils (3 mm) of HRM 714, extending a minimum of 6" (150 mm) onto concrete deck. Immediately embed NEOPRENE FLASHING MEMBRANE into hot membrane up to the throat of drain opening.

Panelized Deck Application ... Cover all static joints between ends and edges of gypsum roof cover board or plywood sheets with a minimum 6" (150 mm) wide, 125-mil (3 mm) coating of HRM 714. Immediately embed a 6" (150 mm) strip of REINFORCING FABRIC HCR centered over joints into hot membrane. Embed with a brush to eliminate wrinkles. Upon completion of joint and detail flashing work, apply 90 mils (2.3 mm) of HRM 714 evenly, covering all previously installed flashings and reinforced areas. Immediately embed REINFORCING FABRIC HCR into membrane while still hot, ensuring a minimum 2" (50 mm) overlap at all side and end laps and full membrane engagement at all end and side laps. Brush reinforcing fabric into membrane to ensure full embedment and eliminate wrinkles. Apply the second layer of hot-applied membrane at a thickness of 125 mils (3 mm) to achieve a total system thickness of 215 mils (5.5 mm).

Upon application of the second and final ply of hot-applied membrane, install protection course. For areas requiring high compressive strength or vehicular traffic over concrete topping slabs, the mineral-fortified PROTECTION COURSE from W. R. MEADOWS protection course should be used.

Where asphaltic concrete road paving asphalt is used, ¼" PROTECTION COURSE, as the protection layer, is set into the second layer of HRM 714 while still hot is required. Joints shall be overlapped ½" or butted together and reinforced with MEL-DEK™ from W. R. MEADOWS.

Protection ... Upon completion of the waterproofing system application, installation of overburden should occur shortly after. Where extended delays installing the overburden occur, protection of the completed waterproofing system is advised. Use of ¾" (19 mm) plywood is recommended where heavy wheeled equipment is used on top of the completed waterproofing system.

PRECAUTIONS

Do not heat HRM 714 membrane greater than 410° F (210° C). HRM 714 is not compatible with coal tar pitch, nor is it recommended over lightweight, non-structural concrete.

For CAD details, most recent data sheet, 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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