



# STRATA\_MAT<sup>™</sup> XT

DS-028.0-0717

**Globally Proven  
Construction Solutions**



## 1. PRODUCT NAME

STRATA\_MAT<sup>™</sup> XT

## 2. MANUFACTURER

LATICRETE International, Inc.  
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## 3. PRODUCT DESCRIPTION

STRATA\_MAT<sup>™</sup> XT is designed specifically for ceramic tile and dimension stone installations serving as an uncoupling layer and vapor management layer that accommodates moisture from beneath the tile covering. STRATA\_MAT XT performs all these functions while still providing the requisite support/load distribution for the tile and stone covering. At 5/16" (7.9 mm) thick STRATA\_MAT XT helps to create an even transition between typical 1/4" to 3/8" (3 to 9 mm) thick tile and 3/4" (19 mm) thick hardwood flooring. STRATA\_MAT XT will provide a faster drying of the mortar, allowing for a shorter time to grout when using both modified or unmodified mortars allowing you to use the appropriate mortar for the installation.

### 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 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)
- 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<sup>®</sup> Lifetime System Warranty.

- Lightweight, easy to carry and fast to install with standard tools
- Can be used under moisture sensitive stone
- Suitable for interior non-industrial vehicular traffic applications over concrete substrates

### Suitable Substrates

- Concrete
- Mortar Beds
- OSB\*\*
- Exterior Glue Plywood\*\*\*
- Cement Backer Board
- Cement Terrazzo
- Resilient Flooring\*\*
- Existing Tile Or Stone
- 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 XT

\*\*Interior applications only

\*\*\* STRATA\_MAT XT Installation Manual DS 010.5

### Packaging & Coverage Information

- 150 ft<sup>2</sup> roll – 45" x 40' (13.9m<sup>2</sup> - 1.1m x 12.2m)

### Limitations

- Not for use in showers, tubs or steam rooms.
- DO NOT bond to particle board, hardwood surfaces, luan or sponge backed vinyl flooring.
- For horizontal use over suitable substrates.
- Not for use over expansion joints or structural movement cracks.
- STRATA\_MAT XT 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<sup>®</sup> 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 XT.

*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

- 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<sup>®</sup> 300 Adhesive, refer to Data Sheet 633.0.

- For white and light-colored marbles use a white LATICRETE® mortar.
- Suitable for interior non-industrial vehicular traffic applications over concrete substrates when using 254 Platinum to adhere STRATA\_MAT<sup>™</sup> XT to the concrete and to install tiles over the STRATA\_MAT XT following a 7 day cure @ 70°F (21°C).

#### 4. TECHNICAL DATA

##### Applicable Standard

ASTM C627, ANSI A118.12

##### Physical Properties:

Robinson Floor Testing per ASTM C627				
Substrate	Layers	Joist Spacing	Tile	Rating
Plywood	2	24" O.C.	Porcelain	Extra Heavy
Plywood	2	24" O.C.	Limestone	Light Comm.
Plywood	1	24" O.C.	Porcelain	Extra Heavy
OSB	1	24" O.C.	Porcelain	Extra Heavy

#### 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 single layer plywood or OSB, consisting of minimum thickness 3/4" (19 mm) nominal thickness – 24" (610 mm) o.c joist spacing.
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 XT to the substrate:

- Install STRATA\_MAT XT 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 (TCNA) 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 XT 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 XT. Spread only enough mortar that can be covered with STRATA\_MAT XT during the specified open time of the mortar.
- Embed STRATA\_MAT XT 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 XT 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 XT 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<sup>™</sup> XT:

- In accordance with TCNA Handbook for Ceramic, Glass and Stone 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 XT<sup>™</sup> will provide for enhanced drying of the mortar between the porcelain tile and mat. LATICRETE recommends the use of a LATICRETE® polymer fortified mortar (e.g. 254 Platinum) for all thin-bed method of installations and 255 MULTIMAX<sup>™</sup> or 4-XLT 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 XT into the bonding mortar. Begin by

skimming or filling the surface STRATA\_MAT<sup>™</sup> XT 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 XT usually will allow for grouting at 16 – 24 hours.

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 255.0: 255 MULTIMAX  
DS 080.0: 4-XLT  
TDS 152: Bonding Ceramic, Tile, Stone or Brick Over  
Wood Floor

## 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](http://www.laticrete.com)

### Cost

Contact a LATICRETE Distributor in your area.

## 7. WARRANTY

See 10. FILING SYSTEM:

DS 230.13: LATICRETE Product Warranty

DS 230.99: 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)

## 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. 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](http://www.laticrete.com).

## 10. FILING SYSTEM

Additional product information is available on our website at [www.laticrete.com](http://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)

STRATA\_MAT<sup>™</sup> XT - <sup>^</sup> English: United States Patent No.: 9,016,018B2 (and other Patents).

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