



**For the Builders
of a Better World™**

3216 Hybrid Thin Set Adhesive

3216 Hybrid Thin Set Adhesive is designed with extraordinary hydrophobic properties, flexibility with enhanced workability and excellent performance used for installing ceramic tile, natural stone and porcelain tile. 3216 Hybrid Thin Set Adhesive is a 2-component system, with 3216 Hybrid Latex and 3216 Hybrid Powder combined to give a stronger, more flexible and water resistant mix than conventional Portland cement adhesive.



FEATURES/BENEFITS

- Low water absorption and water penetration.
- Minimize efflorescence.
- Minimize stain caused by rising dampness.
- High tensile and shear bond strength.
- Increased flexibility and shock resistance.
- Non-hazardous and non-flammable.
- Safe, economical and ease of use.

USES

Interior and exterior floor and wall installations of all types of stone, ceramic and porcelain tile over concrete, masonry, brick wall and a variety of substrates.

MANUFACTURER/ DISTRIBUTED BY

LATICRETE South East Asia Pte Ltd
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Internet: se.laticrete.com

STANDARDS/CERTIFICATIONS

- BS EN 12004
- ANSI A118
- DIN 1048
- ASTM C413
- ASTM C627

Suitable Substrates

- Concrete
- Cement Mortar Beds
- Cement Plaster
- Cement Backer Board
- Drywall Board*
- Concrete Masonry
- Ceramic Tile and Stone
- Brick Masonry
- Ceramic Terrazzo

* Consult Laticrete Technical Services for more information.

Packaging

3216 Hybrid Latex – 20e /pail.

3216 Hybrid Powder (White/Cement Grey) – 25 kg bag.

Coverage

A bag of 3216 Hybrid Thin Set Adhesive (powder) will yield a coverage of 7.4 m² to 8.8m² when mixed with 3216 Hybrid Latex using a 6mm x 6mm square notch trowel.

Application Thickness

Thin Bed Mortar up to 3mm and Medium Bed Mortar up to 15mm.

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for one (1) year if stored at temperatures >0°C and <40°C.

* High humidity will reduce the shelf life

Limitations

- Prevent product from freezing.
- Do not use on Masonite, wood products or metal surfaces.
- Use LATAPOXY 300 Epoxy Adhesive when installing green marble or water sensitive stone and agglomerates.
- Adhesives / mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not replacements for waterproofing membranes. When waterproofing membrane is required, use a LATICRETE Waterproofing Membrane.
- Marble and other Natural Stone Flexural Strength Requirement: Where marble and other natural stone is to be installed, the 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

- During cold weather, protect finished work from traffic until fully cured.
- Keep out of reach of children.

TECHNICAL DATA

Performance Properties

(3216 Hybrid Latex and 3216 Hybrid Powder)

Test	Test Method	Results
Tensile Adhesion Strength (28 days)	BS EN 12004	≥ 2.5N/mm ²
Tensile Adhesion Strength after Heat Ageing (28 days)	BS EN 12004	≥ 2.5N/mm ²
Tensile Adhesion Strength after Water Immersion (28 days)	BS EN 12004	≥ 2.0N/mm ²
Shear Bond Strength (28 days)	ANSI A118	≥ 2.5MPa
Open time (30mins)	BS EN 12004	≥ 1.0N/mm ²
Slip resistance	BS EN 12004	≤ 0.5mm
Deformation	BS EN 12004	≥ 2.5mm
Water Penetration	DIN 1048	< 5mm
Water Absorption	ASTM C413	< 5%
TCNA Service Rating	ASTM C627	Extra Heavy

Working Properties

(3216 Hybrid Latex and 3216 Hybrid Powder)

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 laitance, efflorescence, 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. 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 A108.01-3.7 "Requirements for Movement Joints: Preparations by Other Trades" or TCNA detail E-171 "Movement Joints—Vertical & Horizontal". Do not cover expansion joints with mortar.

Mixing

Use approximately 6.0e - 6.5e of 3216 Hybrid Latex to 25kg of 3216 Hybrid Powder.

Place 3216 Hybrid Latex in a clean plastic pail. Do not dilute. Add 3216 Hybrid Powder to 3216 Hybrid Latex and mix 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 3216 Hybrid Thin Set 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. It is essential that enough mortar is used to completely cover the back of the tile with a minimum 2mm to 3mm uniform thickness. 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 place with a slight twisting motion 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.

Grouting

Grout installation can commence after a minimum of 24 hours curing time at 21°C. Grout with 1500 Sanded Grout mixed with 1776 Grout Enhancer for joint widths 3mm or more. For joint widths 3mm or less, grout with 1800 Hydrophobic Grout. For maximum stain and chemical resistance use SpectralOCK® Pro Premium Grout.

Cleaning

Clean tools and tile 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

3216 Hybrid Thin Set Adhesive is guaranteed by the manufacturer not to breakdown, deteriorate or disintegrate under normal usage for a period of one (1) year from date of installation. Contact manufacturer for full details.

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:

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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.