

Mer-Krete™ 740 Fracture-Guard

MULTI PURPOSE POLYMER MODIFIED PORTLAND CEMENT EGP CRACK ISOLATION THIN-SET MORTAR

1. PRODUCT NAME

740 Fracture-Guard

Multi Purpose Polymer Modified Portland Cement EGP Crack Isolation Thin-set Mortar

2. MANUFACTURER

Mer-Krete Systems
501 Van Ness Avenue
Torrance, CA 90501
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(800) 851-6303
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3. PRODUCT DESCRIPTION

BASIC USE

Mer-Krete 740 Fracture-Guard is a superior grade polymer modified Portland cement flexible crack isolation thin-set mortar for installing ceramic tile and natural stone. **740 Fracture-Guard** helps guard against substrate movement and transferring of horizontal cracks up to 1/16" to the tile installation. It is recommended for use in the thin-set installation method for absorptive, semi-vitreous, vitreous and porcelain tile over properly prepared masonry, concrete, cement backer board and (EGP) exterior grade plywood. In dry areas, it is suitable for gypsum board.

USES

Mer-Krete 740 Fracture-Guard can be used as a thin-set mortar for ceramic tile and natural stone for both walls and floors in interior and exterior applications. It is recommended for use in the thin-set installation method for absorptive, semi-vitreous, vitreous tile and impervious ceramic tile such as porcelain tile and natural stone over properly prepared masonry, concrete, cement backer board, and existing ceramic tile. In interior dry areas, it is suitable for gypsum board and plywood substrates. **740 Fracture-Guard** thin-set is suitable for both residential and commercial construction.

ADVANTAGES

Freeze thaw stable
Interior and exterior
Increased flexibility
CTIOA Tested Material
Bonds to most surfaces
Can be used over cracks 1/16" or less
Superior adhesion for porcelain and glass tile.
Available in both gray and white colors.
Exceeds ANSI A 118.4 for Latex Portland Cement Mortar.

SUITABLE SUBSTRATES

Concrete	Concrete Masonry
Cement Mortar Beds	Cement Plaster
Ceramic Tile and Stone	Brick Masonry
Cement Backer Board**	Cement Terrazzo
Exterior Grade Plywood*	Gypsum Wallboard*
Gypsum Mortar Bed***	

*Interior Use Only

** Consult cement backer board manufacturer for installation recommendations and to verify acceptability for exterior use.

*** **Mer-Krete's Fracture-Guard 5000** crack isolation membrane is required for this installation. Consult Mer-Krete's Technical Department for gypsum mortar bed recommendation over **Mer-Krete Fracture-Guard 5000** membrane.

PHYSICAL & TECHNICAL DATA:

Adhesion in Shear: (ANSI A-118.4)	
48 Hour	> 250 p.s.i.
7 Days	> 500 p.s.i.
Compressive Strength:	
(28 Day)	> 3300 p.s.i.
Linear Shrinkage:	None
Water Absorption:	< 4%
Temperature Sensitivity:	
Low Range	50°F
High Range	100°F
Modulus of Deflection:	> 32
Coverage:	40-50 sq. ft. (40 lb. sack – 1/4" square notch trowel)

TECHNICAL ASSISTANCE:

Specification assistance is highly recommended prior to a proposed installation. Contact any Mer-Krete technical representative for recommendations over existing substrates or problem areas.

***NOTE:** Since marble is an organic material, a test for staining is recommended prior to installation.



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LIMITATIONS

Do not use **740 Fracture-Guard** below 40°F (4°C) or above 95°F (35°C). Use caution; do not allow mortar to freeze for the first 72 hours. Do not soak tiles previous to installation. For horizontal substrate cracks exceeding 1/16"; **Mer-Krete's Fracture-Guard 5000** crack isolation membrane should be used previous to setting the tile with **740 Fracture-Guard** thin-set. **740 Fracture-Guard** must not be used to apply over asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, plastic, or other unstable substrates. Improperly cured or wet plywood, particle board or strip wood are not suitable substrates. Installations that will be continually wet like swimming pools, fountains and gang showers, the completed installation should be cured a minimum of 14 days and allowed to dry before exposure to water. For white or light colored marbles use **740 Fracture-Guard** White mortar. Some dimensional stone tile like green and red marbles may warp when installed with water based setting materials. These water sensitive stone tiles should be installed with **Mer-Krete ProEpoxy**. For use of **740 Fracture-Guard** over additional substrates or situations not mentioned in these instructions, contact Mer-Krete's Technical department.

4. TECHNICAL DATA

APPLICABLE STANDARDS

Mer-Krete's 740 Fracture-Guard thin-set meets or exceeds industry requirements ANSI A118.4 and ANSI A118.11 for Latex Portland Cement EGP Mortar. CTIOA tested Material. Follow ANSI A108.5 for installation.

COLORS

Off White

PACKAGING

40 lbs. (18.2 kg.) bag

5. INSTALLATION

SURFACE PREPARATION

All surfaces must be between 40°F (4°C) to 95°F (35°C) and structurally sound (deflection not to exceed 1/360 of the span), dry clean and free from oil, grease, wax, paint, old adhesives, sealers and curing compounds. Any contaminates which inhibit proper bond must be removed. Substrate preparation should be completed following ANSI A108 AN-2 "General Requirements for Sub-surfaces". All substrates should be plumb and true, surface deviation should not exceed 1/4" in 10'. Patching, leveling or areas requiring a mortar bed should be prepared using Mer-Krete's Underlayments. Movement (Expansion) joints should be provided to comply with TCA method EJ 171.

Plywood Substrates

Maximum joist spacing should be 16" on center. Plywood should be exterior grade only. Maintain a gap of 3/16" between plywood underlayment sheets edges and all that abut walls, columns, posts and adjacent sheets. All plywood installations should be interior areas only and protected from exposure to moisture.

Cement Substrates

All concrete substrates should be cured a minimum of 28 days. Smooth steel troweled floors should be roughed up using mechanical chipping, scraping or shot blasting. Dampen porous or dry concrete previous to installation of tile. Do not leave puddles or standing water.

Cement Backer Board

Follow cement board manufacturer's instructions.

MIXING

In a clean container, add approximately 5 quarts (4.7 liters) of clean potable water. Then add the contents of the 40 lb. (18.16 kg) **740 Fracture-Guard** thin-set mortar. Mix thoroughly by hand or with a slow speed mixer to a smooth, thick, trowelable consistency. Allow mortar to slake for approximately 15 minutes, and then remix before using. Remix without adding additional water or powder. Mortar consistency shall be such that when applied with the recommended notched trowel to the substrate, the ridges formed in the mortar do not flow or slump. During use, stir

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mortar mix occasionally. Do not temper with additional water. Do not add latex liquid to **740 Fracture-Guard** thin-set.

APPLICATION

Apply mortar to the substrate with the flat side of the trowel, with enough pressure to firmly work into the surface. With a notched trowel, immediately follow with a heavier coat of material using the appropriate trowel and enough mortar to provide 100% coverage to the back of the tile. Some extruded or lug back tiles back-buttering of tiles may be required. Do not spread more mortar than can be covered in 20 minutes or before the mortar skins over. It is advised that during the installation, remove a tile to insure the mortar has not skinned over and check the tile and substrate mortar coverage. Comb the mortar using an appropriate notched trowel in one direction. Place tiles in mortar, slide back and forth perpendicular to the ridges (NTCA "Trowel and Error" method) to insure proper coverage. Do not adjust tiles set in mortar after 15 minutes.

CLEANING

Water is all that is needed to remove any uncured mortar from tiles, tools and equipment.

6. AVAILABILITY

Mer-Krete 740 Fracture-Guard thin-set is available at leading tile houses and construction distributors. Contact Mer-Krete for the name of the nearest dealer.

7. WARRANTY

5 year, 10 year and Limited Lifetime warranties are available. Contact Mer-Krete technical department for specific warranty information. Mer-Krete Systems warrants that this product meets applicable ANSI standards in force at the time of manufacture. Mer-Krete will replace any product which proves defective due to quality of ingredients used or due to the manufacturing process itself. The warranty shall apply only if the product is installed and used strictly in accordance with applicable industry standards, specifications, and instructions provided by Mer-Krete. Mer-Krete shall not be liable for misapplication, misuse or abuse of the product, application or other event outside of its control. Replacement of defective product or, at Mer-Krete's option, refund of the price of product of any defective item shall be the buyer's sole remedy under this warranty. Mer-Krete shall in no event be liable for any damages in excess of the purchase price of the defective product. MER-KRETE SHALL IN NO EVENT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES.

This warranty constitutes the sole and exclusive warranty given by Mer-Krete Systems in connection with this product, and Mer-Krete Systems has authorized no person to make or give any other warranties, or representations, oral or written, on its behalf. IN PARTICULAR, THERE ARE NO IMPLIED WARRANTIES, INCLUDING WITHOUT EXCEPTION, WARRANTIES, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No modification of this warranty in favor of any buyer shall be valid unless given in writing and signed by an officer of Mer-Krete Systems.

8. MAINTENANCE

None required, but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

9. TECHNICAL SERVICES

Mer-Krete Systems maintains technical field representatives available throughout the country. Call (800) 851-6303 for the nearest representative.

10. FILING SYSTEMS

Mer-Krete Architectural Product Catalog and CD Rom.
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