Terrazzo Tile Installation Specification. 15 Year System Warranty.

This specification covers the installation of cement-based terrazzo tile to a suitable, internal, concrete floor substrate. Refer to Architectural Drawings and Details for specific installation materials & methods for each specific area and application.

1.0 GENERAL:

1.1 All works shall be carried out by experienced qualified trades.

2.0 SCOPE OF WORK:

2.1 Furnish all labour, materials and equipment necessary to complete the installation of the Terrazzo Tile, in shock resistant, fixing and grout materials, as specified herein and where indicated in drawings and as allowed by the tile manufacturer. Install thin, load bearing waterproof membranes, as specified to floor areas indicated in drawings.

NOTES:

2.2 This is a total system. Call out products by name, number and application to ensure that specifications do not differ from manufacturer's instructions.

2.3 The following shall be inserted in the Concrete Section:
"No sealers, crystalline waterproofing additives or curing compounds shall be used on concrete slabs or masonry which are to be covered with the membrane or terrazzo tile. Slabs shall be covered and wet cured for a minimum of seven (7) days. Allow new concrete slabs to cure and dry for the recommended times before the installation of waterproof membrane or the tile. Areas requiring fill, patching or levelling shall be prepared / screeded using LATICRETE 3701 Fortified Mortar Bed in accordance with the manufacturer's instructions. Gypsum or asphalt-based levelling 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 and form oil. Any contamination shall be removed by the contractor who applied the material."

2.4 For thin-bed tile installations the maximum allowable variation in the substrate is 3mm in 3m from the required plane and 1.5mm in 600mm when measured from the high points in the surface.

2.5 Tile and there, fixing and grouting mortars do not constitute a waterproof barrier. Specify & detail LATICRETE HYDRO BAN Liquid Applied Waterproof Membrane where a waterproof membrane is required.

2.6 Unless otherwise noted in this document, product data sheets, how to guides, technical data sheets and other LATICRETE guidelines, all work should be in accordance with AS3958.1 & 2.

2.7 This specification may not include all the information required to complete the works. Contact LATICRETE for any additional information.

2.8 Consult the relevant, current product data sheets and how to guides for more complete and installation information on products specified in this document.

2.9 Follow all occupational health and safety and site safety procedures. Refer to the relevant material safety data sheets for all safe handling information on the Terrazzo Tile and other products nominated in this specification.
2.10 For the purpose of this specification it is deemed all Terrazzo Tile are suitably calibrated for thin-set installation, dimensionally stable, not moisture sensitive and deemed to be fit for purpose and suitable for the proposed application by the manufacturer. Consult and follow the Terrazzo Tile Technical Manual regarding technical characteristics of the product before use.

2.11 Concrete substrates or other masonry underlayment’s should be dry and not have moisture equilibrium greater than 75% relative humidity as measured with moisture probes.

2.12 Contact LATICRETE for a Custom Specification.

3.0 MATERIALS:

3.1 All Terrazzo Tile where call for shall be as supplied by; .................................................................

3.2 Mortar Beds & Concrete patching materials shall be: LATICRETE 3701 Fortified Mortar Bed.
Slurry Bond Coat materials shall be: LATICRETE 254 Platinum Tile Adhesive
Tile Adhesive shall be: LATICRETE 254 Platinum Tile Adhesive
Tile grout materials shall be: LATICRETE PERMACOLOR Grout
Waterproofing & crack suppression materials shall be: LATICRETE HYDRO BAN Waterproof Membrane, HYDROBAN Fillet and Sealant and as required LATAPOXY Moisture Shield.
Movement joint sealant shall be: LATICRETE LATASIL Sealant and 9118 Primer as required.
Terrazzo Sealer shall be: LATICRETE STONETECH KlenzAll Cleaner and STONETECH Heavy Duty Sealer.
All waterproofing, render mortars, tile fixing and grouting materials shall be as provided by LATICRETE Australia Pty Ltd. 29 Telford Street, VIRGINIA. QLD. 4014, Australia. Telephone: 1800331012. Email: technicalservice@laticrete.com.au Web: au.laticrete.com
Installation shall be in strict accordance with manufacturer’s instructions.

3.3 All materials shall be delivered to the job site in the original factory containers with the manufacturer’s identification on each package. The addition of water or other materials to dilute the installation materials on the job site will not be permitted.

4.0 APPROVALS AND SAMPLES:

4.1 Provide mock ups of each type/style/finish/size/colour of terrazzo tiles along with respective installation adhesives, mortars, grouts and other installation materials to match as close as possible the final installed environment.

5.0 HANDLING AND STORAGE OF MATERIALS:

5.1 Handle and store tile in a manner to avoid contamination & intrusion of foreign matter that may inhibit bond. Follow the terrazzo tile manufacturer’s technical information.

5.2 Handle, mix and apply proprietary installation materials in strict compliance with the manufacturer’s instructions.

5.3 The contractor shall take precautions to protect membranes, admixtures and other installations materials from extreme site conditions.

6.0 MORTAR, GROUT MIXES & WATERPROOF MEMBRANES:

6.1 Thick Bed Mortar/Screed:
20 kg LATICRETE 3701 Fortified Mortar Bed (Adjust quantity of liquid to obtain proper consistency)
6.2 Slurry Bond Coat:
20 kg bags LATICRETE 254 Platinum Adhesive

6.3 Terrazzo Tile Adhesive:
20 kg bags LATICRETE 254 Platinum Adhesive

6.4 Grout:
10 kg bags LATICRETE PERMACOLOR Grout (40 colours as per the LATICRETE colour chart)

6.5 Waterproof Membrane:
15 litre pail LATICRETE HYDRO BAN Waterproof Membrane.
600ml sausage LATICRETE HYDRO BAN Fillet & Sealant.
LATAPOXY Moisture Shield (as required)

6.6 Movement Joint Sealant:
305ml Tube LATICRETE LATASIL Sealant
250ml Jar 9118 LATASIL Primer

6.7 Terrazzo Sealer:
3.8 litre jug STONETECH KlenzAll Cleaner
3.8 litre jug STONETECH Heavy Duty Sealer.

7.0 PREPARATION & CLEANING:

7.1 Prior to commencing the installation, the contractor shall examine the areas to be covered and advise the Main Builder and Architect of any existing conditions or surface contamination, which will require correction before the work commences. Substrate must be dry, clean & free from oil, curing compounds, laitance, dirt or any other foreign material that may inhibit bond.

7.2 As required, the concrete or masonry substrate shall be prepared/processed by grit blast, scarifying, sand blasted, hydro blasted or by whatever method deemed by the contractor necessary to prepare the concrete surface: to expose the fine aggregate; and to present with a sound, clean open pored surface, prior to installing render, waterproofing or adhesives.

7.3 As required the substrate shall be cleaned after surface preparation to remove surface dirt and contamination or weakened surface layers. Any approved cleaning agents must be completely removed, neutralized and rinsed.

8.0 MIXING:

8.1 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.

9.0 SURFACE PATCHING or SCREEDING:

9.1 Dimensional surface correction is necessary if concrete or other surfaces are not finished accurately to meet levelness or flatness tolerances for direct application of the terrazzo tile using the thin bed methods of application.

9.2 Screeds - LATICRETE 3701 Fortified Mortar Beds are normally applied from featheredge – 50mm thick, mixed to a semi-dry consistency and placed over a latex/cement slurry bond coat consisting of LATICRETE 254 Platinum Adhesive. It is levelled between screed boards, thoroughly compacted and finished to the desired levels and plane.
9.3 Before placing the mortar bed, apply the nominally 2mm thick LATICRETE 254 slurry bond coat to the prepared surface by broom or trowel. Place the mortar bed over while the slurry bond coat is still wet and tacky. Do not apply mortar bed over skinned or dried bond coat. Re apply bond coat if it has skinned or dried prior to applying mortar bed over. Once placed - compact, strike off and finish the mortar with a steel float or wood float to the desired planes and levels. Allow the completed mortar to cure for 24 hours at 21°C and allow drying to the correct moisture content prior to the installation of membrane or tile.

9.4 Skimming - Where skimming or shallow levelling coats are required in small areas, LATICRETE 254 Platinum Adhesive can be used. Mix to a plastic consistency and apply to the surface with the straight edge of the trowel. Work in layers, nominally 2-3mm thick between coats. Scratch and allow to dry between coats.

9.5 See product data sheets, how to guides and technical data sheets for more complete information as required.

10.0 INSTALLATION OF WATERPROOF MEMBRANE:

Note: LATICRETE HYDRO BAN waterproof membrane is installed before the terrazzo tile is installed; that are above occupied or enclosed areas; areas as specified and detailed on drawings; or areas requiring a crack isolation membrane. Use LATAPOXY Moisture Shield where high moisture vapour emission rates or excessive dampness is present. Consult LATICRETE.

10.1 Before starting, surface to be covered shall be cleaned to remove soil, dust, curing compounds, form oil, sealants, grease or other contaminants. Ensure surface is dry as per the requirements stated on the product data sheet before application.

10.2 Surface to be waterproofed shall be plumb and true to meet the flatness tolerance for the terrazzo tile and shall be dry and have a compact, flat wood float finish or open pored steel trowel finish. Install two coats of the required thickness, allow drying between coats.

10.3 Tile may be installed directly over the membrane as soon as it is cured.

10.4 Allow membrane to cure fully. Cold weather installations will require a longer cure time.

10.5 See product data sheets, how to guides and technical data sheets for more complete information as required.

11.0 INSTALLATION OF TILE BY THE THIN BED METHOD:

11.1 Obtaining complete adhesive coverage between the tile and the substrate (100%) is absolutely essential to the long-term performance of the tiles. Using the appropriate notched trowel, along with proper troweling techniques and back-buttering will make achieving complete coverage easier. To help ensure maximum coverage to both the substrate and to the back of the tile, mix the adhesive to the correct consistency. Do not allow the adhesive to dry or skin over during the installation process. On site test should be carried out to determine the appropriate trowel size to target; no voids in the adhesive bed; full bedding of the tile; and complete adhesive distribution once the tiles are installed.

11.2 The LATICRETE 254 Platinum Tile Adhesive shall be applied with a notched trowel using a scraping motion to work the material into good contact with the surface to be covered. Only as much adhesive shall be applied as can be covered while adhesive surface is still wet and tacky. The tile shall then be set in place manipulated to insure 100% full bedding (this means full contact of...
adhesive to tile & full contact of adhesive to substrate, especially at corners and edges) and a true surface. Check for required flatness. Tile shall be aligned to show uniform joints and then allowed to set until firm. Clean excess adhesive from face of the tiles and joints between pieces.

11.3 See adhesive product data sheets, how to guides and technical data sheets for more complete information as required.

12.0 EXPANSION, MOVEMENT AND CONTROL JOINTS:

12.1 Provide movement, control or expansion joints as located in the contract drawings and in full conformity, especially in width and depth, with architectural details and the tile manufacturer.

A. Substrate joints must carry through, full width to surface of the tile.
B. Install movement joints in tile work over construction/cold joints or control joints in substrates.
C. Install movement joints where tile abut restraining surfaces (such as perimeter walls, curbs, and columns), changes in plane and corners.
D. Joint width and spacing depends on application – follow tile manufacturer’s recommendations for internal work.
E. Joint width: ≥ 6mm and ≤ 15mm.
F. Layout joint pattern: 1:1 is optimal but must be ≤ 2:1.
G. Remove all contaminants and foreign material from joints void/surfaces such as dirt, dust, oil, water, setting material and the like. Install appropriate backing materials based on movement joint design or as specified.

Notes to specifier
The responsibility for calculating the actual spacing and size of the expansion joints shall be by the architect/engineer.

12.2 Movement joints shall be sealed with LATICRETE LATASIL Sealant and primed with LATASIL 9118 Primer. Use polyethylene backing rods and bond breaker tapes as required.

13.0 GROUTING AND POINTING JOINTS:

13.1 Joints shall be grouted or pointed with LATICRETE PERMACOLOR Grout.

13.2 Joints shall be packed full and free of all voids and pits. (Tool or rake as specified).

13.3 Excess grout shall be cleaned from the surface with water and a damp sponge as the work progresses, while grout is fresh and before it hardens.

13.4 The day after installation grout film or haze shall be removed using a pH neutral detergent solution.

13.5 See product data sheets, how to guides and technical data sheets for more complete information as required.

14.0 PROTECTION & CLEANING:

14.1 During installation of the waterproof membrane, renders, tile adhesive, sealing and grout the contractor shall take precautions to protect the work.
14.2 Cold Weather Note: The curing of waterproof membranes, tile fixing adhesives and grouts, are retarded, by low temperatures. Finished work should be protected for an extended period of time.

14.3 The contractor shall take precautions to protect the finished work from damage by other trades. Do not allow construction traffic on fresh grout joints. Allow the grout to cure for a minimum of 7 days before steam cleaning or using aggressive cleaning techniques.

14.4 Clean excess mortar from tile surface with water before it hardens and as the work progresses. Do not contaminate open grout or movement joint voids while cleaning. Sponge and wash tiles diagonally across joints. Do not use acids for cleaning. Polish with clean dry cloth. Remove surplus and leave premises broom clean.

15 CLEANING & SURFACE SEALING.

15.1 The terrazzo tiles on this project shall be cleaned and sealed with LATICRETE STONETECH Sealers and Cleaners as appropriate for the specific tile installation.

15.2 Consult the product data sheet and technical guides prior to use. For further information contact stonestech@laticrete.com.au Test prior to use in a small unobtrusive area.

15.3 Sealer will require reapplication every 3-5 years depending on the floor’s wear, exposure and cleaning regimes.

“As a professional courtesy, LATICRETE offers technical services free of charge. The user maintains all responsibility for verifying the applicability and suitability of the technical service or information provided”
Drawing No. AES-F101G
Bonded system including mortar bed on concrete

Terrazzo Tile
PERMACOLOR® Grout
LATICRETE 254 Platinum Adhesive
HYDRO BAN® Membrane
LATAPOXY® Moisture Shield
3701 FMB Or 3701 mortar admix
Gauged with 226 Thick Bed Mortar
LATICRETE 254 Platinum
Slurry Bond Coat
Concrete

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