



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.

**Globally Proven
Construction Solutions**



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

LATICRETE New Zealand
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Auckland, 1023, New Zealand

Telephone: +64 9 394 1900

Internet: nz.laticrete.com

Approximate Coverage

(Based on 20kg bag)

- 1 m² at 10 mm thick
- 2 m² 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/720 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

VOC Information

Green Building Council of Australia Green Star Office Design. VOC: 2 grams/litre.

Performance Properties

As per ASTM C270

PROPERTY	VALUES
Water Absorption ANSI A118.7.3.4	5%
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 AS3958–2023

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 AS3958 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 initial 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 than 50mm thick. Scratch and allow to dry between layers. Slurry bond coats are required between layers.

Do not allow slurry 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 immediately 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 consistency as site conditions and effects of the slurry bond coat alter the mix consistency during the laying process. Mix to an easily compactable, semi-dry consistency 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 or 254 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 receive 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.

Application

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 consistency. 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 or 254 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.

Application

Quarry Grout

Mixing

2.1 - 2.2 L of potable water to a 20 kg bag of LATICRETE 3701 Fortified Mortar Bed for a coarse quarry grout suitable for wide joints.

Installation

Generally, allow tile adhesives and bedding to dry for 24 hours at 21°C before grouting. Remove spacers, debris, excessive adhesive or anything that may inhibit a full joint before grouting. Clean down tiles and wipe with a wet sponge prior to grouting. Hydrate dry and hot tile bedding or adhesive. Do not leave water standing in joints. Check if tile may benefit from a grout release sealer.

Only apply as much grout as can be worked with given the current site conditions. Do not spread out too much grout in hot conditions. Do not let grout dry on the surface of the tile.

Spread grout with a sharp, firm rubber grout float. Work the grout paste into the joints until completely filled. Use diagonal strokes to pack and remove excess grout from the joints. Ensure that the joint is filled and the grout is not just sitting on the top, i.e. "bridging the joint".

Grout Primary Cleaning

Remove excess grout from the face of the tiles with the edge of the grout float. Hold the float at 90° angle and pull it diagonally across the joints and tile to avoid pulling out the material.

Grout Secondary Cleaning

Remove remaining grout with a damp sponge (not wet) or a damp towel. Work diagonally to the joints. Allow to dry. When the grout joints are firm polish the surface with a coarse nylon pad or coarse cloth and minimal water. Note: Use caution when polishing soft

glaze tiles or polished stone.

Do not allow grout to dry on the face of the tile. the tile.

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:

Telephone: +64 9 394 1900

For online distributor information, visit LATICRETE at nz.laticrete.com

Cost

Contact a LATICRETE Distributor in your area.

MAINTENANCE

LATICRETE® and LATAPOXY® grouts, sealers and sealants require routine maintenance and cleaning with a neutral pH detergent and water. See TDS 1113 for more information.

All other LATICRETE and LATAPOXY non-finish 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:

Telephone: +64 9 394 1900

Technical and safety literature

To acquire technical and safety literature, please visit our website at nz.laticrete.com

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 Premium Grout¹ and SPECTRALOCK 2000 IG will not contribute to any noticeable efflorescence. For further information, see TDS1159.

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¹ United States Patent No.: 6,881,768 (and other Patents).