

# LATAPOXY 300 Adhesive®

DS-502.0-0913

Globally Proven Construction Solutions



# 1. PRODUCT NAME LATAPOXY<sup>®</sup> 300 Adhesive

# 2. SUPPLIER

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# **3. PRODUCT DESCRIPTION**

LATAPOXY 300 Adhesive is a chemical resistant, epoxy adhesive that will bond to most sound, clean surfaces. Adhesive spreads easily and cleans with water while fresh. LATAPOXY 300 Adhesive is a factory-proportioned kit consisting of epoxy resin, hardener and chemical resistant silica filler. LATAPOXY 300 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 and restaurants etc. Also use LATAPOXY 300 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 work area.
- Ideal for installing sensitive marble and agglomerate tiles.
- Ideal for the resin backed tile, mosaics, stone & agglomerates.
- Non-staining on white and light-coloured 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

Unit consists of the following components:

- 2 pouches of Part A total weight 2.1 lbs (1.0 kg)
- 2 pouches of Part B total weight 4.1 lbs (1.9 kg)
- 2 bags of Part C Powder total weight 18 lbs (8.2 kg)

### Unit Size

#2 Unit Weight: 11.4 kg volume: 6.8 Ł

#### Approximate coverage:

Trowel Type	Coverage per 11.4kg unit
1.5mm v notch trowel	16.7 – 18.6 m2
4mm v notch trowel	6.5 – 7.4 m2
3mm x 3mm trowel	5.6 – 6.5 m2
6mm x 6mm trowel	2.8 – 3.3 m2

### 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

- For veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.
- Not for use as a grout. Use LATICRETE® SpectraLOCK®† PRO Premium Grout, LATICRETE SpectraLOCK PRO Grout, LATAPOXY® SP–100 or LATICRETE SpectraLOCK 2000 IG Grout.

† United States Invention Patent No.: 6881768 (and other Patents)

- 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 MSDS for more safety information.
- During cold weather, protect finished work from traffic until fully cured.
- LATAPOXY 300 Adhesive Part A is corrosive until fully cured. Damage to eyes or skin is possible.
- Wait 14 days after the final grouting period before filling water features with water at 70°F (21°C).
- Contains silica sand. Silica sand may cause 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 GREENGUARD Indoor Air Quality Certified® by the GREENGUARD Environmental Institute under the GREENGUARD Standard for Low Emitting Products in finished form.

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

## Working properties @ 21'C:

Pot Life	45 minutes
Time to grout	12 hours
Time to light traffic	12 hours
Time to heaby traffic	24 hours
Minimum application bed depth	3mm
Maximum application bed depth	9mm
Wet density	1590 Kg/M3

# Applicable Standards

ANSI A118.3, EN 12004 and ISO 13007 Performance Properties



Test	Method	Specification	Results
Quarry Tile Shear Bond Strength	ANSI A118.3–5.5	>1000 psi (6.9 MPa)	>1000 psi (6.9 MPa)
Tensile Strength	ANSI A118.3–5.7	>1000 psi (6.9 MPa)	1000–1400 psi (6.9-9.6 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)	600–700 psi (4.1–4.8 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/mm²	≥2 N/mm <sup>2</sup>
Shear Adhesion Strength after Water Immersion	ISO 13007-2 4.3.5	≥2 N/mm²	≥2 N/mm²
Shear Adhesion After Thermal Shock	ISO 13007-2 4.3.8	≥2 N/mm <sup>2</sup>	≥2 N/mm <sup>2</sup>
Open Time: Tensile Adhesion Strength	ISO 13007-2 4.1	>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. Classification in Compliance with EN 12004

LATAPOXY® 300 Epoxy Adhesive is an improved reaction resin adhesive classified as R2. LATAPOXY 300 Epoxy Adhesive is CE marked, as declared in report no. 50/0776/05 issued by Materialprüfungs-und Versuchsanstalt Neuwied Forschungsinstitut für Vulkanische Baustoffe GmbH (Neuwied, Germany)

### CHEMICAL RESISTANCE CHART LATAPOXY 300 Adhesive

REAGENT TYPE at (70°F [21°C])	LATAPOXY <sup>®</sup> 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	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	
Xylene	NR	NR	

R= Recommended NR= Not Recommended

Chemical Resistance determined in accordance with ASTM C267-1982.

# **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 LATICRETE 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: Temperatures will effect working properties of LATAPOXY® 300 Adhesive. Warm temperatures will speed curing and shorten working time. Cool temperatures will slow curing and require longer time to traffic. Store LATAPOXY 300 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 WBP plywood floors.

**SUBFLOOR:** 5/8" (15 mm) thick exterior glue WBP plywood, either plain with all sheet edges blocked or tongue and groove, over bridged joints spaced 16" (400 mm) centres maximum; fasten plywood 6" (150 mm) centres. along sheet ends and 8" (200 mm) centres along intermediate supports fixed with galvanized 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 WBP plywood fastened 6" (150 mm) centres along sheet ends and 8" (200 mm) centres in the panel field (both directions) fixed with galvanized 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 ${\scriptstyle \circledcirc}$  or hardwood surfaces.

#### Mixing

Pour LATAPOXY 300 Adhesive Part A and Part B into a clean mixing pail and mix thoroughly. 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.

#### Cleaning

Clean tools and masonry with water.

# 6. AVAILABILITY AND COST

## Availability

LATICRETE and LATAPOXY<sup>®</sup> materials are available worldwide. For on-line Distributor Information, call 0151 486 6101 or visit LATICRETE UK at www.laticrete.co.uk

#### 7. MAINTENANCE

LATICRETE and LATAPOXY grouts and pointing mortars 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.

### 8. TECHNICAL SERVICES

#### **Technical Assistance**

Information is available by calling the LATICRETE UK Technical Service Hotline: Tel: 0151 486 6101 Fax: 0151 448 1982 e-mail: sales@laticrete.co.uk

#### **Technical and Safety Literature**

To acquire technical and safety literature, please visit our website at **www.laticrete.co.uk** 

#### 9. DISCLAIMER

The information contained in this document is given in good faith and to the best of our knowledge is true and accurate. This information is subject to change without notice and it is the responsibility of the user to obtain up to date and current information. The use of this product is beyond our control and liability is assumed by the user when used incorrectly and not in accordance with LATICRETE guidelines.

The manufacturer is not responsible for any loss or damage arising from incorrect usage of this product.

The specifier or other party responsible for the project must ensure that the details in this data sheet are appropriate for the intended application and that additional detailing is performed for specific design or any areas that fall outside the scope of this specification.

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