

Waterproofing Elastomeric Coating/Bonding Adhesive

DS-RL 1-17

PRODUCT

R-Lastic™

MANUFACTURER

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DESCRIPTION

R-Lastic is a water based elastomeric coating. It is used primarily as a waterproof membrane over concrete and masonry but also meets the requirements of an anti fracture membrane and organic bonding adhesive. R-Lastic forms a waterproof membrane with exceptional bond strengths, tensile strength, and elongation. It has exceptional bond to concrete, natural stone, masonry, wood and steel. Polymer modified mortars such as Poly VBM and VBM Bonder can also be used to bond masonry or tile veneers and pavers to R-Lastic. R-Lastic meets all VOC requirements and is safe and easy to handle and apply.

USES

A waterproof, elastomeric coating for above or below grade concrete and masonry. It is used as a flexible waterproof membrane that also provides crack isolation properties to floors and walls prior to receiving bonded tile, stone, brick or similar veneers and pavers. R-Lastic may also be used as a bonding adhesive for concrete, pavers, masonry, stone, tile and Styrofoam shapes. An adhesive to metal and wood.

ADVANTAGES

- Excellent waterproofing properties
- Long life expectancy
- Water based-safe, easy application
- Elastomeric-bridges 1/16" cracks
- Strong adhesive properties
- Use in fountains, ponds, water retaining structures
- May be bonded to with polymer mortars
- Versatile

TECHNICAL DATA

Properties of the wet coating:

Form:	Thixotropic liquid
Wt. per gallon	9.2 "lbs. per gallon
Base:	Water based - SBR
Color:	Grey
PH:	8.5-9.5
Clean up:	Water

The R-Lastic formula has been tested and meets the criteria of ANSI 118.10 – Load Bearing, Bonded, Waterproof Membrane For Thin Set Ceramic Tile And Dimension Stone Installation and ANSI 136.1 - An Organic Adhesive For The Installation Of Ceramic tile.

PACKAGING

R-Lastic is packaged in 1 gallon, 5 gallon and 55 gallon containers. Protect from freezing. Recommended storage is at 72°F (22°C) out of direct sunlight.



Waterproofing membrane for masonry and retaining walls

Typical physical properties of the cured R-Lastic membrane

<u>Waterproofing:</u> Hydrostatic resistance (ASTM D-751 B)	Pass
<u>Elongation:</u> (ASTM D-638) 21 day dry	562%
<u>Adhesion:</u> (Swift Pull Test)	<u>Cementitious Board:</u> 41 psi Substrate Failure 7 day dry 156 psi Substrate Failure 7 day dry/ 7 day wet <u>Thinset to R-Lastic Membrane</u> Tile applied with polymer thinset, tile failure 395 psi <u>Plywood:</u> 55 psi substrate failure 7 day dry 89 psi substrate failure 7 day dry/7 day wet
<u>Tensile strength:</u>	562 psi 7 day dry/21 day wet
<u>Permeability:</u> (ASTM E-96)	.013 perm/in
<u>Water Vapor Trans:</u> (ASTM E-96)	.085
<u>Crack Bridging:</u> (ASTM C 836)	@77° F no cracks @ 0° F no cracks
<u>Shear Strength:</u> (ANSI 118.10)	R-Lastic 194 psi @ 100 day water immersion required > 50 psi
<u>Fungus Resistance:</u> (ANSI 118.10)	no growth passes
<u>Breaking Strength:</u> (ANSI 118.10)	401 psi (required - > 170 psi)

LIMITATIONS

- Protect from freezing.
- Do not apply in extreme heat, cold or wind.
- Do not apply over expansion or seismic joints.
- Must be applied a minimum of 1/16" thick.
- Proper substrate preparation is required.
- Minimum of 2 coats required.

APPLICATION

Surface Preparation - All surfaces must be clean, free of any dust, dirt, oil, loose material or any coatings, curing agents etc. which may hinder bonding. All cracks and defects must be repaired prior to application. The substrate should not be excessively wet or wet from hydrostatic pressure. Check adhesion to various substrates by applying the product to a small sample area before starting any job. Dampen the substrate just prior to application-no standing water.

Coating - R-Lastic should not be applied when rain, freezing, extreme heat or cold may effect the membrane prior to cure. R-Lastic may be applied by brush roller or airless spray (compressed air supply pressure of 800 psi, compression ratio of 28:1, tip size of .025" and a fan of 8"). The thickness of the dried membrane depends on the application requirements. A minimum dried coating thickness of 1/16" is needed to provide a vapor barrier. This should be applied in a minimum of 2 coats of 1/32" each. Coverage rate for the required thickness is approximately 25-28 square feet per gallon (3 1/2-4 gal. per 100 sq. ft.). When applying 2 coats allow the first coat to dry to the touch (approx. 1-2 hour @ 70°F) before applying the 2nd coat. It is recommended that the 2nd coat be applied within 24 hours after application of the 1st coat. When applying with a reinforcing mat coverage rates may vary. Clean up is with water prior to curing.

Bonding: R Lastic is not only used as an elastomeric waterproof coating but also provides an excellent elastomeric bonding adhesive for application requiring high flexural bond strengths. R Lastic meets the sheer bond requirements as an organic adhesive of ANSI 118.10. R Lastic may be used to bond ceramic tile, manufactured natural stone, pre-cast concrete, concrete pavers and similar masonry veneers. It is especially effective in applications such as installing pre-cast wall caps and concrete pavers where flexural bonding of cement-based mortars only is often inadequate. R-Lastic may be used for bonding to metal.

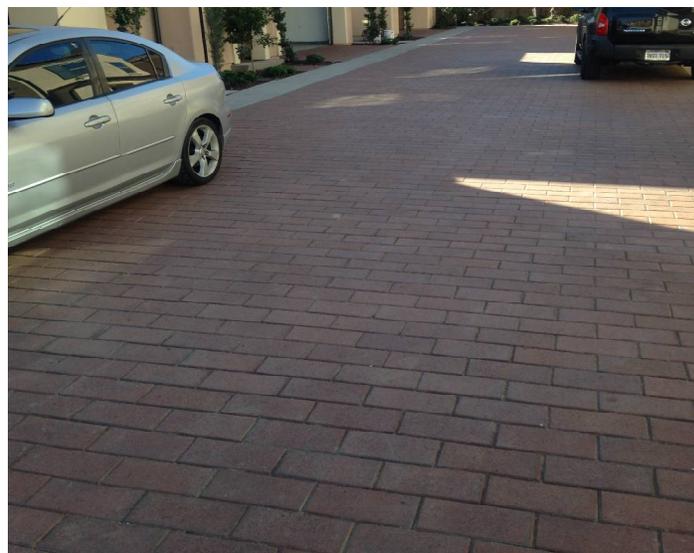
Bonding methods of application:

1) Thin application <1/4": R-Lastic may be used as the only bonding mastic when the substrate and veneers or pavers do not require a thick bed of bonding mortar or grout joint. R-Lastic should not be applied in a total thickness greater than 1/4". R-Lastic shall be applied to the substrate and the veneer by either brush or trowel. Use pressure to assure good contact to the substrate. While still tacky, the veneer should be placed onto the substrate and pressed into place. Adjustment will vary with absorption properties of the substrates and veneers but is typically 5-10 minutes

2) Thick application >1/4" When conditions require a thicker, leveling bonding adhesive or a joint grout R-Lastic may be used but with a different application. A coat of R-Lastic shall be applied to the substrate and the veneers (1/32"-1/16" thick). The R-Lastic shall be allowed to dry (when it changes color). A polymer modified bonding mortar may be applied to the R-Lastic as soon as it changes color but within 48 hours. The veneers or paver shall be put into placing using pressure to assure good contact.



The added flexural bond was stronger than the precast concrete itself. Conventional polymer cement mortars had failed in bonding these cantilevered wall caps.



R-Lastic as a flexible bonding adhesive for pavers on concrete.

R-Lastic is a user friendly and environmentally friendly alternative to epoxy adhesives in many applications.

CAUTION

Prolonged exposure to dust may cause delayed lung disease. Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Freshly mixed materials may cause skin irritation. Avoid direct contact where possible and wash exposed skin areas promptly. If any cementitious materials gets into the eyes, rinse immediately and repeatedly with water and get prompt medical attention. See MSDS.

WARRANTY

The technical information and usage statements are based on our best knowledge. The contents of this specification sheet are presented for informational purposes only and do not constitute responsibility for their use. The manufacturer will replace only that material which is proven defective due to quality of the components or the manufacturing process.

The information and recommendations made here in are based on our own research and the research of others. All information is believed to be accurate. However purchasers should make their own test to determine the suitability of product for their particular application. Our only warranty shall be that of replacing the product due to manufacturing defects.