



Glass Tile Adhesive

DS-252.0-1216

**Globally Proven
Construction Solutions**

1. PRODUCT NAME

Glass Tile Adhesive

2. MANUFACTURER

LATICRETE International, Inc.
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Bethany, CT 06524-3423 USA
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Fax: +1.203.393.1684
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3. PRODUCT DESCRIPTION

Glass Tile Adhesive is a non-sag, polymer fortified adhesive mortar that is specifically formulated for use in glass tile applications. Glass Tile Adhesive has great workability and produces an ultra-white finish that enhances the look of glass mosaics, glass tile, and most any translucent tile or stone. In addition to containing antimicrobial protection, Glass Tile Adhesive is GREENGUARD GOLD certified for low VOC. Glass Tile Adhesive can also be used with porcelain or ceramic tile.

Uses

Designed for interior, exterior, and submerged installations of all types of glass tile over concrete, exterior glue plywood (interior, dry areas only), and a variety of other substrates.

Advantages

- Consistent, ultra white color across the entire application area
- Optimal bond strength with minimal shrinkage
- Single component with no admix needed, just add water
- Superior non-sag performance
- Smooth and creamy consistency
- Equipped with anti-microbial technology.
- UL GREENGUARD GOLD certified
- Unique color options are now available in all LATICRETE® grout colors when mixed with PERMACOLOR® Select Color Kits.‡

‡ LATICRETE makes no guarantee on color match to our grout color card and color tools. This process/method can be used to create a colored adhesive mortar to facilitate the installation of translucent, transparent, opaque glass mosaics and other finishes where cleaning thin set mortar out of the joints is a challenge. Do not use colored adhesive mortar as a substitute for grout. Always conduct a test area to validate performance and results.

Suitable Substrates

- Exterior Glue Plywood*
- Concrete/Masonry
- Concrete Block
- Cement Mortar Beds
- Cement Terrazzo
- Ceramic Tile and Stone

- Gypsum Wallboard*
- Cement Backer Board**
- Masonry and Brick

* Interior use only.

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

Packaging

25 lb bag (11.3 kg); 104 bags per pallet

Approximate Coverage

Glass Tile Adhesive— 25 lb bag (11.3 kg)

Approximately 35 ft ² / 25 lb bag (3.2 m ² /11.3 kg bag) with 1/4" x 1/4" (6 mm x 6 mm) notched trowel.
Approximately 26 ft ² / 25 lb bag (2.4 m ² / 11.3 kg bag) with 1/4" x 3/8" (6 mm x 9 mm) notched trowel.
Approximately 52 ft ² / 25 lb bag (4.8 m ² / 11.3 kg bag) with 1/8" x 3/16" (3 mm x 4.5 mm) notched trowel.

Shelf Life

Advanced plastic bag provides two (2) year shelf life (non-rapid versions only).

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

Limitations

Not for use directly over particle board, interior glue plywood, luan, Masonite® or hardwood floors. Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not replacements for waterproofing membranes. When a waterproofing membrane is required, use a LATICRETE® Waterproofing Membrane (see Section 10 FILING SYSTEMS).

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.

Cautions

Consult SDS for more safety information.

- During cold weather, protect finished work from traffic until fully cured.
- Verify suitability of Glass Tile Adhesive for use with resin, mesh-backed glass, painted or coated tile with glass manufacturer. For installations with a moisture sensitive, resin, mesh-backed, painted or coated backing, use LATAPOXY® 300 Adhesive. Consult with glass tile manufacturer for suitability and compatibility of their product over exterior glue plywood substrates and membranes.

- Contains portland cement and silica sand. May irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin. In case of contact, flush thoroughly with water.
- Do not take internally. Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas. Not for use with green marble or any moisture sensitive tile or stone.
- Keep out of reach of children.

4. TECHNICAL DATA

Applicable Standard

ANSI A118.4, A118.11, ISO 13007-2, C1TE

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.



This product has a cradle-to-gate (with options) Product-Specific (Type III) Environmental Product Declaration. The PCR review, life cycle assessment and declaration were independently verified by UL Environment in accordance with ISO 14025, ISO 14040 and ISO 14044.

Physical Properties

Test	Test Method	Specification	Results
28 Day Cure Porcelain Tile Shear Strength	ANSI A118.4 5.2.4	>200 psi (1.38 MPa)	370-430 psi (2.6 -3.0 MPa)
14 Day Shear Bond Porcelain Tile Water Immersion	ANSI A118.4 5.2.3	>150 psi (1.0 MPa)	150-170 psi (1.0-1.2 MPa)
28 Day Cure Quarry Tile to Plywood Shear Bond	ANSI A118.11 4 1.2	>150 psi (1.0 MPa)	170-190 psi (1.2-1.3 MPa)

Test	Test Method	Specification	Results
28 Day Cure Tensile Adhesive Strength	ISO 13007-2 4.4.2	0.5 MPa (72 psi)	1.1-1.3 MPa (160-188 psi)
7 Day Cure 21 Day Water Immersion Tensile Adhesive Strength	ISO 13007-2 4.4.3	1 MPa (145 psi)	0.6-0.7 MPa (87-101 psi)
14 Day Cure 14 Day Heat Age Tensile Adhesive Strength	ISO 13007-2 4.4.4	1 MPa (145 psi)	1.7-1.9 MPa (247-276 psi)
7 Day Cure 21 Day Water Immersion 25 Freeze/Thaw Cycle Tensile Adhesive Strength	ISO 13007-2 4.4.5	0.5 MPa (72 psi)	1.3 – 1.5 MPa (266 psi)

Open Time After 20 Minutes	ISO 13007-2 2.4.1	0.5 MPa (73 psi)	0.9-1.1 MPa (130-159 psi)
Slip	ISO 13007-2 2.4.2	Less than or equal to 0.5 mm (0.02")	0-0.3 mm (0-0.1")

Working Properties

Open Time	20 minutes
Pot Life	5 hours
Wet Density	11.3 lb/gal (13.6 kg/m ³)

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.

5. INSTALLATION

Surface Preparation

All surfaces should be between 40°F (4°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. Dry, dusty concrete slabs or masonry should be dampened and excess water swept off. Installation may be made on a damp surface. Concrete slabs must be plumb and true to within 1/4" (6 mm) in 10' (3 m).

1. Installer must verify that deflection under all live, dead and impact loads of interior plywood floors does not exceed

Note: 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.

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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.

Mixing

Place clean, potable water into a clean pail. Add Glass Tile Adhesive Mortar. Use approximately 2.5 – 2.6 qts (2.4 – 2.5 L) of water for 25 lbs (11.3 kg) of powder. Mix by hand or with a slow speed mixer to a smooth, trowelable consistency. Allow mortar to slake for 5 – 10 minutes. Remix without adding any more water or powder. During use, stir occasionally to keep mix fluffy. DO NOT temper with water.

Mixing with PERMACOLOR® Select Color Kits

Requires 1 PERMACOLOR Select Color Kit (contains 2 individual color packets, use both color packets) Place water in a clean mixing container. Remove color packets from the cardboard container as well as the protective plastic sleeve. The internal bag is a water dispersible pack – when using the 25 lbs. (11.3 kg) bag of Glass Tile Adhesive, drop both color packets directly in to water in clean mixing container. Mix with a drill mixer until pigment is dispersed evenly in container and the dispersible packet is no longer visible. Add Glass Tile Adhesive and mix as directed above. Please note that additional water may be necessary when using PERMACOLOR Select Color Kits.

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. Back butter tiles before setting in order to provide full bedding and firm support and to prevent mortar ribbons from showing through transparent or translucent glass tile. 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. If mortar is skinned over (not sticky), remove and replace with fresh mortar.

Note: Use proper sized notched trowel to ensure full bedding of the tile. Spread as much mortar as can be covered with tile in 15–20 minutes. Check with glass manufacturer for suitability of glass tile when used in conjunction with any specified membrane, thin-set and/or grout.

Grouting

Grout installation after a minimum of 24 hours curing time at 70°F (21°C). Grout with SPECTRALOCK® PRO Premium Grout†, SPECTRALOCK PRO Grout†, PERMACOLOR Select, or PERMACOLOR Grout[‡]

Cleaning

Clean tools and tile work with water while mortar is fresh.

6. AVAILABILITY AND COST

Availability

LATICRETE® and LATAPOXY® materials are available worldwide. For Distributor information:

Toll Free: 1.800.243.4788

Telephone: +1.203.393.0010

For online 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 025.0: LATICRETE 25 Year System Warranty
(United States and Canada)

8. MAINTENANCE

Non-finish LATICRETE and LATAPOXY installation 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:

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 025.0: LATICRETE 25 Year System Warranty
(United States and Canada)

DS 236.0: 9235 Waterproofing Membrane

DS 250.0: PERMACOLOR Grout

DS 281.0: PERMACOLOR Select

DS 633.0: LATAPOXY 300 Adhesive

DS 663.0: HYDRO BAN®

DS 681.0: SPECTRALOCK PRO Premium Grout

DS 685.0: SPECTRALOCK PRO Grout

TDS 152: Bonding Ceramic Tile, Stone or Brick Over Wood Floors

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

‡ United States Invention Patent No.: 6,784,229 (and other Patents)

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