



Installation of Ceramic or Stone Tile Over Gypsum Based Underlayments

DATE

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All gypsum underlayment installations must meet the following requirements prior to the installation of tile or stone:

1. The gypsum underlayment must meet performance requirements of ASTM C627 for the anticipated service level designated by the specifier for intended use and have a compressive strength of 2000 PSI.
2. The subfloor must be adequate to withstand live and dead load with a deflection limitation of $\frac{1}{360}$ for tile and $\frac{1}{720}$ for stone.
3. Surfaces to be tiled shall be structurally sound, dry, free from oil, grease, dust, loose or peeling paint, concrete sealers or curing compounds. Any or all contaminants, if they exist, shall be removed prior to the installation of the membrane and/or primer.

For new gypsum underlayment installations

H.B. Fuller Construction Products Inc. ("HBF-CP"), the manufacturer of TEC® brand products, recommends TotalFlex® 150 High Performance Polymer-Modified Mortar, TotalFlex® 110 High Performance Polymer-Modified Mortar, or Ultimate 6 Plus Mortar to bond tile directly to newly installed gypsum based underlayment (minimum compressive strength of 2000 PSI). Be sure to follow gypsum underlayment manufacturer's current installation instructions, including priming of the substrate. Gypsum underlayment without primed substrate must be primed with TEC® Multipurpose Primer. See the Primer product data sheet for dilution and application instructions.

These mortars are high-performance polymer-modified mortars that are formulated with premium cement that is able to bond to a primed gypsum based underlayment.

For new or existing gypsum underlayment installations

HBF-CP recommends application of one of the following TEC products prior to installation of the tile or stone on new or existing gypsum underlayment. When installing a TEC membrane over gypsum underlayments that have not been primed, the underlayment surface must first be primed with TEC Multipurpose Primer. See the Primer product data sheet for dilution and application instructions.

1. Use TEC Multipurpose Primer before applying TEC® HydraFlex™ Waterproofing Crack Isolation Membrane (316)
2. TEC® Triple Flex™ Waterproofing, Crack Isolation Membrane and Flexible Mortar (324)
3. TEC Multipurpose Primer (560)

Allow for curing of primer/membrane then install tile or stone with a suitable TEC product that meets or exceeds ANSI 118.4/118.11 or 118.4/118.15.

Questions?

Call the Technical Support Hotline at 1-800-832-9023.

This Technical Bulletin has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about and guidelines for the proper use and application of the covered TEC brand product(s) under normal environmental and working conditions. Because each project is different, H.B. Fuller Construction Products Inc. cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

Mortar	Grout	Gyp-Crete® thickness	Subfloor	Joist Spacing	Subfloor thickness
TotalFlex 150 High Performance Polymer-Modified Mortar white or gray, TotalFlex 110 High Performance Polymer-Modified Mortar white or gray, or Ultimate 6 Plus Mortar white	Power Grout® or AccuColor® Sanded, mixed with TEC Acrylic Grout Additive or Grout Boost®	1/2" (12 mm)	Concrete	N/A	N/A
		1" (25 mm)	OSB	20" O.C. (50 mm O.C.)	3/4" (19 mm)
		1" (25 mm)	Plywood	20" O.C. (50 mm O.C.)	3/4" (19 mm)

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