

# STRATA HEAT™ Mat

DS-26.1-0119

# Globally Proven Construction Solutions



### 1. PRODUCT NAME

STRATA\_HEAT™ Mat

# 2. MANUFACTURER

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### 3. PRODUCT DESCRIPTION

STRATA\_HEAT Mat combines the comfort of floor heating wire with the advantages associated with STRATA \_MAT™ uncoupling membrane. Warm your tile floor and enhance the mechanical bond to the substrate. STRATA\_HEAT Mat will provide faster drying of the mortar, allowing for shorter time to grout. At the same time it will easily hold the STRATA\_HEAT Wire at multiple spacing scenarios for floor heating or warming installations. Just as our other uncoupling membranes it is specifically designed for use with both modified and unmodified mortars, you can use the appropriate mortar for the installation.

#### Uses

 Doubles as an uncoupling mat and holder for STRATA\_HEAT Wire

### **Advantages**

- Use with STRATA\_HEAT WIRE and STRATA\_HEAT THERMOSTAT to provide luxury and comfort to your room
- Multiple spacing options allow for variability in Heat output

- 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
- 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
- No SLU required quicker easier installation compatible with LATICRETE thin-sets
- Part of the LATICRETE® Lifetime System Warranty

### **Suitable Substrates**

- Concrete (Interior Only)
- Mortar Bed (Interior Only)
- Oriented Strand Board (OSB) (Interior Only)
- Exterior Glue Plywood (Interior Only)
- Cement Backer Board (Interior Only)
- Cement Terrazzo (Interior Only)
- Resilient Flooring (Interior Only)
- Existing Ceramic Tile and Stone (Interior Only)
- Gypsum Underlayment Or Light Weight Concrete (Interior Only)

## **Approximate Coverage**

150 ft<sup>2</sup> roll- 39" x 46' 2" (13.9m<sup>2</sup> – 1m x 14.1m) 10 x 8.2 ft<sup>2</sup> sheets – 39" x 30.3" (0.77m<sup>2</sup> - 11m x 0.7m)

### Shelf Life

Unlimited. Store at 40°F to 75°F (4°-24°C) in a covered area (out of the sun).

### Limitations

- Interior floor installations over suitable substrates only.
- DO NOT bond to particle board, hardwood surfaces, luan or sponge backed vinyl flooring.
- Not for use over expansion joints or structural movement cracks.
- STRATA\_HEAT™ is not intended for use as a waterproofing membrane.
- Not for use as a 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 3.5" x 3.5" (89 mm x 89 mm) ceramic, porcelain or glass tile and stone can be set over STRATA\_HEAT.

- Do not leave STRATA\_HEAT exposed for more than one week. Cover the STRATA\_HEAT after installing it and protect it from other trades if not setting tile immediately. If the STRATA\_HEAT is going to be left for more than 72 hours it should be covered with thin-set and troweled smooth covering the STRATA\_HEAT completely to protect it from potential UV damage and physical abuse.
- 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.
- 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
- Suitable for interior non-industrial vehicular traffic applications over concrete substrates when using 254 Platinum to adhere STRAT\_HEAT™ to the concrete and to install tiles over the STRATA\_HEAT following a 7 day cure @ 70°F (21°C)
- For white and light-colored marbles use a white LATICRETE mortar
- Do not turn STRATA\_HEAT Wire on until entire installation of tile and grout has cured for a minimum of 7 days at 70°F (21°C)
- Do not hook wire up to power while still on the spool
- Protect finished work from traffic until fully cured
- Use only appropriate size of STRATA\_HEAT Wire for specified area of floor to be heated. DO NOT TUCK/INSTALL/FOLD EXCESS WIRE INTO WALL CAVITY
- Carefully read this installation manual before commencing installation

## 4. TECHNICAL DATA

## **Applicable Standard**

- ASTM C627
- ANSI A118.12

**Physical Properties** 

Test	Test Method	Results
Thickness	NA	1/4" (6.4 mm)
Point Load	ANSI	1485 lbf (6606
	A118.12.5.2	N)
Accelerated Aging shear	ANSI	141 PSI (0.97
Strength	A118.12.5.1.5	MPa)
7 Day Shear Strength	ANSI	126 PSI (0.87
	A118.12.5.1.3	MPa)
4 Week Shear Strength	ANSI	145 PSI (1.0
	A118.12.5.1.4	MPa)
Robinson Thin-Bed Floor	ASTM C627	Light
Test 19.2" O.C.		

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 HEAT™ to the substrate:

- 1. Install STRATA\_HEAT 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\_HEAT 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, or ¼" (6 mm) x ¼" (6 mm) square notch trowel, being sure to key the mortar into the substrate. Ensure mortar is "wet-out" sufficiently to allow for optimal bedding of STRATA\_HEAT. Spread only enough mortar that can be covered with STRAT™\_Heat during the specified open time of the mortar.
- 2. Embed STRATA\_HEAT 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\_HEAT 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.
- 3. Install adjacent sections of STRATA\_HEAT™ in the same manner, being sure to line edges of each section without leaving any gaps.

## STRATA HEAT WIRE INSTALLATION

Follow DS 44.6 STRATA\_HEAT Wire Installation Manual when installing the STRATA\_HEAT Wire into the STRATA\_HEAT Mat.

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

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. 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 230.99: 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 MortarDS 296.0: 253 Gold

■ DS 663.0: HYDRO BAN®

DS 677.0: 254 Platinum

DS 255.0: 255 Multimax

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

DS 614.0: Floor Heat Wire

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