

Fast Setting Dry-Set Mortar

PRODUCT DESCRIPTION

PERMABOND® FASTSET 904 is a factory blend of Portland cement, sand and special chemical additives which produce an excellent, fast setting, dry-set mortar. PERMABOND FASTSET 904 enables the contractor to set tile and grout within two hours so that he will have a finished installation which can be open to foot traffic in 4 hours.

▶ BASIC USE

PERMABOND FASTSET is used as a bond coat for setting absorptive, semi-vitreous and vitreous ceramic tile for service in residential and commercial use for both floor and wall installations. It is used in a mortar bed from 3/32" to 3/16" (2.4 to 5 mm) after the tiles have been properly embedded. PERMABOND FASTSET 904 has excellent water and impact resistance, is water cleanable, non-flammable, good for exterior work. No presoaking of tiles is necessary. PERMABOND FASTSET 904 mortar is not affected by prolonged contact with water, but does not form a waterproof barrier. PERMABOND FASTSET 904 provides a permanent installation with higher bond strength and lower material and labor costs than conventional Portland cement mortar beds.

▶ AREAS OF USE

Suitable backings, when properly prepared, include plumb and true masonry concrete, gypsum board (*dry interior walls only*), cementitious backer units, cured Portland cement and mortar beds, brick, unglazed ceramic tile and marble.

▶ LIMITATIONS

PERMABOND FASTSET 904 must not be applied directly over wood, asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, plastic, or gypsum mortar beds. Apply in a temperature range of 40°F to 90°F (4°C to 32°C). (*Do not allow mortar to freeze for the first 72 hours.*) Lower temperatures may require longer set time before traffic is allowed. Some green or red marbles may warp when installed with setting materials containing water, causing loss of bond and/or damage to the finish. These marbles must be set with COLORSET EPOXY 931.

▶ APPLICABLE STANDARDS

Conforms to requirements for dry-set mortars found in ANSI A118.1 and ANSI A108.5. When mixed with CUREMIX® 937, CURECRYLIC® PREMIUM 939 or PORCELAIN STONE & TILE 948 conforms to requirements for ANSI A118.4. (*As modified for fast setting dry-set mortars.*)
Color — Gray
Texture — Powder, consisting of Portland cement, graded sand, organic and inorganic chemicals.

▶ PACKAGING

25 lb. (11.3 kg) bags, 5 lb. (2.27 kg) and 10 lb. (4.54 kg) boxes.

INSTALLATION

▶ PREPARATORY WORK

All surfaces on which tiles are to be set must be dry, structurally sound and not subject to temperatures below 40°F (4°C) or above 100°F (38°C). Detailed installation procedures may be found in the TCA Handbook and ANSI A108.5. Surfaces must be dry and free of all grease, oil, dirt, dust, curing compounds, sealers, coatings, efflorescence, old adhesive residues, gypsum based underlayments and any other foreign matter.

▶ CEMENTITIOUS SUBSTRATES

Cleaning may be accomplished via mechanical sanding, scraping or chipping. Surfaces may be cleaned with muriatic acid (*use proper precautions*) if thoroughly flushed and neutralized. Smooth, steel troweled concrete floors must be roughened to ensure a good bond. It is advisable to dampen dry porous concrete before installing ceramic tile with PERMABOND FASTSET 904 mortar. Do not leave puddles or standing water on surfaces.

▶ NON-CEMENTITIOUS SUBSTRATES

Surfaces such as wood and old plaster or painted surfaces that provide bonding problems should be covered with a cleavage membrane topped with a 3/8" to 3/4" (9.5 to 19 mm) reinforced mortar bed for walls and a 1 1/4" (32 mm) reinforced mortar bed for floors. After a minimum of 20 hours, the dry-set mortar may be applied to the mortar bed.

▶ CERAMIC TILE SUBSTRATES

It is absolutely essential that the existing tile be well bonded. The surface must be prepared in accordance with the requirements for cementitious surfaces. It is also necessary to abrade the surface to assure proper bonding. Mortar shall be mixed with CUREMIX 937, CURECRYLIC PREMIUM 939 or PORCELAIN STONE & TILE 948 in lieu of water.

▶ EXPANSION JOINTS

Expansion joints shall be installed in accordance with local building codes. See EJ 171 in TCA Handbook for detailed specifications. Expansion joints, control joints and cold joints shall never be bridged with setting material.

▶ MIXING

PERMABOND FASTSET 904 should be added to clean, potable water, CUREMIX 937, CURECRYLIC PREMIUM 939 or PORCELAIN STONE & TILE 948 at the rate of approximately 3/4 gallon (2.84 L) per 25 lbs. (11.3 kg). Mix thoroughly until smooth. If a mechanical mixer is used, do not use a high speed drill to mix mortar. Mix only enough mortar that can be used within 30 minutes. The proper mortar consistency is such that when applied with a notch trowel to the substrate, the ridges formed in the mortar will not flow or slump. Some stiffening of the mortar may occur prior to

30 minutes; restir occasionally. If after 30 minutes the material becomes hardened, do not add water, but discard.

▶ APPLICATION

Spread mortar with flat side of trowel to key into substrate. Then, apply additional mortar to a depth sufficient to be notch with a suitable trowel that will leave only enough mortar to give 100% contact with back of tile, and a subsequent mortar bed of 3/32" to 3/16" (2.4 to 5 mm). 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.

NOTE: As a practical test, it is recommended that 3 or more separate 12 inch square (.3 m²) areas of tile be bonded to the properly prepared surface with the actual tile and bonding material that will be used on the finished installation. These should be allowed to cure for 24 hours and then removed with a hammer and chisel. At this point, one can determine if adequate bond has been obtained or if a problem exists.

▶ CLEANING

Water is all that is needed to remove uncured mortar.

▶ CURING AND GROUTING

Grouting can begin as soon as the tiles are firmly set (about two hours after setting). For most installations, C-Cure AR® 922, SUPREME 925, CUREPERFECT® 930 or MP® GROUTS 923 and 924 will be acceptable. Grout in the normal manner (see grouting instructions on corresponding data sheets).

GUARANTEE

The recommendations, suggestions, statements and technical data are based on the best knowledge available to C-Cure and are given for informational purposes ONLY and without any responsibility for their use.

C-Cure MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE PRODUCT SOLD HEREIN except that the quality of the ingredients shall be in accordance with C-Cure specifications. It is expressly understood and agreed that the buyer's sole and exclusive remedy shall be replacement of defective products and under no circumstances shall C-Cure be liable for incidental or consequential damages. C-Cure neither assumes nor authorizes any others to assume for it any liability with respect to furnishing of the product. Handling and use of the product are beyond the control of C-Cure, therefore, no warranty is made, expressed or implied, as to the results obtained from the use of the product or against any claims for infringement of patents resulting from the use of the product.

This writing constitutes a complete and exclusive statement of the understanding between C-Cure and buyer. There were no oral agreements or warranties, expressed or implied, collateral to or affecting the furnishing of the product. This understanding shall not be modified except in writing by an officer of C-Cure.

PermaBond® FastSet 904

Fast Setting Dry-Set Mortar

PERMABOND FASTSET 904 TECHNICAL DATA		
TEST	TYPICAL VALUES	
*A. Open Time @ 70°F (21°C)	10 Minutes	
*B. Adjustability @ 70°F (21°C)	10 - 15 Minutes	
*C. Bucket Life @ 70°F (21°C)	45 Minutes	
D. Shear Bond ANSI A118.1		
Non-Vitreous Tile	2 Hours	>200 psi (14 kg/cm ²)
	4 Hours	>300 psi (21 kg/cm ²)
	24 Hours	>500 psi (35 kg/cm ²)
Vitreous (Paver) Tile	2 Hours	>140 psi (10 kg/cm ²)
	4 Hours	>350 psi (25 kg/cm ²)
	24 Hours	>450 psi (32 kg/cm ²)
E. Safety—CAUTION: May cause eye, skin or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for Silica dust. Contains Portland cement. If any cement or cement mixtures get into eye, flush immediately and repeatedly with water, and consult a physician promptly. Freshly mixed cement, mortar, concrete or grout may cause skin injury. Avoid contact with skin where possible and wash exposed skin areas promptly with water.		
KEEP OUT OF REACH OF CHILDREN		

*These values reflect the results of practical testing methods closely associated with applications in the field.

COVERAGE			
PRODUCT	SQUARE FEET (M ²) PER 50 LB. (22.7 KG) BAG		
	1/4" x 1/4" x 1/4" (6 x 6 x 6 mm) Square-Notch Trowel	1/4" x 3/8" x 1/4" (6 x 9.5 x 6 mm) Square-Notch Trowel	1/2" x 1/2" x 1/2" (13 x 13 x 13 mm) Square-Notch Trowel
PERMABOND® FASTSET 904	44 (4.8)	38 (3.53)	28 (2.14)

Members of National Tile Contractors Association,
Materials & Methods Standards Association, Ceramic Tile Distributors Association.

NOTICE: The information in this bulletin is presented in good faith, but no warranty, express or implied, is given nor is freedom from any patent. In as much as any assistance furnished by C-Cure with reference to the safe use and disposal of its products is provided without charge, C-Cure assumes no obligation or liability therefore, except to the extent that any such assistance shall be given in good faith.

C-CURE
Seal Beach, CA 90740
800-895-2874
www.c-cure.com