

1. PRODUCT NAMES

Proprietary product lines of RMI: Garna-Flex®, Garna-Thane®, Garna-White® plus other products including Garna-Prime® and Garna-Tape®.

2. MANUFACTURER

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3. PRODUCT DESCRIPTION

MATERIALS

Garna-Flex is a two part catalyzed Polyglycol™ rubber, 100% solids, solvent free, low perm liquid applied membrane used as a base layer (vapor barrier) or flashing membrane for application in multiple component systems utilizing Garna-Thane, Garna-White as wear surface coatings for waterproofing, roof maintenance & restoration and new/recover roof systems. The plural component "Flex" is a catalyzed product with a quick cure rate and elongation values superior to many other conventional roofing materials.

"Flex" may be used as a waterproof joint flashing with Garna-Thane, or White for exterior roof level metal duct restoration and energy efficiency.

Garna-Thane (polished flake aluminum), Garna-White are high solid, low VOC based, single component (flexible) liquid applied radiant barrier surface coatings. Each may be used as a standalone product or as a system surface coating with "Flex" products. Each has CRRC (Cool Roof) testing.

Specific applications may require Garna-Prime, a single component primer used for surface preparation and Garna-Tape (asphalt & solvent free, coating ready, pressure sensitive reinforcing tape) for applications in which extreme transitions or voids supersede Flex, Thane or White capabilities.

APPLICATIONS

RMI line of products are designed to seal and waterproof vertical and horizontal construction components. Their versatility allows integration into both roofing & waterproofing applications including: **SEE*****

- Maintenance and repair for single ply membranes. *******
- Maintenance, repair and recover for built-up and modified bitumen. *******
- Restoration for metal roof panels. *******
- Spray polyurethane foam coatings. *******
- Pedestrian & Vehicular bearing decks. *******
- Concrete & CMU block. *******
- Roof level metal mechanical ducts, sheet metal pans and counterflashing. *******
- Storage tanks & silos. *******
- Garden roofs. *******

**** While RMI products are versatile, each application presents a unique set of conditions for optimal performance, safety & regulatory compliance. It is the responsibility of the specifier to insure project conditions are properly accessed. RMI does not practice architecture or engineering. It offers no opinion on, and expressly disclaims any responsibility for the soundness of any particular structure, or surface on which its products may be applied. RMI shall not be responsible or liable for any indirect, consequential or incidental damages including the presence of mold, fungi, bacteria, spores, toxins or the like or further loss of any kind whatsoever, including but not limited to the building, its contents, components, loss of use, or damage to any other property or persons.*

ADVANTAGES

RMI line of products form a durable seamless roofing & waterproofing membrane with superior adhesion to a variety of substrates requiring no ballast, additional surfacing or mechanical fasteners to form a tough monolithic system that bonds molecularly with and conforms to the substrate surface.

"Flex" exceeds the elongation testing limitations of typical fluid applied materials as water based acrylic coatings. RMI high solids materials bridge that "sacrificial" gap of typical coatings to form a durable, low perm membrane with exceptional performance. RMI high solid materials possess faster cure times than conventional water or solvent based products which require longer periods of dry weather and surface conditions for application. Rapid set-up and cure time of "Flex" allows surface coating applications in less than 1 hour. Faster cure times limit potential application errors, reduce impact on occupancy and construction schedules allowing the building owner to get on with their business.

As RMI systems are field fabricated with fluid applied components, it allow a specifier to determine desired service life by mil thickness without waste. With conventional roofing systems incorporating roll goods, there is a waste factor increasing impact to landfills.

VAPOR TRANSMISSION

RMI high solid products inherently have lower perm ratings than water based roof coatings creating a true fluid applied waterproof roof membrane without the need for fabric reinforcements. "Flex" perm ratings are commensurate with typical peel & stick underlayment sheets when tested at comparable thickness.

COOL ROOF

RMI products highly reflective surfaces are listed by the Cool Roof Rating Council (CRRC) for Solar Reflectance, Thermal Emittance and Solar Reflectance Index. Compliant with the requirements of CA Title 24, California Energy Code.

WARRANTY

RMI products are eligible for both material and material / labor warranty. As any material, warranty eligibility is based upon a criteria of substrate suitability, applied material thickness and quality of application. Material warranty up to 5 years are available and Material & Labor warranty from 5 - 30 years are available when installed by a certified contractor. Contact RMI technical services for a sample warranty.

Technical assistance including CSI formatted sections, detail drawings, contractor training, quality assurance inspections and specifier assistance are available through RMI Technical Services.

4. REGULATORY TESTING & STANDARDS

Compliant with IBC 2006, CA Title 24, UL790, ASTM 108, FM 4450, FM 4470 for fire classifications, resistance to foot traffic, hail resistance, leakage and wind uplift. RMI products have been rigorously tested including the following industry standards

- FIRE TESTING: UL790, ASTM 108 - Class A
- WEATHERING / TRAFFIC: FM 4450, FM 4470
- COOL ROOF RATING: CRRC for SR/TE/SRI
- MATERIAL PROPERTIES: American Society for Testing & Materials (ASTM) including: E96, D6083, D412, D903, C836, D2240, E1918, D662, C794, D471, D2370, D1644, D2897, D4798, D522, D2370, G21, D1644, D2196, D93, D2697, D1640, D3389, C-518, C1549, C1371.

PROPERTY	Garna-Flex / Roof-Flex
Hardness,	63 Duro
Tensile Strength	380+ psi
Elongation/Tear	480% +
Memory of elongation	94%
Low temperature flexibility	Excellent
Solids content	100%
Abrasion resistance	Excellent
Adhesion	Excellent
Water vapor transmission	0.15 @ 32-48 mil
Solvents	None
UV resistance	Excellent
Drying rate (Flex® 5)	5 min. at 100° F 3 hour cure

PROPERTY/TEST	Garna-Thane / Roof-Thane
Color	Silver
Hardness	A60 +/-5
Solids	70%+
Tensile Strength	598 psi
Elongation/Tear	126%
Memory of elongation	100%
Low temperature flexibility	Excellent
Aluminum content by volume	28.73%
Abrasion resistance	Excellent
Adhesion	Excellent
Water vapor transmission	2
Water Swelling	2.04%
Solvents	Xylene
UV resistance	Excellent
Fungi Resistance	Excellent
1000 Hr. Xenon Arc Weathering	Pass
Solar Reflectance	76%
Thermal Emittance	0.287
Solar Reflectance Index	77
Drying rate (Flex® 5)	2 hours, 24 hour cure

PROPERTY/TEST	Garna-White / Roof-White, DucT-White
Color	Brilliant White
Hardness	A60 +/-5
Solids	84%+
Tensile Strength	1028 psi
Elongation/Tear	541%
Memory of elongation	100%
Low temperature flexibility	Excellent
Abrasion resistance	Excellent
Adhesion	Excellent
Water vapor transmission	4
Water Swelling	3.4%
Solvents	Xylene
UV resistance	Excellent
Fungi Resistance	Excellent
1000 Hr. Xenon Arc Weathering	Pass
Solar Reflectance	78%
Thermal Emittance	0.92
Solar Reflectance Index	96
Drying rate (Flex® 5)	2 hours, 24 hour cure

5. HANDLING & LIMITATIONS

Garna-Thane and Garna-Prime contain solvents requiring typical handling precautions. Avoid contact with skin, clothing and prohibit open flame in storage or application areas. RMI products are intended for exterior use only. Apply RMI products in well ventilated areas. Conform to all OSHA requirements for safety, handling and application including any required clothing, masks, filters or breathing apparatus. Always check to insure all vents, windows, ducts or other openings are sealed to prevent fumes into occupied areas.

RMI products may not adhere to some surfaces and are not intended for use over wet substrates/surfaces and are limited to special applications over vapor releasing substrates. "Flex" products form a vapor barrier. Without proper ventilation incorporated into system design, trapped moisture or vapors may not escape and blistering may occur. Consult with RMI technical services for proper application and limitations over specific roof systems, coatings, insulations, metal, glass and concrete surfaces.

Moisture-cured RMI products tolerate humidity or the presence of limited moisture during application; however, are intolerant to precipitation and residual surface moisture in any amount during application. All surfaces must be smooth, dry, firm and free of loose materials. Do not install RMI products at ambient air temperatures below dew point. Apply all materials at rates of application approved by RMI technical services. Allow primer, Flex, Thane or White products to cure between coats if more than one coat is required.

6. AVAILABILITY

RMI Products are not typically sold through distribution outlets and require installation by a select national base of certified contractors to be eligible for material and labor warranty. Contact RMI Technical Services for a listing of contractors in your area.

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