



Technical Bulletin # 119

RE: Freeze-thaw or frost resistant applications.

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Frost Resistant Mortar

Polymer additives in setting mortar reduce the porosity and increase the flexibility of cement. Mortars and Grouts that do not contain latex or polymer additives are very absorptive and susceptible to damage from freezing water. Unmodified mortars or grouts are not recommended for freeze-thaw or frost resistant applications.

Freeze-thaw areas include all exterior applications which experience below-freezing temperatures and interior applications such as freezers.

Select a porcelain or frost proof tile suitable for the application.

C-Cure polymer-modified mortars complying with ANSI A118.4 are considered frost resistant mortars. These include:

PST 948 modified setting systems
M-Flex Strata 914 Mortar
UniFlex 916 Elastomeric Mortar

Setting Conditions

Mortar should not be applied on surfaces that are frozen or contain frost. Tile setting and grouting must be performed at ambient temperatures that remain within a range of 40°F to 90°F (4°C to 32°C) during for the first 72 hours after installation. Lower temperatures may require longer set time before traffic is allowed.

A minimum 14-day air cure before continuous water submersion is required for C-Cure polymer-modified mortars (average cure time depending on ambient temperature).

Applicable Standards

Detailed installation procedures may be found in the TCA Handbook and America National Standard Specifications for the Installation of Ceramic Tile (ANSI). C-Cure products may be used in installations that must conform to ANSI. Detailed installation procedures may be found in the TCA Handbook.

Movement Joints

Adherence to TCA EJ 171 is required where applicable. Contact C-Cure Technical Services Department for additional information.

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