



257 TITANIUM™

The ultimate, lightweight, polymer fortified, thin-set adhesive for the installation of ceramic, stone and glass tiles. Formulated without sand. 257 TITANIUM is designed with key features to facilitate the installation of large format porcelain panels and slabs with its long open time, good adjustability and superior adhesive for maximum coverage and easier handling. Rated for exterior and immersed installations.

**Globally Proven
Construction Solutions**



FEATURES/BENEFITS

- Optimal performance for Gauged Porcelain Panels/Slabs.
- Lightweight- 11 kg bag has coverage of a 20 kg traditional bag.
- Formulated without sand to reduce respirable silica.
- Extra Heavy Rating.
- Suitable for use on interior, exterior and immersed installations.
- Conforms to ISO 13007-1 with a classification of C2TES2
- Extended open time for large panel installation and swimming pools.
- Ultimate adhesion for porcelain and glass tiles.
- Incredible bond to exterior glue plywood and concrete[^].
- Superior workability for extreme applications.
- Excellent shear and tensile bond strength.
- A component of LATICRETE System Warranties
- Unique colour options are now available in all LATICRETE® grout colours when mixed with PERMACOLOR® Select Colour Kits[^] (257 TITANIUM white only)
- Smooth creamy, lightweight formula.

[^] See limitations.

^{^^} When used as part of the LATICRETE 25 Year System Warranty DS – 1146

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

SUITABLE SUBSTRATES

- Exterior Glue Plywood*
- Properly Prepared Vinyl Or Other Resilient Tile*
- Concrete Masonry
- Concrete Block
- Cement Plaster
- Cement Mortar Bed
- Cement Terrazzo
- Cement Backer Board[~]
- Gypsum Wallboard*
- Gypsum Plaster*
- Plastic Laminate*
- Existing Ceramic Tile and Stone
- STRATA_MAT

*Interior use only.

[~] Check with cement backer board manufacturer for exterior work and load limits.

MANUFACTURER

LATICRETE Australia Pty Ltd
29 Telford Street
Virginia, QLD 4014 Australia

Telephone: 07 3865 1599
Toll Free: 1800 331 012
Fax: 07 3865 2250
Internet: www.laticrete.com.au

Packaging

11kg bags, 56 per pallet.

Colour: White

Approximate Coverage (per 11kg bag)

| | | |
|----------------------|---|-------------------------------|
| 7 – 8 m ² | / | 6 mm x 6 mm notched trowel |
| 4.5 – 5.5 m | / | 10 mm x 10 mm notched trowel |
| 4 – 5 m ² | / | 12 mm x 12 mm notched trowel. |

Shelf Life

Factory sealed bags of this product are guaranteed to be of first quality for one (1) year from date of manufacture. High humidity will reduce the shelf life of bagged product.

Limitations

- For exterior veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.
- Not for use directly over particle board, 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
- 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, L/720 for ceramic tile/brick to external framed and sheeted substrates or L/720 for thin bed stone installations where L=span length.

Cautions

Before using any LATICRETE product:

- Consult SDS for safety information.
- Some marbles and other stone have low flexural strength and may not be suitable for installation over wood floors.
- During cold weather, protect finished work from traffic until fully cured.
- DO NOT take internally.
- For white and light-coloured marbles use 257 TITANIUM™ White. For green marble, resin backed tile and stone and other moisture sensitive marbles and agglomerates, use LATAPOXY® 300 Adhesive (refer to Data Sheet 1047).
- Curing times will be extended when installing large format tile and panel, particularly over non porous substrates and in cold weather
- Keep out of reach of children.

TECHNICAL DATA

VOC Product Information

Total VOC Content of product in unused form is 0.00 g/L.

Applicable Standard

- ISO 13007.1 & 2

Physical Properties

| Test | Test Method | ISO 13007-1 C2 Specification | Results |
|---|-------------------|-------------------------------|----------|
| 28 Day Cure Tensile Adhesive Strength | ISO 13007-2 4.4.2 | 1 MPa | >2.0 MPa |
| 7 Day Cure 21 Day Water Immersion Tensile Adhesive Strength | ISO 13007-2 4.4.3 | 1 MPa | >1.3MPa |
| 14 Day Cure 14 Day Heat Age Tensile Adhesive Strength | ISO 13007-2 4.4.4 | 1 MPa | >2 MPa |
| Transverse Deformation | ISO 13007-2 4.5 | Greater than or equal to 5 mm | >5.5 mm |

257 TITANIUM™ is ISO 13007-1 C2TES2

Working Properties at 21 °C

| | |
|--|--------------|
| Open Time | > 45 minutes |
| Pot Life | 2-4 hours |
| Time to Light Traffic for tiles <600 x 600mm | 24 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.

INSTALLATIONS

Surface Preparation

All surfaces should be between 4°C and 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 and other backgrounds must be plumb and true to suit the format size being installed.

Note: 257 TITANIUM™ does not require a minimum cure time for concrete slabs. Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Follow AS 3958 for requirements for movement joints or TCNA detail EJ-171 "Movement Joints – Vertical & Horizontal". Do not cover movement joints with adhesives.

Mixing

Place clean, potable water into a clean pail. Use approximately 4.75L – 5L of water for 11 kg of powder. When using to install Gauged Porcelain Tile Panels/Slabs use up to 5.2L of water for 11 kg of powder (adhesive ridges should still stand without sagging). Add 257 TITANIUM to water. Mix to a smooth, trowelable consistency. Allow adhesive to slake for 5–10 minutes. Remix with out adding any more water or powder. During use, stir occasionally to keep mix fluffy. DO NOT temper with water.

Mixing with PERMACOLOR® Select Colour Kits (257 TITANIUM White only)

Requires 2 PERMACOLOR® Select Colour Kits. (Each Colour Kit contains 2 individual colour packets, use all 4 colour packets) Place water in a clean mixing container. Remove colour packets from the cardboard container as well as the protective plastic sleeve. The internal bag is a water dispersible packet – when using the 11 kg bag of 257 TITANIUM, drop all colour packs 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 257 TITANIUM and mix as directed above. Please note that additional water may be necessary when using PERMACOLOR Select colour Kits.

Application

Apply adhesive to the substrate with the flat side of the trowel, pressing firmly to work into surface. Comb on additional adhesive with the notched side.

Note: Use proper sized notched trowel to ensure full bedding of the tile. Spread as much adhesive as can be covered with tile in 15–20 minutes. Back notch trowel large tile and panels to provide full bedding and firm support. Place tiles into wet, sticky adhesive and beat in using a and rubber mallet and/or slide the tile back and forth to embed tile and adjust level. Check adhesive for complete coverage by periodically removing a tile and inspecting bedding adhesive transfer onto back of tile. If adhesive is skinned over (not sticky), remove and replace with fresh adhesive.

Grouting

Grout installation after a minimum of 24 hours curing time at 21°C. Grout with SPECTRALOCK®[†] PRO Premium Grout; LATAPOXY SP-100 Grout; PERMACOLOR Select Grout; or, PERMACOLOR Grout.

Note: Large format tile and panel will require a longer time to set before grouting can start.

Cleaning

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

AVAILABILITY AND COST

Availability

LATICRETE® and LATAPOXY® materials are available worldwide.

For Distributor information:

Toll Free: 1800 331 012

Telephone: 07 3865 1599

For online distributor information, visit LATICRETE at www.laticrete.com.au

Cost

Contact a LATICRETE Distributor in your area.

MAINTENANCE

LATICRETE and LATAPOXY grouts, sealers and sealants require routine maintenance and cleaning with a neutral pH detergent and water. See TDS 1113 for more information.

All other LATICRETE and LATAPOXY non-finish materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

TECHNICAL SERVICES

Technical assistance

Information is available by calling:

Toll Free: 1800 331 012

Telephone: 07 3865 1599

Fax: 07 3865 2250

Technical and safety literature

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

DISCLAIMER

- The information contained in this document is given in good faith and to the best of our knowledge is true and accurate.
- This information is subject to change without notice and it is the responsibility of the user to obtain up to date and current information.
- The use of this product is beyond our control and liability is assumed by the user when used incorrectly and not in accordance with LATICRETE® guidelines.
- The manufacturer is not responsible for any loss or damage arising from incorrect usage of this product.
- The specifier or other party responsible for the project must ensure that the details in this data sheet are appropriate for the intended application and that additional detailing is performed for specific design or any areas that fall outside the scope of this specification.
- Efflorescence is a normal condition of Portland cement and is not covered by any warranty. The use of LATAPOXY® 310 Stone Adhesive, LATAPOXY 300 Adhesive, SPECTRALOCK® PRO Premium Grout[†] and SPECTRALOCK 2000 IG will not contribute to any noticeable efflorescence.

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