



X-100
POLYMER-MODIFIED MULTI-PURPOSE THINSET

Basic Use X-100 may be used for setting absorptive, semi-vitreous, vitreous and impervious tiles (except glass) in residential or commercial service areas. It may be used for interior or exterior applications. It has excellent water and impact resistance. Is water cleanable, non-flammable and requires no soaking of tiles.

Area of Use Suitable backings, when clean and properly prepared, include masonry, concrete, cementitious backer units, cured Portland cement mortar beds, brick, unglazed ceramic tile and marble. In interior dry areas only, it can be used over gypsum board (walls only).

Limitations X-100 must not be applied directly to asphalt sheeting, vinyl covered wall board, Masonite, cutback adhesive, cement asbestos board, metal, glass, plastic, curing compounds, chemically treated surfaces, particleboard, plywood, strip wood surfaces or gypsum mortar beds. Use in temperature range above 40° F (Do not allow mortar to freeze for the first 72 hours.) This product is not affected by prolonged water contact but it does not form a waterproof barrier.

Applicable Standards Meets and exceeds requirements for dry-set mortars found in ANSI A118.1, A118.4, ANSI A108.5 and A108.11.

Installation

Preparatory Work

All surfaces on which tiles are to be set must be structurally sound cured a minimum of 28 days, completely clean and free of frost and in an atmosphere above 40° F and below 90° F during the initial (72 hours) curing of the installation.

Cementitious Substrates

Area must be dry and free of efflorescence, grease, oil, dirt, dust, paint, sealers, curing compounds, asphalt, cut back residue, old adhesives and other foreign matter. Cleaning may be accomplished via mechanical sanding, scraping or chipping. Smooth steel troweled concrete must be roughened, shot-blasted or acid-etched. If acid-etched, the residue must be thoroughly neutralized (with baking soda or TSP) and flushed from the floor.

Expansion Joints

Shall be installed in accordance with local building codes. See EJ 171 in T.C.A. Handbook for detailed specifications. Never bridge an expansion, contraction, or construction joint. Remove all thinset, mortar, grout and debris from joints before sealant is placed.

Mixing X-100 should be only added to clean potable water (60°- 80°F). Mix X-100 with approximately 1-1/2 gallons of clean water to obtain a smooth paste consistency mortar. Allow mix to slake for 10 to 15, minutes, then remix before using. If mechanical mixer is used, it must be a low rpm (300 or less) to avoid entrapping air into the mortar. Do not use mortar after initial set in bucket. During use, remix mortar occasionally.

Application Spread mortar with flat side of trowel to key-in substrate; then, reapply additional mortar to a depth sufficient to be notched with a suitable trowel that will leave enough mortar to give 100% contact with back of tile and a subsequent mortar bed of 3/32"-3/16". With high lug tiles, back buttering may be required to ensure 100% coverage to back of tiles. During the setting of tile, it is advisable to occasionally remove a tile to be sure mortar has not skinned over and sufficient transfer is being made. It is also required that tiles be "embedded" to obtain good transfer of mortar to tile and for proper alignment. Do not adjust tiles in mortar after they have been set past 10-15 minutes. **Do not abut tile to perimeter walls or restraining surfaces. Leave a minimum spacing of 1/4", void of any setting material or tile, to allow for expansion.**

Coverage per 50 lb. bag using square notched trowels: 1/4" x 1/4" =80 - 90 sq.ft., 1/4" x 3/8" =approximately 70 sq.ft., 1/2" x 1/2" =50 sq.ft.

Working Time Approximately 2 to 3 hours, depending on ambient temperature.

Initial Set Approximately 1 hour.

Cleaning Water is all that is needed to remove uncured mortar.

Curing and Grouting A minimum cure is obtained in 12-24 hours, depending on ambient temperatures. Normal grouting should be done 48 hours after tiles have been set except for setting beds in excess of 3/8" may require 72 hours before grouting.

Caution This material contains portland cement and silica. Avoid dusty conditions and breathing dust. Wear OSHA approved dust masks. Avoid all contact with skin and eyes. Wear gloves and eye protection.

Technical Data	
Pot Life	2 - 3 hours
Initial Cure	24 - 48 hours
Final Cure	28 days
Shear Strength	28 days
Marble & Granite	> 400 psi
Porcelain Tile	> 300 psi
Quarry Tile	> 400 psi