

## 1. PRODUCT NAME

LATICRETE® 333 Super Flexible Additive

## 2. MANUFACTURER

LATICRETE International, Inc.  
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## 3. PRODUCT DESCRIPTION

LATICRETE 333 Super Flexible Additive is an extraordinarily flexible latex additive for use with thin set mortars, and other cement mixes. LATICRETE 333 Super Flexible Additive is specially formulated to provide a strong, super flexible bond to most surfaces, including plywood. Recommended for interior and exterior\* use with LATICRETE Thin-Set. Must fortify with LATICRETE 333 Super Flexible Additive.

### Uses

Used in place of water with thin set mortars for installing: ceramic tile, brick, natural stone, porcelain tile.

### Advantages

- Makes high strength shock resistant mortar.
- Strong, super flexible bond to many surfaces
- Safe and water cleanable, non-hazardous, non-flammable liquid
- Easy to use
- Sag resistant

### Suitable Substrates

- Concrete
- Ceramic Tile and Stones
- Cement Backer Board\*\*
- Brick Masonry
- Exterior Grade Plywood\*
- Asphaltic Adhesives\*
- Plastic Laminate\*
- Cement Mortar Beds
- Concrete Masonry
- Cement Plaster
- Cement Terrazzo
- Gypsum Wallboard\*
- Vinyl or Other Resilient Tile\*

\*Interior use only.

\*\*Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use.

### Packaging

- 1 US gallon (3.8ℓ) jug, 6 jugs per carton, 28 cartons per pallet.
- 2 US gallon (7.6ℓ) pail, 40 pails per pallet.
- 5 US gallon (19ℓ) pail, 36 pails per pallet.

### Approximate Coverage

35-40 ft<sup>2</sup> per US gallon (0.85-1.00 m<sup>2</sup> per liter) of LATICRETE 333 Super Flexible Additive using a 1/4" x 1/4" (6 x 6 mm) notched trowel.

### Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for five (5) years if stored at temperatures >32°F (0°C) and <110°F (43°C).

### Limitations

- Use LATAPOXY® 300 Epoxy Adhesive for installing green marble, water sensitive natural stone and agglomerates.
- Use a white thin set mortar when installing white or light colored natural stones.
- Adhesives/mastics, mortars for ceramic tile, brick and stone are not replacements for waterproof membranes. When a waterproof membrane is required, use a LATICRETE Waterproof Membrane (see Section 10 Filing Systems).
- 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.
- Exterior use limited to residential/light commercial.
- Not for use in areas subject to water immersion.

### Cautions

- During cold weather, protect finished work from traffic until fully cured.
- Keep out of reach of children.

## 4. TECHNICAL DATA

**Applicable Standard** ANSI A118.4-1999 and A118.11-1999

### Performance Properties

LATICRETE 333 Super Flexible Additive mixed with LATICRETE 272 Premium Floor N' Wall Thin-Set Mortar

Test/Test Method	Results
Shear Bond, Porcelain Tile, 28 day cure ANSI A118.4-1999; F-5.2.4	390 psi (2.7 MPa)
Shear Bond, Quarry Tile/Plywood A118.11-1999 P-4.1.1.2	384 psi (2.6 MPa)
Water Absorption ANSI A118.6-1999 H-4.4	4% max.
Compressive Strength ANSI A118.4-1999; F-6.1	1600 psi 11.0 MPa
TCA Service Rating ASTM C-627	Extra Heavy

### Working Properties

LATICRETE 333 Super Flexible Additive mixed with LATICRETE 272 Premium Floor N' Wall Thin-Set Mortar (70°F(21°C))

Open Time	35 minutes
Pot Life	3 hours
Time to Heavy Traffic	24 hours
Wet Density	92 lbs/ft <sup>3</sup> (1480 kg/m <sup>3</sup> )

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, loose peeling paint, concrete sealers or curing compounds. Rough or uneven concrete surfaces should be made smooth with LATICRETE 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. Note: Latex Portland cement mortars do not require a minimum cure time for concrete slabs. All slabs must be plumb and true to within 1/4" (6mm) in 10 ft (3m). Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Follow ANSI Specification AN-3.8

"Requirements for Expansion Joints" or TCA Detail EJ171 "Expansion Joints". Do not cover expansion joints with mortar. Cement Backer Board: follow TCA installation detail W244.

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" (15mm) thick exterior grade 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" (150mm) o.c. along sheet ends and 8" (200mm) o.c. along intermediate supports with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3mm) between sheet ends and 1/4" (6mm) between sheets edges; all sheet ends must be supported by a framing member; glue sheets to joints with construction adhesive; **UNDERLAYMENT:** 5/8" (15mm) thick exterior grade plywood fastened 6" (150mm) o.c. along sheet ends and 8" (200mm) o.c. in the panel field (both directions) with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3mm) to 1/4" (6mm) between sheets and 1/4" (6mm) 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 "Requirements for Direct Bonding of Ceramic or Stone Tiles Over Wood Floors" for complete details.

3. **DO NOT** bond to particle board, luan, Masonite® or hardwood surfaces. **For white and light colored marbles use LATICRETE® 220 Marble and Granite Mortar WHITE. For green and moisture sensitive marbles, use LATAPOXY® 300 Epoxy Adhesive, refer to Data Sheet 633.0.**

**Mixing - Stir LATICRETE® 333 Super Flexible Additive thoroughly before use.**

**As a thin-set additive** - Use approximately 2 gallons (8ℓ) of LATICRETE 333 Super Flexible Additive to 50 lbs (22.7 kg) of LATICRETE Thin-Set Mortar. Place LATICRETE 333 Super Flexible Additive in a clean plastic pail. Do not dilute. Add LATICRETE Thin-Set mortar to LATICRETE 333 Super Flexible Additive and mix 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**

**Thin-Set Mortar** - 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. Note: Use the proper sized notched trowel to insure full bedding of the tile. Spread as much mortar as can be covered with tile in 15-20 minutes. Back butter large tiles >8"x8" (>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 imbed 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 LATICRETE 1500 or 1600 Tri-Poly Fortified Grout or LATICRETE Sanded or Unsanded Grout mixed with LATICRETE 1776 Grout Admix Plus. For maximum stain resistance use LATAPOXY SP-100 Stainless Grout For Floors N' Walls.

**Cold Weather Note:** The setting of Portland cement mortars are retarded by low temperatures. Protect finished work for an extended period when installing in cold weather. For faster setting mortar use LATICRETE 101Rapid Set Latex Admix. 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 temperatures over 95°F (35°C).

**Cleaning Mortar** - Clean tools and tile work with water while mortar is fresh.

## **6. AVAILABILITY AND COST**

### **Availability**

LATICRETE and LATAPOXY® materials are available worldwide. For distributor information, call:

Toll Free: (800) 243-4788

Telephone: (203) 393-0015

For on-line distributor information, visit LATICRETE at [www.laticrete.com](http://www.laticrete.com).

### **Cost**

Contact a LATICRETE/LATAPOXY Distributor in your area.

## **7. WARRANTY**

LATICRETE International, Inc. warrants that LATICRETE 333 Super Flexible Additive is free from manufacturing defects and will not break down, deteriorate or disintegrate under normal usage for a period of one (1) year from date of purchase subject to the terms and conditions stated in Data Sheet 230.13 LATICRETE Product Warranty (see 10. FILING SYSTEM).

In addition, when used as a component of a LATICRETE System Installation, LATICRETE 333 Super Flexible Additive, is warranted for a period of ten (10) years from date of purchase subject to the terms and conditions stated in Data Sheet 230.12 LATICRETE System 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

(Hours 8:00 AM to 5:30 PM EST):

Toll Free: (800) 243-4788 ext. 235

Telephone: (203) 393-0015 ext. 235

FAX: (203) 393-1948

### **Technical and safety literature**

To receive data via fax 24 hours 7 days, call:

- (800) 359-3297 or (203) 393-0015, ext. 360
- To receive a Material Safety Data Sheet, enter Fax on Demand code **8024**.

### **10. FILING SYSTEM**

Additional product information available upon request:

- DS 236.0: LATICRETE 9235 Waterproofing Membrane  
(Fax on Demand code 2360)
- DS 259.0: LATICRETE 272 Premium Floor N' Wall Thin-Set  
Mortar (Fax on Demand code 2590)
- DS 633.0: LATAPOXY 300 Epoxy Adhesive  
(Fax on Demand Code 6330)
- DS 264.0: LATICRETE 101 Rapid-Set Latex Admix  
(Fax on Demand Code 2640)
- TDS 135: Installing Ceramic Tile over Vinyl, Linoleum  
(Fax on Demand code 1221)
- TDS 152: Installing Ceramic Tile over Wood Floors  
(Fax on Demand code 1254)
- DS 230.13: LATICRETE Product Warranty  
(Fax on Demand Code 3013)
- DS 230.12: LATICRETE 10 Year System Warranty  
(Fax on Demand Code 3012)



***Globally proven.  
Professionally endorsed.***

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