

For the Builders of a Better World™

# 323 Tile Adhesive

323 Tile Adhesive is a polymer-modified cementitious thin-set adhesive, which is just mixed with water or latex admixture for interior and exterior tile and stone installation. Recommended for medium and heavy-duty areas and trafficable surfaces. Suitable for installation of ceramic, porcelain tiles and stone finishes.



# FEATURES/BENEFITS

- Smooth and creamy consistency.
- **E**ase of use.
- Ready to use, just mix with water.
- Extended open time
- Water & heat resistant.
- High bond strength.
- Durable.



# **USES**

- Designed for floor and wall, interior and exterior\* installation of ceramic, porcelain tiles and stones.
- \*Note: Recommended to add Laticrete Latex admixture into the 323 Tile Adhesive for exterior or exposed application.

# MANUFACTURER/ DISTRIBUTED BY

LATICRETE South East Asia Pte Ltd No. 38 Sungei Kadut Street 2 (Level 2, A3) Singapore 729245 Telephone: +65 6515 3028 Fax: +65 6515 3037

Internet: se.laticrete.com

# STANDARDS/CERTIFICATIONS

- BS EN 12004
- ANSI A118





This product has been certified green by the UL GREENGUARD Certification Program and Singapore Green Building Council.

#### **Suitable Substrates**

- Concrete\*
- Cement mortar beds
- Concrete masonry
- Cement terrazzo
- Cement plaster
- Brick masonry
- Drywall board\*\*
- Ceramic tile and stone\*\*\*
- Cement backer board\*\*\*\*
- \* To add with latex
- \*\* Consult Laticrete Technical Services for more information.
- \*\*\* When mixed with 3701 Mortar Admix
- \*\*\*\*Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use.

#### **Packaging**

25kg bag, 80 bags per pallet.

#### Color

Default Grey and White

#### Coverage

25kg of 323 Tile Adhesive with clean water will yield a coverage of  $6.5 - 7.5 \text{ m}^2$  with 6mm x 6mm square notch trowel.

#### Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for one (1) year\* if stored off the ground in a dry area, at temperatures  $\geq 0^{\circ}$ C to  $\leq 40^{\circ}$ C.

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

## Limitations

- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not designed as replacements for waterproof membranes. When a waterproof barrier is required, use a LATICRETE Waterproof Membrane.
- 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**

- 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.
- Keep out of reach of children.

#### TECHNICAL DATA

#### **Performance Properties**

323 Cementitious Adhesive with clean water.

Test	Test Method	Results
Tensile Adhesion Bond Strength (28 days)	BS EN 12004	≥ 1.5 N/mm <sup>2</sup>
Tensile Adhesion Bond Strength after Heat Ageing (28 days)	BS EN 12004	≥ 1.0 N/mm <sup>2</sup>
Tensile Adhesion Bond Strength after Water Immersion (28 days)	BS EN 12004	≥ 1.0 N/mm²
Shear Bond Strength (28 days)	ANSI A118	≥ 1.5 MPa
Open Time (30 mins)	BS EN 12004	$\geq 0.5 \text{ N/mm}^2$
Slip Resistance	BS EN 12004	≤ 0.5 mm

# **Working Properties**

323 Cementitious Adhesive with clean water.

Open Time (25°C)	30 minutes
Pot Life (25°C)	2 hours
Time to Light Traffic	24 hours

Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

#### **INSTALLATION**

#### **Surface Preparation**

All surfaces should be between 5°C and 40°C and structurally sound, clean and free of all dirt, oil, grease, loose peeling 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. Dry, dusty concrete slabs or masonry should be dampened and excess water swept off. Installation may be made on a damp surface. New concrete slabs shall be damp cured and 28 days old before application.

\*Note: Latex Portland Cement Mortars do not require a minimum cure time for concrete slabs. All slabs must be plumb and true to within 6mm in 3m. Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Follow ANSI Specification AN-3.8 "Requirements for Expansion Joints" or TCA Detail EJ171 "Expansion Joints". Do not cover expansion joints with mortar. Glass Mesh Mortar Unit: follow TCA installation detail W244.

#### Mixing

Place clean, potable water into a clean pail. Add 323 Tile Adhesive powder. Mortar: Use approximately  $5.75\ell$  -  $6.25\ell$  of water for 25kg of powder. Mix by hand or with a slow speed mixer to a smooth, trowellable consistency. Allow mortar to slake for 3-5 minutes. Adjust consistency if necessary. Remix and apply with the proper sized notched trowel.

**Note**: For improved bond strength, flexibility and for exterior installations use with LATICRETE Latex Admixture. For rapid "Open to Traffic" installations use 101R Rapid Latex Mortar Additive. Mix by hand or with a slow speed mixer to a smooth, trowelable consistency. Allow mortar to slake for 3—5 minutes. Adjust consistency if necessary. Remix and apply with the proper sized notched trowel.

Please do not mix other aggregates such as cement or sand etc to 323 Tile Adhesive.
\*Actual mix ratio & field performance will depend on application methods, site condition and temperature.

# **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 insure full bedding of the tile. Spread as much mortar as can be covered with tile in 15-20 minutes. Back butter large tiles >300mm x 300mm to provide full bedding and firm support.

Place tiles into wet, sticky mortar and beat in using a beating block and rubber mallet to imbed 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.

# Cleaning

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

#### **AVAILABILITY AND COST**

#### Availability

LATICRETE and LATAPOXY materials are available worldwide. For distributor information, call:

Telephone: (65) 6515-3028 Fax: (65) 6515-3037

For on-line distributor information, visit LATICRETE at se.laticrete.com

#### Cost

Contact a LATICRETE Distributor in your area.

# WARRANTY

LATICRETE South East Asia Pte Ltd warrants that 323 Tile Adhesive is free from manufacturing defects and will not break down, deteriorate or disintegrate under normal usage for a period of one (1) year from date of purchase subject to terms and conditions stated.

#### **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.

# TECHNICAL SERVICES / CONTACT

## **Technical Assistance**

Information is available by calling:

LATICRETE South East Asia Pte Ltd No. 38 Sungei Kadut Street 2 (Level 2, A3) Singapore 729245

Telephone: (65) 6515-3028 Fax: (65) 6515-3037

Email: enquiry@laticrete.com.sg

#### Technical and safety literature

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

#### Disclaimer

LATICRETE is not responsible for product use beyond its intended application. Liability is limited to replacing defective materials. We are not responsible for any loss or damage resulting from improper use. Product specifications are subject to change without notice. For the most up-to-date information, please visit our website at se.laticrete.com.