

Globally Proven
Construction Solutions

# 170 Sound & Crack Isolation Mat - 3mm (GenieMat® RST)

170 Sound & Crack Isolation Mat (Genie Mat® RST) is a high-performance acoustical underlayment system that muffles impact noises through ceramic tiles, stone, and other hard surfacing materials. It also minimizes the transmission of cracks from the substrate to the tile installation up to 1/8" (3 mm), non-movement cracks. It is comprised of 88.5% - 94% post-consumer recycled materials.





# **ADVANTAGES**

- Eliminates transmission of substrate cracks of up to 1/8" (3 mm) from transferring to the finished floor
- Delta IIC rating of 14 per ASTM E2179 (See PHYSICAL PROPERTIES)
- IIC rating of 45 per ASTM E492/E989
- Load bearing "Light" service rating per ASTM C627/TCA
- Meets ANSI A118.12 & ANSI A118.13 specifications\*
- Easy and fast to install with standard tools
- Resistance to mold, bacteria, and fungi
- Meet VOC emission requirements for indoor air quality (IAQ) tests per ASTM D5116
- \* Interior dry applications only

## **MANUFACTURER**



# Made in Canada for

## LATICRETE Middle East LLC.

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# **USES**

- Designed to be used under thin-bed adhesive for interior floor installations of ceramic tile, marble, stone, and brick to eliminate the transmission of impact noise from one floor to the floor below
- Eliminates the transmission of stresses from the concrete base slab to the tile installation
- Combines low installed weight with minimal "above substrate" thickness
- To eliminate cracks in tile work and reduce noise transmission, should be applied to the entire substrate prior to the installation of ceramic tile, marble, stone, terrazzo, and brick

## **STANDARDS**

# **Applicable Standard**

- ASTM E2179
- ASTM C 627
- ANSI A 118.12
- ANSI A 118.13

## Packaging,

170 Sound & Crack Isolation Mat (GenieMat RST03):

3mm Roll (1.2 m wide, 9.1 m long)

Pallet: 20 rolls per pallet

## Suitable Substrates,

Interior Use Only

- Concrete
- Mortar beds
- Exterior glue plywood
- Cement backer board
- Cement terrazzo
- Ceramic tile and stone

## **Approximate Coverage**

150 ft<sup>2</sup> (13.9 m<sup>2</sup>) per roll.

#### **Shelf Life**

Factory sealed containers of this product are guaranteed to be of first quality for two (2) years if stored at temperatures >32°F (0°C) and <110°F (43°C).

#### Limitations

- DO NOT bond to particle board, OSB, Luan, Masonite<sup>®</sup> or hardwood surfaces.
- For horizontal use over suitable interior substrates only.
- DO NOT double stack pallets.
- Not for use over expansion joints or structural movement cracks.
- Not intended for use as a waterproofing membrane.
- Minimum tile size to be installed over 170 Sound & Crack Isolation mat (Genie Mat<sup>®</sup> RST) is 4"x4" (102 x 102 mm).
- 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 (Contact our technical support for further information)

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**

- See the installation instruction of the tile adhesive, 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 300.me.
- For white and light-colored marbles use 254 Platinum (WHITE).
- Keep out of reach of children.

## **TECHNICAL DATA**

## **Physical Properties**

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Property	Test Method	Results
Shear Bond – 28 days	ANSI A 118.13 (5.1.5)	81 psi (0.6 MPa) (Specification 50)
Point Load	ANSI A118.12 (5.2)	1260 psi (8.3 MPa)
Impact Insulation Class (IIC)	ASTM E2179 (Delta) ASTM E989	Delta IIC 14*
Robinson Floor Test	ASTM C627	LIGHT
Sound Transmission Class (STC)	ASTM E90 ASTM E413	57
Impact Insulation Class (IIC)	ASTM E492 ASTM E989	45

Tested with SURE SET

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.

#### **INSTALLATION**

## **Surface Preparation**

Concrete shall be in place for 28 days (minimum) and shall be dry. The surface shall have a smooth finish and 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 of all dirt, oil, grease, paint, concrete sealers or curing compounds and cement laitance. Rough or uneven concrete surfaces should be made smooth with a modified portland cement underlayment to provide a wood float or better finish.

Do not level with gypsum or asphalt-based products. Refer to Technical Data Sheet 152 "Bonding Ceramic Tile, Stone or Brick Over Wood Floors" (For the detailed information, please consult LATICRETE Middle East technical dept.)

- 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 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.

## **Application**

# **Perimeter Isolation Strip**

It is essential that all walls and building elements are isolated from the floor. The use of acoustical ceiling panels in the space below would provide additional sound control.

Note: It is recommended to install a perimeter isolation strip before placing and trimming 170 Sound & Crack Isolation Mat (Genie Mat® RST). Attach the perimeter isolation strip to the perimeter wall of the entire subfloor, as well as around the perimeter of any protrusions, to isolate or break the vibration transmission path between the floor and the wall. Temporarily fasten perimeter isolation strip in place with masking, duct, or carpet tape. The perimeter isolation strip can then be removed after the tiles have set firm. The joints can then be filled with an appropriate acoustical sealant.

Note: As an alternative to perimeter isolation strip, the installer may run the sheets of 170 Sound & Crack Isolation mat (GenieMat® RST) up the wall approximately 3" (75 mm). This should take place throughout the entire perimeter of the room as well as around the perimeter of any protrusions in order to isolate or break the vibration transmission path between the floor and the wall.

#### **Installation instructions:**

Use a LATICRETE polymer modified thin-set adhesive or C2 S1 class to adhere the 170 Sound & Crack Isolation Mat (Genie Mat RST) to the substrate. Use a 6 mm x 6 mm notched trowel and comb mortar over substrate, apply only enough mortar as can be covered within 25 minutes.

- Install the perimeter isolation strip to the base of the perimeter wall of the entire subfloor, as well as the perimeter of any protrusions
- Unroll and place 170 Sound & Crack Isolation Mat (Genie Mat RST) underlayment perpendicular to subsequent installation direction of finished floor.
- Trim ends of each section to fit floor surface area.
   Align lengthwise edges of underlayment with neighboring sheets by butting up or overlapping them.
- Determine whether installation will be floating floor

- or glue- down and follow the corresponding instructions.
- Use duct tape or high-quality carpet tape to secure butt joints and seams and prevent underlayment from moving.
- Once installed, use a 15kg- 45kg roller to embed the 170 Sound & Crack Isolation Mat (Genie Mat RST) firmly into the thin-set adhesive mortar. Allow to cure for a minimum of 24hrs at 21°C.
- Proceed to Finished Floor Installation. Install ceramic tile, porcelain, or stone finish directly over the mat using polymer fortified multipurpose thin set adhesive.
   Follow instructions on adhesive packaging.

#### **AVAILABILITY AND COST**

## **Availability**

LATICRETE® materials are available worldwide. For distributor information, please contact us by email at: <a href="mailto:enquiry@laticrete.me">enquiry@laticrete.me</a> or, visit <a href="https://www.laticrete.me">www.laticrete.me</a>

#### Cost

Contact a LATICRETE® closer distributor to obtain complete information and cost.

## **WARRANTY**

The supplier warrants that the product will not deteriorate under normal conditions and use. The warranty validity of one (1) year. Contact Technical Support for further information

#### **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.

## **TECHNICAL SERVICES**

#### **Technical assistance**

For information contact us by email at: <a href="mailto:enquiry@laticrete.me">enquiry@laticrete.me</a>

## Technical and safety literature

To obtain technical and safety literature, please visit our website at: www.laticrete.me

Warning: The information and the instructions in the data sheet, although based on knowledge gained through years of applications, are indicative. LATICRETE® unable to directly control the installation conditions and modalities of application of products, do not assume any liability arising from their implementation. Those who want to use the LATICRETE® products must conduct adequate tests to determine the site specifications. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation method and site conditions.