

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

# 254 Platinum

The ultimate one-step, polymer fortified, thin-set mortar for interior and exterior installation of ceramic tile, porcelain tile, thin porcelain tile, large format tiles, stone, quarry tile, pavers and brick. 254 Platinum, designed to just mix with water, has a long open time with unsurpassed adhesion and workability.



# FEATURES/BENEFITS

- Ideal for thin porcelain tile/tile panels and large format tiles.
- Exceeds ANSI A118.4, A118.11 and ANSI A118.15.
- Conforms to BS EN 12004 with a classification of C2TES1P1.
- Ultimate adhesion for porcelain, glass tiles and large format tiles.
- Incredible bond to exterior glue plywood and concrete\*.
- Superior for exterior and submerged applications.
- High shear bond strength.
- Smooth creamy formula.
- ASTM C627 Extra Heavy (TCNA).

# MANUFACTURER/ DISTRIBUTED BY

LATICRETE South East Asia Pte Ltd

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# USES

Excellent for exterior and underwater applications as well as providing superior bond to exterior glue plywood (interior only) and concrete. The ultimate thin-set for porcelain, thin porcelain, glass tiles and large format tiles.

# STANDARDS/CERTIFICATIONS

- BS EN 12004
- ANSI A118
- ASTM C627



This product has been certified green by the UL GREENGUARD Certification Program.

## **Suitable Substrates**

- Exterior Glue Plywood\*
- Properly Prepared Binyl Tile\*
- Concrete/Masonry
- Concrete Block
- Cement Plaster
- Cement Mortar Beds
- Non-Water Soluble Cut-Back Adhesive\*\*
- Cement Terrozzo
- Cement Backer Boards\*\*
- Gypsum Wallboard\*
- Plastic Laminate\*
- Existing Ceramic Tile and Stone
- \* Interior use only.

## **Packaging**

25kg per bag, 80 bags per pallet

#### Colour

White and Cement Grey

#### Coverage

25kg of 254 Platinum mixed with clean water will yield a coverage of 7.5m<sup>2</sup> using a 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  $>0^{\circ}$ C and  $<40^{\circ}$ C.

#### Limitations

- For 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<sup>®</sup> 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)

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 (except where local building codes specify more stringent deflection requirements)

# Cautions

Consult MSDS for more 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.

- 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.
- Wait 14 days after the final grouting period before filing water features with water at 21°C.
- DO NOT take internally. Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas
- For white and light—colored marbles use 254 Platinum WHITE. For green marble, resin backed tile and stone and other moisture sensitive marbles and agglomerates, use LATAPOXY® 300 Adhesive (refer to Data Sheet 633.0).
- Keep out of reach of children.

# TECHNICAL DATA

## **Performance Properties**

254 Platinum mixed with clean water

Test	Test Method	Results
Tensile Adhesion Strength (28 days)	BS EN 12004	$\geq 2.5 \text{N/mm}^2$
Tensile Adhesion after Heat Ageing (28 days)	BS EN 12004	≥ 2.5N/mm <sup>2</sup>
Tensile Adhesion after Water Immersion (28 days)	BS EN 12004	≥ 1.5N/mm <sup>2</sup>
Shear Bond Strength (28 days)	ANSI A118	≥2.5 MPa
Shear Bond Strength After Heat Aging (28 days)	ANSI A118	≥ 2.0 MPa
Shear Bond Strength After Water Immersion (28 days)	ANSI A118	≥ 1.5 MPa
Shear Bond Strength (Plywood)	ANSI A118	≥ 1.5 MPa
Open Time (30 min)	BS EN 12004	$\geq 1.0  \text{N/mm}^2$
Slip Resistance	BS EN 12004	≤ 0.5 mm
Transverse Deformation	BS EN 12004	$\geq$ 3.0 mm
TCNA Service Rating	ASTM C627	Extra Heavy

# **Working Properties**

254 Platinum mixed 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.

<sup>\*\*</sup>Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use.

<sup>\*</sup> High humidity will reduce the shelf life of bagged product.

#### **INSTALLATION**

# **Surface Preparation**

All surfaces should be between 5°C and 40°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 6 mm in 3 m. Note: 254 Platinum 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 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.

- 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: 15 mm thick exterior glue plywood ,either plain with all sheet edges blocked or tongue and groove, over bridged joints spaced 400 mm o.c. maximum; fasten plywood 150 mm o.c. along sheet ends and 200 mm o.c. along intermediate supports with 8d ringshank, coated or hot dip galvanized nails (or screws); allow 3 mm between sheet ends and 6 mm between sheets edges; all sheet ends must be supported by a framing member; glue sheets to joints with construction adhesive.

UNDERLAYMENT: 15 mm thick exterior glue plywood fastened 150 mm o.c. along sheet ends and 200 mm o.c. in the panel field (both directions) with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 3 mm to 6 mm between sheets and 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.

#### Mixina

Place clean, potable water into a clean pail. Use approximately 6.75 L to 7.25L of water for 25 kg of powder. Pour 254 Platinum into the pail of potable water. Mix using a low speed electric mixer. Adjust quantity of liquid and powder to obtain uniform mix and sticky texture. Allow the mortar to slake for 3-5minutes.

## **Application**

Dampen prepared surfaces. Apply the adhesive mortar onto the substrate with the flat side of the trowel, pressing firmly to work into surface.

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. Back butter large tiles >300 mm x 300 mm to provide full bedding and firm support. Place tiles into wet, sticky mortar and beat in using a beating block and rubber mallet to 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.

## Grouting

Grout installation after a minimum of 24 hours curing time at 21°C. Grout with SPECTRALOCK®† PRO Premium Grout†.

## **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 254 PLATINUM 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**

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.

# 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

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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.