253R Gold Rapid

1. PRODUCT NAME
253R Gold Rapid

2. MANUFACTURER
LATICRETE International, Inc.
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Fax: +1.203.393.1684
Website: laticrete.com

3. PRODUCT DESCRIPTION
253R Gold Rapid is a fast setting, bagged cementitious powder to be mixed only with water to install ceramic tile, porcelain tile and stone using the thin-set method of installation.

Uses
- Designed for interior and exterior floor and wall installations of all types of ceramic tiles and stone over concrete, exterior glue plywood and a variety of other substrates.

Advantages
- Rapid setting, ready for grouting in 2 - 4 hours
- High bond strength
- Interior and exterior
- Exceeds ANSI A118.4F requirements
- Smooth, creamy and easy to install

Suitable Substrates
- Concrete
- Exterior Glue Plywood (Interior Only)
- Concrete Masonry
- Brick Masonry
- Non-Water Soluble Cut-Back Adhesive
- Vinyl Or Other Resilient Tile
- Gypsum Wallboard
- Cement Plaster
- Cement Terrazzo
- Plastic Laminate
- Cement Backer Board
- Steel

Packaging
Grey and White
Colors
50 lb bag (22.7 kg); 56 bags per pallet

Approximate Coverage

<table>
<thead>
<tr>
<th>Coverage</th>
<th>Packaging Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>80–94 ft²</td>
<td>50 lb bag (7.4–8.8 m²/22.7 kg bag) with 1/4&quot; x 1/4&quot; (6 mm x 6 mm) notched trowel.</td>
</tr>
<tr>
<td>60–70 ft²</td>
<td>50 lb bag (5.6–6.6 m²/22.7 kg bag) with 1/4&quot; x 3/8&quot; (6 mm x 9 mm) notched trowel.</td>
</tr>
</tbody>
</table>

Coverage will vary depending upon 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.
- DO NOT apply directly to particle board, luan, Masonite® or hardwood floors.
- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not designed as replacements for waterproofing membranes. When a waterproofing barrier is required, use a Waterproofing Membrane (see Section 10 FILING SYSTEMS).
- Not for use in submerged applications. For these applications, use 254 Platinum.
- 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.

Data Sheets are subject to change without notice. For latest revision, visit laticrete.com.
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 natural stone have low flexural strength and may not be suitable for installation over wood floors.
- Use LATAPOXY® 300 Adhesive for installing green marble, resin backed or water sensitive stone, tile and agglomerates.
- During cold weather, protect finished work from traffic until fully cured.
- Contains portland cement and silica sand. Causes severe skin burns and serious eye damage. Wear protective gloves, protective clothing and eye protection. In case of contact, flush thoroughly with water.
- DO NOT take internally. Silica sand may cause cancer, respiratory irritation or serious lung problems. Do not breathe dust. Wear a respirator in dusty areas.
- Use white mortar for white or light–colored marble or stone.
- Keep out of reach of children.

4. TECHNICAL DATA

Applicable Standard
- ANSI A118.4 and 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

<table>
<thead>
<tr>
<th>Test</th>
<th>Test Method</th>
<th>Results</th>
<th>ANSI Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Porcelain Tile Shear Strength</td>
<td>ANSI A118.4–5.2.4</td>
<td>300–370 psi (2.1–2.6 MPa)</td>
<td>&gt;200 psi (1.4 MPa)</td>
</tr>
<tr>
<td>Porcelain Tile Shear Strength</td>
<td>ANSI A118.4–5.2.3</td>
<td>150–200 psi (1.03–1.4 MPa)</td>
<td>&gt;150 psi (1.03 MPa)</td>
</tr>
<tr>
<td>Water Immersion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quarry Tile to Plywood Shear</td>
<td>ANSI A118.11–4.1.2</td>
<td>150–200 psi (1.03–1.4 MPa)</td>
<td>&gt;150 psi (1.03 MPa)</td>
</tr>
<tr>
<td>Strength</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Porcelain Tile Shear Strength</td>
<td>ANSI A118.4–5.5</td>
<td>70–100 psi (0.5–0.7 MPa)</td>
<td>&gt;50 psi (0.3 MPa)</td>
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</tbody>
</table>

From Report on RLS 2164

Working Properties

<table>
<thead>
<tr>
<th>Test</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Time</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Pot Life</td>
<td>50 minutes</td>
</tr>
<tr>
<td>Time to Grout</td>
<td>2–4 hours</td>
</tr>
</tbody>
</table>

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
- 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 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 1/4" (6mm) in 10ft (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.
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" (15mm) thick exterior glue plywood, either plain with all sheet edges blocked or tongue and groove, over bridged joints spaced 16" (400mm) o.c. maximum; fasten plywood 6" (150mm) o.c. along sheet ends and 8" (200mm) o.c. along intermediate supports with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3mm) between sheet ends and 1/4" (6mm) 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 253R Gold Rapid. Use approximately 6 qts (5.7L) of water for 50lb (22.7kg) of powder. (To mix smaller quantities use 3.2 parts powder to 1 part water.) Mix by hand or with a slow speed mixer to a smooth, trowelable consistency. If mortar tightens up, remix for 20 seconds without water to extend pot life. 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 the proper sized notched trowel to ensure full bedding of the tile. Spread as much mortar as can be covered with tile in 15 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 Grout mixed with water or 1500 Sanded Grout or 1600 Unsanded Grout gauged with 1776 Grout Enhancer or with water.

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

6. **AVAILABILITY AND COST**

**Availability**
LATICRETE materials are available worldwide.

**For Distributor Information, Call:**
- Toll Free: 1.800.243.4788
- Telephone: +1.203.393.0010
For on-line distributor information, visit LATICRETE at laticrete.com

**Cost**
Contact a LATICRETE Distributor in your area.

7. **WARRANTY**
See 10. FILING SYSTEM:
- DS 230.10: 10 Year System Warranty
- DS 230.13: 1 Year Product Warranty

8. **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. 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. 1235
- Telephone: +1.203.393.0010, ext. 1235
- Fax: +1.203.393.1948

**Technical and Safety Literature**
To acquire technical and safety literature, please visit our website at laticrete.com.
10. FILING SYSTEM
Additional product information is available on our website at laticrete.com. The following is a list of related documents:

- DS 230.13: LATICRETE Product Warranty
- DS 230.10: LATICRETE 10 Year System Warranty (United States and Canada)
- DS 236.0: 9235 Waterproofing Membrane
- DS 250.0: PERMACOLOR Grout
- DS 633.0: LATAPOXY 300 Adhesive
- DS 663.0: HYDRO BAN®
- DS 681.0: SPECTRALOCK PRO Premium Grout
- DS 685.0: SPECTRALOCK PRO Grout
- TDS 152: “Bonding Ceramic Tile, Stone or Brick Over Wood Floors”