STONEPEAK
high tech porcelain

Thin-Body Porcelain Panel Installation Guidelines

SCOPE

Interior installations of STONEPEAK® thin-body porcelain panels on interior floors and walls.

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 (≤ 1/8" or 3mm) in the substrate. Floor installations of thin-body porcelain panels are suitable for "light commercial" traffic exposure only, as defined by ASTM C627. A LATICRETE "System" approach to installation is covered by a comprehensive 25 year warranty (Reference LATICRETE DS 025.0 APD).

MATERIALS

Tiles: STONEPEAK thin-body porcelain panels as supplied by Stone Peak Ceramics, Inc.; www.stonepeakceramics.com.

Thick Bed Mortar: LATICRETE® 3701 Fortified Mortar Bed

Waterproofing/Crack Suppression Membrane: LATICRETE Hydro Ban

Thin Bed Adhesive Mortar: LATICRETE 254 Platinum

Rapid-Setting Thin Bed Adhesive Mortar: LATICRETE 254R Platinum Rapid

Rapid-Setting Medium Bed Adhesive Mortar: LATICRETE 4-XLT™

Polymer Fortified Cement Grout: LATICRETE PermaColor™ Grout

Stain Resistant Epoxy Grout: LATICRETE SpectraLOCK® PRO Premium 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.

SUITABLE SUBSTRATES

- Concrete slabs (on-grade or above-grade)
- Existing ceramic tiles (must be clean, sound, and well-bonded to substrate beneath)
- Cement backer board walls over steel or wood framing
- Properly prepared concrete and CMU walls

PREPARATIONS

The contractor is to examine substrates and advise General Contractor and Architect of existing conditions and surface contamination which will require correction before the work commences. Substrates are to comply with deflection requirements called for by International Building Code (IBC), International Residential Code (IRC), or applicable local building code. All curing compounds, concrete sealers, residual installation mortars, dirt, dust, paints, etc. are to be mechanically removed using diamond or carborundum grinding disks; followed by a clean water wash. Substrates are to be prepared to a floor flatness (FF) of >50. Maximum substrate variation not to exceed 1/8" in 10' (3mm in 3m) and 1/16" in 1' (1,5 mm in 30 cm) when measured from surface high points with a straight-edge. LATICRETE 3701 Fortified Mortar Bed is to be used for truing / flattening all suitable concrete and masonry substrates.

MOVEMENT JOINTS

Existing joints in substrate to be carried through the thin-body porcelain panel installation and conform to architectural details. Expansion joints are to be installed where thin-body porcelain panels meet restraining surfaces (e.g. perimeter walls, curbs, columns, corners, etc.) and at all changes-in-plane in the Work. Joints are to be clean and free of all contaminants and thin-set mortar. Refer to Tile Council of North America (TCNA) Detail EJ-171 for industry guidelines. LATICRETE® Latasil™ to be used to caulk all movement joints in thin panel installation.

INSTALLATION OF WATERPROOFING AND CRACK ISOLATION MEMBRANE

LATICRETE Hydro Ban™ is to be installed in all wet areas and over all hairline cracks (≤ 1/8" or 3mm) before tile is installed. Install per LATICRETE written installation instructions. Refer to LATICRETE DS 663.0 and DS 663.5 for complete information.

MIXING

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

THIN-BODY PORCELAIN PANEL INSTALLATION

Installations are to comply with current revisions of ANSI A108.02, A108.1B and ANSI A108.5. Select an appropriately-sized 'Euro-notch' trowel or slant-notch trowel (e.g. 5/16" x 5/16" or 8mm x 8mm) that will provide full bedding and coverage to the panel backs. Use flat side of trowel to apply the adhesive mortar into full contact with the substrate. Immediately following, apply mortar with notched side of trowel. Spread only as much mortar as can be covered while the mortar surface is still wet and tacky. Mortar is to be applied to the panel backs using the notch side of the trowel. Trowel ridges on both the panel backs and substrate must be parallel to each other when panels are installed to assist in achieving 100% adhesive coverage to panel backs. Mechanical edge-leveling systems are strongly recommended to help minimize lippage between panel edges. Consult edge-leveling system manufacturer for detailed instructions on use of their systems. Allow installation to cure for minimum 48 hours at 70° F (21° C). Clean excess mortar from panel surfaces and panel joints while fresh.

PORTLAND CEMENT GROUTING

Allow thin-body porcelain panel installation to cure minimum 48 hours at 70° F (21°C). Verify grout joints are free of dirt, debris, thin-set mortar and grout spacers. Sponge or wipe dust/dirt off panel surfaces. Remove all water standing in joints. Apply grout release to panels to facilitate cleaning. Surface temperature must be between 40-90° F (4-32°C). Mixing: Pour approximately 64 oz. (1.9 L) of clean, potable water into a clean mixing container. Add a 25 lb. (11.3 kg) bag of LATICRETE PermaColor™ Grout to the container while mixing. Mix with a slow speed mixer to a smooth, stiff consistency. Allow to slake for 5 minutes and remix. Install grout per current revisions of ANSI A108.1A (7.0 Grouting of tile), ANSI A108.02 (4.5 Cleaning tile) and ANSI A108.10. Dampen dry surfaces with clean water. Spread using a sharp edged, hard rubber float and work grout into joints. Using diagonal (at 45° angle to direction of grout line) strokes, pack joints full and free of voids/pits. Hold float face at a 90° angle to panel surface and use float edge to "squeegee" off excess grout, stroking diagonally to reduce pulling grout out of filled joints. Initial cleaning can begin when grout has become firm, typically 15-20 minutes after grouting @ 70° F (21°C). Higher temperatures may require faster time to initial cleaning; wider joints or lower temperatures may require a longer time to initial cleaning. Begin initial cleaning by lightly dampening the entire grouted area with a damp sponge. Then, wash clean the entire area with a damp (not wet) sponge. Drag a clean, dampened sponge diagonally over the panel surfaces to remove grout haze left after "squeegeeing." Rinse towel/sponge frequently. Change rinse water at least every 200 ft^2 (19m^2). Repeat this cleaning sequence again if grout haze is still present. Allow grout joints to become firm. Buff surface of grout with clean coarse cloth. Inspect joint for pinholes/voids and repair them with freshly mixed grout. Within 24 hours, check for remaining haze and remove it with warm soapy water and a nylon scrubbing pad, using a circular motion, to lightly scrub surfaces and dissolve haze/film. Do not use acid cleaners on latex Portland cement grout less than 10 days old.

EPOXY GROUTING

Allow thin-body porcelain panel installation to cure minimum 48 hours at 70° F (21°C). Store liquid components of LATICRETE SpectraLOCK® PRO Premium Grout† for 24 hours @ 70-80°F (21-27°C) prior to use to facilitate mixing and application. Substrate temperature must be 40-95°F (4-35°C). Verify joints are free of dirt, debris, thin-set mortar or grout spacers. Sponge or wipe dust/dirt off panels faces and remove all water standing in joints. Apply grout release to panel faces to facilitate cleaning. Cut open pouch and pour LATICRETE SpectraLOCK PRO Premium Grout Part A Liquid into a clean mixing pail. Then open pouch and pour LATICRETE SpectraLOCK PRO Premium Grout Part B Liquid into the mixing pail. Mix by hand or with a slow speed (<300 rpm) mixer until the two liquids are well blended. Then, while mixing, add LATICRETE SpectraLOCK Grout Part C Powder and blend until uniform. For narrow joints, it is acceptable to leave out up to 10% of the LATICRETE SpectraLOCK Grout Part C Powder to produce a more fluid mix. Install

LATICRETE SpectraLOCK PRO Premium Grout in compliance with current revisions of ANSI A108.02 (3.13) and ANSI A108.6 (3.0 - 4.0). Spread using a sharp edged, firm rubber float and work grout into joints. Using strokes diagonal (at 45° angle) to the grout lines, pack joints full and free of voids/pits. Then hold float face at a 90° angle to grouted surface and use float edge to "squeegee" off excess grout, stroking diagonally to avoid pulling grout out of filled joints. Once excess grout is removed, a thin film/haze will be left. Initial cleaning of the remaining film/haze can begin approximately 20 minutes after grouting (wait longer when temperatures are cooler). Begin by mixing one cleaning additive packet with 2 gallons (7.6 L) of clean water in a clean bucket to make cleaning solution. Dip a clean sponge into the bucket and then wring out cleaning solution until sponge is damp. Using a circular motion, lightly scrub grouted surfaces with the damp sponge to loosen grout film/haze. Then drag sponge diagonally over the panel surfaces to remove froth. Rinse sponge frequently and change cleaning solution at least every 50 ft^2 (4.7m^2). Discard sponges as they become "gummy" with residue. Check work as you clean and repair any low spots with additional grout. One (1) hour after finishing first cleaning, clean the same area again following the same procedure but utilizing a clean white scrub pad and fresh cleaning solution. Rinse scrub pad frequently. Drag a clean sponge diagonally over the panel surfaces to remove froth. Use each side of sponge only once before rinsing and change cleaning solution at least every 50 ft^2 (4.7m^2). Allow cleaned areas to dry and inspect panel surfaces. For persistent grout film/haze (within 24 hours), repeat scrubbing procedure with undiluted white vinegar and clean pad. Rinse with clean water and allow surface to dry. Inspect grout joint for pinholes/voids and repair them with freshly mixed LATICRETE® SpectraLOCK® PRO Premium Grout[†]. *Cautions*: *Do not use acid cleaners on epoxy grout less than 7 days old.*

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. Protect floor installations of thin-body porcelain panels for 72 hours at 70° F (21°C) before exposing to light foot traffic. Protect floor installations of thin-body porcelain panels installed with rapid-setting thin-set mortar for 12 hours at 70° F (21°C) before exposing to light foot traffic. 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 Premium 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 18º F below 70º F (10ºC below 21ºC), tile installation materials take twice as long to cure.

R June 27, 2012

LATICRETE

LATICRETE International, Inc.
Bethany, CT 06524-3423 USA
www.laticrete.com ▪ technicalservices@laticrete.com