

## 272 Mortar

DS-259-0524

# Globally Proven Construction Solutions



## 1. PRODUCT NAME

272 Mortar

#### 2. MANUFACTURER

LATICRETE International, Inc. 1 LATICRETE Park North Bethany, CT 06524-3423 USA

Telephone: +1.203.393.0010, ext. 1235 Toll Free: 1.800.243.4788, ext. 1235

Fax: +1.203.393.1684 Website: laticrete.com

## 3. PRODUCT DESCRIPTION

272 Mortar is a high performance bagged cementitious powder to be mixed with either water or latex admixture to install ceramic tile and stone using the thin-set method of installation.

## Uses

• Designed for interior or exterior installation of ceramic tile and stone for walls and floors.

#### **Advantages**

- High Tack—will hang tile without slippage
- Dual Purpose—for walls and floors
- · Cleans with water
- Easy to Use—plastic
- High Bond Strength—200% stronger than mastic type adhesives
- · workable and long open time
- Safe—non-flammable and non-toxic during storage
- application and after hardening

#### **Suitable Substrates**

- Concrete
- Cement Plaster
- Cement Terrazzo
- Cement Mortar Bed
- Concrete Masonry
- Brick Masonry
- Ceramic Tile and Stone
- · Ceramic Tile and Stone
- Cement Backer Board
- Exterior Glue Plywood (Interior Only. Requires use of 333 Flexible Additive)

## **Packaging**

• 50LB (22.7KG) BAG (White)

## Limitations

- DO NOT apply directly to plywood, chipboard, particleboard, decorative laminates or resilient flooring.
- For veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.
- For installations over exterior glue plywood, decorative laminates or resilient flooring use with 333 Super Flexible Additive.
- Industry standards recommend the use of latex Additive for exterior installations. Use 3701 Mortar Admix for best results.
- DO NOT install tile/stone when surface temperatures are below freezing 32°F (0°C). Always use latex additives when temperatures approach freezing.
- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not designed as replacements for waterproofing membranes. When a waterproofing membrane is required, use a LATICRETE® Waterproofing Membrane (see Section 10 FILING SYSTEMS).
- For exterior use, fortify with 333 Super Flexible Additive or 3701 Mortar Admix.

## **Cautions**

· Consult SDS for more safety information.

- Contains portland cement and silica sand. Causes severe skin burns and serious eye damage. Wear protective gloves, protective clothing, and eye protection. In case of contact, flush thoroughly with water.
- DO NOT take internally. Silica sand may cause cancer, respiratory irritation or serious lung problems.
   Do not breathe dust. Wear a respirator in dusty areas.
- Use LATAPOXY® 300 Adhesive for installing green marble, water sensitive stone and agglomerates and resin backed tile and stone. Refer to DS 633.0.
- Use a white mortar for white and light-colored marble and stone.
- For tile/stone applications in pools, fountains, showers or bathtubs, mix with 3701 Mortar Admix. Wait 14 days before filling with water.
- Protect finished work from traffic or damage by other trades for an extended period of time during cold weather conditions. At room temperature conditions 70°F (21°C), protect overnight.
- · Keep out of reach of children.

## 4. TECHNICAL DATA

## **Applicable Standard**

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

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 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, laitance, 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. \*No minimum cure time for concrete slabs when thin-set mortar is mixed with 3701 Mortar Additive or 333 Super Flexible Additive. 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. 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. Minimum construction for interior plywood floors. Mix 272 Mortar mixed with 333 Super Flexible Additive over Exterior Glue Plywood. SUBFLOOR: 5/8" (15 mm) thick exterior glue plywood, either plain with all sheet edges blocked or tongue and groove, over bridged joints 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 joints from joints in subfloor and stagger joints between sheet ends; glue underlayment to subfloor with construction adhesive. Refer to Technical Data Sheet 152 "Bonding Ceramic Tile, Stone or Brick Over Wood Floors" for complete details. Mixing Stir admix thoroughly before use. Place clean, potable water or a Latex Admix into a clean pail. Add 272 Mortar. Use approximately 1.5 – 2 gallons (5.7 - 7.6 L) of water for 50 lbs (22.7 kg) of powder. (To mix smaller quantities use 2.9 parts powder to 1 part water.) Fortify with 3701 Mortar Admix or 333 Super Flexible Additive (for nonsubmerged areas) when installing porcelain tile, glass and stone mosaics in heavy traffic areas, and for exterior use. For tile installation over cement backer board, check with board manufacturer for compatibility—if an ANSI A118.4 thin-set is required then mix with latex additive. Mix by hand or with a slow speed mixer to a smooth, trowelable consistency. Allow mortar to slake for 5 – 10 minutes. Adjust consistency if necessary. Remix and apply with the proper sized notched trowel. Application Apply mortar to the substrate with the flat side of the trowel, pressing firmly to work into surface. Comb on additional mortar with the notched side. Use the proper sized notched trowel to ensure full bedding of the tile. Spread as much mortar as can be covered with tile in 15-20 minutes. Back butter large tiles > 8" x 8" (>200 x 200 mm) to provide full bedding and firm support. Place tiles into wet, sticky mortar and beat in using a beating block and rubber mallet to embed tile and adjust level. 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. Grouting Grout installation after a minimum of 24 hours curing time at 70°F (21°C). Grout with SPECTRALOCK® PRO Premium Grout+, SPECTRALOCK PRO Grout†, PERMACOLOR®

Grout? mixed with water or 1500 Sanded Grout or 1600 Unsanded Grout gauged with 1776 Grout Enhancer or with water. Cold Weather Note: The setting of portland cement mortars and grouts are retarded by low temperatures. Protect finished work for an extended period when installing in cold weather. Do not set tile when surface temperature is below freezing or when substrate is frozen. Hot Weather Note: The evaporation of moisture in portland cement mortars is accelerated by hot, dry conditions. Apply to dampened surfaces and protect freshly spread mortar and finished work when installing in hot temperatures. 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:

## 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. 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 <u>laticrete.com</u>. The following is a list of related documents:

 DS 230.13:LATICRETE Product Warranty (United States and Canada)

LATICRETE International, Inc.