

# Mer-Krete™ 705 ProSet Plus

## MULTI PURPOSE POLYMER MODIFIED PORTLAND CEMENT EGP THIN-SET MORTAR

### 1. PRODUCT NAME

#### 705 ProSet Plus

Multi Purpose Polymer Modified Portland Cement EGP Thin-set Mortar

### 2. MANUFACTURER

Mer-Krete Systems  
501 Van Ness Avenue  
Torrance, CA 90501  
PH (323) 775-2461  
FAX (310) 320-4938  
(800) 851-6303  
www.merkrete.com

### 3. PRODUCT DESCRIPTION

#### BASIC USE

**Mer-Krete 705 ProSet Plus** is a professional grade (EGP) polymer modified Portland cement thin-set mortar for installing porcelain, ceramic and natural stone tiles. It is recommended for use in the thin-set installation method for absorptive, semi-vitreous and vitreous tile over properly prepared masonry, concrete, and cement backer board. In dry areas, it is suitable for gypsum board and (EGP) plywood substrates.

#### USES

**705 ProSet Plus** 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 and impervious tile 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. It is used as a thin set from 3/32" to 3/16" (2.4 to 4.8mm) after the tiles have been properly beat in. **705 ProSet Plus** is suitable for both residential and commercial construction.

#### ADVANTAGES

Freeze thaw stable  
Interior and Exterior  
Bonds to most surfaces  
Available in both gray and white colors.  
Exceeds ANSI A 118.4 for Latex Portland Cement Mortar and A 118.11 for EGP Latex Portland Cement Mortar.

#### SUITABLE SUBSTRATES

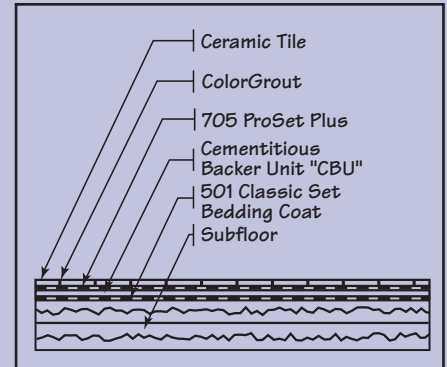
Concrete	Concrete Masonry
Cement Mortar Beds	Cement Plaster
Ceramic Tile and Stone	Brick Masonry
Cement Backer Board**	Cement Terrazzo
Exterior Grade Plywood*	Gypsum Wallboard*

\*Interior Use Only

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

#### LIMITATIONS

Do not use **705 ProSet Plus** 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. **705 ProSet Plus** must not be used to apply over asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, plastic, gypsum mortar beds 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



Mer-Krete ProSet PLUS Test DATA ANSI A 118.4		
TEST	EVALUATION	ANSI STANDARD
Initial Set @ 100° F	3.5 hrs	> than 1 Hour
Final Set	13 hrs	> than 9 Hour
Open Time @ 73° F	>65 min.	50 min. or more
Open Time @ 110° F	35 min.	20 min. or more
Adjustability @ 73° F	>35 min.	30 min. or more
Adjustability @ 110° F	>15 min.	10 min. or more
Sag	10/64 inch	< 1/16 inch
	SHEAR BOND	ANSI STANDARD
Glazed Wall Tile	7 day wet, 329 psi	> 200 psi
Glazed Wall Tile	12 wk, 595 psi	> 300 psi
Impervious Mosaic	7 day, 324 psi	> 200 psi
Impervious Mosaic	28 day, 262 psi	> 200 psi
Freeze Thaw	4 wk, 194 psi	>175 psi
Quarry Tile	7 day, 312 psi	> 100 psi
Quarry Tile	28 day, 273 psi	> 150 psi
Freeze Thaw	4 wk, 245 psi	>100 psi
Compressive Strength	2664 psi	Not < 2500 psi

### 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.



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For the latest and most current product information, make sure to visit our website at: [www.merkrete.com](http://www.merkrete.com)

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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 **705 ProSet Plus** 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 **705 ProSet Plus** over additional substrates or situations not mentioned in these instructions, contact Mer-Krete Technical department.

### 4. TECHNICAL DATA

#### APPLICABLE STANDARDS

**Mer-Krete's 705 ProSet Plus** meets or exceeds industry requirements ANSI A118.4 for Latex Portland Cement Mortar and ANSI A118.11 for EPG Latex Portland Cement Mortar. Follow ANSI A108.5 for installation.

### 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 Subsurfaces". 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 (EGP) 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 50 lb. (22.7 kg) **705 ProSet Plus** 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 mortar mix occasionally. Do not temper with additional water. Do not add latex liquid to **705 ProSet Plus**.

#### 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.

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## 6. AVAILABILITY

**Mer-Krete 705 ProSet Plus** 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.

## 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.  
[www.merkrete.com](http://www.merkrete.com)

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