



## **NURAZZO® TILES**

**SPECIFICATION** This specification covers the installation of Nurazzo® terrazzo tiles on interior floors and walls in dry areas and areas subjected to intermittent water exposure.

**NOTE TO SPECIFIER** Tiles, mortars, and grouts do not provide a completely waterproof barrier. Detail and specify LATICRETE® Hydro Ban<sup>™</sup> in all wet areas and over existing, non-structural, hairline cracks (≤ 1/8" or 3mm) in the substrate. A LATICRETE "System" approach to installation is covered by a comprehensive 25 year warranty (Reference LATICRETE DS 025.0).

Although Nurazzo Tiles are to be sealed after the installation is completed, the omission of grout joints between Nurazzo Tiles can potentially expose the setting bed and the substrate on which the tiles are installed to intrusion by water and other contaminants.

**MATERIALS** Tiles: Nurazzo Tiles as manufactured by Nurazzo; 212 Boring Drive; Dalton, GA 30721; Toll Free Phone: 1-888-NURAZZO (687-2996) <u>https://nurazzo.com/</u>

Thick Bed Mortar: LATICRETE 3701 Fortified Mortar Bed
Waterproofing/Crack Suppression Membrane: LATICRETE Hydro Ban
Thin Bed Adhesive Mortar: LATICRETE 254 Platinum
Large Heavy Tile Mortar: LATICRETE MULTIMAX™ Epoxy Thin Bed Adhesive Mortar: LITE

LATAPOXY® 300 Adhesive: (For installing Nurazzo Tiles to clean, rigid, steel substrates)

**Polymer Fortified Cement Grout (Optional)**: LATICRETE PermaColor® Grout [For joint widths 1/8" to 1/2" (1.5 mm to 12 mm)].

**Stain Resistant Epoxy Grout (Optional)**: for residential and light commercial applications): LATICRETE SpectraLOCK® PRO Premium Grout, LATICRETE SpectraLOCK 2000 IG (for Commercial Kitchens, Operating Rooms, Veterinarian Hospitals etc..

Pre-Mixed Grout (Optional): LATICRETE SpectraLock® 1 Grout

100% Silicone Caulk: LATICRETE Latasil™

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

**PREPARATIONS** The moisture vapor emission rate (MVER) of concrete and all cementitious substrates to receive Nurazzo Tiles must be  $\leq$  7.0 lbs / 1,000 square feet in 24 hours (3.15 kg / 90 m2 in 24 hours), when tested in accord with ASTM F1869, using an anhydrous calcium chloride test kit. When LATICRETE Hydro Ban is used for waterproofing and / or crack suppression, the MVER of all cementitious substrates must be  $\leq$  5

Ibs / 1,000 square feet in 24 hours (2.25 kg / 90 m2 in 24 hours). Prior to commencing the installation, the contractor must examine substrates and advise 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, diamond wheel grinder 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 flat to within 1/8" in 10' (3 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 substrate 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 prior to installing Nurazzo Tiles. Install anti-fracture membrane over all hairline cracks (< 1/8" or 3mm) in surfaces prior to installing Nurazzo Tiles.

**LEVELING-SYSTEMS** NURAZZO recommends using the leveling-clip system for the installation of our product.

**MIXING** Mix according to printed product instructions included with each product package. Mix only long enough to wet out the batch. Do not over-mix. **INSTALLATION OF NURAZZO® TILES BY THE THIN BED METHOD** 

Apply the thin bed mortar to the substrate with scraping motion, using the flat side of the notched trowel. Work the thin bed mortar into good contact with the substrate. A trowel with notches large enough to ensure full coverage and support of the tile is required. Using the notched side of the trowel, comb the thin bed mortar in one direction. Back-butter each tile with a thin layer of thin bed mortar. Firmly press the tile into the fresh thin bed 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 tile corners and edges fully supported. Do not apply more thin bed mortar than can be covered within 10-15 minutes, or while thin bed mortar coverage is being achieved. Allow tile installation to set for 24 hours at 70° F (21° C), prior to grouting and prior to exposure to foot traffic. Excess thin bed mortar must be cleaned from tile surfaces with a clean, wet cloth or sponge, while it is still fresh. Seal the face of Nurazzo Tiles (honed only) with Daycon Sunbrite in accord with the written recommendations of Nurazzo.

**Large Heavy Tile Mortar Method:** Install LATICRETE MULTIMAX<sup>™</sup> LITE in compliance with current revisions of ANSI A108.02 (3.11), A108.1B and ANSI A108.5. Use the appropriate trowel notch size to ensure proper bedding of the tiles. Work LATICRETE MULTIMAX<sup>™</sup> LITE into good contact with the

substrate and comb with notched side of trowel. Spread only as much LATICRETE MULTIMAX<sup>™</sup> LITE as can be covered while the mortar surface is still wet and tacky. When installing large format (>8" x 8"/200mm x 200mm) tiles, rib/button/lug back tiles, pavers or sheet mounted ceramics/mosaics, apply Large Heavy Tile Mortar onto the back of (i.e. 'back-butter') each piece/sheet in addition to troweling Large Heavy Tile Mortar over the substrate. Beat each piece/sheet into the Mortar with a beating block or rubber mallet to insure full bedding and flatness. Allow installation to set until firm. Clean excess LATICRETE MULTIMAX<sup>™</sup> LITE from tile or stone face and joints between pieces.

## SPECTRALOCK PRO PREMIUM GROUT:

Allow porcelain panel installation to cure minimum 48 hours at 70° F (21°C). Store liquid components of LATICRETE SpectraLOCK<sup>®</sup> PRO Premium Grout<sup>+</sup> 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<sup>2</sup>(4.7m<sup>2</sup>). 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<sup>2</sup>(4.7m<sup>2</sup>). 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<sup>®</sup> PRO Premium Grout<sup>†</sup>. Cautions: Do not use acid cleaners on epoxy grout less than 7 days old.

**INSTALLATION: SPECTRALOCK 1:** Surface Preparation Before starting to grout, remove spacers and debris in grout joints and remove dust and dirt using a wet sponge. Do not leave water standing in joints. The use of a topical sealer or grout release applied to unglazed porcelain tile, abrasive, non-slip or rough textured tiles or porous tile or stone surfaces before grouting will facilitate cleaning. Note: when grouting in hot weather refer to FINAL INSPECTION AND CLEANING TDS 176 Hot Weather Tiling and Grouting. Substrate temperature must be between 50°F (10°C) and 90°F (32°C). Prior to grouting, apply SPECTRALOCK 1 to a small area to ensure the product will not stain. Apply STONETECH® Grout Release or a suitable STONETECH sealer to the surface of the tile, if necessary. Application See Data Sheet 36589.5, How To Install SPECTRALOCK® 1 Pre Mixed Grout, for detailed installation instructions. This document is available online atwww.laticrete.com. Please note that working time is affected by many variables including surface and room temperatures. Warmer climates, for example, will shorten curing & working time, while colder conditions will extend the cure time. Installation substrate temperature range should be between 50°F (10°C) - 90°F (32°C). Do not add water or any other materials to the grout mixture. This will have an adverse effect on the product and void all warranties. Clean-up is critical. Prepare for the initial and final washes by having pails of clean water ready for the clean-up process. NOTE: After surfaces are cleaned, allow to dry thoroughly before grouting. • Spread grout using a sharp edged, firm rubber grout float. Work the grout diagonally across the joints, packing them full. • "Cut" excess grout off the tile surface using the edge of the float held at a 90° angle like a squeegee, stroking diagonally to avoid pulling grout out of filled joints. Cleaning NOTE: Have clean water, new clean sponges, white nylon scrub or scouring pads and clean microfiber towels ready. • Once grout has been spread, wait approximately 5-10 minutes before cleaning (or within an "arms-length" of what has been spread). Wait slightly longer at colder temperatures. • Submerge clean sponge into water and wring until the sponge is moist but not dripping with water. Putting too much water on the grout joints could affect the cure time and appearance of grout joints. • Change wash water every 50 ft<sup>2</sup> (4.6 m<sup>2</sup>). • Wipe grout joints and tile surface in a light circular motion, loosening grout residue while keeping the joints smooth and full. • Drag a clean sponge diagonally over the scrubbed surfaces to remove any remaining grout residue. • For best results, we recommend to rinse sponge after every final pass; use each side of sponge only once between rinsing. • Check work as you clean. If necessary, repair any low spots with additional grout. WALL APPLICATIONS Instead of a sponge, the use of a damp, well wrung, folded terry cloth towel can be helpful to remove excess grout while smoothing joints less than 1/8" (3 mm) on walls. Use light pressure when using folded terry cloth towel. F.7.3.12 - 0315 • Begin final cleaning when grout joints are hard to the touch, depending upon the size of the grout joint and the ambient temperature. Smaller grout joints (1/16" (1.6mm) or 1/8" (3.2mm)) would take less time to start to clean, approx. 45 min. For larger grout joints (3/8" (9.5 mm)) we recommend waiting about 1 hour to ensure the grout joints are hard and cannot be disturbed with the second cleaning. • Use only clean water and simply dunk the white nylon scrub or scouring pad in the water and let all the water pour out – it should be nearly dry and then start to break up the grout haze left from the initial wash on the surface of the tiles. • Rinse scrub pad frequently, letting all water escape before continuing to clean. • Then, use a clean cloth to the scrubbed surfaces to remove any residue. • Allow cleaned areas to dry and inspect tile/stone surface. • If haze remains on the tiles the following day, it can be buffed off the using a nylon scrub pad. • Make certain to check tile surface with adequate lighting after the tile surface is dry. • Rinse with clean water and allow surface to dry. Inspect grout surface and repair as required with fresh grout. • For ANY area that will later receive intermittent water exposure, allow area to cure a minimum of 48 hours at 70°F (21°C) & 50% RH. • Protect finished

surface from traffic for at least 24 hours at 70°F (21°C). • Do not expose grout to acid cleaners for 14 days. • Allow grout to cure for 14 days at 70°F (21°C) prior to use in submerged applications or steam rooms. See LATICRETE Technical Data Sheet 192 for more information on grouting of ceramic tile in submerged installations. For use with our SPECTRALOCK® Dazzle™ Please follow these instructions to use with any color in the SPECTRALOCK 1 Pre-Mixed Grout: • Obtain a 1 gal (3.8 L) bucket of SPECTRALOCK 1 Pre Mixed Grout and an empty 1 gal (3.8 L) bucket. • With a margin trowel – take approx. 1/2 of the material within the SPECTRALOCK 1 Pre-Mixed Grout bucket and place within the empty bucket. • Then in the center of each bucket create a small hole with a margin trowel. • Open the Dazzle (any color) and proceed to place 1 jar of Dazzle within each bucket inside the small holes in the center of each bucket. • Next, take a good scoop of SPECTRALOCK 1 PreMixed Grout and cover the Dazzle in the hole very slowly and gently (this helps to mitigate the Dazzle from dispersing in the air and out of the bucket). • Then proceed to mix by hand (It is not recommended using any drills to mix the SPECTRALOCK 1 PreMixed Grout since that would help to incorporate more Data Sheets are subject to change without notice. For latest revision, visit laticrete.com. DS-36589-0524air in the mixture – potentially speed up the cure/setting process). • Thoroughly mix the dazzle and disperse throughout the bucket. • Once each bucket has been mixed extensively and the Dazzle seems to be dispersed evenly within each bucket- then add the other 1/2 gal (1.9 L) back into the original bucket. Now you are ready to grout or reseal the original bucket to keep the SPECTRALOCK 1 from skimming over & curing. NOTE: The use of dazzle in the mix will shorten the shelf life of the SPECTRALOCK 1.

Installation of SpectraLOCK 2000 IG: (Commercial areas) Surface Preparation Before starting to grout remove spacers and debris in grout joints and remove dust and dirt using a damp sponge. Allow to dry. Do not leave water standing in joints. Do not clean tiles with acid cleaners. Substrate temperature must be between 45°F (7°C) and 90°F (32°C). Note: Temperature will affect working properties of SPECTRALOCK 2000 IG. Warm temperatures will speed curing and shorten working time. Cool temperatures will slow curing and require longer time to traffic. Store SPECTRALOCK 2000 IG (including Part C) at 70°F (21°C) for 24 hours prior to use. Mixing Pour SPECTRALOCK 2000 IG Part A and Part B into a clean mixing pail and mix thoroughly with a drill mixer until liquids are completely blended. Add all of the Part C powder. The mix will look thick at the beginning. Whip it thoroughly with high speed mixer (>450 rpm) until uniformly blended (Minimum 2 Minutes). This will aerate the grout to a very fluffy mix. Application For maximum pot life, remove grout from bucket and spread on floor or plastic sheeting. Spread the grout with sharp, firm rubber grout float. Work the grout paste into the joints. Insure the joint is filled and grout is not sitting on top. Remove excess grout from the face of the tiles with the edge of the grout float. Hold the float at 90° F.7.3.12 - 0315 angle and pull it diagonally across the joints and tile to avoid pulling out the material. Initial Cleaning – USE INITIAL WASH CLEANING ADDITIVE. Once grout has been spread, wait approximately 30 minutes at 70°F (21°C) prior to beginning initial wash. Add Initial Wash cleaning additive to 2 gals (7.6 L) of clean water and mix until fully dissolved. Do not mix cleaning additive with grout. Wipe grout joints and tile surface with a white nylon pad and plenty of water (with the cleaning additive) using a circular motion. Drag a damp clean sponge diagonally over the scrubbed surface to remove grout residue. Final Cleaning – USE FINAL WASH CLEANING ADDITIVE. Wait at least 90 minutes after the initial wash at 70°F (21°C) for the final wash using the same procedure as in the initial wash. Prepare another two gallons of clean water and add the Final Wash cleaning additive and mix until fully dissolved. In the final wash avoid contact with the grout - clean tile surface only.

**GROUTING AND POINTING JOINTS** Nurazzo requires installing Nurazzo tiles with a grout joint. Nurazzo recommends a minimum 1/8" grout line. Using Nurazzo written recommendations, apply one coat of Sunbrite prior to grouting. When grouting, the grout joints must be packed full and free of all voids and pits. Excess grout must be cleaned from the surface of the tile 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 solution. Epoxy grout haze should be removed the same day as indicated in the printed product instructions.

No acids should be used for cleaning Nurazzo Tiles. If using LATICRETE® SpectraLOCK PRO Premium Grout, use electric dishwashing machine detergent in place of the cleaning additive that is provided in the LATICRETE SpectraLOCK PRO Grout packaging. Mix approximately 1/4 cup (0.06 l) of the detergent to 3.5 gallons (13.3 l) of clean water. Change the cleaning water and sponge frequently for best results. **Due to the difficulties of installing large format tiles with the butt joint method, Nurazzo does not recommend this type of installation for Nurazzo tiles. Nurazzo will not warrant butt joint installations.** 

**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 Premium Grout is not recommended.* 

**COLD WEATHER NOTE** The curing of latex, epoxy, and Portland cement based 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), latex, epoxy, and Portland cement based materials take twice as long to cure.

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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) 393-684. 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. © 2024 LATICRETE INTERNATIONAL, Inc. The right to copy, distribute, and utilize for commercial purposes is specifically granted to Stone and Tile Importers and manufacturers, Architects, Engineers, and Specifications Writers.