



Sure Set™

DS-261.0-1111



1. PRODUCT NAME

LATICRETE® Sure Set™

2. MANUFACTURER

LATICRETE International, Inc.
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3. PRODUCT DESCRIPTION

LATICRETE Sure Set is a superior polymer fortified cementitious thin-set which eliminates the need for back buttering large format tile and stone. LATICRETE 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

LATICRETE Sure Set is designed for interior installations on floors for large format tile and stone allowing complete coverage without back buttering. LATICRETE Sure Set can be used in thin bed or medium bed 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.
- Interior applications only.

- Horizontal and vertical* installations.
- Wet and dry applications.
- Exceeds ANSI A118.4** and A118.11 shear bond strength requirements.
- "Extra Heavy" rating using ASTM C627 Robinson Floor Test

* 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 beds
- Ceramic tile and stone
- Exterior glue plywood
- Brick masonry
- Cement terrazzo
- Cement backer board***

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

Packaging

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

Color

Grey and White

Approximate Coverage

| |
|--|
| Approximately 80–95 ft ² /50 lb bag (7.4–8.8 m ² /22.7 kg bag) with 1/4" x 1/4" (6 mm x 6 mm) notched trowel. |
| Approximately 55–70 ft ² /50 lb bag (5.1–6.5 m ² /22.7 kg bag) with 1/4" x 3/8" (6 mm x 9 mm) notched trowel. |
| Approximately 40–55 ft ² /50 lb bag (3.7–5.1 m ² /22.7 kg bag) with 1/2" x 1/2" (12 mm x 12 mm) notched 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.

Limitations

- Not for use directly over OSB 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 Waterproofing Membrane (see Section 10 FILING SYSTEMS).
- Not for use in submerged or steam room applications. For these applications please use LATICRETE 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 installations or L/480 for thin bed stone installations where L=span length.

Cautions

Consult MSDS for more safety information.

- For white and light-colored marbles, use LATICRETE 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

Physical Properties

| Test | Test Method | Specification | Result |
|---|--------------------|---------------------|-----------------------------|
| 28 day Cure Porcelain Tile Shear Strength | ANSI A118.4 5.2.4 | >200 psi (1.38 MPa) | 250–300 psi (1.72–2.07 MPa) |
| Shear Bond Porcelain Tile Water Immersion | ANSI A118.4 5.2.3 | >150 psi (1.03 MPa) | 185 psi (1.27 MPa) |
| 28 day Cure Quarry Tile to Plywood Shear Bond | ANSI A118.11 4.1.2 | >150 psi (1.03 MPa) | 210–250 psi (1.45–1.72 MPa) |

| Test | Test Method | ISO13007-1 Specification | Results |
|---|-------------------|--------------------------|---------------------------|
| 20 minute Open time | ISO 13007- 4.1 | 0.5 MPa (72 psi) | 1.9–2.2 MPa (276–319 psi) |
| 30 minute Open time | ISO 13007- 4.1 | 0.5 MPa (72 psi) | 1.5–1.7 MPa (218–247 psi) |
| 28 day cure tensile bond | ISO 13007 4.4.4.2 | 1 MPa (145 psi) | 1.6–1.8 MPa (232–261 psi) |
| 7 day cure 21 day water immersion tensile bond | ISO 13007 4.4.4.3 | 1 MPa (145 psi) | 1.1–1.3 MPa (159–188 psi) |
| 14 day cure 14 day heat age at 70°C tensile bond | ISO 13007 4.4.4.4 | 1 MPa (145 psi) | 2.2–2.4 MPa (319–348 psi) |
| 7 day cure 21 day water immersion 25 cycle freeze/thaw tensile bond | ISO 13007 4.4.4.5 | 1 MPa (145 psi) | 1–1.2 MPa (145–174 MPa) |
| 28 day cure tensile bond to plywood | ISO 13007 4.4.4.2 | 0.5 MPa (72 psi) | 0.5-0.6 MPa (72-87 psi) |
| Classification | | C2EP1 | |

Working Properties

| | |
|-----------------------|---------------------------|
| Open Time | 50 minutes |
| Pot Life | 2–4 hours |
| Time to Heavy Traffic | 24 hours |
| Wet Density | 87.4 lbs/ft³ (1400 kg/m³) |

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 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 sheets edges; all sheet ends must be supported by a framing member; glue sheets to joists 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."

Mixing

Place clean, potable water into a clean pail. Add LATICRETE 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 with out 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 LATICRETE SpectraLOCK®† PRO Grout, LATICRETE PermaColor™ Grout mixed with water or LATICRETE 1500 Sanded Grout or LATICRETE 1600 Unsanded Grout gauged with LATICRETE 1776 Grout Enhancer or with water.

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

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 230.12HC: LATICRETE Home Center 10 Year System
Warranty

DS 230.05APD: LATICRETE 5 Year System Warranty – APD

DS 025.0APD: LATICRETE 25 Year System Warranty – APD

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.

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 230.12HC: LATICRETE Home Center 10 Year System
Warranty

DS 230.05APD: LATICRETE 5 Year System Warranty – APD

DS 025.0APD: LATICRETE 25 Year System Warranty – APD

DS 663.0: LATICRETE Hydro Ban®

DS 236.0: LATICRETE 9235 Waterproofing Membrane

DS 258.0: LATICRETE 1600 Unsanded Grout

DS 256.0: LATICRETE 1500 Sanded Grout

DS 685.0: LATICRETE SpectraLOCK®† PRO Grout

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

DS 265.0: LATICRETE 1776 Grout Enhancer

DS 633.0: LATAPOXY® 300 Adhesive

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

DS 677.0: LATICRETE 254 Platinum

DS 250.0: LATICRETE PermaColor™ Grout

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