STRATA_MAT™

Globally Proven Construction Solutions

1. PRODUCT NAME
STRATA_MAT™

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
STRATA_MAT is a next generation high performance uncoupling mat for use under ceramic tile and stone installations, for both residential and commercial applications. Designed to replace traditional underlayment materials. The unique patent pending design of STRATA_MAT provides for an enhanced mechanical bond of the adhesive mortar and provides for faster drying of the mortar, allowing for shorter time to grout. Specifically designed for use with both modified and unmodified mortars, STRATA_MAT allows for the proper adhesive mortar to be used with porcelain or large format tiles and stone.

Uses
- Use as an uncoupling membrane under tile and stone installations to prevent stresses from transmitting up from the substrate

Advantages
- Mortar Hydration Vents - creates a mechanical bond between the mat and adhesive mortar - allows the mortar to cure faster providing a stronger bond of tile at 16 – 24 hours for faster time to grout

- Allows for use of the appropriate mortar per industry standards.
- Provides vapor management
- Eliminates transmission of in plane substrate cracks of up to 1/8" (3 mm) when used in direct bond applications
- Instant coverage verification· allows for installer to see mortar coverage underneath the mat during installation without having to lift and verify
- Allows for easier floor layout as chalk lines are easily visible on surface prior to tile installation
- Part of the LATICRETE® Lifetime System Warranty.
- Rated Extra Heavy per ASTM C627 using the thin-bed method
- Rated residential over wood joist or trussed floors when installing tile using a large & heavy tile adhesive mortar (aka medium bed method)
- Rated light over concrete when installing tile using a large & heavy tile adhesive mortar (aka medium bed mortar)
- Lightweight
- Can be used under moisture sensitive stone
- Suitable for interior non-industrial vehicular traffic applications over concrete substrates
- easy to carry and fast to install with standard tools

Suitable Substrates
- Gypsum Underlayment Or Light Weight Concrete (If gypsum or light weight concrete is used follow the manufacturer's recommendation regarding priming and/or special surface preparation before installing STRATA_MAT)
- Oriented Strand Board (OSB) (Interior applications only)
- Concrete
- Mortar Bed
- Exterior Glue Plywood (STRATA_MAT™ Installation Manual DS 010.5)
- Cement Backer Board
- Cement Terrazzo
- Resilient Flooring (Interior applications only)
- Existing Tile Or Stone

Packaging
- 323 ft² (30m² - 1.1m x 26.2m) roll - 45" x 86'
- 150 ft² (13.9m² - 1.1m x 12.2m) roll - 45" x 40'

Limitations
- DO NOT bond to particle board, hardwood surfaces, luan or sponge backed vinyl flooring.
- Not for use under Large & Heavy Tile Adhesive Mortar (aka medium-bed mortars) in performance levels with greater than Residential Service requirements.
- For horizontal use over suitable interior or exterior substrates.
- Not for use over expansion joints or structural movement cracks.

- STRATA_MAT™ is not intended for use as a waterproofing membrane.
- Not for wear surface, must be covered with tile.
- 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).
- Minimum of 2" x 2" (50 mm x 50 mm) ceramic, porcelain or glass tile and stone can be set over STRATA_MAT.
- Do not leave STRATA_MAT exposed for more than one week. Cover the STRATA_MAT after installing it and protect it from other trades if not setting tile immediately. If the STRATA_MAT is going to be left for more than 72 hours it should be covered with thin-set and troweled smooth covering the STRATA_MAT completely to protect it from potential UV damage and physical abuse.
- When used with LATICRETE self-leveling underlayments / overlayments; consult the respective LATICRETE Product Data Sheets for specific installation instructions.

Cautions
- During cold weather, protect finished work from traffic until fully cured.
- For green marble, resin backed or other moisture sensitive tile or stone, use LATAPOXY® 300 Adhesive, refer to Data Sheet 633.0.
- For white and light-colored marbles use a white LATICRETE mortar.
- Suitable for exterior applications over concrete for patio, walkways and balconies or terraces over unoccupied space.
- Suitable for interior non-industrial vehicular traffic applications over concrete substrates when using 254 Platinum to adhere STRATA_MAT to the concrete and to install tiles over the STRATA_MAT following a 7 day cure @ 70°F (21°C).

4. TECHNICAL DATA
Applicable Standard
- ASTM C627, ANSI A118.12

Physical Properties

Test	Test Method
Property	Test Method
Thickness	N/A
Point Load	ANSI A118.12 5.2
Robinson Thin-Bed Floor Test 16" o.c. 19.2" o.c. 24" o.c.	ASTM C627
Large & Heavy Tile Mortar – Wood Floors(aka medium-bed mortars) 16" o.c. 19.2" o.c. 24" o.c.	
Large & Heavy Tile Mortar (aka medium-bed mortars) over concrete	ASTM C627

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
Concrete Substrates
Concrete must be cured sufficiently to support tile installation traffic as determined by design professional, construction manager, or general contractor. The surface shall be free of voids, sharp protrusions and loose aggregate. All surfaces should be between 40°F (4°C) and 90°F (32°C) and structurally sound, clean and free from all dirt, oil, grease, paint, concrete sealers or curing compounds and cement laitance. Rough or uneven concrete surfaces should be made smooth with a LATICRETE Latex Portland cement underlayment to provide a wood float or better finish. Do not level with gypsum or asphalt based products.

OSB or Exterior Glue Plywood Substrates
Refer to LATICRETE Technical Data Sheet 152 "Bonding Ceramic Tile, Stone or Brick Over Wood Floors" (refer to section 10, FILING SYSTEMS).
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 ceramic or porcelain tiled floors as follows:
- For single layer plywood or OSB – 16" (406 mm) o.c. joist spacing – use 5/8" (15 mm) tongue and groove nominal thickness.
- For single layer plywood or OSB – 19.2 (488 mm) o.c. joist spacing – use 3/4"(19 mm) tongue and groove nominal thickness.
- For double layer plywood or OSB – 24" (610 mm) o.c joist spacing – use double layer plywood or OSB consisting of minimum subfloor thickness 3/4" (19 mm) nominal thickness, tongue and groove minimum underlayment thickness 3/8" (9 mm) nominal thickness.
3.   Minimum construction for interior natural stone tiled floors as follows: Maximum spacing 24" (610 mm) o.c. double layer wood floor consisting of a minimum subfloor thickness 3/4" nominal (19 mm) tongue-and-groove with a minimum underlayment thickness 3/8" nominal (10 mm)

SUBFLOOR: 3/4" (19 mm) thick plywood or OSB, either plain with all sheet edges blocked or tongue and groove, over bridged joists spaced 24" (610 mm) o.c. maximum; fasten plywood every 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: 3/8" (9 mm) thick plugged-faced plywood or OSB fastened every 6" (150 mm) along sheet ends and every 8" (200 mm) 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 joists from joints in subfloor

and stagger joints between sheet ends; glue underlayment to subfloor with construction adhesive. Refer to Technical Data Sheet 152 "Requirements for Direct Bonding of Ceramic or Stone Tiles Over Wood Floors" for complete details.

Installation of STRATA_MAT™ to the substrate:
- Install STRATA_MAT™ to the substrate using the appropriate ANSI A118.4, ANSI A118.11 or ANSI A118.15 mortar as outlined by the Tile Council of North America for the applicable installation. Mix the mortar on the loose side but still able to hold a notch to enable complete wetting of the STRATA_MAT fleece layer. Using a LATICRETE® polymer modified mortar apply to the substrate in a thin-bed method using a 1/4" (6mm) x 3/16" (5mm) V-notched trowel, being sure to key the mortar into the substrate. Ensure mortar is "wet-out" sufficiently to allow for optimal bedding of STRATA_MAT. Spread only enough mortar that can be covered with STRATA_MAT during the specified open time of the mortar.
- Embed STRATA_MAT into the mortar, fabric side down. Using a trowel or screed, apply pressure to ensure proper bedding. Be sure to verify proper coverage beneath the mat. Areas of STRATA_MAT embedded properly in the mortar will appear darker than areas not embedded, lift occasionally if necessary to verify coverage. Cut mat to appropriate lengths when approaching walls or other objects, leave approximately 1/4" (6mm) between mat and edge of wall or object for movement.
- Install adjacent sections of STRATA_MAT in the same manner, being sure to line edges of each section without leaving any gaps.

Installation of ceramic, porcelain or stone tiles onto STRATA_MAT:
- In accordance with TCNA Handbook for Ceramic Tile Installation and that of porcelain tile manufacturers, LATICRETE recommends the use of a polymer modified thin set mortar complying with ANSI A118.4 or ANSI A118.15 (e.g. 254 Platinum) when installing porcelain tiles. The unique patent pending design feature of STRATA_MAT will provide for enhanced drying of the mortar between the porcelain tile and mat. LATICRETE recommends the use of a LATICRETE polymer modified mortar (e.g. 254 Platinum) for all thin-bed method of installations and the appropriate LATICRETE large and heavy tile adhesive mortar (e.g. TRI_LITE) for Large & Heavy Tile (aka medium-bed method) installations. An unmodified mortar (e.g. 272 Mortar) can be used for applicable installations in accordance with project specifications.
- Installation of the tile finish can begin immediately after embedding STRATA_MAT into the bonding mortar. Begin by skimming or filling the surface of STRATA_ MAT using the flat side of the trowel, ensuring all circles and vents are completely filled. Follow by combing mortar over the mat using a notched trowel that is suitable for the size of tile being installed. Install tiles in accordance with industry guidelines.
- Depending upon adhesive mortar used, tile size, tile type and job site conditions, grouting may be done once mortar has cured enough to allow for light foot traffic – STRATA_MAT usually will allow for grouting at 16 – 24 hours.

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:
- LATICRETE 25 Year Tile & Stone System Warranty
- LATICRETE 5 Year System Warranty (United States and Canada)
- LATICRETE 10 Year System Warranty (United States and Canada)
- LATICRETE Product Warranty
- LATICRETE Lifetime System Warranty (United States and Canada)

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.

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:
- 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 230.99:

LATICRETE Lifetime System Warranty (United States and Canada)   DS 025.0:   LATICRETE 25 Year System Warranty (United States and Canada)
DS 230.10: LATICRETE 10 Year System Warranty (United States and Canada)   DS 230.05: LATICRETE 5 Year System Warranty (United States and Canada)   DS 259.0:   272 Mortar   DS 296.0:
253 Gold   DS 663.0:   HYDRO BAN®   DS 677.0:   254 Platinum   DS 320.0:   TRI-LITE   TDS 152:   Bonding Ceramic Tile, Stone or Brick Over Wood Floor