

# **GLASS TILE ADHESIVE LITE**

DS-36628-0524

# Globally Proven Construction Solutions



1. PRODUCT NAME GLASS TILE ADHESIVE LITE

# 2. MANUFACTURER

LATICRETE International, Inc. 1 LATICRETE Park North Bethany, CT 06524-3423 USA Telephone: +1.203.393.0010, ext. 1235 Toll Free: 1.800.243.4788, ext. 1235 Fax: +1.203.393.1684 Website: laticrete.com

# **3. PRODUCT DESCRIPTION**

Glass Tile Adhesive Lite is a lightweight non-sag, polymer fortified adhesive mortar that is specifically formulated for use in glass tile applications. Glass Tile Adhesive Lite contains no respirablecrystalline silica levels that exceed the OSHA action level\* and has a smooth easy-to-trowel consistency and long open for ease of installation. The formula exceeds ANSI A118.15 robust requirements. Glass Tile Adhesive Lite 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 Lite is GREENGUARD GOLD certified for low VOC. Glass Tile Adhesive Lite can also be used with porcelain or ceramic tile.

\* OSHA action level set forth in OSHA's Respirable Crystalline Silica (RCS) standard for construction, 29 CFR 1926.1153, as tested by an independent laboratory to be below the OSHA action level for respirable crystalline silica. See laticrete.com/en/innovation-and-impact/oshasilica for more details. Equipped with Anti-Microbial Protection

## 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

- Lightweight 12.5 LB (5.7 KG) bag has coverage of 25 LB (11.3 KG) of traditional mortar
- Consistent, ultra white color across the entire application area
- Optimal bond strength with minimal shrinkage
- Exceeds ANSI A118.15 ET, A118.4 and A118.11
- Exceeds ISO 13007-C2TES1P1
- Single component with no admix needed, just add water
- Superior non-sag performance
- Smooth and creamy consistency
- Equipped with anti-microbial technology to protect the treated article.
- UL GREENGUARD GOLD certified
- Unique color options are now available in all LATICRETE<sup>®</sup> grout colors when mixed with PERMACOLOR<sup>®</sup> 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 (Interior Only)
- Concrete Masonry
- Cement Block
- Cement Mortar Bed
- Cement Terrazzo
- Ceramic Tile and Stone
- Ceramic Tile and Stone

- Gypsum Wallboard
- Cement Backer Board
- Masonry Surfaces
- HYDRO BAN Board

## Packaging

• 12.5 LB (5.7 KG) BAG

## Approximate Coverage

GLASS TILE ADHESIVE LITE- 12.5 lb bag (5.7 kg)

Approximately 38 - 42 ft<sup>2</sup> /(3.5 - 3.9 m<sup>2</sup>) 12.5 lb (5.7 kg) bag) with 1/4" x 1/4" (6 mm x 6 mm) notched trowel. Approximately 25 - 30 ft<sup>2</sup> / (2.3 - 2.8 m<sup>2</sup>) 12.5 lb (5.7 kg) bag) with 1/4" x 3/8" (6 mm x 9 mm) notched trowel. Approximately 75 - 85 ft<sup>2</sup> / 7.0 -7.9 m<sup>2</sup>/ 12.5 lb (5.7 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). For use with glass tile only when used as a thin bed adhesive. Maximum adhesive mortar thickness not to exceed 3/16" (4.7mm). Follow glass tile manufacturers installation instructions. 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 safety information.
- During cold weather, protect finished work from traffic until fully cured.
- Verify suitability of Glass Tile Adhesive Lite 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<sup>®</sup> 300 Adhesive. Consult with glass tile manufacturer for suitability and

compatibility of their product over exterior glue plywood substrates and membranes.

- 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 A118.15, A118.4, A118.11, ISO 13007-2, C2TES1P1
- This product currently has a Product Specific (Type III) Environmental Product Declaration (EPD). 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	Results
28 day Cure 20 cycle Freeze/Thaw Quarry Tile Shear Strength	ANSI A118.15 7.3.3	375-475 psi ( 2.6 - 3.3 MPa)
30 minute Open Time	ANSI A118.15 5.3.5	90-110 psi (0.6 - 0.8 MPa)
28 day Quarry Tile Shear Strength	ANSI A118.15 7.3.2	375-475 psi ( 2.6 - 3.3 MPa)
14 day cure 14 day Heat Age Porcelain Tile Shear Strength	ANSI A118.15 7.2.7	475-575 psi (3.3 - 4.0 MPa)
28 day Cure 20 Cycle Freeze/Thaw Porcelain Tile Shear Strength	ANSI A118.15 7.2.6	400-450 psi (2.8 - 3.1 MPa)
7 day Cure 7 day Water Immersion Shear Strength	ANSI A118.15 7.1.3	325-425 psi (2.2 - 2.9 MPa)
7 day Porcelain Tile Shear Strength	ANSI A118.15 7.2.3	500-600 psi (3.4 - 4.1 MPa)
1 day Porcelain Tile Shear strength	ANSI A118.15 7.2.2	200-250 psi (1.4 - 1.7 MPa)
14 day Cure 14 Day Heat Cure wall tile shear strength	ANSI A118.15 7.1.4	550-600 psi (3.8 - 4.1 MPa)
7 Day Wall Tile Shear Strength	ANSI A118.15 7.1.2	500-550 psi (3.4 - 3.8 MPa)
7 day Water Immersion Shear Strength, Porcelain Mosaic Tile	ANSI A118.15 7.2.4	350-450 psi (2.4- 3.1 MPa)
28 day Shear Bond, Porcelain Mosaic Tile	ANSI A118.15 7.2.5	500-600 psi (3.4- 4.1 MPa)
28 day Shear Bond, Quarry Tile/Plywood	ANSI A118.11 4.1.1.2	180-230 psi ( 1.2- 1.6 MPa)
Sag on Wall	ANSI A118.15.6.0	0 in. (0 mm)
28 day Cure Tensile Adhesive Strength	ISO 13007- 4.4 4.2	1.5-1.9 Мра
7 day Cure 21 day Water Immersion Tensile Adhesive Strength	ISO 13007- 4.4 4.3	1.0-1.5 Мра

14 day Cure 14 Day Heat Age Tensile Adhesive Strength	ISO 13007- 4.4 4.4	1.4-2.0 MPa
7 day Cure 21 Day Water Immersion 25 Freeze/Thaw Cycle Tensile Adhesive Strength	ISO 13007- 4.4 4.5	1.0-1.5 Mpa
Transverse Deformation	ISO 13007- 4.4 4.5	3.0-3.5 mm

## **Working Properties**

Open Time @70° F (21°) C	40 minutes
Pot Life	4 hours

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.

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# **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).

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.

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 Lite Use approximately 2.3 - 2.5 qts (2.2 -2.4 L) of water for 12.5 lbs (5.7 kg) of powder. (To mix smaller quantities use 3.1 parts powder to 1 part water.) 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 12.5 lb (5.7 kg) bag of Glass Tile Adhesive Lite, 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 Lite 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 adhesive and move them perpendicularly, across the ridges, forward and back to flatten the ridges, 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<sup>®</sup> PRO Premium Grout<sup>+</sup>, SPECTRALOCK PRO Grout<sup>+</sup>, PERMACOLOR Select, or PERMACOLOR Grout<sup>^</sup>

## Cleaning

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

## 6. AVAILABILITY AND COST

**Availability** 

LATICRETE 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 laticrete.com

## Cost

Contact a LATICRETE Distributor in your area.

## 7. WARRANTY

See 10. FILING SYSTEM:

- 25 Year System Warranty (US) (English)
- 1 Year Product Warranty (US) (English)

#### 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 the LATICRETE Technical Service Hotline:

Toll Free:	1.800.243.4788, ext. 1235
Telephone:	+1.203.393.0010, ext. 1235
Fax:	+1.203.393.1948

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

To acquire technical and safety literature, please visit our website at <u>laticrete.com</u>.

# **10. FILING SYSTEM**

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

• DS 230.13: LATICRETE Product WarrantyDS 025.0: LATICRETE 25 Year System Warranty(United States and Canada) DS 9235 Waterproofing Membrane DS 236.0: PERMACOLOR GroutDS 250.0: 281.0: PERMACOLOR Select DS LATAPOXY 300 Adhesive DS 633.0: HYDRO BAN®DS 663.0: SPECTRALOCK PRO Premium Grout DS 681.0: 685.0: SPECTRALOCK PRO GroutTDS 152: Bonding Ceramic Tile. Stone or Brick Over Wood Floors<sup>†</sup> United States Invention Patent No.: 6,881,768 (and other Patents). \United States Invention Patent No.: 6,784,229 (and other Patents