

Installation of Tile or Stone Over Existing Terrazzo TDS 173

Terrazzo flooring is a composite material poured in place or pre-cast which is used for wall and floor finishes. Terrazzo can consist of marble, quartz, granite, glass and other types of aggregate chips mixed with a binder that is portland cement based, resin based or a hybrid of both types and colored pigments. Poured in place terrazzo is cured and then ground and polished to the desired surface finish.

Various types of terrazzo are available which include:

Venetian – utilizes a large size chip Standard – the most common type of terrazzo which generally utilizes a small size chip Palladianna – utilizes thin random fractured slabs of marble Structural – cement based terrazzo topping placed over a minimum of 4" (100mm) thick concrete slab Rustic – textured terrazzo finish in which the chips are exposed Resinous – generally an epoxy or polyester based binder mixed with small chips. Terrazzo can be applied as thin as ¹/₄" (6mm).

Terrazzo floors can range in thickness from 2 ½" (62mm) for sand cushion terrazzo floors to as thin as ¼" (6mm) for resin based terrazzo pours. Epoxy resin, polyester resin and polyacrylate terrazzo types can even have certain chemical resistant properties.

Pre-cast terrazzo tiles can be installed using traditional tile setting methods as outlined by the Tile Council of North America (TCNA) and are then either grouted as traditional tile pavers or ground and polished in place. Pre-cast terrazzo is also used for stair treads / risers, window stools, base, wall panels and thresholds.

There are times though when it becomes necessary, for a variety of reasons, to change the appearance or finish of an existing terrazzo floor. Provided that existing terrazzo is sound, well adhered and properly prepared, a method exists for the application of tile or stone directly onto the floor. When installing tile over all types of terrazzo it is important to figure out the type of terrazzo which is currently in place. When trying to install tile over cement based or resin based terrazzo the installation materials needed to complete the job can be different.

To determine which terrazzo floor is in place it would be necessary to remove any wax, sealer or other protective coating from the surface of a small area to expose the terrazzo material. Grinding a small area to expose the inside of the terrazzo may be necessary to expose the binder. Place a few drops of a strong acid (e.g. muriatic, sulfuric) onto the binder and watch for a reaction; if the area begins to bubble or "fizz" then the binder is cement or cement/resin based. If no reaction occurs, the binder is probably resin (epoxy) or polyester based. Make sure to neutralize and rinse any remaining acid residue before proceeding. Now that the determination has been made on the type of terrazzo a determination can be made on the proper installation materials for the tile or stone.

Remove any wax, sealers or other protective coating from the entire surface of the terrazzo before proceeding with the tile or stone installation. Bead-blasting, shot-blasting or grinding are the most effective means of removing wax, sealers or protective coating. Epoxy or polyester based terrazzo will require that you use an epoxy based setting material to adhere tile. LATAPOXY[®] 300 Adhesive or LATAPOXY BIOGREEN 300 would be the ideal setting material for this application. After the epoxy flooring terrazzo has been cleaned of any foreign materials that will inhibit the bond, tile can be installed using LATAPOXY 300 Adhesive or LATAPOXY BIOGREEN 300 directly to the terrazzo surface.

If the terrazzo is cement based it will still be necessary to remove any wax, sealers or other protective coating from the entire surface of the terrazzo before proceeding with the tile or stone installation. Tile or stone can be installed onto existing cement based terrazzo using 254 Platinum, 254 Platinum Plus or MULTIMAXTM LITE.

If a waterproofing/anti-fracture membrane is required over cement based terrazzo then follow the steps to completely remove any wax, sealer or protective coating and then skim coat the surface of the terrazzo with 254 Platinum. Allow the skim coat to fully dry before applying the HYDRO BAN[®] XP, HYDRO BAN or 9235 Waterproofing Membrane. Once the HYDRO BAN XP, HYDRO BAN or 9235 Waterproofing Membrane is dry to the touch the tile or stone can be installed using 254 Platinum, 254 Platinum Plus or MULTIMAXTM LITE.

It is essential to select a grout which is appropriate for the application in which it will be subjected;

- SPECTRALOCK[®] 2000 IG (for industrial and commercial kitchen applications),
- SPECTRALOCK PRO Premium Grout*,
- SPECTRALOCK PRO Grout,
- SPECTRALOCK 1,
- PERMACOLOR[®] Select,
- PERMACOLOR Grout, or,
- PERMACOLOR Select NS

Movement joints should be placed as per TCNA EJ-171 and treated with LATASIL[™].

Note that LATAPOXY[®] 300 Adhesive or LATAPOXY BIOGREEN[™] 300 should also be used for installation of tile or stone over properly prepared Torginol[®].

* United States Patent No.: 6,881,768 (and other Patents)

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