1. PRODUCT NAME
3701 Fortified Mortar

2. MANUFACTURER
LATICRETE International, Inc.
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Bethany, CT 06524-3423 USA
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Fax: +1.203.393.1684
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3. PRODUCT DESCRIPTION
3701 Fortified Mortar is a polymer fortified blend of carefully selected polymers, portland cement and graded aggregates. 3701 Fortified Mortar does not require the use of latex admix, you only need to add water to produce thick bed mortar with exceptional strength. 3701 Fortified Mortar is an approved substitute for 226 Thick Bed Mortar mixed with 3701 Mortar Admix.

Uses
- Interior and exterior applications
- Wet and dry applications
- Bonded and non-bonded thick bed mortar applications
- Conventional thick bed mortar applications
- Concrete repairs

Advantages
- Polymer fortified – no need for latex additives
- Premixed – no job site blending of powders required
- Economical – saves time and money
- High strength formula
- Pumpable for large scale veneer projects
- Exceeds ASTM C270 requirements
- For use as a scratch or finish coat in place of Type S or Type N mortar
- Excellent for ramping and pitching - can be used in a bonded mortar bed assembly with a slurry bond coat of LATICRETE 254 Platinum down to a feather edge

Suitable Substrates
- Concrete
- Ceramic tile & stone
- Concrete masonry
- Brick masonry
- Exterior glue plywood*
- Cement mortar beds
- Cement backer board**
- Cement plaster
- Cement terrazzo
* For interior only, over cleavage membrane with wire reinforcing min. 2" (50 mm) thick
** Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use

Packaging
60 lb (27.3 kg) bag; 56 bags per pallet

Approximate Coverage

<table>
<thead>
<tr>
<th>Thickness</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot; (1.1 mm)</td>
<td>12 ft² at 1/2&quot; (1.3 m²)</td>
</tr>
<tr>
<td>1&quot; (25 mm)</td>
<td>6 ft² at 1&quot; thickness (0.56 m²)</td>
</tr>
<tr>
<td>2&quot; (50 mm)</td>
<td>3 ft² at 2&quot; (0.3 m²)</td>
</tr>
</tbody>
</table>

Shelf Life
Advanced plastic bag provides two (2) year shelf life (non-rapid versions only).

Limitations
- Use LATAPOXY® 300 Adhesive for installing green marble or moisture sensitive stone, agglomerates, and resin backed tile or stone.
- 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).

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...
The document appears to be a technical manual for a product. It includes details on application, installation, and product specifications. Here is a summary of the key points:

### 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 and silica sand. May irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin. In case of contact, flush thoroughly with water.
- Do not take internally. Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas.
- Keep out of reach of children.

### Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Absorption</td>
<td>ANSI A118.7.3.4</td>
<td>5%</td>
</tr>
<tr>
<td>28 Day Compressive Strength</td>
<td>ASTM C270</td>
<td></td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>ANSI A118.7.3.5</td>
<td></td>
</tr>
<tr>
<td>Shrinkage 7 Day Cure</td>
<td>ASTM C-157</td>
<td>0.05%</td>
</tr>
<tr>
<td>TCNA Service Rating</td>
<td>ASTM C-627</td>
<td>Extra Heavy</td>
</tr>
</tbody>
</table>

### Working Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pot Life</td>
<td>2 hours</td>
</tr>
<tr>
<td>Time to Foot Traffic</td>
<td>16 hours</td>
</tr>
<tr>
<td>Time to Heavy Traffic</td>
<td>72 hours</td>
</tr>
</tbody>
</table>

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.

### Application

#### Mortar Bed

##### Mixing Mortar Bed—Dry Pack Consistency for Floors
Mix a 60 lb bag (27 kg) of 3701 Fortified Mortar to 0.5–0.8 gal (2.0–3 l) of water. 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 4237 Latex Additive mixed with 211 Powder. While the slurry bond coat is wet, spread the mortar and compact well. If placing tile immediately, apply a slurry bond coat, made from either 254 Platinum or 4237 Latex Additive mixed with 211 Powder to the mortar. 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, apply 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 well. Minimum mortar bed thickness shall be 2" (50 mm). If placing tile immediately, apply a slurry bond coat, made from either 254 Platinum or 4237 Latex Additive mixed with 211 Powder to the mortar. While the slurry bond coat is wet and sticky, place the tile and beat in well.

### Wall Renders

#### Mixing Wall Renders
Mix a 60 lb bag (27 kg) of 3701 Fortified Mortar to 0.8 – 0.9 gal (3 – 3.4L) of water. 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. Apply “scratch coat” first – not to exceed 1/2” (12 mm) thickness. 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 5/8" (15 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.

#### As a Pumped Mortar for Renders and Plaster
Pumping of 3701 Fortified Mortar should be done when using a liquid plasticizer/pump aid. Confirm with manufacturer of pump aid for compatibility with polymer fortified mortar mixes. Approximate coverage for 7 – 60 lb. (27.3 kg) bags of mortar will be 45 ft² (4.2 m²) at 1" (25 mm) thick. Coverage will vary according to mixing, pumping, placement, job site conditions and 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.

### 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 EJ-171 “Movement joints-Vertical & Horizontal”. Do not cover expansion joints with mortar.

### Applicable Standards

- **ASTM C270**

### Specifications

- **Mixing Mortar Bed**—Dry Pack Consistency for Floors
  - Mix ratio: 0.5–0.8 gal (2.0–3 l) of water.
  - Mix to a stiff, semi-dry consistency.

- **Bonded Mortar Bed**—Installation
  - Apply a slurry bond coat made from 254 Platinum or 4237 Latex Additive mixed with 211 Powder.

- **Unbonded Mortar Bed**—Installation
  - Apply a cleavage membrane (e.g. 4 mil thick polyethylene sheeting or 15 lb, builder felt) on the substrate.
  - Apply mortar over the cleavage membrane (approximately 1/2 the depth of the mortar bed).
  - Spread the mortar and compact well.

### Working Properties

- **Pot Life**: 2 hours
- **Time to Foot Traffic**: 16 hours
- **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.

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DS-100.0-1017
rebound. Do not exceed 5/8" (15 mm) thickness per lift/application of pumped render. Scratch up previous lift prior to placing subsequent lifts.

**Application**

- **Concrete Repair and Resurfacing – Leveling Mortar**
  Consistency Mixing Leveling Mortars Mix a 60 lb bag (27.3 kg) of 3701 Fortified Mortar to 0.8 – 0.9 (3 – 3.4 L) of water. Mix to a plastic consistency. Mix ratio may vary dependent upon weight of finish.

- **Concrete Repair and Resurfacing – Installation**
  Before placing mortar, apply a slurry bond coat made from 254 Platinum or 4237 Latex Additive mixed with 211 Powder. Apply a slurry bond coat to all reinforcing steel and existing clean, sound and stable concrete surfaces just 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.*

**Cleaning**

Clean tools and tile work with water while the mortar is fresh.

### 6. AVAILABILITY AND COST

**Availability**

LATICTRETE® and LATAPOXY® materials are available worldwide.

**For Distributor information:**
- Toll Free: 1.800.243.4788
- Telephone: +1.203.393.0010

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

**Cost** Contact a LATICTRETE Distributor in your area.

### 7. WARRANTY

See 10. FILING SYSTEM:
- **DS 230.13:** LATICTRETE Product Warranty
- A component of:
  - **DS 230.05:** LATICTRETE 5 Year System Warranty (United States and Canada)
  - **DS 230.15:** LATICTRETE 15 Year System Warranty (For Steel or Wood Framed Exterior Facades) (United States and Canada)
  - **DS 025.0:** LATICTRETE 25 Year System Warranty (United States and Canada)
  - **DS 230.99:** LATICTRETE Lifetime Tile & Stone System Warranty

### 8. MAINTENANCE

LATICTRETE and LATAPOXY grouts require routine cleaning with a neutral pH soap and water. All other LATICTRETE 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 LATICTRETE 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:** LATICTRETE Product Warranty
- **DS 230.05:** LATICTRETE 5 Year System Warranty (United States and Canada)
- **DS 230.15:** LATICTRETE 15 Year System Warranty (For Steel or Wood Framed Exterior Facades) (United States and Canada)
- **DS 025.0:** LATICTRETE 25 Year System Warranty (United States and Canada)
- **DS 230.99:** LATICTRETE Lifetime System Warranty
- **DS 230.1:** 4237 Latex Additive
- **DS 236.0:** 9235 Waterproofing Membrane
- **DS 239.0:** 211 Powder
- **DS 633.0:** LATAPOXY 300 Adhesive
- **DS 663.0:** HYDRO BAN®
- **DS 677.0:** 254 Platinum
- **TDS 143:** Slurry Bond Coats When & What to Use