

Technical Bulletin Hard Surfaces Quality Control

Control Number: CQ-HS-TE025B Issue Date: 08/20/09
Revised Date: 11/12/09

Subject: Film Matted Glass Tile Installation Instructions

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Glass tile has a high rate of contracting and expanding which dictates a need for expansion joints. These are to be in agreement with TCNA (EJ 171.05 or ANSI A108.01 paragraph 3.7 -3.7.4.1). In exterior applications there need be no more than 8-12 feet of product without an expansion joint in both vertical and horizontal applications. In interior applications there need be no more than 21-25 feet of product without an expansion joint in both vertical and horizontal applications. The perimeter of the installation must also maintain this expansion in order to ensure a satisfactory installation.

The substrate, in which the glass will be adhered to, must be cementitious backer board units (CBU) or a professionally applied mortar bed that has been cured a minimum of 7 days.

The bonding material used to bond this application of film matted glass tile is to be a white bodied polymer thin-set (Shaw Multi-Set). This bonding material is to be mixed at a rate of 300 RPM or slower to ensure that there is no air entrapment thus causing voids in the background. The bonding material initially must be keyed into the substrate using the flat side of the trowel. The bonding material can now be notched, using the appropriate size notch trowel, and then flatten the notches out be using the flat side of the trowel once more. (ANSI 108.16 5.1-5.3)

This glass tile is beveled on the back and has a thin film adhered to the front. The film side is to be faced out with the beveled side set into the bonding material.

Site and atmosphere environments are to be made aware of due to the open time the bonding material has prior to setting the glass tile in. Glass tile has a very low absorption rate and must be set into the bonding material prior to the bonding material skinning over or beginning the curing process. Once the glass tile has been set into the bonding material the installer needs to beat-in the glass tile with a beating block to ensure a true flatness. Temperatures are to be within 50 - 90 degrees F for proper curing and adjusting times. The installer should avoid direct sunlight and using fans thus causing the curing and adjusting times to be inadequate.

After the setting process has been initiated the film matted glass tile must set for a minimum of 24 hours on vertical installations and 48 hours on horizontal applications. Once this has been achieved the film can be removed by pulling the corners slowly and continuing until completely removed. Pull film slowly to ensure no damage to the glass tile bonding material. After the film has been removed use warm water and a medium abrasive nylon scrub brush to eliminate any residue or film that may be adhered to the glass tile as well as the grout joint.

Grouting the glass tile can be achieved using either a non-sanded (wall) grout or an epoxy grout. When using a non-sanded grout the installer needs to allow for adequate drying time. The installer then needs cheesecloth or soft terrycloth to dry buff the remaining grout off the surface of the glass tile. This may need repeating two to three times to ensure no residue remaining on the glass tile from the grouting process.

This application of glass tile should not be submerged for a minimum of 14 to 28 days.