



125 TRI MAX[®]

DS-24-1024

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

125 TRI MAX[®]

2. MANUFACTURER

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3. PRODUCT DESCRIPTION

125 TRI MAX[®] is a superior crack prevention and sound isolation adhesive mortar that is a direct replacement for 125 Sound & Crack Adhesive. Independently tested to ANSI A118.12 system crack resistance test, ASTM E2179 and ASTM E492 impact sound isolation for ceramic tile and stone installations. 125 TRI MAX is a single component adhesive mortar which takes the place of costly time consuming membrane or mat systems by allowing for faster more effective tile or stone installations.

Uses

- Apartments
- Condos
- College dormitories
- Classrooms
- Office Buildings
- Any multi-floor inhabitant needing sound reduction

Advantages

- Prevents transmission of cracks from the approved substrates to the tile or stone finish when subjected to horizontal in plane movement of cracks up to 1/8" (3 mm) under normal usage.
- Single component.
- Contains 36% post consumer recycled materials.
- Superior workability—equipped with lightweight technology.
- Single component - just add water.
- Fiber reinforced.
- Equipped with anti-microbial technology to protect the treated article only.
- "Heavy" as per ASTM C627 Robinson Floor Test - TCNA.
- Part of the 25 Year Warranty†. (See Data Sheet DS 025.0 APD for complete warranty information).
- LEED compliant.
- Conforms to ISO 13007-1 (C1ES2) classification.
- 30% faster than membrane and thin-set installations.
- Saves up to 20% on material and labor costs.

Suitable Substrates (Interior Use Only)

- Brick Masonry
- Cement Backer Board
- Cement Mortar Bed
- Cement Terrazzo
- Ceramic Tile and Stone
- Ceramic Tile and Stone
- Concrete
- Poured Gypsum Underlayment
- Exterior Glue Plywood (Interior Only)

Packaging

- 25LB (11.4KG) BAG

Approximate Coverage

73-82 ft²/25 lb. bag (6.8–7.6 m²/11.4 kg bag) with 1/4" x 1/4" (6 mm x 6 mm) notched trowel.

49-54 ft²/25 lb. bag (4.6–5.0 m²/ 11.4 kg bag) with 1/4" x 3/8" (6 mm x 9 mm) notched trowel.

37-41 ft²/25 lb. bag (3.4–3.8 m²/ 11.4 kg bag) with 1/2" x 1/2" (12 mm x 12 mm) notched trowel.

For all installations requiring sound protection, use a 1/4" x 3/8" (6 mm x 9 mm) notched trowel for back buttering tiles.

For installations only requiring anti-fracture protection, a 1/4" x 1/4" (6 mm x 6 mm) or 1/4" x 3/8" (6 mm x 9 mm) may be used for maximum coverage

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) and off the ground in a dry area.

Limitations

- Maximum amount of moisture in the concrete substrate should not exceed 5 lbs/1,000 ft²/24hrs [285 µg/s•m²] per ASTM F1869 or 75% relative humidity as measured with moisture probes per ASTM F2170. Consult with finish material manufacturer to determine the maximum allowable moisture content for substrates under their finished material
- Not for use directly over particle board, OSB, luan, Masonite® or hardwood floors
- Interior installations only
- Use LATAPOXY® 300 Adhesive for installing green marble, moisture sensitive stone, and resin backed stone or tile, and agglomerates. (refer to DS 633.0)
- Should not be used to level or repair floors or walls. To properly level or repair a substrate please use a suitable LATICRETE® underlayment.
- 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).
- Not for use in submerged or steam room applications. For these applications use 254 Platinum.
- Installation of large format tile or stone may require a longer cure time prior to exposure to traffic or for grouting.
- Some light colored stones may darken. Conduct a test area to verify performance.

Cautions

- USE ONLY CLEAN MIXING PAILS AND PADDLES DURING PREP. Do not contaminate 125 TRI MAX

with other products. Failure to do so will have an impact on the setting time and performance of this product

- Consult SDS for more safety information.
- Protect finished work from traffic until fully cured.
- Causes serious eye irritation. Wear eye protection. If in eyes, flush thoroughly with water. Do not breathe dust. Wear a respirator in dusty areas.
- When installing a floor requiring a specific service rating, per TCNA Floor Tiling Installation Guide, the tile or stone finish must also be similarly rated for the application.
- Protection of newly installed floors Follow TCNA "Protecting New Tile Work" criteria outlined in the TCNA Handbook for Ceramic, Glass and Stone Tile Installation.
- Keep out of reach of children

4. TECHNICAL DATA

Applicable Standard

- ANSI A118.12
- ANSI A118.13
- ASTM E989
- ASTM E942
- ISO 13007-1
- This product currently has a Product Specific (Type III) Environmental Product Declaration (EPD). The PCR review, life cycle assessment and declaration were independently verified by UL Environment in accordance with ISO 14025, ISO 14040 and ISO 14044.

Physical Properties

Test	Test Method	Results
System Crack Resistance Test	ANSI A118.12 5.4	High
28 day Cure Porcelain Tile Shear Strength	ANSI A118.12 5.1.5	100–135 psi (0.7– 0.9 MPa)
Shear Strength after Accelerated Aging	ANSI A118.12.5.1.6	200-215 psi (1.4-1.5 Mpa)
Increase in Impact Insulation Class using ½"x ½" (12 x 12 mm) trowel	ASTM E 2179	Delta IIC = 16 dB
Impact Sound Transmission Test using ½"x ½" (12 x 12 mm) trowel 6" slab	ASTM E 492/ ASTM E 989	Impact Insulation Class IIC = 44 dB
Impact Insulation Class using ½"x ½" (12 x 12 mm) trowel 6" slab drop ceiling	ASTM E 492/ ASTM E 989	Impact Insulation Class IIC = 66 dB
Impact Insulation Class using ½"x ½" (12 x 12 mm) trowel 8" slab drop ceiling	ASTM E 492/ ASTM E 989	Impact Insulation Class IIC = 68 dB
Increase in Impact Insulation Class using ¼" x 3/8" (6 x 9 mm) trowel	ASTM E 2179	Delta IIC =14 dB
Impact Sound Transmission Test using ¼" x 3/8" (6 x 9 mm) trowel 6"slab	ASTM E 492/ ASTM E 989	Impact Insulation Class IIC = 42 dB
ISO Designation	ISO 13007-1	C1ES2
Tensile Adhesion Strength	ISO 13007-2;4.4.4.2	1.4-1.5 MPa
Tensile Adhesion Strength after Heat Aging	ISO 13007-2;4.4.4.4	1.8-1.9 MPa
Tensile Adhesion Strength after Water Immersion	ISO 13007-2;4.4.4.3	0.6-0.7 MPa
Extended open time: tensile adhesion strength	ISO 13007-2;4.1	1.3-1.4 MPa

Working Properties

Property Name	Property Value
Open Time	40 minutes
Pot Life	2 hours
Time to Foot Traffic	24 hours
Wet Density	59.3 lbs./ft3 (0.95 g/cc)

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

• Preparation

Identify the type of crack in the substrate. **DO NOT** use 125 TRI MAX® over structural cracks or other areas with differential vertical movement.

Shrinkage Cracks: Occur during the curing process of the concrete. Typically the movement is horizontal (open and close).

Structural Cracks: Occur from improper design or installations of substructure for load conditions. Typical movement is vertical (up and down). 125 TRI MAX is not intended to bridge joints which experience dynamic movement such as expansion joints and structural cracks. Expansion joints must be carried through the entire tile installation.

Note: Treat closest joint to cold or saw cut joint with LATASIL™. Do not remove all of 125 TRI MAX from the grout joints in areas that are treating non-structural cracks, cold joints, saw cut joints. However, 125 TRI MAX must be removed from all other movement joints while fresh to allow for maximum movement of these joints. Fill these joints completely with LATASIL and the appropriate backer rod or bond breaker tape.

Surface Preparation

All surfaces should be between 50°F (10°C) and 90°F (32°C) and structurally sound, clean and free of all dirt, oil, grease, paint, concrete sealers or curing compounds. Rough or uneven concrete surfaces should be made smooth with Latex Portland Cement Underlayment to provide a wood float (or better) finish. Dry, dusty concrete slabs or masonry should be dampened and excess water swept off. Installation may be made on a damp surface. New concrete slabs shall be damp cured and 28 days old before application. All slabs must be plumb and true to within 1/4" (6 mm) in 10 ft (3 m). Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Follow ANSI specification A108.01-3.7 "Requirements for Movement Joints: Preparations by Other Trades" or

TCNA detail EJ-171 "Movement Joints—Vertical & Horizontal". Do not cover expansion joints with mortar.

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. **SUB-FLOOR:** 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 joints 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 joists in sub-floor and stagger joints between sheet ends; glue underlayment to sub-floor with construction adhesive. Refer to Technical Data Sheet 152 "Bonding Ceramic Tile, Stone or Brick Over Wood Floors" for complete details.

Mixing: NOTE: Use only clean mixing pails and mixing paddles. Do not contaminate 125 TRI MAX with other products. Add 4.0 – 4.5 qtrs. (3.8 – 4.3L) of water into the pail, add the 25 lbs (11.4 kg) of powder, and mix for 2 minutes. (To mix smaller quantities use 5.2 parts powder to 1 part water) Mix with a slow speed mixer to a smooth, trowelable consistency. Allow mortar to slake for 5–10 minutes and remix for an additional minute. Remix without adding any more water or powder. During use, stir occasionally to keep mix fluffy. DO NOT temper with water.

Application

Perimeter Isolation Strip for Sound Control Installations

It is essential that all walls and building elements are isolated from the floor.

Note: It is recommended to install a perimeter isolation strip before the installation of 125 Sound and Crack Adhesive. Attach the perimeter isolation strip to the perimeter wall of the entire sub-floor, 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 staples 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. Apply mortar to the substrate with the flat side of the trowel, pressing firmly to work into surface. Comb an additional mortar with the notched side.

Note: To obtain stated sound control rating, tile must be back-buttered. Use the proper sized notched trowel to ensure full bedding of the tile. Nominal thickness after bedding using 1/2" x 1/2" (12.5 mm x 12.5 mm) trowel and back-buttering tile for sound abatement is 1/8" to 3/8" (3 – 9 mm). Spread as much mortar as can be covered with tile in 15–20 minutes. Place tiles into wet, sticky mortar and adjust. Check mortar for complete coverage by periodically removing a tile and inspecting bedding mortar transfer onto back of tile. If mortar is skinned over (not sticky), remove and replace with fresh mortar. For installations requiring sound control; all tiles must be back buttered.

Grouting

Grout installation after a minimum of 5 hours curing time at 70°F (21°C) or above. The time to grouting may be prolonged when the air and/or substrate temperature is below 70°F (21°C). Grout with your choice of LATICRETE grout. The time to grouting may be prolonged when mortar is built up for medium bed applications or when back buttering tile for sound control applications. Cleaning Clean tools and tile work with water while mortar is fresh.

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:

- 25 Year System Warranty (US) (English)
- 10 Year System Warranty (US) (English)
- 1 Year Product Warranty (US) (English)

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 236.0: 9235 Waterproofing Membrane
- DS 250.0: PERMACOLOR® Grout
- DS 025.0: LATICRETE 25 Year System Warranty (United States and Canada)
- DS 256.0: 1500 Sanded Grout
- DS 258.0: 1600 Unsanded Grout
- DS 265.0: 1776 Grout Enhancer
- DS 620.01: LATASIL™
- DS 633.0: LATAPOXY 300 Adhesive
- DS 663.0: HYDRO BAN®
- DS 677.0: 254 Platinum
- DS 681.0: SPECTRALOCK® PRO Premium Grout
- DS 685.0: SPECTRALOCK PRO Grout
- TDS 152: "Bonding Ceramic Tile, Stone or Brick Over Wood Floors"

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