



# A Premium Crack Prevention Thin Set Mortar

## DESCRIPTION AND USE:

Multicoat's FLEX SET MORTAR is a premium polymer modified mortar adhesive used to set tile, glass tile, stone, brick, brick veneer, and rock.

## ADVANTAGES:

- Flexible to Help Reduce Cracking in Tile
- Aggressive Bonding Strength
- Just Add Water
- Suitable for Submerged Applications
- Bond Non Porous Tile such as Porcelain
- Environmentally Friendly



**Meets or exceeds ANSI A118.4, A118.1, A118.11**

## BASIC USE:

FLEX SET is a premium quality polymer modified, cementitious pre-blended dry material designed to bond masonry units to one another.

## PACKAGING/COLOR:

FLEX SET MORTAR is furnished in Grey or White color , packaged in 50-lb bags.

## COVERAGE:

<u>Size</u>	<u>Trowel Size</u>	<u>Coverage</u>
Up to 8"	1/4"x1/4"x1/4" Sq. Notch	90-100 Sq. Ft/Bag
8" to 12"	1/2"x1/2"x1/2" Sq. Notch	60-70 Sq. Ft/Bag
12" +	1/2"x1/2"x1/2" Sq. Notch	45-50 Sq. Ft/Bag

## SUITABLE SURFACES:

Concrete, mortar beds, cement based plaster, most masonry substrates, cold applied liquid waterproofing membrane such as Multicoat's MULASTICOAT®, existing tile and laminates (scarified first) and lightweight cement and gypsum.

## SURFACE PREPARTION:

Substrate must be structurally sound, free from grease, oil, paint, dirt, dust, sealers. Laitance, curing compounds, and any other foreign material which may prevent proper bonding. When applying to any cementitious surface, that surface must be fully cured. Water should be able to penetrate the substrate. If water beads, surface contaminates are present. Insure that surface is not subjected to hydrostatic pressure, if so, do not apply. Concrete slabs and mortar beds should have a coarse finish to assist in bonding.

When applying to Gypsum and Lightweight Cement the substrate must have a minimum of 2,000 psi compressive strength. Must be dry and properly cured. When applying in wet areas, we recommend a waterproofing membrane of MULASTICOAT® be used (refer to instruction sheets for proper specifications and installation instructions).

When applying to existing tile, laminates or resilient flooring, insure surface is well bonded and clean. Roughen the surfaces by sanding or scarifying, rinse and allow to dry. Do not sand floors that contain asbestos.

## MIXING:

FLEX SET MORTAR is to be field mixed with clean potable water and mechanically mixed to desired consistency based upon scope of application. Add approximately 6-1/2 quarts of water into mixing container. Slowly pour the contents of the bag into the mixing water. Mix until a firm, workable consistency is achieved. If more water is needed, add small amounts and continue to mix until consistency is achieved. Let the mixture slake or stand 5 to 10 minutes, then stir again and use. Stir occasionally but do not add more water. Desired consistency should be trowel ridges should stand without slumping. Do not exceed a total volume of 1.5 gallons of water for each 65-lb bags.

# FLEX SET MORTAR



**APPLICATION / PLACEMENT:**

Be sure mixed material is consistent from batch to batch. Apply FLEX SET MORTER to substrate with flat trowel. Use a properly sized notch trowel to insure proper coverage and spread of material under tiles. Work placed FLEX SET MORTAR with notched trowel to create rows of adhesive to proper thickness for item being placed. Press tile firmly in place, moving back and forth to insure a proper set. Adjust tile quickly and then gently tap into place with rubber mallet or beating block until flush with other units. Periodically pull up a tile or stone and check the back to insure proper adhesive coverage. If mortar has already taken its set under the lifted tile, remove mortar and replace with fresh FLEX SET MORTAR. Placed FLEX SET MORTAR can be a total of 3/8" thick once item has been set and tamped into place.

**CURING:**

Curing time will vary due to weather conditions, thickness, substrate absorption, etc. Material should be protected from weather elements and foot traffic for a minimum of 24 hours.

**EXPANSION JOINTS:**

Provision for movement (expansion joints and control joints) and other changes of plane in all installations are required. Do not bridge expansion or control joints. Those joints should be brought up through the work and filled with a suitable caulking.

**LIMITATIONS:**

Do not apply if precipitation is expected with twelve hours of application. Do not apply if ambient air temperature is 40° F and falling or above 100° F and rising. Do not add other materials to the mixture of the product. When applying glass tile, insure glass tile manufacturer instructions are closely followed. Do not apply to walls or floors that are subjected to negative side pressure.

**STORAGE:**

Store bags in a cool, dry location. Store away from direct contact with the ground or concrete. Protect from weather and other damage. Shelf life is approximately 24 months in unopened bags.

**CLEANING:**

Clean with warm soapy water immediately after use. Once dried, material will require mechanical means for removal.

**TEST DATA:**

TEST	RESULT / ANSI A118.4	TEST	RESULT	Mode Of Failure
Open Time—PSI 20 Minute	170 75			
Sheer Strength, PSI		<b>ASTM C-482</b>		
Faux Brick to Concrete		Bond Strength, PSI	16	Staple/Lathe & Cement
7 Day	270	<b>ASTM C—273</b>		
28 Day	380	Shear Strength, PSI	54	Bond Fail at brick tile to Grout
Quarry Tile				
28 Day	305 150			
Glazed Tile				
7 Day	405 300			
7 Day Wet	245 200			
Mosaic Tile				
1 Day	80 75			
7 Day	325 200			
7 Day Wet	160 150			
28 Day	365 200			
Faux Brick to Faux Brick				
7 Day	265			
28 Day	435			

**WARRANTY:**

**WARRANTY:** Materials are guaranteed with respect to uniformity and quality within manufacturer's specifications.

**WARRANTY DISCLAIMER:** There are no warranties which extend beyond the description of the fact hereof. Seller expressly disclaims all other warranties regarding the use of its products, whether expressed or implied, including the implied warranties of merchantability and for fitness of a particular purpose. Since use of the product is beyond the Seller's control, the Buyer assumes all risk of use.

**EXCLUSIVE REMEDY:** Seller's sole obligation, and buyer's exclusive remedy shall be to replace material if found to be defective.

**DAMAGE LIMITATION:** Seller shall not be liable for any damages, injury, loss, direct or consequential, resulting from its products. The parties intend that the limitation of damages, including consequential damages, applies even if the exclusive remedy provided for herein fails of its essential purpose.

**FOR PROFESSIONAL USE ONLY:** Multicoat products should be used by licensed contractors. Multicoat is not a contractor and the contractor remains liable for all damages and inadequate product performance caused by construction means, methods, sequences and techniques that are used to install the product which may include: design and construction of the substrate and the

selection WEST COAST  
installation Toll Free (877) 685-8426  
all seal-

EAST COAST  
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