1. PRODUCT NAME
SURE SET™

2. MANUFACTURER
LATICRETE International, Inc.
1 LATICRETE Park North
Bethany, CT 06524-3423 USA

   Telephone: +1.203.393.0010, ext. 235
   Toll Free: 1.800.243.4788, ext. 235
   Fax: +1.203.393.1684
   Internet: www.laticrete.com

3. PRODUCT DESCRIPTION
SURE SET is a superior polymer fortified cementitous thin-set which eliminates the need for back buttering large format tile and stone. SURE SET is mixed with water and has unique wetting characteristics which yield maximum coverage on larger tile and stone. This also allows the installer to quickly and easily install tile in a drop, adjust and go method.

Uses
SURE SET is designed for interior installations on floors for large format tile and stone allowing complete coverage without back buttering. SURE SET can be used in thin bed or large and heavy tile applications in both wet and dry areas.

Advantages
- Maximum coverage without back buttering
- Drop, adjust and go application
- Any size tile and stone
- Thin-bed or medium-bed* applications
- Horizontal and vertical** installations
- Wet and dry applications
- Equipped with antimicrobial technology
- Exceeds ANSI A118.4*** and A118.11
- UL GREENGUARD Gold certified
- "Extra Heavy" rating using ASTM C627 Robinson Floor Test

* Up to 3/8" (10mm) thickness
**Tile may need to be supported; do not use over 1/4 x 3/8 trowel
***Does not include ANSI A118.4 Freeze Thaw requirements.

Suitable Substrates (Interior Only)
- Concrete
- Cement Mortar Bed
- Ceramic Tile And Stone
- Exterior Glue Plywood
- Brick Masonry
- Cement Terrazzo
- Cement Backer Board****
- HYDRO BAN® Board***

****Consult cement backer board manufacturer for specific installation recommendations

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

Packaging
50 lb bag (22.7 kg); 56 bags per pallet

Color
Grey and White

Approximate Coverage

<table>
<thead>
<tr>
<th>Coverage</th>
<th>Trowel Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approximately 80–95 ft²/50 lb bag (7.4–8.8 m²/22.7 kg bag)</td>
<td>1/4&quot; x 1/4&quot; (6 mm x 6 mm) notched trowel</td>
</tr>
<tr>
<td>Approximately 55–70 ft²/50 lb bag (5.1–6.5 m²/22.7 kg bag)</td>
<td>1/4&quot; x 3/8&quot; (6 mm x 9 mm) notched trowel</td>
</tr>
<tr>
<td>Approximately 40–55 ft²/50 lb bag (3.7–5.1 m²/22.7 kg bag)</td>
<td>1/2&quot; x 1/2&quot; (12 mm x 12 mm) notched trowel</td>
</tr>
</tbody>
</table>

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 OSB particle board, luan, interior glue plywood, 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 (see Section 10 FILING SYSTEMS).
- Not for use in submerged or steam room applications. For these applications please use 254 Platinum.
- Interior applications only.

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.

Cautions
Consult SDS for more safety information.
- For white and light-colored marbles, use SURE SET™ white.
- During cold weather, protect finished work from traffic until fully cured.
- Use LATAPOXY® 300 Adhesive for installing green marble, water sensitive stone, resin backed stone or tile and agglomerates.
- 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.
- 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.

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>Specification</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>28 day Cure Porcelain</td>
<td>ANSI A118.4.5.2.4</td>
<td>&gt;200 psi (1.4 MPa)</td>
<td>380-430 psi (2.6-3.0 MPa)</td>
</tr>
<tr>
<td>Tile Shear Strength</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shear Bond Porcelain</td>
<td>ANSI A118.4.5.2.3</td>
<td>&gt;150 psi (1.0 MPa)</td>
<td>360-390 psi (2.5-2.7 MPa)</td>
</tr>
<tr>
<td>Tile Water Immersion</td>
<td></td>
<td></td>
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<tr>
<td>28 day Cure Quarry</td>
<td>ANSI A118.11.4.1.2</td>
<td>&gt;150 psi (1.0 MPa)</td>
<td>210-250 psi (1.5-1.7 MPa)</td>
</tr>
<tr>
<td>Tile to Plywood Shear Bond</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Test</th>
<th>Test Method</th>
<th>ISO13007-1 Specification</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 minute Open Time</td>
<td>ISO 13007-4.1</td>
<td>0.5 MPa (72 psi)</td>
<td>1–1.2 MPa (145-174 psi)</td>
</tr>
<tr>
<td>30 minute Open Time</td>
<td>ISO 13007-4.1</td>
<td>0.5 MPa (72 psi)</td>
<td>0.6-0.8 MPa (87-116 psi)</td>
</tr>
<tr>
<td>28 day Cure Tensile Bond</td>
<td>ISO 13007 4.4.4.2</td>
<td>1 MPa (145 psi)</td>
<td>2 – 2.2 MPa (290-319 psi)</td>
</tr>
</tbody>
</table>

Working Properties

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<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Open Time</td>
<td>50 minutes</td>
<td></td>
</tr>
<tr>
<td>Pot Life</td>
<td>2–4 hours</td>
<td></td>
</tr>
<tr>
<td>Time to Heavy Traffic</td>
<td>24 hours</td>
<td></td>
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<tr>
<td>Wet Density</td>
<td>87.4 lbs/ft³ (1400 kg/m³)</td>
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</tbody>
</table>

Specifications subject to change without notification. Results shown are typical but reflect 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 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. Maximum variation in the slab shall not exceed 1/4” in 10’ (6 mm in 3 m) and 1/16” in 1’ (1.5 mm in 300 mm). 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 joists 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 sheet edges; all sheet ends must be supported by a framing member; glue sheets to joists with construction adhesive.

UNDERLAMENT: 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

Data Sheets are subject to change without notice. For latest revision, visit www.laticrete.com
Technical Data Sheet 152 “Bonding Ceramic Tile, Stone or Brick Over Wood Floors.”

Mixing
Place clean, potable water into a clean pail. Add SURE SET™. Use approximately 4.7 – 5.2 qts (4.4 – 4.9 L) of water for 50 lbs (22.7 kg) of powder. Mix by hand or with a slow speed mixer to a smooth, trowelable consistency. Allow mortar to slake for 5 – 10 minutes. 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 the 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. Place tiles into wet, sticky mortar, adjust and go. 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 70°F (21°C). Grout with SPECTRALOCK® PRO Premium Grout†, SPECTRALOCK PRO Grout† or PERMACOLOR® Grout^∧.

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 Call:
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
DS 230.05: LATICRETE 5 Year 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.

† United States Invention Patent No.: 6,881,768 (and other Patents)
∧∧ United States Invention Patent No.: 6,784,229 (and other Patents)

9. TECHNICAL SERVICES
Technical Assistance
Information is available by calling
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 230.05: LATICRETE 5 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 677.0: 254 Platinum
DS 681.0: SPECTRALOCK PRO Premium Grout†
DS 685.0: SPECTRALOCK PRO Grout†
TDS 152: Bonding Ceramic Tile, Stone or Brick Over Wood Floors