PRODUCT DATA

CSI Code: 07100

W. R. MEADOWS SEALTIGHT

NO. 714

JULY 2004
(Supersedes January 2004)

MEL-ROL®

Rolled, Self-Adhering Waterproofing Membrane

DESCRIPTION

MEL-ROL Waterproofing System is a flexible, versatile, dependable, roll-type waterproofing membrane. It is composed of a nominally 56 mil thick layer of polymeric waterproofing membrane on a heavy-duty, 4 mil thick, cross-laminated polyethylene carrier film. The two components are laminated together under strict quality-controlled, production procedures.

A handy overlap guideline is printed 2 ½" (63.5mm) in from the material edge on each side to assure proper overlap coverage and assist in maintaining a straight application. Special, exposed polymeric membrane strips are provided on both sides for positive membrane-to-membrane adhesion in the overlap area. The membrane strips are protected by a pull-off release strip. All components of the MEL-ROL Waterproofing System work together to provide a cost-effective, positive waterproofing system that's quick and easy to apply. W. R. MEADOWS' accessory products included in the MEL-ROL Waterproofing System are: MEL-ROL Liquid Membrane, MEL-PRIME Primers (Solvent-Base, Solvent-Base VOC and/or Water-Base), Pointing Mastic, Detail Strips, Catalytic Bonding Asphalt, Termination Bars, Protection Course and MEL-DRAIN Drainage Board.

USES

MEL-ROL Waterproofing System provides a cost-effective answer to properly waterproof foundations, vertical walls and below-grade floors in residential and commercial construction. It is equally effective for use as a between-the-slab waterproofing on plaza decks, parking decks and structural slabs. Use it as a waterproofing membrane to isolate mechanical and electronic rooms, laboratories, kitchens and bathrooms. MEL-ROL offers positive protection when "wrapped around" major rapid transit, vehicular, utility and pedestrian tunnel projects.

Installation of Protection Course from W. R. MEADOWS is recommended before backfilling. It can also be used with drainage boards when specified.

FEATURES AND BENEFITS

- Provides cost-effective, flexible, versatile, dependable, positive waterproofing protection against damaging moisture migration and the infiltration of free water
- Offers a quick and easy-to-apply system for maximum productivity
- Special membrane-to-membrane adhesion provides additional overlap security
- Meets or exceeds the test requirements of all currently applicable specifications
- Components work together for positive waterproofing protection
- Handles with ease on the jobsite
- The product will help meet and maintain the maximum slab moisture transfer rate of 3 lbs./1000 sq.ft./24 hours required by the flooring industry specifications.
- Available in a low temperature version, for use when air and surface temperatures are between 20°F (-7°C) and 60°F (16°C).

PACKAGING

38.5" (.98m) wide x 60' (18.29m) long, one roll per carton.

COVERAGE

Provides 180 square feet (17.88 square meters) per roll.

STORAGE AND HANDLING

Store membrane cartons on pallets and cover if left outside. Keep materials away from sparks and flames. Store where temperature will not exceed 90°F (32°C) for extended periods of time.

SPECIFICATIONS

A.R.E.M.A. Specifications
Chapter 29, Waterproofing

ADDITIONAL WATERPROOFING MEMBRANES FROM W. R. MEADOWS CAN BE FOUND BY VISITING OUR WEBSITE: www.wrmeadows.com

CONTINUED ON REVERSE SIDE...

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MEL-ROL COMBINES POSITIVE WATERPROOFING PROTECTION WITH EASE OF HANDLING

EXCLUSIVE FEATURES

A handy overlap guideline is printed 2 ½" (63.5mm) in from the material edge on each side...assuring proper overlap coverage and assisting in maintaining a straight application.The polymeric waterproofing membrane is protected by a special, easy-to-remove release paper...the exposed membrane strips on the material edges are protected by a pull-off release strip. Exposed polymeric membrane strips are provided on both sides of MEL-ROL for positive membrane-to-membrane adhesion in the overlap area... note the detail, as shown in inset photo.

TECHNICAL DATA			
PROPERTY		**TYPICAL VALUE**	**TEST METHOD**
COLOR. . . Carrier Film		White	
Polymeric Membrane		Black	
THICKNESS . . .Carrier Film		4 mils	
Polymeric Membrane		56 mils	
TENSILE STRENGTH. . . Carrier Film		5900 psi min. (40.71MPa)	ASTM D 412
Polymeric Membrane		590 psi min. (4.07MPa)	(Die C)
ELONGATION. . . Polymeric Membrane		455% min.	ASTM D 412 (Die C)
PERFORMANCE OF COMPOSITE MEMBRANE			
PEEL ADHESION	Dry	7 lb./in. (125g/mm)	Footnote 1
	Wet	7 lb./in. (125g/mm)	
LAP ADHESION	Dry	5 lb./in. (90g/mm)	
PLIABILITY 180° Bend, 1" (25.4MM) Mandrel @ -25°F (-32°C)		Unaffected	ASTM D 146
WATER VAPOR PERMEABILITY		0.019 Perms	ASTM E-96, B
WATER ABSORPTION		0.1%, 72 hrs. max.	ASTM D 1970
RESISTANCE TO HYDROSTATIC HEAD		Equiv. to 240 ft. (73.1m) of water	Footnote 2
PUNCTURE RESISTANCE		67 lbs. (2.98 kN)	ASTM E 154
EXPOSURE TO FUNGI		Pass, 16 weeks	Soil Test

1. 90% peel after 7 days at 70°F plus 7 days at 120°F plus 7 days at 70°F (Dry) (Wet).
2. Membrane placed over a porous base in a test cell and edges sealed. Water was placed over test specimen. Cell fastened and sealed and placed under 105 psi (.73 Mpa) (approx. 240 foot (73.1m) water head) pressure for 24 hours. Test specimen did not show any water to permeate the membrane.

MEL-ROL IS QUICK AND EASY TO APPLY

Application Tools


Knife


Roller


Caulking Gun


Manual Sprayer


Paint Roller

APPLICATION

SURFACE PREPARATION...Concrete should be cured at least 72 hours, be clean, dry, smooth and free of voids. Repair spalled areas; fill all voids and remove all sharp protrusions.

*TEMPERATURE...Apply in dry, fair weather when the air and surface temperatures are above 40°F (4°C). Do not apply to frozen concrete.

*MEL-ROL Low Temp. can be used when air and surface temperatures are between 20°F (-7°C) and 60°F (16°C).

PRIME...Prior to application, prime all surfaces to be covered in one working day with applicable MEL-PRIME Primer. Uncovered, primed surfaces must be re-primed the next day. Follow all instructions and precautions shown on primer containers.

FOOTING DETAILS...Use Detail Strips for impaction sheet coverage. First, fold strips lengthwise and then cut at the fold. Material is then ready to install as 4 ½"(114.3mm) strips on either side of the rebar. Any excess can be turned down on the face of the footing. Next, fill the voids around rebars in the keyway with Catalytic Bonding Asphalt. Pour the walls. Install a Detail Strip horizontally along the wall where it meets the footing, placing half the material up the wall and the other half onto the footing. Extend the material 4 ½" (114.3mm) beyond outside corners. Slit extended portion of detail strip lengthwise. Place the horizontal flap out onto the footing and bend the vertical flap around the wall (See Diagram A). Repeat this procedure in the opposite direction as shown in Diagram B.

DIAGRAM A
Outside Corner

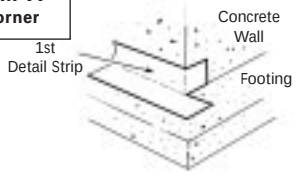
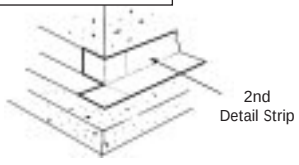


DIAGRAM B
Outside Corner



HORIZONTAL APPLICATIONS...Position the MEL-ROL Membrane from low to high points, so all laps will shed water. Stagger end laps and overlap all seams at least 2.5 inches (63.5mm). Apply a double-thickness of the MEL-ROL Membrane over construction, control and expansion joints and over cracks greater than 1/16" (1.59mm) wide.

VERTICAL WALL APPLICATION...Apply MEL-ROL Membrane vertically in lengths approximately 8' (2.44m) long over the top of the horizontal Detail Strips at the footing. Overlap all seams at least 2.5" (63.5mm). Tightly butt edges of membrane and apply Pointing Mastic in corner applications. (See Diagram C).

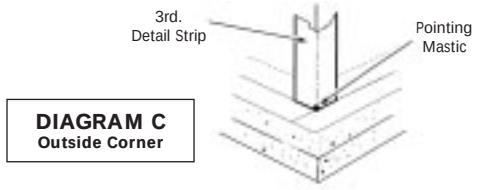


DIAGRAM C
Outside Corner

To the top terminations, apply Pointing Mastic at least 1/8" (3.18mm) thick and 1" (25.4mm) wide. As an option, Termination Bars may be used to mechanically fasten the membrane. Masonry walls must be parge-coated with an asphaltic foundation coating or a cementitious material before applying MEL-ROL.

HAND-RUB AND ROLL PRESS...Once positioned, immediately hand-rub MEL-ROL Membrane firmly to the surface and then pressure roll the complete surface to assure positive adhesion.

INSIDE CORNERS...Before MEL-ROL is applied, place a vertical Detail Strip on inside corners extending the material 4 1/2" (114.3mm) beyond each side of the corner (See Diagram D). Terminate at the footing and finish the corner with Pointing Mastic.

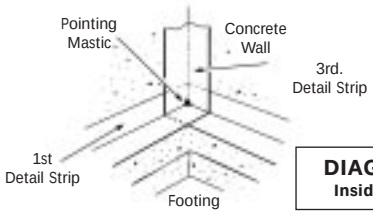
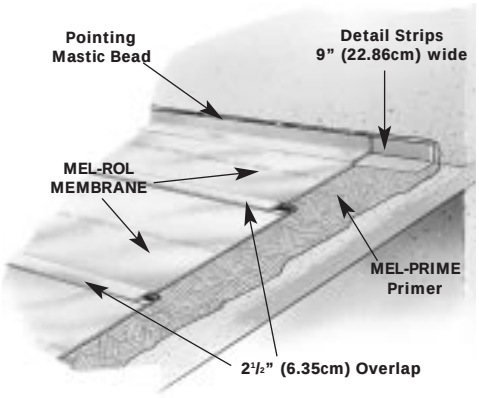
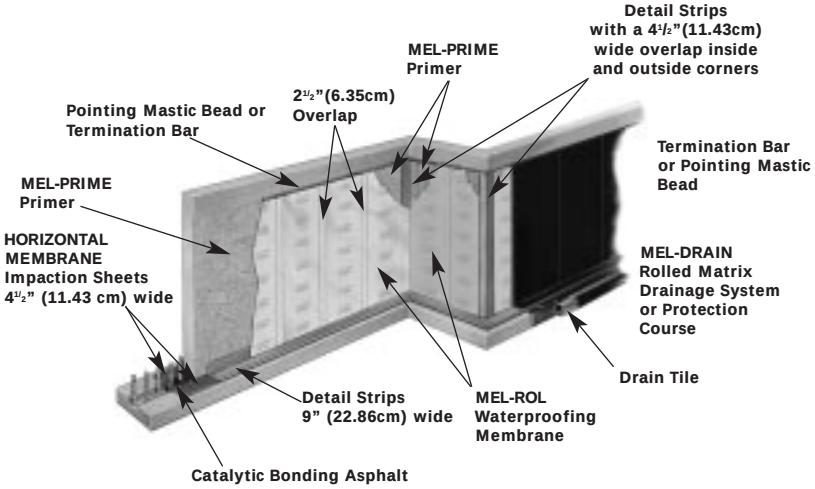


DIAGRAM D
Inside Corner

OUTSIDE CORNERS...Bend a Detail Strip vertically over the outside corner and extend 4 1/2" (114.3mm) beyond each side of the corner. Terminate the material at the footing. Finish the corner with Pointing Mastic. (See Diagram C).

DRAINS AND PROTRUSIONS...All protrusions should be sealed with two layers of Membrane applied at least 6" (152.4mm) in all directions. Seal all terminations with Pointing Mastic. Around drains apply two layers of MEL-ROL Membrane and put a bead of Pointing Mastic between the membrane and clamping rings and at all terminations, drains and protrusions.





INSPECT AND REPAIR...a thorough inspection should be made before covering and all necessary repairs made immediately. Tears and inadequate overlaps should be covered with MEL-ROL Membrane...slit fishmouths and patch. Seal edges of all patches with Pointing Mastic. Where applicable, horizontal applications can be flood-tested for 24 hours. All leaks should be marked and repaired when membrane dries.

PROTECT THE MEMBRANE...On all vertical and horizontal installations with the immediate application of Protection Course, if no drainage system is used, or MEL-DRAIN. (Refer to Data Sheet Nos. 712 and 719 for application instructions). Use Pointing Mastic as an adhesive. Backfilling should be done immediately using care and caution to avoid damaging the waterproofing application.

PRECAUTIONS

Avoid the use of products which contain tars, solvents, pitches, polysulfide polymers, or PVC materials that may come into contact with MEL-ROL. The use of MEL-ROL 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.

Read and follow application information, precautions and Material Safety Data information.

ACCESSORIES

MEL-PRIME WATER-BASE PRIMER…Prepares concrete surfaces for MEL-ROL Membrane application. Arrives ready to use. Requires no additional mixing. MEL-PRIME W/B emits no unpleasant odors and works with all W. R. MEADOWS Waterproofing Membranes. Applied easily with manual sprayer or roller. V.O.C. compliant. MEL-PRIME W/B is for use at temperatures of 40°F (4°C) and up. (Refer to Data Sheet No. 752).

COVERAGE: 250 to 350 sq.ft/gal. (6.14 to 8.59 sq.m/L) PACKAGING: 1 Gallon (3.79 Liter) Units (4 units per carton) and 5 Gallon (18.93 Liter) Pails

MEL-PRIME SOLVENT-BASE OR VOC COMPLIANT SOLVENT-BASE PRIMERS…These primers are for use at temperatures of 25°F (-4°C) and above. (Refer to Data Sheet Nos. 751 and 7100-542).

COVERAGE: 250-350 sq.ft/gal. (6.14 to 8.59 sq.m/L) PACKAGING: 5 Gallon (18.93 Liter) Pails

MEL-ROL LIQUID MEMBRANE…
A two-component material used as a flashing, to form fillets at corners and at protrusions. May be used as a substitute for Pointing Mastic. (Refer to Data Sheet No. 741).

COVERAGE: As a fillet, approximately 135 lineal feet per gallon (10.87 meters per liter) PACKAGING: 1 Gallon (3.79 Liter) Units, 4 Units per carton.

POINTING MASTIC…Used for sealing top edge terminations on Detail Strips and Membrane. (Refer to Data Sheet No. 740).

COVERAGE: 1/8”x 1”x 200 ft./gal. (3.18mm x 25.4mm x 16.10ml). PACKAGING: 5 Gallon (18.93 Liter) Pails or 29 Oz. (857.65ml) Cartridges, 12/ctn.

CATALYTIC BONDING ASPHALT…Easy-to-apply one-component material for sealing around rebar.

COVERAGE: 5 gal./1,000 sq.ft/gal. (4.9 sq.m/L) PACKAGING: 5 Gallon (18.93 Liter) Pails.

DETAIL STRIP…Convenient, easy-to-use detail strips provide an economical and effective method for sealing vertical and horizontal butt joints i.e. inside or outside corners and where walls and footings meet.

PACKAGING: 9” x 50’ (.23 x 15.24m) roll, 4 rolls per carton.

PROTECTION COURSE…Use for vertical and horizontal applications. Adhere with Pointing Mastic.

PACKAGING: 4’ by 8’ (1.22 by 2.44m) panels. (Refer to Data Sheet No. 712).

MEL-DRAIN Rolled Matrix Drainage System…A dimple-raised molded polystyrene fabric designed to provide high flow capacity to reduce hydrostatic pressure build-up around waterproofing and vaporproofing membranes. Choice of drain-types available for vertical, horizontal and site applications. (Refer to Data Sheet No. 719).

TERMINATION BAR...A high strength, pre-formed, multi-purpose, plastic strip designed to support vertical membrane systems at their termination point.

PACKAGING: 10' (Holes every 6" o/c, 2" from either end), 25 pieces per carton.

MAINTAIN ENERGY EFFICIENCY

Wet insulating materials lose much of their “R” factor performance characteristics, reducing the energy efficiency of the structure. W. R. MEADOWS’ thermal and moisture protection products play a key role in *maintaining* the structure’s energy efficiency and aiding in the integrity of other structural systems, such as insulation.

TO VERIFY MOST RECENT TECHNICAL DATA SHEET IS BEING USED, VISIT OUR WEBSITE: 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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