



# 3701 Lite Mortar R

DS-36603-0822

**Globally Proven  
Construction Solutions**



## 1. PRODUCT NAME

3701 Lite Mortar R

## 2. MANUFACTURER

LATICRETE International, Inc.

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## 3. PRODUCT DESCRIPTION

3701 Lite Mortar R contains carefully selected polymers, portland cement and light weight aggregates. This Rapid mortar can be used in a large amount of projects, decreasing the wait time significantly. 3701 Lite Mortar R does not need a latex admixture. You will only need to add water to produce thick bed mortar or a vertical repair mortar/screed. It contains no respirable crystalline silica levels that exceed the OSHA action level\*. 3701 Lite Mortar R weighs half the amount of a conventional thick bed mortar and retains the same coverage.

### Uses

- Interior and exterior applications
- Horizontal, vertical, overhead applications
- Wet and dry applications
- Bonded and non-bonded thick bed mortar applications
- Conventional thick bed mortar applications
- Concrete repairs

### Advantages

- Rapid formula - cure time between 1.5 to 2 hours
- Light weight - half the weight of conventional mortars
- Excellent for vertical applications such as rendering walls, pools, etc.
- Excellent for overhead applications
- Contains no respirable crystalline silica levels that exceed the OSHA action level\*
- Freeze-thaw compliant
- Ease of mixing and application - can be applied up to 3/4" on a vertical surface
- Polymer fortified – no need for latex additives
- Premixed – no job site blending of powders required
- Economical – saves time and money
- For use as a scratch or finish coat in place of Type S or Type N mortar
- Can be used to ramp and pitch areas - bonded mortar bed assembly is possible with a slurry bond coat of LATICRETE 254 Platinum, down to a feather edge

\* OSHA action level set forth in OSHA's Respirable Crystalline Silica (RCS) standard for construction, 29 CFR 1926.1153, as tested by an independent laboratory to be below the OSHA action level for respirable crystalline silica - [laticrete.com/silica](http://laticrete.com/silica)

### Suitable Substrates

- Concrete
- Ceramic Tile and Stone
- Concrete Masonry
- Brick Masonry
- Cement Mortar Bed
- Cement Plaster
- Cement Terrazzo
- Exterior Glue Plywood (For interior only, minimum 2" (50 mm) over cleavage membrane with wire reinforcing)
- Cement Backer Board (Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use)

### Packaging

30 lb (13.6 kg) bag; 56 bags per pallet

Part Number: 2060-0030-21-1

## Approximate Coverage

Render/Repair	Mortar Bed	Depth
12 sq. ft. (1.1 m <sup>2</sup> )	10 sq. ft. (.93 m <sup>2</sup> )	½" (13mm)
6 sq. ft. (.56 m <sup>2</sup> )	5 sq. ft. (.46 m <sup>2</sup> )	1" (25 mm)
4 sq. ft. (.37 m <sup>2</sup> )	3 sq. ft. (.28 m <sup>2</sup> )	1-½" (38mm)
3 sq. ft. (.28 m <sup>2</sup> )	2 sq. ft. (.19 m <sup>2</sup> )	2" (51 mm)

## Shelf Life

One year shelf life

## Limitations

- Use LATAPOXY® 300 Adhesive for installing green marble or moisture sensitive stone, agglomerates, and resin backed tile or stone.
- Keep material temperature controlled.
- For veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.
- 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).
- 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 (except where local building codes specify more stringent deflection requirements (L=span length)). Data Sheets are subject to change without notice. For latest revision, check our website at [www.laticrete.com](http://www.laticrete.com).

## Cautions

Consult SDS for more safety information.

- During cold weather, protect finished work from traffic until fully cured.
- Allow a minimum 14 day cure at 70°F (21°C) after the final grouting period prior to filling water features with water.
- Contains portland cement. Causes severe skin burns and eye damage. Wear protective gloves, protective clothing and eye protection. In case of contact, flush thoroughly with water.
- Do not take internally. Do not breathe dust. Wear a respirator in dusty areas.
- Keep out of reach of children

## 4. TECHNICAL DATA



## Physical Properties

Testing	Results (Render/Repair)
Compressive Strength (PSI) ASTM C109	2 hour = 400 to 500 1 day = 1000 to 1500 7 day = 1500 to 2000 28 day = 2000 to 3000
Flexural Strength (PSI) ASTM C348	7 day = 600 to 800
Tensile Strength (PSI) ASTM C1583	28 day = 150 to 200

Testing	Results (Mortar Bed)
Compressive Strength (PSI) ASTM C109	2 hour = 600 to 900 7 day = 2000 to 3000 28 day = 2500 to 3500
Flexural Strength (PSI) ASTM C348	7 day = 600 to 800
Tensile Strength (PSI) ASTM C1583	28 day = 150 to 200

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.

## Working Properties

Properties	Time
Initial Set	35 to 45 minutes
Final Set	50 to 70 minutes
Pot Life	25 to 35 minutes
Time to Foot Traffic	90 to 120 minutes
Time to Heavy Traffic	72 hours

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, laitance, paint, concrete sealers or curing compounds. Dry dusty concrete slabs or masonry should be dampened and excess water swept off. Installation may be made on a damp surface. 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 EJ171 "Movement joints-Vertical & Horizontal". Do not cover expansion joints with mortar.

### Application

#### Mortar Bed

- **Mixing Mortar Bed—Dry Pack Consistency for Floors**

Mix a 30 lb bag (13.6 kg) of 3701 3701 Lite Mortar R with 3.5 to 3.7 qts (3.3 to 3.5 ℓ) of water for 2 to 3 minutes. Mix to a stiff, semi-dry consistency. Mix ratio may vary dependent upon weight of finish.

- **Bonded Mortar Bed—Installation**

Before placing mortar, apply a slurry bond coat made from 254 Platinum or 257 Titanium. While the slurry bond coat is wet, spread the mortar and compact well. If placing tile immediately, apply another slurry bond coat to the surface of the mortar bed (made from either 254 Platinum or 257 Titanium). While the slurry bond coat is wet and sticky, place the tile and beat in well. Refer to TDS 143 "Slurry Bond Coats – When & What to Use" for more information on slurry bond coats.

- **Unbonded Mortar Bed—Installation**

Before placing mortar, place a cleavage membrane (e.g. 4 mil thick polyethylene sheeting or 15 lb, builder felt) on the substrate. Place mortar over the cleavage membrane (approximately 1/2 the depth of the mortar bed). Next, place 2" x 2" (50 mm x 50 mm), 16 gauge galvanized welded wire mesh over the mortar. Then, place the balance of the mortar bed. The wire mesh should be suspended in the middle of the mortar bed. Spread the mortar and compact it well. Minimum mortar bed thickness shall be 2" (50 mm). If placing tile immediately, apply another slurry bond coat to the surface of the mortar bed (made from either 254 Platinum or 257 Titanium). While the slurry bond coat is wet and sticky, place the tile and beat in well.

### Wall Renders

- **Mixing Wall Renders**

Mix a 30 lb bag (13.6 kg) of 3701 Lite Mortar R with 4.9 to 5.1 qts (4.7 to 4.8 ℓ) of water for 2 to 3 minutes. Mix to a plastic consistency.

- **Wall Renders—Installation**

No slurry bond coat is required prior to placing wall renders. Apply wall render with a steel trowel pressing mortar into good contact with the substrate.

Application thicknesses over 3/4" (19 mm). Apply "scratch coat" first. Scratch mortar before it hardens. After "scratch coat" hardens, apply the "brown or float coat" working the mortar into good contact with the scratch coat. Do not exceed 3/4" (19 mm) thickness per lift. Scratch all lifts that will receive additional float coats. Float wall with steel trowel and straight edges to form a plumb and true mortar surface. Allow the completed render coats to cure for 24 hours at 70°F (21° C) prior to the installation of tile.

### Concrete Repairs

- **Concrete Repair and Resurfacing – Installation**

Mix a 30 lb bag (13.6 kg) of 3701 Lite Mortar R with 4.9 to 5.1 qts (4.7 to 4.8 ℓ) of water for 2 to 3 minutes. Mix to a plastic consistency.

Before placing mortar, apply a slurry bond coat made from 254 Platinum or 257 Titanium to all reinforcing steel and existing clean, sound and stable concrete surfaces. Prior to placing the mortar. While the slurry bond coat is wet and sticky place the topping mortar. Compact the surface of the mortar with a flat trowel and ensure all voids are filled. Avoid over troweling.

- **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.

- **Hot Weather Note**

The evaporation of moisture in portland cement mortars is accelerated by hot, dry conditions. Apply mortar to dampened surfaces and protect freshly spread mortar and finished work when installing in temperatures over 90°F (32°C).

**Note:** A slurry bond coat should also be applied to the edges of mortar beds installed from previous work periods. Clean tools and tile work with water while the 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](http://laticrete.com)**Cost**

Contact a LATICRETE Distributor in your area.

**7. WARRANTY**

See 10. FILING SYSTEM:

- DS 230.13: 1 Year Product Warranty (US - English)
- DS 230.05: 5 Year System Warranty (US - English)
- DS 230.10: 10 Year System Warranty (US - English)
- DS 230.99: LATICRETE Lifetime System Warranty (US - English)

**9. TECHNICAL SERVICES****Technical Assistance**Information is available by calling the LATICRETE  
Technical Service Hotline:

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**Technical and Safety Literature**To acquire technical and safety literature, please visit our  
website at [laticrete.com](http://laticrete.com).

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