

Trem-Lar® LRM

A One-Part Liquid Applied Elastomeric Roofing Membrane

Composition: Trem-Lar® LRM is a single component, bitumen modified moisture curing polyurethane.

Basic Uses: Trem-Lar LRM is designed as the waterproofing membrane in a fully adhered protected membrane roof system for structural concrete decks.

Refer to UL Roofing Materials and Systems Directory and/or FM Approvals for applicable system configurations.

Limitations:

- Not intended for twin-slab, precast, or lightweight concrete.
- Not for use as a traffic-bearing surface.
- Trem-Lar LRM requires acceptable protective surfacing such as insulation with ballast, pavers, reflective and protective coatings, decorative surfaces, and protective covers.
- Concrete substrates must be free of all traces of bitumen prior to application of Trem-Lar LRM.

Grade: Horizontal areas: Squeegee (Trem-Lar LRM-H)
Vertical surfaces: Trowel (Trem-Lar LRM-V)

Equipment: Triangular notched squeegee to provide 60 mil (1.5mm) thick uniform application.

Packaging: Available in 5 gallon (18.9L) containers.

Color: Black

Storage Life: Up to 12 months in unopened container.

Applicable Standards: Meets or exceeds performance standards of ASTM C 836-89.

APPLICATION DATA:

Conditions:

Do not begin work during rainy or inclement weather or when such weather is imminent. Rainfall will damage freshly applied material. Minimum recommended ambient air temperature during application: 40°F (4°C) and rising. Maximum allowed surface temperature during application: 110°F (43°C).

SURFACE PREPARATION:

Concrete: Surface shall be dry, free of dust, oil, bitumen, curing agents, form release agents, and other contaminants. Compressive strength: 2,500 psi (17 237 kPa), minimum. The concrete shall have a light steel trowel finish followed by a natural hairbrush to render a uniform granular texture. New concrete must cure 28 days minimum by either water, burlap or polyethylene cure methods.

Sandblast, shotblast, or scarify existing concrete to assure the substrate is free of contamination and it has the proper surface texture to assure adhesion of the Trem-Lar LRM.

Verify the dry condition of the concrete with a rubber mat test. After taping the mat to the concrete for at least 24 hours, no liquid water droplets should be present on the underside of the mat. A valid test requires the concrete be warmed by the sun during the test.

Metal: Clean metal surfaces of paint, oils, rust, and other contaminants.

DETAIL /PREPARATORY WORK:

Priming for Detail Course: Prime concrete detail areas with AlphaGuard C-Prime prior to application of Trem-Lar LRM. Allow primer to fully dry prior to application of Trem-Lar LRM.

Vertical penetrations: Provide a 1" x 1" (25 x 25mm) cant of Trem-Lar LRM-V at parapet walls, columns, stacks, etc. Install Trem-Lar LRM as a flashing to the specified height. Extend flashing 6" (150mm) onto horizontal surface. Coating thickness: 60 mils (1.5mm) (wet).

Cracks of 1/16" (1.6mm) or less: Pretreat shrinkage and non-moving structural cracks with Trem-Lar LRM applied at a thickness of 60 mils (1.5mm) (wet) 3" (75mm) either side of the crack.

Cracks of 1/16" (1.6mm) or greater: Rout all cracks, moving structural joints, and cold joints to 1/4" wide x 1/2" (6.3 x 12.7mm) deep. Insert a 3/8" (9.5mm) closed-cell polyethylene backer rod. Recess backer rod 1/8" (3.2mm) from surface. Fill recess with Trem-Lar LRM applied at a thickness of 60 mils (1.5mm) (wet) 3" (75mm) either side of the crack/joint. Proper treatment of expansion joints is critical. Consult your local Tremco Representative for recommendations.

Product Advantages	
Features	Benefits
Fully bonded to concrete	<ul style="list-style-type: none"> • Reduces potential for water migration under membrane
Cold applied	<ul style="list-style-type: none"> • Can be used in difficult access areas • No hot kettles
One-part	<ul style="list-style-type: none"> • No mixing or special equipment needed
One coat application	<ul style="list-style-type: none"> • Labor savings
Low modulus High elongation High recovery	<ul style="list-style-type: none"> • Accommodates typical movement

APPLICATION:

Priming Concrete/Masonry: Prime all concrete and vertical masonry with AlphaGuard C-Prime. AlphaGuard C-Prime must dry tack free (6 to 8 hours at 75°F (24°C) and 50% R.H.) prior to application of Trem-Lar LRM. Open time of AlphaGuard C-Prime is 72 hours after tack free cure. Trem-Lar LRM must be applied within the open time. If open time is exceeded, substrate must first be mechanically abraded, then reprimed.

Alternately, prime concrete substrates with Tremlar LRM-H thinned with toluene at a rate of 32 oz. toluene per gallon of Trem-Lar LRM-H. Apply the thinned Trem-Lar LRM-H to the clean, dry surface at a coverage rate of 1 gal/SQ (0.4 L/m²) Allow to dry 1 hour minimum and apply the specified coverage of Trem-LAR LRM-H (must be applied the same day).

Priming Trem-Lar LRM: If Trem-Lar LRM has been applied and cured in excess of 48 hours and an additional coat of Trem-Lar LRM must be applied, prime the existing Trem-Lar LRM with GeoGard Primer. Apply Trem-Lar LRM while GeoGard Primer is tacky.

Application: Apply Trem-Lar LRM-H directly to surface by squeegee and cross-roll with a long nap roller to a uniform thickness. Overlap previous day's work 6" (150mm) minimum.

Coverage: 25 ft²/gal. (0.6m²/L) per coat maximum.

Water Test: Allow membrane to cure 36 hours minimum (75°F (24°C) @ 60% RH). Longer cure times will be required at lower temperatures and/or humidities.

Prior to placement of protective surfacing, water test applied area. Block drains and provide perimeter dams. Flood test area with water for 48 hours. Do not exceed deck design load requirements during water testing.

Cure Time: 24 hours at 75°F (24°C), 50% RH. Longer cure times will result at lower temperatures and/or lower relative humidity.

Clean-Up: Use Xylene or Toluene to remove Trem-Lar LRM from equipment before cure.

Precautions: Users must read and follow container labels and Material Safety Data Sheets for instructions for health and safety precautions prior to and during use.

Availability and Cost: Contact your local Tremco Roofing Representative for pricing and availability. For the name and number of your Representative, call the Roofing Division at 216/292-5000.

Maintenance: Your local Tremco Roofing Representative can provide you with effective maintenance procedures which may vary, depending upon specific conditions. Periodic inspections, early repairs and preventive maintenance are all part of a sound roof program.

Guarantee/Warranty: Tremco Inc. warrants Trem-Lar LRM to be free of defects and to meet published physical properties when tested according to ASTM and Tremco standards. Under this warranty, any Trem-Lar LRM product that is proved to be defective when applied in accordance to our written instructions, and in applications recommended by Tremco as suitable for this product will be replaced with like product at no charge. THIS IS BUYERS SOLE AND EXCLUSIVE REMEDY.

All claims concerning product defects must be made in writing within twelve (12) months of shipment. The absence of such claims in writing during this period will constitute a waiver of all claims with respect to such product.

Physical Performance Characteristics

Trem-Lar® LRM

Property	Typical Value		Test Method
	Horizontal Grade	Vertical Grade	
Ultimate elongation	950%	700%	ASTM D 412-92
Ultimate tensile strength	300psi (21 kg/cm ²)	250 psi (17.5 kg/cm ²)	ASTM D 412-92
Recovery from 350% elongation	95%	90%	ASTM D 412-92
Hardness (Shore A)	25	38	ASTM D 2240-86
Hardness (Shore OO)	80 - 95	85 - 90	ASTM C 836-89
Water vapor permeance	0.13 metric perms*	0.26 metric perms*	ASTM E 96-80
Low temperature elongation @ -20°F(-29°C)	>500%	>500%	ASTM D 412-92
Service temperature (continuous ambient)	-40°F to 150°F (-40°C to 66°C)	-40°F to 150°F (-40°C to 66°C)	ASTM D 412-92
Nonvolatile content	87%	81%	ASTM D 2369-87
Volatile organic compound (less water, less exempt solvents)	110 g/L	110 g/L	ASTM D3960-89
Viscosity @ 77°F (25°C)	7,000 - 12,000 cP (7-12Pa*s)	30,000 - 50,000 cP (30-50Pa*s)	ASTM D 2196-86
Density @ 77°F (25°C)	8.8 lb/gal (1052g/L)	9.1 lb/gal (1088g/L)	ASTM D 70-82 (1986)
Flash point	>100°F (>38°C)	>100°F (>38°C)	ASTM D 3278-82

*Metric perms = (g/m²)•(24h)•(mm Hg)

This warranty shall be IN LIEU OF any other warranty, express or implied, including but not limited to, any implied warranty of MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Technical Services: Your local Tremco Representative, working with the Technical Service Staff, can help analyze conditions and needs to develop recommendations for special applications. The services of the Tremco Research Center, which has earned a unique reputation in weatherproofing technology, complement and extend the services of the Tremco Technical Service staff.

Statement of Policy and Responsibility: Tremco takes responsibility for furnishing quality materials and for providing specifications and recommendations for their proper installation.

As neither Tremco itself nor its Representatives practice architecture or engineering, Tremco offers no opinion on, and expressly disclaims any responsibility for the soundness of any structure or any components below the building structure on which its products may be applied. If questions arise as to the soundness of a structure, its ability to support a planned installation properly, or whether material below the structure will be disturbed, the Owner should obtain the opinion of competent structural engineers before proceeding. Tremco accepts no liability for any failure of the structure or material below the structure or for resultant damages, and no Tremco Representative is authorized to vary this disclaimer.

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