



252 SILVER™

DS-676-0324

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

252 SILVER™

2. MANUFACTURER

LATICRETE International, Inc.

1 LATICRETE Park North

Bethany, CT 06524-3423 USA

Telephone: +1.203.393.0010, ext. 1235

Toll Free: 1.800.243.4788, ext. 1235

Fax: +1.203.393.1684

Website: laticrete.com

3. PRODUCT DESCRIPTION

252 SILVER™ is an economical polymer modified, bagged, cementitious thin-set powder to be mixed only with water using the thin-set method of installation.

Uses

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

Advantages

- Interior and exterior.
- Exceeds ANSI A118.4 shear bond strength requirements.
- Bonds to most surfaces.

Suitable Substrates

- Concrete
- Exterior Glue Plywood (Interior Only)

- Concrete Masonry
- Brick Masonry
- Non-Water Soluble Cut-Back Adhesive
- Non-Water Soluble Cut-Back Adhesive
- Vinyl Or Other Resilient Tile
- Gypsum Wallboard
- Cement Plaster
- Cement Terrazzo
- Cement Backer Board

Packaging

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

Color

Grey and White

Approximate Coverage

Approximately 60-70 ft ² /50 lb bag (5.6-6.5/22.7 kg bag) with 1/4" x 3/8" (6 mm x 9 mm) notched trowel.
Approximately 80-95 ft ² /50 lb bag (7.4-8.8/22.7 kg bag) with 1/4" x 1/4" (6 mm x 6 mm) notched trowel.

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

Shelf Life

Two (2) year shelf life. ***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.
- 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 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 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, water sensitive stone, agglomerates and resin backed tiles and stones.
- 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. Causes severe skin burns and 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.
- 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 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

Test	Test Method	Results	ANSI Specification
Porcelain Tile Shear Strength	ANSI A118.4-7.2.5	250-350 psi (1.7-2.4 MPa)	>200 psi (1.4 MPa)
Porcelain Tile Shear Strength Water Immersion	ANSI A118.4-7.2.4	175-200 psi (1.2-1.4 MPa)	>150 psi (1.0 MPa)
Quarry Tile to Plywood Shear Strength	ANSI A118.11-4.1.2	150-170 psi (1.0-1.2 MPa)	>150 psi (1.03 MPa)

Working Properties

Open Time	30 minutes
Pot Life	2 hours
Time to Heavy Traffic	24 hours
Wet Density	103 lbs/ft ³ (1653 kg/m ³)

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" (6 mm) in 10 ft (3 m). 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 252 SILVER™. Use approximately 5 qts (4.7 L) of water for 50 lbs (22.7 kg) of powder. (To mix smaller quantities use 3.6 parts powder to 1 part water.) 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. 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 24 hours curing time at 70°F (21°C). Grout with SPECTRALOCK® PRO Premium Grout†, SPECTRALOCK PRO Grout†, PERMACOLOR® Grout, 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:

- 5 Year System Warranty (US - English)
- 1 Year Product Warranty (US - English)

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. 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 230.0: LATICRETE 5 Year Warranty (United States and Canada)
- DS 236.0: 9235 Waterproofing Membrane
- DS 250.0: PERMACOLOR® Grout
- DS 256.0: 1500 Sanded Grout
- DS 258.0: 1600 Unsanded Grout
- DS 265.0: 1776 Grout Enhancer
- DS 633.0: LATAPOXY 300 Adhesive
- DS 681.0: SPECTRALOCK PRO Premium Grout†
- DS 685.0: SPECTRALOCK PRO Grout†
- DS 663.0: HYDRO BAN®
- DS 677.0: 254 Platinum

- TDS 152: “Bonding Ceramic Tile, Stone or Brick Over Wood Floors”
- DS 026.0: STRATA_MAT™