



**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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Telephone: +65 6515 3028 Fax: +65 6515 3037  
Internet: [se.laticrete.com](http://se.laticrete.com)

### STANDARDS/CERTIFICATIONS

- BS EN 1348
- BS EN 1346
- BS EN 1308
- BS EN 12808-5
- ANSI A118.4, American National Standard Specifications for Modified Dry-Set Cement Mortar
- DIN 1048 Pt.5
- BS EN 12002

### 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/Grey) – 25 kg bag.

### Coverage

A bag of 3216 Hybrid Thin Set Adhesive (powder) will yield a coverage of 7.4 m<sup>2</sup> to 8.8m<sup>2</sup> 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	Specification	Results	
Tensile Adhesion Strength (28 days)	BS EN 1348	≥1N/mm <sup>2</sup>	≥2.0N/mm <sup>2</sup>	
Tensile Adhesion Strength after Heat Ageing (28 days)	BS EN 1348	≥1N/mm <sup>2</sup>	≥1.8N/mm <sup>2</sup>	
Tensile Adhesion Strength after Water Immersion (28 days)	BS EN 1348	≥1N/mm <sup>2</sup>	≥1.3N/mm <sup>2</sup>	
Open time (30mins)	BS EN 1346	≥0.5N/mm <sup>2</sup>	≥1.2N/mm <sup>2</sup>	
Slip resistance	BS EN 1308	< 0.5mm	< 0.5mm	
28 days Shear Bond Strength	ANSI A118.4	≥1.0	≥2.0N/mm <sup>2</sup>	
Water Absorption	After 30 min	BS EN 12808-5	≤2g	≤ 0.5 g
	After 240 min		≤5g	≤ 1.0 g
Water Penetration (0.7 kgf/cm <sup>2</sup> for 6 hours)	DIN 1048 Pt. 5	<5mm	< 3mm	
Deformation	BS EN 12002	2.5 to 5mm	≥2.5mm	

### 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

Specifications are 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.

## INSTALLATION

### Surface Preparation

All surfaces should be between 8°C and 35°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 EJ-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 SpectralLOCK® Pro Grout.

### Cleaning

Clean tools and tile with water while mortar is fresh.

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:

LATICRETE South East Asia Pte Ltd  
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No. 38 Sungei Kadut Street 2,  
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Telephone: (65) 6515-3028

Fax: (65) 6515-3037

Email: [enquiry@laticrete.com.sg](mailto:enquiry@laticrete.com.sg)

#### Technical and safety literature

To acquire technical and safety literature, please visit our website at [se.laticrete.com](http://se.laticrete.com)

## 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](http://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