



254R Platinum Rapid

DS-729.0-0817

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

254R Platinum Rapid

2. MANUFACTURER

LATICRETE International, Inc.

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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. 254R Platinum Rapid is designed to mix with water and provide unsurpassed adhesion and workability.

Uses

Excellent for exterior and under water applications, with a superior bond to exterior glue plywood and concrete. 254R Platinum Rapid is the ultimate rapid setting adhesive for porcelain tiles.

Advantages

- Contains antimicrobial protection to inhibit the growth of stain-causing mold and mildew in the substrate.
- Exceeds ANSI A118.4 Requirements & ANSI A118.11.
- Rapid Set Mortar; can be grouted in 2–4 hours.
- Ultimate adhesion for porcelain tiles.
- Incredible bond to exterior glue plywood and concrete*.
- Excellent shear bond strength.
- Superior adhesion for submerged applications.
- High performing smooth creamy formula.

* See limitations.

Suitable Substrates

- Exterior glue plywood**
- Properly prepared vinyl**
- Concrete/masonry
- Concrete block

- Cement mortar beds
- Non-water soluble cut-back adhesive**
- Existing ceramic tile
- Gypsum wallboard**
- Gypsum plaster**
- Plastic laminate**
- Cement terrazzo
- Cement backer boards***
- HYDRO BAN® Board***

**Interior use only.

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

***Consult product datasheet (DS-040.0) for specific installation recommendations

Packaging

25 lb bag (11.3 kg); 100 bags per pallet

Color

Grey and White

Approximate Coverage

40–47 ft ² /25 lb bag (3.7–4.4 m ² /11.3 kg bag) with 1/4" x 1/4" (6 mm x 6 mm) notched trowel.
25–30 ft ² /25 lb bag (2.3–2.8 m ² /11.3 kg bag) with 1/4" x 3/8" (6 mm x 9 mm) notched trowel.
20–23 ft ² /25 lb bag (1.9–2.1 m ² /11.3 kg bag) with 1/2" x 1/2" (12 mm x 12 mm) notched trowel.

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

- Not for use directly over particle board, luan, Masonite® or hardwood floors.
- For veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.
- Wait 14 days after the final grouting period before filing water features with water at 70°F (21°C).
- Use LATAPOXY® 300 Adhesive for installing green marble, resin backed, or water sensitive tile, stone and agglomerates.
- 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 SDS for more safety information.

- Some marbles and other stones 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.
- Use white mortar for white or light-colored stone.
- 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.
- DO NOT take internally. Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas.
- For green, resin backed and moisture sensitive stones and agglomerates, use LATAPOXY® 300 Adhesive (refer to Data Sheet 633.0).
- Keep out of reach of children.

4. TECHNICAL DATA

Applicable Standard

ANSI A118.4, ANSI A118.11



This product has a cradle-to-gate (with options) Product-Specific (Type III) Environmental Product Declaration. The PCR review, life cycle assessment and declaration were independently verified by UL Environment in accordance with ISO 14025, ISO 14040 and ISO 14044.

Physical Properties

Test/Test Method	Results	ANSI Specs
Shear Bond, Porcelain Tile, 28 day cure ANSI A118.4-5.2.4	400–450 psi (2.8–3.1 MPa)	200 psi (1.4 MPa)
Shear Bond, Porcelain Tile Water Immersion ANSI A118.4-5.2.3	200–220 psi (1.4–1.5 MPa)	150 psi (1.0 MPa)
Shear Bond, Quarry Tile/Plywood ANSI A118.11	190–230 psi (1.3–1.6 MPa)	150 psi (1.0 MPa)

Working Properties @ 70°F (21°C)

Open Time	30 minutes
Pot Life	50 minutes
Time to Grout	2–4 hours

Time to Heavy Traffic	5 hours
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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.

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 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 must be damp cured and at least 28 days old prior to application. 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.

1. 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: 5/8" (15 mm) thick exterior glue plywood, either plain with all sheet edges blocked or tongue and groove, over bridged joints spaced 16" (400 mm) o.c. maximum; fasten plywood 6" (150 mm) o.c. along sheet ends and 8" (200 mm) o.c. along intermediate supports with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3 mm) between sheet ends and 1/4" (6 mm) between sheets edges; all sheet ends must be supported by a framing member; glue sheets to joints with construction adhesive.

UNDERLAYMENT: 5/8" (15 mm) thick exterior glue plywood fastened 6" (150 mm) o.c. along sheet ends and 8" (200 mm) o.c. in the panel field (both directions) with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3 mm) to 1/4" (6 mm) between sheets and 1/4" (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.

Mixing

Place clean, potable water into a clean pail. Add 254R Platinum Rapid. Use approximately 2.9 - 3 qts (2.7 - 2.9 L) of water for 25 lbs (11.3 kg) of powder. Mix by hand or with a slow speed mixer to a smooth, trowelable consistency. Remix without adding any more water or powder. During use, stir occasionally to keep mix fluffy. **Do not temper with water.**

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 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 >8" x 8" (>200 mm x 200 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 2-4 hours curing time at 70°F (21°C). Grout with SPECTRALOCK® PRO Premium Grout†, SPECTRALOCK PRO Grout†, PERMACOLOR® Select, PERMACOLOR®^ Grout, or 1500 Sanded Grout or 1600 Unsanded Grout gauged with 1776 Grout Enhancer.

Cleaning

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

6. AVAILABILITY AND COST

Availability

LATICRETE® and LATAPOXY® materials are available worldwide.

For Distributor Information:

Toll Free: 1.800.243.4788

Telephone: +1.203.393.0010

For on-line Distributor information, visit LATICRETE at

www.laticrete.com.

Cost

Contact a LATICRETE Distributor in your area.

7. WARRANTY

See 10. FILING SYSTEM

DS 230.13: LATICRETE Product Warranty

A component of:

DS 025.0APD: LATICRETE 25 Year System
Warranty (United States and Canada)

DS 230.99: LATICRETE Lifetime System
Warranty (United States and Canada)

8. 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.

All stone and tile should be maintained and sealed with LATICRETE STONETECH® professional products as appropriate for the specific tile/stone and installation situation.

9. TECHNICAL SERVICES

Technical Assistance

Information is available by calling the LATICRETE Technical Service Hotline:

Toll Free: 1.800.243.4788, ext. 235

Telephone: +1.203.393.0010, ext. 235

Fax: +1.203.393.1948

Technical and safety literature

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

10. FILING SYSTEM

Additional product information is available on our website at

www.laticrete.com. The following is a list of related documents:

DS 230.13: LATICRETE Product Warranty

DS 025.0: LATICRETE 25 Year System
Warranty (United States and Canada)

DS 230.99: LATICRETE Lifetime System
Warranty (United States and Canada)

DS 236.0: 9235 Waterproofing Membrane

DS 250.0: PERMACOLOR^ Grout

DS 281.0: PERMACOLOR Select

DS 256.0: 1500 Sanded Grout

DS 258.0: 1600 Unsanded Grout

DS 264.0: 1776 Grout Enhancer

DS 633.0: LATAPOXY 300 Adhesive

DS 681.0: SPECTRALOCK PRO Premium Grout

DS 685.0: SPECTRALOCK PRO Grout

TDS 152: "Bonding Ceramic Tile, Stone or Brick Over
Wood Floors"

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

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