



# REDI POXY™

## Epoxy Adhesive

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### 1. PRODUCT NAME

Redi Poxy™ Epoxy Adhesive

### 2. MANUFACTURER

Tile Redi USA, LLC  
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### 3. PRODUCT DESCRIPTION

Redi Poxy™ Epoxy Adhesive is a chemical resistant, epoxy adhesive that will bond to most sound, clean surfaces. Adhesive spreads easily and cleans with water while fresh. Redi Poxy™ Epoxy Adhesive is a factory-proportioned kit consisting of epoxy resin, hardener and chemical resistant silica filler. Redi Poxy™ Epoxy Adhesive can be used in interior and exterior (see limitations) walls and floors, wet and dry areas.

#### Uses

For heavy duty commercial chemical resistant installations in food processing areas, commercial kitchens, restaurants, etc. Also use Redi Poxy™ Epoxy Adhesive to install all types of ceramic tile, marble and natural stone over post-tensioned and precast floor systems. Also recommended for rubber flooring and wood block floors, the installation of green marble, white marble, and resin backed tiles and stones agglomerate marbles that have a tendency to stain,

darken or warp when installed with water-based installation materials.

**Note:** The Tile Council of North America recommends the use of epoxy adhesives and grouts for thin-set installations on suspended concrete slabs and for floors and walls when chemical resistance is required.

#### Advantages

- Water cleanable.
- No flammable solvents are required to clean tools or finished work.
- Ideal for installing moisture sensitive marble and agglomerate tiles.
- Ideal for the installation of resin backed tile, mosaics, stone, and agglomerates.
- Non-staining on white and light-colored marble.
- High bond strength.
- Maximum chemical resistance.

Conforms to EN 12004 and ISO 13007 with a R2 Classification

#### Suitable Substrates

- Concrete
- Ceramic tile and stones
- Exterior glue plywood\*
- Concrete masonry
- Brick masonry
- Non-water soluble cut-back adhesive\*
- Vinyl or other resilient tile\*
- Cement mortar beds
- Gypsum wallboard\*
- Cement plaster
- Cement terrazzo
- Plastic laminate\*
- Cement backer board\*\*
- Steel

\*Interior application only.

\*\* Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use.

#### Packaging

Redi Poxy™ Epoxy Adhesive is a factory proportioned kit with resin (part A), hardener (part B) and filler powder (part C), packed in a plastic bag (part A and B) and carton (part C)

#### Unit Sizes

##### #1 Unit Redi Poxy™ 6

Weight 6 lb. (2.72 kg) volume: (1.7 l)

##### #2 Unit Redi Poxy™ 9

Weight 9 lb. (4.08 kg) volume: (2.5 l)

##### #3 Unit Redi Poxy™ 12

Weight 12.6 lb. (5.71 kg) volume: (3.4 l)

## Approximate Coverage

	#1 Unit - 6lb	#2 Unit - 9 lb	#3 Unit - 12.6 lb
With 1/16" (1.5 mm)* v-notch trowel	45-50 sq. ft./4.2-4.6m <sup>2</sup>	65-75 sq. ft./6.0-6.9m <sup>2</sup>	90-100 sq. ft./8.1-9.0 m <sup>2</sup>
With 3/16" (4 mm) v-notch trowel	17-20 sq. ft./1.6-1.9m <sup>2</sup>	26-30 sq. ft./2.4-2.8m <sup>2</sup>	35-40 sq. ft./3.2-3.6 m <sup>2</sup>
With 1/8" x 1/8 (3 x 3 mm) square notch trowel	22-27 sq. ft./2.0-2.5m <sup>2</sup>	33-41 sq. ft./3.1-3.8m <sup>2</sup>	45-55 sq. ft./4.2-5.1 m <sup>2</sup>
With 1/4" x 1/4 (6 x 6 mm) square notch trowel	7-9 sq. ft./0.7-0.8m <sup>2</sup>	11-13 sq. ft./1.0-1.2m <sup>2</sup>	15-18 sq. ft./1.4-1.7 m <sup>2</sup>

## Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for two (2) years\*.

\* High humidity will reduce the shelf life of bagged product.

## Limitations

- Not for use as a grout.
- Do not install when surface temperature is below 60°F (16°C) or above 90°F (32°C).
- Adhesives for ceramic tile and stone are not replacements for waterproofing membranes.
- Consult manufacturer regarding limitations for exterior installations.
- When installing ceramic tile and stone, verify that substrate deflection does not exceed the maximum allowable industry standard of L/360 for ceramic tile and L/480 for stone under combined live and dead loads. Some marbles and other stone have low flexural strength and may not be suitable for installation over wood floors.

## Cautions

- Consult MSDS for more safety information.
- During cold weather, protect finished work from traffic until fully cured.
- Redi Poxy™ Epoxy Adhesive Part A is corrosive until fully cured. Damage to eyes or skin are possible.
- Wait 14 days after the final grouting period before filing water features with water at 70°F (21°C).
- Contains silica sand. Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas.
- Keep out of reach of children.
- Allow a minimum 14 day cure prior filing water features with water at 70°F (21°C).

## 4. TECHNICAL DATA

### VOC/LEED Product Information

Total VOC Content pounds/gallon (grams/liter) of product in unused form is 0.0067 lb/gal (0.80 g/l).

### Applicable Standards

ANSI A118.3, EN 12004 and ISO 13007

### Performance Properties

Test	Method	Results	Specification
Quarry Tile Shear Bond Strength	ANSI A118.3-5.5	>1250 psi (8.6 MPa)	>1000 psi (6.9 MPa)
Tensile Strength	ANSI A118.3-5.7	1400-1700 psi (9.6-11.7 MPa)	>1000 psi (6.9 MPa)
Compressive Strength	ANSI A118.3-5.6	5000-5400 psi (34.4-37.2 MPa)	>3500 psi (24.1 MPa)
Thermal Shock Resistance	ANSI A118.3-5.8	600-700 psi (4.1-4.8 MPa)	>500 psi (3.4 MPa)

Shrinkage	ANSI A118.3-5.3	0-0.1%	<0.25%
Sag Resistance	ANSI A118.3-5.4	Pass	No shape change
Water Cleanability	ANSI A118.3-5.1	>80 minutes	>80 minutes
Initial Shear Adhesion	EN12003 7.3	≥2 N/mm <sup>2</sup>	≥2 N/mm <sup>2</sup>
Shear Adhesion Strength after Water Immersion	EN12003 7.4	≥2 N/mm <sup>2</sup>	≥2 N/mm <sup>2</sup>
Shear Adhesion After Thermal Shock	EN12003 7.5	≥2 N/mm <sup>2</sup>	≥2 N/mm <sup>2</sup>
Open Time Tensile Adhesion Strength	EN1346	>0.5 N/mm <sup>2</sup> in not less than 20 minutes	>0.5 N/mm <sup>2</sup> in not less than 20 minutes

Data from TCA054-05, TCA 095-90, and 50/0776/05.

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

### Classification in Compliance with EN 12004

Redi Poxy™ Epoxy Adhesive is an improved reaction resin adhesive classified as R2.

Redi Poxy™ Epoxy Adhesive is CE marked, as declared in report no. 50/0776/05 issued by Material prüfungs-und Versuchsanstalt Neuwied Forschungsinstitut für Vulkanische Baustoffe GmbH (Neuwied, Germany)

## Working Properties (70°F [21°C])

Pot Life	45 minutes
Time to Grout	12 hours
Time to Light Traffic	12 hours
Time to Heavy Traffic	24 hours
Minimum Application Layer	1/8 in (3 mm)
Maximum Application Layer	3/8 in (9 mm)
Wet Density	99 lbs/ft <sup>3</sup> (1590 kg/m <sup>3</sup> )

## Chemical Resistance Chart

Redi Poxy™ Epoxy Adhesive

REAGENT TYPE at (70°F [21°C])	Redi Poxy™ Adhesive EXPOSURE LEVEL	
	Intermittent	Constant
Citric Acid 10%	R	R
Sulfuric Acid 10%	R	R
Hydrochloric Acid 10%	R	R
Lactic Acid 5%	R	R
Vinegar	R	NR
Acetic Acid 10%	R	NR
Nitric Acid 10%	R	R
Sodium Hydroxide 10%	R	R
Sodium Chloride 10%	R	R
Concentrated Detergents	R	R
Ammonium Hydroxide	R	R
Sugars	R	R
Gasoline	R	R
Cooking Oils	R	R
Turpentine	R	R
Mineral Spirits	R	R
Toluene	NR	NR
Xylol	NR	NR

R= Recommended NR= Not Recommended

Chemical Resistance determined in accordance with ASTM C267-1982.

**NOTES TO SPECIFIER:** Use the constant exposure recommendations for intermittent exposure to reagents at temperatures above 90°F (32°C).

## 5. INSTALLATION

### Surface Preparation

All surfaces should be between 60°F (16°C) and 90°F (32°C) and structurally sound, clean and free of all dirt, oil, grease, paint, concrete sealers or curing compounds. Rough or uneven concrete surfaces should be made smooth with a Portland cement underlayment to provide a wood float (or better) finish. Installation

may be made on a damp surface. New concrete slabs must be damp cured and 28 days old prior to application. All slabs must be plumb and true to within 1/4" (6 mm) in 10 ft (3 m). Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Follow ANSI specification A108.01-3.7 "Requirements for Movement Joints: Preparations by Other Trades" or TCNA detail EJ-171 "Movement Joints—Vertical & Horizontal". Do not cover expansion joints with mortar.

**Note:** Temperature will affect working properties of Redi Pox<sup>TM</sup> Adhesive. Warm temperatures will speed curing and shorten working time. Cool temperatures will slow curing and require longer time to traffic. Store Redi Pox<sup>TM</sup> Adhesive at 70°F (21°C) for 24 hours prior to use.

1. Installer must verify that deflection under all live, dead and impact loads of interior plywood floors does not exceed industry standards of L/360 for ceramic tile and brick or L/480 for stone installations where L=span length.
2. Minimum construction for interior plywood floors.

**SUBFLOOR:** 5/8" (15 mm) thick exterior glue plywood, either plain with all sheet edges blocked or tongue and groove, over bridged joints spaced 16" (400 mm) o.c. maximum; fasten plywood 6" (150 mm) o.c. along sheet ends and 8" (200 mm) o.c. along intermediate supports with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3 mm) between sheet ends and 1/4" (6 mm) between sheets edges; all sheet ends must be supported by a framing member; glue sheets to joints with construction adhesive.

**UNDERLAYMENT:** 5/8" (15 mm) thick exterior glue plywood fastened 6" (150 mm) o.c. along sheet ends and 8" (200 mm) o.c. in the panel field (both directions) with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3 mm) to 1/4" (6 mm) between sheets and 1/4" (6 mm) between sheet edges and any abutting surfaces; offset underlayment joints from joints in subfloor and stagger joints between sheet ends; glue underlayment to subfloor with construction adhesive.

#### Mixing

Pour Redi Pox<sup>TM</sup> Adhesive Part A and Part B into a clean mixing pail and mix thoroughly. Add Redi Pox<sup>TM</sup> Part C Filler Powder and mix to a smooth, trowelable consistency. Mortar is ready for use immediately after mixing.



#### Application

Apply mortar to the substrate with the flat side of the trowel, pressing firmly to work into surface. Comb on additional mortar with the notched side.

**Note:** Use the proper sized notched trowel to ensure full bedding of the tile. Back butter large tiles > 8" x 8" (>200 mm x 200 mm) to provide full bedding and firm support. Place tiles into wet, sticky mortar and beat in using a beating block and rubber mallet to embed tile and adjust level. Check mortar for complete coverage by periodically removing a tile and inspecting bedding mortar transfer onto back of tile.

## 6. AVAILABILITY AND COST

Tile Redi® Products and Redi Pox<sup>TM</sup> materials are available. For Distributor information, call:

Toll Free: 800-232-6156

Telephone: 954-323-0125

For on-line Distributor information, please visit our website at [www.tileredi.com](http://www.tileredi.com)

#### Cost

Contact a Tile Redi Distributor in your area.

## 7. WARRANTY

This limited warranty is for a period of one (1) year in accordance with the terms of the Tile Redi Warranty

## 8. MAINTENANCE

Redi Pox<sup>TM</sup> materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

## 9. TECHNICAL SERVICES

#### Technical Assistance

Information is available by calling the Tile Redi® Technical Support hotline (hours 8:00 AM to 6:00 PM EST)

Toll Free: 800-232-6156

Telephone: 954-323-0125

Fax: 954-344-8064

#### Technical and Safety Literature

To acquire technical and safety literature, please visit our website at [www.tileredi.com](http://www.tileredi.com)

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