



LATAPOXY® BIOGREEN™

DS-023.0-1217

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

LATAPOXY® BIOGREEN™

2. MANUFACTURER

LATICRETE International, Inc.
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3. PRODUCT DESCRIPTION

LATAPOXY BIOGREEN is a high strength, chemical resistant, epoxy adhesive that contains Biobased materials derived from renewable resources. Biobased materials provide an alternative to conventional non-renewable materials such as petroleum derived products, contribute to a cleaner environment and may contribute to LEED V4 points. LATAPOXY BIOGREEN will bond to most sound, clean surfaces, spreads easily and cleans with water while fresh. LATAPOXY BIOGREEN is available in a factory-proportioned kit consisting of epoxy resin, hardener, and chemical resistant silica filler. LATAPOXY BIOGREEN 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 LATAPOXY BIOGREEN to install all types of ceramic tile, marble and natural stone over post-tensioned 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

- Made with Biobased materials
- 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 ISO 13007 with an 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
- Fiberglass
- HYDRO BAN® Board***

* Interior application only.

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

***Consult product datasheet (DS-040.0) for specific installation recommendations

Packaging

Unit consists of the following components:

- 2 pouches of Part A total weight 2 lbs (0.9 kg)
- 2 pouches of Part B total weight 4 lbs (1.8 kg)
- 2 bags of Part C Powder total weight 18 lbs (8.2 kg)

Unit Size

#2 Unit

Weight: 24 lb (10.9 kg) volume: 1.9 gals (7.2 L)

Approximate Coverage

	#2 Unit
With 1/16" (1.5 mm) v-notch trowel	125-135 ft ² / 11.6-12.5 m ²
With 3/16" (4 mm) v-notch trowel	40-50 ft ² / 3.7-4.6 m ²
With 1/8" x 1/8" (3 x 3 mm) square notch trowel	60-70 ft ² / 5.6-6.5 m ²
With 1/4" x 1/4" (6 x 6 mm) square notch trowel	30-35 ft ² / 2.8-3.3 m ²

Shelf Life

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

Limitations

- For veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.
- Not for use as a grout. Use SPECTRALOCK® PRO Premium Grout†, SPECTRALOCK PRO Grout†, LATAPOXY® SP-100 or SPECTRALOCK 2000 IG.
- Do not install when surface temperature is below 60°F (16°C) or above 90°F (32°C).
- Not for use as a wear surface.
- Adhesives for ceramic tile and stone are not replacements for waterproofing membranes. When a waterproofing membrane is required, use a LATICRETE® Waterproofing Membrane (see Section 10 FILING SYSTEMS).
- Consult LATICRETE Technical Services on limitations for exterior installations.

Note: Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick and similar finishes. Substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/360 for thin bed ceramic tile/brick installations or L/480 for thin bed stone installations where L=span length (except where local building codes specify more stringent deflection requirements)

Cautions

Consult SDS for more safety information.

- During cold weather, protect finished work from traffic until fully cured.
- LATAPOXY® BIOGREEN™ Part A is corrosive until fully cured. Damage to eyes or skin is possible.
- Wait 14 days after the final grouting period before filling pools, spas and water features with water at 70°F (21°C).
- Allow grout to cure for 10 days with epoxy grout or 14 days with cement grout prior to turning on steam in a steam room.
- 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.

4. TECHNICAL DATA

VOC/LEED Product Information



This product has been certified for Low Chemical Emissions (ULCOM/GG UL2818) under the UL GREENGUARD Certification Program for Chemical Emissions for Building Materials, Finishes and Furnishings (UL 2818 Standard) by UL Environment.

Total VOC Content of product in unused form is 18 g/L.

Applicable Standards

ANSI A118.3, ISO 13007

Performance Properties



Test	Method	Specification	Results
Quarry Tile Shear Bond Strength	ANSI A118.3-5.5	>1000 psi (6.9 MPa)	1400-1500 psi (9.6-10.3 MPa)
Tensile Strength	ANSI A118.3-5.7	>1000 psi (6.9 MPa)	1300-1400 psi (8.9-9.6 MPa)
Compressive Strength	ANSI A118.3-5.6	>3500 psi (24.1 MPa)	5000-5400 psi (34.4-37.2 MPa)
Thermal Shock Resistance	ANSI A118.3-5.8	>500 psi (3.4 MPa)	1300-1400 psi (8.9-9.6 MPa)
Shrinkage	ANSI A118.3-5.3	<0.25%	0-0.1%
Sag Resistance	ANSI A118.3-5.4	No shape change	pass
Water Cleanability	ANSI A118.3-5.1	>80 minutes	>80 minutes
Shear Adhesion Strength	ISO 13007-2 4.3.4	≥2 N/mm ²	7.5-8 N/mm ²
Shear Adhesion Strength after Water Immersion	ISO 13007-2 4.3.5	≥2 N/mm ²	7.5-8 N/mm ²
Shear Adhesion After Thermal Shock	ISO 13007-2 4.3.8	≥2 N/mm ²	9.0-9.5 N/mm ²
Open Time: Tensile Adhesion Strength	ISO 13007-2 4.1	>0.5 N/mm ² in not less than 20 minutes	3-3.5 N/mm ² in not less than 20 minutes

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

LATAPOXY® BIOGREEN is an improved reaction resin adhesive classified as R2.

Working Properties (70°F [21°C])

Pot Life	45 minutes
Time to Grout	8 hours
Time to Light Traffic	8 hours
Time to Heavy Traffic	12 hours
Wet Density	13.2 lb/gal (1.59 g/ml)

CHEMICAL RESISTANCE CHART

LATAPOXY® BIOGREEN

REAGENT TYPE at (70°F [21°C])	LATAPOXY® BIOGREEN 300 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	R
Acetic Acid 10%	R	R
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	NR	NR
Cooking Oils	R	R
Turpentine	R	R
Mineral Spirits	R	R
Toluene	NR	NR
Xylene	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 Latex 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 effect working properties of LATAPOXY BIOGREEN. Warm temperatures will speed curing and shorten working time. Cool temperatures will slow curing and require longer time to traffic. Store LATAPOXY BIOGREEN 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. Refer to Technical Data Sheet 152 "Bonding Ceramic Tile Stone or Brick Over Wood Floors" for complete details.

3. DO NOT bond to particle board, OSB, luan, Masonite® or hardwood surfaces.

Mixing

Pour LATAPOXY® BIOGREEN™ Part A and Part B into a clean mixing pail and mix thoroughly for 90 seconds. Add LATAPOXY 300 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

Availability

LATICRETE® and LATAPOXY materials are available worldwide.

For Distributor Information, Call:

Toll Free: 1.800.243.4788

Telephone: +1.203.393.0010

For on-line Distributor information, visit LATICRETE at

www.laticrete.com.

Cost

Contact a LATICRETE Distributor in your area.

7. WARRANTY

See 10. Filing System

DS 230.13: LATICRETE® Product Warranty

A component of:

DS 230.99: LATICRETE Lifetime System

Warranty (United States and Canada)

8. MAINTENANCE

LATICRETE and LATAPOXY® grouts require routine cleaning with a neutral pH soap and water. All other LATICRETE and LATAPOXY® 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 LATICRETE Technical Service Hotline:

Toll Free: 1.800.243.4788, ext. 235
Telephone: +1.203.393.0010, ext. 235
Fax: +1.203.393.1948

Technical and Safety Literature

To acquire technical and safety literature, please visit our website at www.laticrete.com.

10. FILING SYSTEM

Additional product information is available on our website at www.laticrete.com. The following is a list of related documents:

DS 230.13: LATICRETE Product Warranty
DS 230.99: LATICRETE Lifetime System Warranty (United States and Canada)
DS 030.0: SPECTRALOCK® 2000 IG
DS 236.0: 9235 Waterproofing Membrane
DS 631.0: LATAPOXY SP-100
DS 663.0: HYDRO BAN®
DS 681.0: SPECTRALOCK PRO Premium Grout†
DS 685.0: SPECTRALOCK PRO Grout†
TDS 179: Pool Maintenance Guide

† United States Invention Patent No.: 6,881,768 (and other Patents)

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