



LATICRETE® 254 Platinum

DS-254.0-0913

**Globally Proven
Construction Solutions**



1. PRODUCT NAME Laticrete 254 Platinum

2. MANUFACTURER LATICRETE UK

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3. PRODUCT DESCRIPTION

The ultimate one-step, polymer fortified, thin-set mortar for interior and exterior installation of ceramic tile, stone, quarry tile, pavers and brick. 254 Platinum, designed to just mix with water, has a long open time with unsurpassed initial grab, high shear, tensile & flexural strength along with excellent workability.

NB. 254 Platinum is a LATICRETE® approved all-in-one substitute for 211 Powder mixed with 4237 Latex Additive.

Uses

This adhesive is rated excellent for all interior, exterior and underwater tile fixing applications and as well as providing superior bond strength to all commonly encountered building materials including WBP exterior glue plywood (interior only). It has been used to fix heavy & large format tile & stone in the most challenging environments. LATICRETE® 254 Platinum remains the ultimate thin-set for porcelain and glass tiles.

Advantages

- Contains Anti-fungal protection to inhibit the growth of stain causing mould and mildew in the substrate.
- Exceeds ANSI A118.4 Shear Bond Strength Requirements & ANSI A118.11.
- Conforms to EN 12004 C2TE-S2.
- Ultimate adhesion for porcelain and glass tiles.
- Incredible bond to WBP exterior glue plywood and concrete*.
- Superior performance for exterior and submerged applications.

- High shear bond strength.
- Smooth creamy formula.
- Can be used as a bonding slurry coat#
- 25 Year Tile & Stone System Warranty**.

* See limitations.

** When used as part of the LATICRETE 25 Year Tile & Stone System Warranty DS 025.0APD.

Suitable Substrates

- Exterior glue WBP
- Cement terrazzo plywood*
- Properly prepared vinyl tile*
- Concrete/masonry
- Concrete block
- Cement mortar beds
- Non-water soluble cut-back adhesive*
- Cement backer boards**
- Gypsum wallboard*
- Gypsum plaster***
- Plastic laminate*
- Existing ceramic tile and stone

* Interior use only.

**Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use.

*** Sealed with 2 coats of NXT PRIMER

Packaging

20.0 kg; 54 bags per pallet

Color: Grey and White

Approximate Coverage

6.7–8.0 m ² /20.0 kg bag with a 6 mm x 6 mm notched trowel.
4.0–4.8 m ² /20.0 kg bag with a 6 mm x 9 mm notched trowel.
3.3–3.8 m ² /20.0 kg bag with a 12 mm x 12 mm notched trowel.
8.0 – 10.0 m ² /20.0 kg bag when applied as a bonding slurry coat#

Coverage will vary depending on trowel notch size, type and size of tile and substrate.

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.

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

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® 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® HYDRO BAN 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 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 filling water features with water at 70°F (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 LATICRETE® 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.

4. TECHNICAL DATA

VOC/LEED Product Information



This product has been certified for Low Chemical Emissions (ULCOM/GG UL2818) under the UL GREENGUARD Certification Program for Chemical Emissions for Building Materials, Finishes and Furnishings (UL 2818 Standard) by UL Environment.

Total VOC Content pounds/gallon (grams/liter) of product in unused form is 0.00 lb/gal (0.00 g/l).

Applicable Standard

ANSI A118.4, ANSI 118.11, EN 12004, ISO 13007

Physical Properties

Test	Test Method	Results	Specification
28 day Cure Porcelain Tile Shear Strength	ANSI A118.4 5.2.4	450–520 psi (3.1–3.6 MPa)	>200 psi (1.38 MPa)
Shear Bond Porcelain Tile Water Immersion	ANSI A118.4 5.2.3	300 psi (2.1 MPa)	>150 psi (1.0 MPa)
28 day Cure Quarry Tile to Plywood Shear Bond	ANSI A118.11 4.1.2	265 psi (1.83 MPa)	>150 psi (1.0 MPa)

Data from TCA 055-55 and NAP126

Test	Test Method	EN12004 C2 Specification	Results
28 day cure tensile adhesive strength	EN 1348 – 8.2	> 1.0 N/mm2	2.8 – 3.6 N/mm2
7 day cure 21 day water immersion tensile adhesive strength	EN 1348 – 8.3	> 1.0 N/mm2	2.4 – 3.0 N/mm2
14 day cure 14 day heat age tensile adhesive strength	EN 1348 – 8.4	> 1.0 N/mm2	3.2 -3.7 N/mm2
7 day cure 21 day water immersion 25 freeze/thaw cycle tensile adhesive strength	EN 1348 – 8.5	> 1.0 N/mm2	2.2 – 2.9 N/mm2
Open time after 30 minutes	EN 1346	> 0.5 N/mm2	1.7 – 2.1 N/mm2
Slip	EN1308	< 0.5 mm	0.2 mm
Transverse deformation	EN 12008	> 5.0 mm	7.2-7.6 mm

LATICRETE 254 Platinum is EN12004 C2TE-S2

Working Properties

Open Time	40 minutes
Pot Life	2 hours
Time to Heavy Traffic	24 hours
Wet Density	1653 kg/m ³

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.

5. INSTALLATION

Surface Preparation

All surfaces should be between 40°F (4°C) and 90°F (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 LATICRETE® NXT LEVEL 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 metres.

Note: 254 Platinum does not require a minimum cure time for concrete slabs. Movement joints shall be provided through the tile work from all existing construction or expansion joints in the substrate. Follow BS 5385–5:2009 section 8 for the design & installation of movement joints within the tiled area. Do not cover movement joints with mortar.

Minimum construction for interior plywood floors:

SUBFLOOR: minimum 15 mm thick (WBP) exterior glue plywood, either plain with all sheet edges blocked or tongue and groove, over bridged joints spaced no more than 400 mm maximum. Screw fix plywood at 150 mm (6") centres along sheet ends and 200 mm centres along intermediate supports with coated or hot galvanized screws; allow 3 mm between sheet ends and 6 mm between sheet edges at the perimeter; all sheet ends must be supported by a framing member; glue sheets to joints with construction adhesive.

UNDERLAYMENT: WBP 15 mm thick exterior glue plywood fastened at 150 mm (6") centres along sheet ends and 8" (200 mm) centres in the panel field (both directions) with coated or hot galvanized 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".

Mixing

Place clean, potable water into a clean pail. Add Laticrete 254 Platinum. Use approximately 4.7 l of water for 20.0 kg of powder. Mix with a slow speed mixer to a smooth, trowellable consistency. Allow mortar to stand for 5–10 minutes. Remix without adding any more water or powder. During use, stir occasionally to keep mix fluffy and DO NOT temper with water.

Note: Platinum 254 can be used to form a bonding coat# when mixed with 6.6 l of water to a 20.0 kg bag of powder and then applied as an even, smooth slurry coat to a depth of no more than 1.5mm. Refer to Technical Data Sheet 143 for more information.

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 an appropriately sized notched trowel to ensure full bedding of the tile. Spread as much mortar as can be covered with tile in 20–30 minutes. Use a 6mm x 6mm notch at 10mm centres for general wall tiling and 12mm x 12mm notch at 16mm centres for floor tiling.

Back butter large format 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 all joints within the installation after a minimum of 24 hours curing time at 70°F (21°C). Cooler temperatures require a longer curing time. Grout joints with either LATICRETE® Permacolour grout or LATICRETE® SpectraLOCK® Premium PRO grout in accordance with the product instructions.

Cleaning

Clean tools with water.

6. AVAILABILITY AND COST

Availability

LATICRETE and LATAPOXY® materials are available worldwide. For Distributor Information, call 0151 486 6101 or visit LATICRETE UK at www.laticrete.co.uk

7. 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.

8. TECHNICAL SERVICES

Technical Assistance

Information is available by calling the LATICRETE UK Technical Service Hotline:

Tel: 0151 486 6101

Fax: 0151 448 1982

e-mail: sales@laticrete.co.uk

Technical and Safety Literature

To acquire technical and safety literature, please visit our website at www.laticrete.co.uk

9. 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.

[^] United States Invention Patent No.: 6784229 (and other Patents)

[†] United States Invention Patent No.: 6881768 (and other Patents).

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