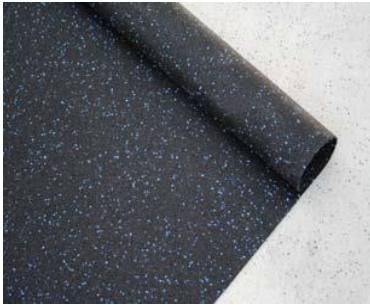




# 170 Sound & Crack Isolation Mat

DS-170.0-0217

**Globally Proven  
Construction Solutions**



## 1. PRODUCT NAME

170 Sound & Crack Isolation Mat

## 2. MANUFACTURER

LATICRETE International, Inc.

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Bethany, CT 06524-3423 USA

Telephone: +1.203.393.0010, ext. 235

Toll Free: 1.800.243.4788, ext. 235

Fax: +1.203.393.1684

Internet: [www.laticrete.com](http://www.laticrete.com)

## 3. PRODUCT DESCRIPTION

170 Sound & Crack Isolation Mat 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. 170 Sound & Crack Isolation Mat is a 3 mm thick rubberized membrane comprised of 88.5% post-consumer recycled materials.

### 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, 170 Sound & Crack Isolation Mat should be applied to the entire substrate prior to the installation of ceramic tile, marble, stone, terrazzo and brick

### 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 specifications\*
- Easy and fast to install with standard tools

\* Interior dry applications only

### Suitable Substrates (Interior Use Only)

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

### Packaging

170 Sound & Crack Isolation Mat:

4ft x 37.5 ft (150 ft<sup>2</sup>), (1.2 m x 11.3 m) (13.9 m<sup>2</sup>) roll, 20 rolls per pallet

### Coverage

170 Sound & Crack Isolation Mat

Approximate 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® 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.
- 170 Sound & Crack Isolation Mat is not intended for use as a waterproofing membrane.
- 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 tile size to be installed over 170 Sound & Crack Isolation mat is 4"x4" (102 x 102 mm).

*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® 300 Adhesive, refer to Data Sheet 633.0.
- For white and light-colored marbles use 254 Platinum (WHITE).
- Keep out of reach of children.

## 4. TECHNICAL DATA

### Applicable Standard

ASTM E2179, ASTM C 627, ANSI A 118.13

### Physical Properties

Tested with SURE SET™

Property	Test Method	Results
Shear Bond – 28 day	ANSI A118.13 (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

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.

\* IIC Rating based on independent laboratory tests. Complete test report available upon request.

## 5. 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” (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 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. Attach the perimeter isolation strip to the perimeter wall of the entire subfloor, 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. 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 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.*

#### 170 Sound & Crack Isolation Mat Installation instructions:

Use a polymer fortified multipurpose thin set adhesive (e.g. 254 Platinum or SURE SET) to adhere the 170 Sound & Crack Isolation Mat to the substrate. Use a 1/4" x 1/4" (6 mm x 6 mm) notched trowel and comb mortar over substrate, apply only enough mortar as can be covered within 25 minutes. Unroll the 170 Sound & Crack Isolation Mat into place, in the thin set adhesive mortar. Once installed, use a 25–45 lbs (11.3–20 kg) roller to embed the 170 Sound & Crack Isolation Mat firmly into the thin set adhesive mortar. Allow to cure for 24 hrs at 70°F (21°C). Install 170 Sound & Crack Isolation Mat over the area to be treated, do not overlap edges but be sure edges of each piece butt firmly together. Trim length of mat to desired length and width. Once fully cured, install ceramic tile, porcelain or stone finish directly over the 170 Sound & Crack Isolation Mat using a polymer fortified multipurpose thin set adhesive. Follow instructions on adhesive packaging (refer to section 10, FILING SYSTEMS).

## 6. AVAILABILITY AND COST

### Availability

LATICRETE® and LATAPOXY® materials are available worldwide.

### For Distributor Information:

Toll Free: 1.800.243.4788

Telephone: +1.203.393.0010

For online 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

A component of:

DS 230.05: LATICRETE 5 Year System  
Warranty (United States and Canada)

DS 025.0: LATICRETE 25 Year System  
Warranty (United States and Canada)

## 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.

## 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 230.05: LATICRETE 5 Year System  
Warranty (United States and Canada)

DS 025.0: LATICRETE 25 Year System  
Warranty (United States and Canada)

DS 236.0: 9235 Waterproofing Membrane

DS 261.0: SURE SET™

DS 296.0: 253 Gold

DS 605.0: Floor Heat

DS 633.0: LATAPOXY 300 Adhesive

DS 663.0: HYDRO BAN®

DS 677.0: 254 Platinum

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

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