

TILE INSTALLATION OVER GYPSUM-BASED UNDERLAYMENTS

Gypsum-based underlayments are found in many public areas of commercial buildings, as well as hotels and residences. With the popularity of ceramic and natural stone tile installation in these areas, many installers are encountering this substrate and being asked to tile over it. Gypsum underlayments are also a popular means for encapsulating floor heating systems under ceramic tile floors. The Tile Council of North America (TCNA) recognizes poured gypsum underlayment as an acceptable substrate for the installation of ceramic and natural stone tile when a suitable membrane or primer is used. The installation of tile to gypsum underlayments is detailed as follows in the TCNA Handbook:

- F200 details the installation of tile on gypsum underlayments over a concrete slab.
- F180 details the installation of tile on gypsum underlayments over a plywood subfloor.
- RH111 details the installation of tile over hydronic heating systems encapsulated in gypsum underlayment over concrete slab.
- RH122 details the installation of tile over hydronic heating systems encapsulated in gypsum underlayment over plywood subfloor.

CUSTOM's Multi-Surface Bonding Primer™ (MBP) is ideal for the installation of ceramic and natural stone tile over gypsum underlayments in dry environments (TCNA RES1, RES2, COM1 and COM2). MBP is a single-component, water-based primer engineered to deliver superior adhesion on a variety of substrates where proper bonding is difficult. It has been specially formulated with aggregates and polymers to promote adhesion to gypsum underlayments and to provide a surface for the installation of ceramic and natural stone tile. By creating a barrier between the cement-based installation product and the gypsum underlayment, MBP eliminates the potential of a Portland cement and gypsum interaction.

Prior to tiling, the gypsum-based underlayment must obtain a minimum 2000 psi (13.8 MP) compressive strength and be sufficiently dry and cured to manufacturer's specifications. Surfaces to be tiled must be structurally sound and subject to deflection not to exceed the current ANSI Standards. Surfaces shall be free of all grease, oil, dirt, dust, waxes, adhesives or any other foreign matter.

Apply MBP to the surface of the gypsum underlayment with a paint brush or roller at a rate of 150 ft² (14 m²) per gallon (3.8 L), per manufacturer's directions. Allow MBP to dry before installation of a tile floor covering. Dry time is generally 1 hour, but can be longer depending on environmental conditions.

For product details visit www.custombuildingproducts.com or call CUSTOM Technical Services at 800-282-8786.

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