



Betona® Concrete Tiles

Short Form Specification



SPECIFICATION

This specification covers the installation of Betona® concrete tiles on floors and walls in interior areas.

NOTE TO SPECIFIER

Tiles, mortars, and grouts do not provide a completely waterproof barrier. Detail and specify LATICRETE® Hydro Ban™ in all wet areas and over existing, non-structural, hairline cracks ($\leq 1/8"$ or 3mm) in the substrate. LATICRETE 254 Platinum may be used to install tile over "green" or fresh concrete, cement mortars, and cement plasters. A LATICRETE "System" approach to installation is covered by a comprehensive 25 year warranty (Reference LATICRETE DS 025.0).

MATERIALS

Tiles: Betona concrete tiles as manufactured by Polycem, LLC; www.betona.com

Latex Portland Cement Thick Bed Mortar: LATICRETE 3701 Fortified Mortar Bed

Sound and Crack Isolation Mat: LATICRETE 170 Sound & Crack Isolation Mat.

Waterproofing and Crack Suppression Membrane: LATICRETE Hydro Ban

Latex Portland Cement Thin Bed Adhesive Mortar: LATICRETE 254 Platinum

Epoxy Thin Bed Adhesive Mortar: LATAPOXY® 300 Adhesive

Polymer Fortified Portland Cement Grout: LATICRETE PermaColor™ Grout [For joint widths $1/16"$ to $1/2"$ (1.5 mm to 12 mm)]

Stain Resistant Epoxy Grout (For residential and light commercial applications): LATICRETE SpectraLOCK® PRO Grout.

100% Silicone Caulk: LATICRETE Latasil™

Tile installation materials to be supplied by LATICRETE International, Inc.; Bethany, CT; USA Telephone: 1 (203) 393-0010; Fax: 1 (203) 393-1684; E-mail: technicalservices@laticrete.com; Website: www.laticrete.com.

PREPARATIONS

Prior to commencing the installation, the contractor should examine substrates and notify the General Contractor and Architect of any existing conditions or surface contamination which will require correction before the work commences. Before starting, substrates must be cleaned to remove curing compounds, sealers, soil, mortar, dirt, dust, etc. Curing compounds or sealers must be removed by bead-blasting, grit / sand blasting, hydro blasting, diamond wheel grinding with dustless vacuum attachment, or equivalent methods of mechanical scarifying. After removal of the curing compounds and sealers, all rough, uneven or "out-of-plumb" surfaces must be made "plumb and true" to within $1/4"$ in 10' (6 mm in 3 m) and $1/16"$ in 1' (1.5 mm 300 mm) using LATICRETE 3701 Fortified Mortar Bed. Dry or dusty concrete or masonry surfaces must be water washed and excess water removed just prior to the application of LATICRETE underlayments, membranes and mortars.

EXPANSION AND CONTROL JOINTS

Existing joints in subsurface must be carried through the tile work and must conform to architectural details. Expansion joints must be installed where tile abuts 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 Tile Council of North America (TCNA) Detail EJ-171 (Current Year) for industry recommendations

INSTALLATION OF WATERPROOFING AND CRACK SUPPRESSION MEMBRANE

Install waterproofing membrane in all wet areas before tile is installed. Install crack suppression membrane over all hairline cracks ($\leq 1/8"$ or 3mm) in surfaces prior to installing tile. Membranes are to be installed in strict accordance with the LATICRETE written installation instructions.

MIXING

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

INSTALLATION OF TILE BY THE THIN BED METHOD

Apply a thin layer of thin set mortar to the back of each tile as the work progresses. Next, apply the thin set mortar to the substrate with scraping motion, using the flat side of the notched trowel. Work the thin set mortar into good contact with the substrate. Using the notched side of the trowel, comb the thin set mortar in one direction. Use a trowel with notches large enough to ensure full coverage and support of the tile. Firmly press the tiles into the fresh thin set mortar and move them perpendicularly across the ridges to flatten and compress the ridges. This helps to produce maximum coverage to the backs of the tile and leave the corners and edges fully supported. Do not apply more thin set mortar than can be covered within 10-15 minutes, or while thin set mortar is still wet and tacky. Periodically, pull up a freshly installed tile to verify full thin set mortar coverage is being achieved. Allow tile installation to set for 24 hours at 70° F (21° C), prior to grouting. Excess thin set mortar must be cleaned from tile surfaces with a clean, wet cloth or sponge, while it is still fresh.

GROUTING

Joints must be packed full and free of all voids and pits. Excess grout must be cleaned from the surface of the tiles as the work progresses, while the grout is fresh and before it hardens. The day after installation cement grout film or haze must be removed using a neutral pH detergent and water solution. Epoxy grout haze should be removed the same day as indicated in the printed product instructions. No acids should be used for cleaning tile work.

PROTECTION

The contractor must take precautions to protect the finished work from damage by other trades. Do not allow construction traffic on fresh grout joints. Builder must provide up to 3/4" (18 mm) thick plywood or OSB protection board, over non-staining kraft paper, to protect floors after installation until the materials have cured. Allow the cement grout to cure for a minimum of 7 days at 70° F (21° C) before aggressive cleaning. *NOTE: Steam cleaning LATICRETE® SpectraLOCK® PRO Grout is not recommended.*

COLD WEATHER NOTE

The curing of installation materials is retarded by low temperatures and finished work should be protected for an extended period of time. Typically, for every 18° F below 70° F (10°C below 21°C), installation materials take twice as long to cure.

LATICRETE Technical Services provides review of job specifications and plans, project detail planning and review, and provides answers to questions concerning the installation of ceramic tile, brick, marble and stone. Call toll free USA +1 (203) 393-0010. Fax: USA +1 (203) 393-1684. E-mail: technicalservices@laticrete.com, Internet: www.laticrete.com. To obtain a copy of detailed product information, most recent revisions of LATICRETE data sheets, and answers to installation questions, E-mail: technicalservices@laticrete.com or call (800) 243-4788 x.235.

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