



Ceramic Tile and Stone to XCEM ALPHAFLOOR™ Concrete Panels Installation Recommendations

SCOPE:

These general recommendations apply to internal and external installations of ceramic tile and natural stone on XCEM ALPHAFLOOR™ Concrete Panel substrates. Furnish all labour, materials and tools to complete the works. All works shall be carried out by experienced qualified trades.

NOTES TO SPECIFIER:

Contact LATICRETE for a custom specification.

LATICRETE installations systems are covered by a comprehensive 15- & 25-Year Systems Warranty. See LATICRETE DS1097 for more information on total LATICRETE Systems Warranties.

Install work in accordance with LATICRETE specifications, technical data sheets, product data sheets and AS3958.

Substrate deflection which includes the concrete panels, under all live, dead and impact loads, including concentrated loads, must not exceed $L/360$ for thin bed ceramic tile or $L/720$ for thin bed stone installations where L =span length.

Falls shall be built and be directed away from the building, see XCEM ALPHAFLOOR™ guide.

Provide protection for packaging and against exposure to rain or other sources of water.

MATERIALS:

Latex-Portland Cement Mortar Beds & Screeds:

- LATICRETE® 3701 Fortified Mortar Bed or
- LATICRETE® 3701 Mortar Admix gauged with
- LATICRETE® 226 Thick Bed Mortar

Waterproofing/Crack Isolation System:

- LATAPOXY® Moisture Shield
- LATICRETE® HYDRO BAN®
- LATICRETE® HYDRO BAN® Fillet & Sealant

Latex-Portland Cement Skims & Thin Bed Adhesive:

- LATICRETE® 254 Adhesive or
- LATICRETE® 335 Adhesive.

Epoxy Thin Bed Adhesive:

- LATAPOXY® 300 Epoxy Adhesive

Cementitious Grout:

- LATICRETE® PERMACOLOR Grout

Epoxy Grout:

- LATICRETE® SPECTRALOCK® PRO Premium Grout or
- LATAPOXY® SP100 Grout

100% Silicone Caulk:

- LATICRETE® LATAFIL™
- LATICRETE® LATAFIL™ 9118 Primer

Cleaners & Sealers:

- LATICRETE® STONETECH® KlensAll™ Cleaner
- LATICRETE® STONETECH® Grout Release
- LATICRETE® STONETECH® Bulletproof® Sealer or
- LATICRETE® STONETECH® Heavy Duty Sealer

Installation materials to be supplied by LATICRETE Australia Pty Ltd; Telephone: 1800 331 012; E-mail: technicalservices@laticrete.com.au; Website: www.laticrete.com.au

All tiles and stone shall be deemed not moisture sensitive, dimensionally stable and fit for purpose for the proposed installation by the tile or stone manufacturer. Contact LATICRETE where the tile/stone may be moisture sensitive, dimensionally unstable, pre-sealed or have an applied backing.

PREPARATIONS:

Areas that are to receive large format tile installed by the thin bed method shall be true to within 3 mm in 3m from the required plane and 1.5mm in 600mm when measured from the high spot. Adjacent sheet edges shall not exceed 1mm difference in height. Gypsum or asphalt-based compounds shall not be permitted. No polyvinyl (PVA) acetates shall be permitted in any substrate to receive tile. The surface, which is to be covered, shall be left clean, free of dust, plaster, sealer or curing compounds oil and that may inhibit bond. Any contamination shall be removed by the contractor who applied the material.

EXPANSION AND CONTROL JOINTS:

Existing joints in substrate are to be carried through the tile work and conform to architectural details. Expansion joints must be installed where tile abut restraining surfaces, such as perimeter walls, curbs, columns, corners, etc. Expansion joints must be installed at all "changes of plane" in the tile work. Refer to AS3958 for industry recommendations. The responsibility for calculating the actual spacing and size of the expansion joints shall be by the architect/engineer. Use LATICRETE LATASIL™, with LATASIL 9118 Primer where required. Minimum movement joint width shall be 6mm.

MIXING:

Mix according to printed product instructions included with each LATICRETE product package.

DIMENSIONAL SURFACE CORRECTION:

Dimensional surface correction should be made accurate in the sub-framing and installation of the sheets to meet levelness or flatness tolerances for direct application of waterproof membrane and tiling using the thin bed method of application. Screed or skim work shall be in accordance with LATICRETE technical data sheets and specifications to correct surface flatness to the required plane

WATERPROOFING /CRACK ISOLATION MEMBRANE INSTALLATION:

Ensure surfaces are flat, smooth, plumb and dry before applying membrane. Install LATAPOXY Moisture Shield under all external installations of HYDRO BAN Membrane. Use HYDRO BAN Fillet & Sealant to all transitions. Follow TDS 1003 for installation procedures. Detail HYDRO BAN over existing, non-structural, hairline cracks ($\leq 3\text{mm}$) in the substrate.

TILE AND STONE INSTALLATION BY THE THIN BED METHOD:

Minimum final adhesive bed thickness is 3mm for larger tile. Surface temperature must be between 4 - 32°C. Use the appropriate trowel notch size to ensure proper bedding of the selected tile. Back notch trowel all tile. Work the adhesive into good contact with the substrate and comb with notched side of trowel. Spread only as much adhesive as can be covered while the adhesive surface is still wet and tacky. Target 100% adhesion contact that is free from any voids. See AS3958 for trowel fixing methods. Clean excess adhesive from tile faces and joints as the work progresses. Allow installation to set 24 hours at 21° C prior to grouting.

GROUT INSTALLATION:

Verify grout joints are free of dirt, debris and spacers. Sponge or wipe dust/dirt off tile face and remove any water standing in joints. Surface temperature must be between 16 - 32°C for epoxy grout. Check for pigment staining and use STONETECH® Grout Release to help with clean-up and reduce staining. Fully pack joints and dress to the desired finish and depth. Inspect joints for pinholes/voids and repair them with freshly mixed grout. Within 24 hours, check for remaining haze and remove it with warm soapy water. Do not use acid cleaners.

JOINT SEALANT:

Where required, prime all movement joints with LATASIL 9118 Primer before applying LATASIL Silicone Sealer. Use

polyethylene backing rods and bond breaker tapes as required.

PROTECTION:

The contractor is to take precautions to protect the work from damage by other trades. Protect tile installations from exposure to rain for a minimum of 3 days at 21°C.

WEATHER NOTE:

The curing of waterproof membranes, tile fixing adhesives and grouts, are retarded, by low temperatures and accelerated by high temperatures. When hot, work in shaded environments, cover areas with light coloured tarps, and work at cooler times of days when scheduling allows. When cold, work in protected heated environments. Heating the substrate is more effective than heating the open area. Finished work should be protected for an extended period of time.

CLEANING & SURFACE SEALING:

Tiles shall be cleaned and sealed with LATICRETE STONETECH Sealers and Cleaners as appropriate for the installation. Consult the product data sheet and technical guides prior to use. For further information contact stonetech@laticrete.com.au Test prior to use in a small unobtrusive area.

LATICRETE Technical Services provides review of job specifications and plans, project detail planning and review, and provides answers to questions concerning the installation of Tile and Stone. Call toll free on 1800331012. E-mail: technicalservices@laticrete.com.au Internet: www.laticrete.com.au to obtain a copy of detailed product information, most recent revisions of LATICRETE data sheets, and for answers on installation questions.

Contact LATICRETE for a custom specification.

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