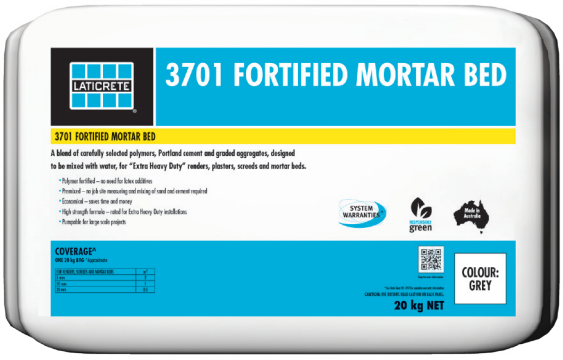
Globally Proven Construction Solutions

3701 Fortified Mortar Bed

3701 Fortified Mortar Bed is a polymer fortified blend of carefully selected polymers, Portland cement and graded aggregates for use in renders and screeds. 3701 Fortified Mortar Bed does not require the use of latex admix, you only need to mix with water to produce mortars with exceptional strength for Extra Heavy Duty installations.



FEATURES/BENEFITS

- Thin – use from feather edge to desired thickness
- Polymer fortified – no need for latex additives.
- Premixed – no job site blending of powders required.
- Economical – saves time and money.
- High strength formula, rated for Extra Heavy Duty installations.
- Pumpable for large scale veneer projects.
- Exceeds ASTM C270 requirements.
- For use as a scratch or finish coat in place of standard or normal mortars.

SUITABLE SUBSTRATES

- Concrete
- Concrete block
- Ceramic tile and stone
- Cement mortar beds
- Cement backer board**
- Brick and concrete masonry
- Cement plaster
- Cement terrazzo
- Exterior glue plywood^

^ Interior use only with wire reinforcing
** Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use.

PACKAGING/COLOURS

- 20 kg bag; 56 bags per pallet
- Grey

USES

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

MANUFACTURER

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Virginia, QLD 4014 Australia

Telephone: 07 3865 1599
Toll Free: 1800 331 012
Fax: 07 3865 2250
Internet: www.laticrete.com.au

Approximate Coverage

(Based on 20kg bag)

- 1 m^2 at 10 mm thick
- 2 m^2 at 5 mm thick

Shelf Life

Factory sealed bags of this product are guaranteed to be of first quality for one (1) year* if stored off the ground in a dry area.

* High humidity will reduce the shelf life of bagged product.

Limitations

- Use LATAPOXY® 300 Adhesive for installing green marble or water sensitive stone, agglomerates or tile.
- Use white adhesive for installing white or light coloured marble or stone.
- Not for use over expansion joints or structural movement cracks.
- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not replacements for waterproof membranes. When a waterproof membrane is required, use a LATICRETE Waterproof Membrane.
- 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. See TDS1011 for more details.

Cautions

- During cold weather, protect finished work from traffic until fully cured.
- Keep out of reach of children.
- 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. Use rubber gloves and eye protection when handling product.
- Do not take internally. Silica sand may cause cancer or serious lung problems.
- Avoid breathing dust. Wear an approved respirator in dusty areas.
- Efflorescence is a normal condition of Portland cement. Contact LATICRETE for information on reducing the effects of efflorescence.

TECHNICAL DATA

Performance Properties

As per ASTM C270

PROPERTY	VALUES
Water Absorption ANSI A118.7.3.4	5%
28-day Compressive Strength ASTM C270	27.6 – 34.5 MPa
Flexural Strength ANSI A118.7.3.5	7.5 – 8.3 MPa
Shrinkage 7-day Cure ASTM C-157	0.05%
TCNA Service Rating ASTM C-627	Extra Heavy

Working Properties at 21°C

PROPERTY	VALUES
Pot Life	2 hours
Time to Foot Traffic	16 hours
Time to Heavy Traffic	72 hours
Wet Density (as a render mix)	1900kg/m^3

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.

INSTALLATIONS

Unless otherwise stated in this document, LATICRETE technical data sheets and guidelines, all work should be in accordance with AS3958.1 -2007.

Note: Expansion joints shall be provided through all bedding and tile work from all dynamic construction or expansion joints in the substrate. Follow Australian Standard requirements for Expansion Joints in AS3958.1 Section 5.4.5 & AS3958.2 Section 4.5 or TCNA detail EJ-171 "Movement Joints – Vertical & Horizontal". Do not cover expansion joints with mortar.

When using wet plaster type mixes for wall renders or levelling bed application to horizontal surfaces, do not apply greater than 15mm per lift after an intial first coat of 12mm. Scratch and allow to dry between lifts or coats.

Where bonded semi-dry mortar beds are greater than 50mm in thickness, install wire mesh as outlined in the **Unbonded Mortar Bed** section below. Alternatively, install in multiple layers less then 50mm thick. Scratch and allow to dry between layers. Slurry bond coats are required between layers.

Do not allow surry bond coats to skin or dry out; re-apply fresh slurry bond coat over skinned or dry slurry bond coat before applying fresh mortar. Do not apply slurry bond coats to areas that are not going to be immediatly covered. See TDS 1009 for more information.

Preparation

All surfaces should be between 4°C and 32°C and structurally sound, clean and free of all laitance, dirt, oil, grease, loose peeling paint, concrete sealers, curing compounds or anything that may inhibit bond. Dry, dusty concrete slabs or masonry should be dampened and excess water swept off. Installation may be made on a damp surface.

Mixing

Mix with water. For best results semi-dry mixes are best when mixed in a forced blade, static drum type mixer. Wetter, plaster type mixes are best when mixed in a rotating drum mixer. Do not mix semi-dry mixes in a rotating drum mixer.

Application

Mortar Bed

Mixing — Dry Pack Consistency for Floors

Mix 20kg of LATICRETE 3701 Fortified Mortar Bed with approximately 1.5 – 1.7 Litres of potable water. Adjust liquid to achieve the desired consistancy as site conditions and effects of the surrly bond coat alter the mix consistancy during the laying process. Mix to an easily compactable, semi-dry consistancy that holds its shape and presents with a slight sheen to the surface. Mix only what can be used within the pot life as a mortar

Bonded Mortar Bed: Installation

Pre-Screed before installation - Immediately before placing fresh mortar, apply and work into the surface, a nominal 1 – 2mm thick slurry bond coat made of 335 Premium Flexible Adhesive or other specified bond coats to the prepared substrate. Whilst the bond coat is still wet and tacky, spread and screed the mortar mix over the bond coat and compact well as the work progresses. Finish with a wood float to the required surface tolerances, falls and levels. Allow to dry for the application of membranes or tile.

Wet-Bed installation - In the case where tiles or pavers are to be beaten into a fresh, plastic semi-dry mortar bed that has been applied over a slurry bond coat as above; screed to the desired levels and falls, and compact. Float the surface flat and tight with a surcharge of mortar (additional mortar to account for the compaction in the beating and bedding process). Then apply a nominally 2mm thick slurry bond coat to the surface of the plastic mortar bed (only to the area that will immediately recieve tile or paver) with the flat edge of the trowel. While the slurry bond coat is wet and tacky, place the tile and beat in well to the correct level and alignment.

Unbonded Mortar Bed

Installation

Before placing mortar, install a cleavage membrane, e.g. 200 µm polyethylene sheeting, lapped and taped on the substrate. Place, screed and compact the mortar over the cleavage membrane (approximately 1/2 the depth of the mortar bed). Next place 25 mm x 25 mm to 75 mm x 50 mm, 1.2 mm to 2 mm diameter galvanized welded wire mesh over the 1/2 depth mortar bed, lapping the mesh as required. Then, place, compact and screed the remainder of the mortar bed. The wire mesh should be suspended in the middle of the mortar bed and 200mm laps exposed where adjoining mortar beds are to be installed later. Finish as required. Minimum mortar bed thickness shall be 40 mm. In the case where tiles are to be beaten into a wet and plastic mix as the work progresses and after the second layer of the mortar bed has been applied over the mesh; follow the process outlined in the Wet-Bed installation section above.

Note: A slurry bond coat should also be applied to the edges of mortar beds installed from previous work periods.

Wall Renders

Mixing Wall Renders

Mix 20 kg of LATICRETE 3701 Fortified Mortar Bed with 2.1 – 2.2 litres of potable water, nominally at 21°C. 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 prepared substrate. Apply "scratch coat" first – not to exceed 12 mm thickness. Scratch mortar before it hardens. After "scratch coat" hardens, apply the "float coat" working the mortar into good contact with the scratch coat. Do not exceed 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 21°C prior to the installation of tile.

Application

Concrete Repair & Patching: Semi-dry Mortar Consistency

Mixing Patching Mortars

Mix 20 kg of LATICRETE 3701 Fortified Mortar Bed with 1.5 - 1.9 litres of potable water. Adjust mix to the desired consistancy. Mix should be pliable and able to pack voids without slumping.

Concrete Repair & Patching:

Immediately before placing fresh mortar, apply and work into the surface, a nominal 1 – 2mm thick slurry bond coat made of 335 Premium Flexible Adhesive or other specified bond coats to the prepared substrate. Whilst the bond coat is still wet and tacky, pack the mortar into the repair taking care to compact the mortar and leave no voids. Some repairs may need to be packed in stages. Scratch and allow to dry between stages. Re-apply slurry bond coat between stages. Consult LATICRETE for information on treating exposed steel in immersed installations.

Cold Weather Note

The setting of Portland cement adhesives, mortars and grouts are retarded by low temperatures. Protect finished work for an extended period when installing in cold weather. For faster setting adhesives use LATICRETE Rapid Setting Thin-Set Adhesives and Additives. Do not set tile when surface temperature is below freezing or when substrate is frozen. For further information, see TDS1002.

Hot Weather Note

The evaporation of moisture in Portland cement adhesives, mortars and grouts is accelerated by hot, dry conditions. Apply to dampened surfaces and protect freshly spread mortar and finished work when installing in temperatures over 35°C. For further information, see TDS1018.

Cleaning

Clean tools and tile work with water while adhesive is fresh.

AVAILABILITY AND COST

Availability

LATICRETE and LATAPOXY® materials are available worldwide.

For Distributor information:
Toll Free: 1800 331 012
Telephone: 07 3865 1599

For online distributor information, visit LATICRETE at **www.laticrete.com.au**

Cost

Contact a LATICRETE Distributor in your area.

MAINTENANCE

LATICRETE and LATAPOXY grouts require routine cleaning with a neutral pH detergent and water. All stone and tiles should be maintained and sealed with STONETECH® products as appropriate for the specific tile / stone and installation situation.

All other LATICRETE and LATAPOXY materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

TECHNICAL SERVICES

Technical assistance

Information is available by calling:

Toll Free: 1800 331 012
Telephone: 07 3865 1599
Fax: 07 3865 2250

Technical and safety literature

To acquire technical and safety literature, please visit our website at **www.laticrete.com.au**

DISCLAIMER

- The information contained in this document is given in good faith and to the best of our knowledge is true and accurate.
- This information is subject to change without notice and it is the responsibility of the user to obtain up to date and current information.
- The use of this product is beyond our control and LATICRETE is not responsible for any loss or damage arising from the incorrect use of this product.
- Efflorescence is a normal condition of Portland cement and is not covered by any warranty. The use of LATAPOXY 310 Stone Adhesive, LATAPOXY 300 Adhesive, LATAPOXY SP-100, SPECTRALOCK® PRO / PRO Premium Grout† and SPECTRALOCK® 2000 IG will not contribute to any noticeable efflorescence. For further information, see TDS1159.

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† United States Patent No.: 6,881,768 (and other Patents).