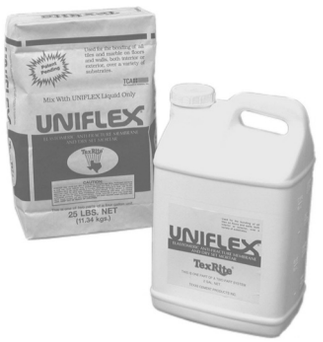
# UNIFLEX
## Elastomeric Anti-Fracture Membrane and Dry-Set Mortar

## Product Information






***Uniflex*** is a technological break-through in the development of a truly elastomeric dry-set mortar for the installation of ceramic tile and stone. Composed of a unique synergism of latex polymers and Portland cement, ***Uniflex*** may also be used as an elastomeric crack isolation membrane for the installation of ceramic tile, marble, slate, and granite over a variety of surfaces.

## BASIC USE

***Uniflex*** is trowel applied to develop an elastic membrane that is designed to prevent existing cracks in the substrate from transferring through the tile installation. Due to its excellent flexibility, ***Uniflex*** allows the installation of hard surfaces to substrates subject to vibrations and deflection up to 1/240th of the span. ***Uniflex*** can be used interior or exterior on floors and walls, or anywhere a water-resistant "truly – stretchable" elastomeric setting material is desired for the installation of ceramic tile and stone surfaces.

## AREA OF USE

Suitable backings when properly prepared include: cured Portland cement mortar beds, existing ceramic tile, well bonded VCT or sheet vinyl (noncushioned), concrete slabs, steel decks, plastic laminates, concrete block and glass mesh mortar units. ***UniFlex*** may be used over cut-back adhesive residue properly prepared in accordance with the Resilient Floor Covering Institute paper on "Recommended Work Practices for Removal of Resilient Floor Coverings". Exterior grade plywood and gypsum board are suitable substrates in dry interior areas only. When used as an elastomeric crack isolation membrane, ***Uniflex*** allows installations over properly prepared shrinkage cracks as described in this product information sheet.

## LIMITATIONS

***Uniflex*** must not be applied directly over asphalt sheeting, vinyl covered wall board, Masonite, cement asbestos board, glass, aluminum, anodized surfaces or gypsum mortar beds. Improperly cured or wet plywood, particle board, or strip wood surfaces are not considered suitable substrates. Do not apply to surfaces below 40° F or above 85° F. Keep above 40°F at least 72 hours after application to allow for proper cure. Do not apply over wet surfaces or surfaces subject to hydrostatic pressure. Some green or red marble may warp when installed with setting materials that contain water causing loss of bond and or damage to the finish. This marble must be set using EpoxyPlus 2002 TS. Because of its soft nature, marble should not be installed over substrates with deflection in excess of 1/720th of the span. Never apply ***Uniflex*** over $^{3}/_{16}$" thick after embedding. ***Uniflex*** is not to be used as a wearing surface.

## APPLICABLE STANDARDS

***Uniflex*** may be used in installations that must conform to ANSI A108.5, A108.12. Detailed information procedures may be found in the TCNA Handbook. Meets shear bond requirements ANSI A118.1, A118.4, A118.11 and meets the requirements for ANSI A118.12.

## PACKAGING

COLOR: Grey or white.
TEXTURE: Powder: consisting of Portland cement, graded sand, organic and inorganic chemicals.
LIQUID: White flowable latex additive.
PACKAGING: Three sizes available.
A "One Gallon Unit" consists of two quarts of ***Uniflex*** Liquid and two 3.1 pound bags of ***Uniflex*** Powder.
A "Two Gallon Unit" consists of one gallon of ***Uniflex*** Liquid and a 12.5 pound bag of ***Uniflex*** Powder.
A "Four Gallon Unit" consists of a 2 gallons of ***Uniflex*** Liquid and a 25 pound bag of ***Uniflex*** Powder.

## INSTALLATION

***Preparatory Work***

All surfaces on which ceramic tiles are to be set must be dry, structurally sound, and not subject to temperatures below 40º F or above 90º F. Detailed installation procedures may be found in the T.C.N.A. Handbook, and ANSI A108.5. All surfaces must be dry and free of all grease, oil, dust, dirt, curing compounds, paint, sealers, coatings, efflorescence, old adhesive residue, gypsum based underlayments and any other foreign matter.

***Cementitious Substrates***

Cleaning may be accomplished via mechanical sanding, scraping, or chipping. Smooth steel troweled concrete must be roughened, shot-blasted or acid-etched using a 10% muratic acid wash. It is important that the acid sludge be thoroughly neutralized (with baking soda or TSP) and flushed from the floor. It is advisable to dampen dry porous concrete before installing ceramic tile with ***Uniflex*** mortar. Do not leave puddles or standing water on the surface. Substrate deflection shall not exceed 1/240th of the span.

***Plywood Subfloor***

Floor systems including the framing system and subfloor panels over which tile will be installed shall be in conformance with the IRC for residential applications, the IBC for commerical applications or applicable building codes. Wood underlayments must be exterior glue plywood only, secured with screw-type nails and glued where possible. A gap of $^{3}/_{16}$" shall be left between sheets of plywood and between the plywood edges and all materials that they abut to allow for expansion. The gaps shall remain empty when the installation is complete. In addition, all wooden surfaces must be interior use only and protected from exposure to water.

***Construction/Expansion/Contraction/Isolation Joints***

Do not bridge these types of joints. Carry these types of joints through any subsequent finishing material. Follow installation procedures as outlined in the section EJ 171 in the T.C.N.A. Handbook and ANSI A-108.5. Remove all thinset, mortar grout and debris from joints before sealant is placed.

***Mixing***

The correct mixing ratio is 1 gallon of ***Uniflex*** Liquid for each $12^{1}/_{2}$ pounds of ***Uniflex*** Powder. Add the liquid to a clean bucket first then add the powder **s-l-o-w-l-y** while mixing. Let the mix slake for 10 minutes. Do not use mechanical mixers at speeds greater than 300 rpm's to avoid entrapment of air. Do not add water, more liquid, powder or any other material to this mix

UNIFLEX





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# UNIFLEX
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TexRite®

**Product Information**





***Use As Crack Treatment***

For isolation of shrinkage cracks 1/8" wide or less, proceed as follows:

***Uniflex*** can be used to bond tile directly over the crack. First fill the crack by compressing the ***Uniflex*** Mortar into the cracks with the flat side of the trowel. Then follow the directions for usage as a dry-set mortar.

When used as a crack isolation membrane in limited areas over existing cracks, compress the ***Uniflex*** into the crack. Then with a flat trowel, key the ***Uniflex*** into the adjacent substrate. Next, comb the ***Uniflex*** with a 3/16" x 3/16" V-notched trowel and smooth with the flat side of trowel. Apply the ***Uniflex*** to a minimum of 1/16". Allow to cure 24 hours then use one of Tex-Rite's polymer modified Dry-Set Mortars such as CeramaBond, MultiPurpose, CeramaFlex, Rapid Bond, Total Contact, Floor Mix mixed with A-Crylic Mortar Admixture, or more ***Uniflex*** over the ***Uniflex*** as the tile bonding mortar.

For crack isolation using either of the above methods, ***Uniflex*** shall be applied over the crack and extending a minimum of the diagonal measurement of the tile to be installed, or 12 inches whichever is greater on both sides of the crack. For cracks greater than 1/8", treat the same as construction joints.

***Use As a Dry-Set Mortar***

***Uniflex*** may also be used as a dry-set mortar to bond ceramic tile, stone, slate, and marble directly over acceptable substrates previously described. ***Uniflex*** may also be used over precast or prestressed concrete slabs in high-rise buildings.

Mix the ***Uniflex*** as described above and spread a thin layer of mortar with the flat side of the trowel to key mortar into the substrate; then apply additional mortar to a depth sufficient to be notched with a suitable trowel to give 100% contact with the back of the tile and subsequent mortar bed of 3/32" to 3/16" after embedding the tile. With high lug tiles, "back buttering" may be required to insure 100% coverage of back of tile. During the setting of tile, it is advisable to occasionally remove a tile to be sure the ***Uniflex*** has not skinned over and sufficient transfer is being made. Do not adjust tiles after they have been set past 20 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.

When using as a mortar for marble, set several pieces in the ***Uniflex*** and allow to dry for 16 hours to test for any bleed through or discoloring.

***Coverage***

25 sq. ft./ gallon using a 3/16" x 3/16" "V" notched trowel at 1/16";
17 sq.ft./ gallon using a 1/4" x 1/4" square notched trowel at 3/32".

***Working Time***

Approximately 5 to 6 hours, depending on ambient temperature.

***Initial Set***

Approximately 1 hour

***Cleaning***

Tools and tiles should be cleaned as soon as possible with water while the ***Uniflex*** is fresh, wet paste.

***Curing and Grouting***

A minimum cure is obtained in 24-48 hours, depending on ambient temperatures (ANSI A-108.5). Normal grouting should be done 72 hours later.

Patent pending

**SPECIFICATIONS - Technical Data: Uniflex**

| | Test | Typical Values |
|---|---|---|
| A. | Appearance | White or gray sanded powder mixed with a white liquid. |
| B. | Density | 10.4 pound/gallon when mixed. |
| *C. | Pot Life | 6 hours |
| *D. | Skin time | 20 minutes |
| *E. | Working time: | Approximately 60 minutes |
| F. | Open to Traffic: | 48 hours for grouting; 72 hours for light foot traffic; 7 days for heavy traffic. |
| G. | Curing Temperature | 40-120°F. |
| H. | Hardness | 30 Shore "D" scale |
| I. | Elongation: (ASTM D751) | >190% |
| J. | Tensile Strength (ASTM D751) | >120 PSI |
| K. | Bond Strength to paver Tile: (ANSI A-118.4) 28 day | 400 PSI |

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

L. Storage Life - One year if kept in tightly sealed containers in temperatures of 40-90 ° F. **Protect From Freezing.**

**CAUTION**

**LIQUID**: Avoid inhalation of vapors, use in well ventilated areas. Avoid contact with eyes, flush with water and call physician immediately; for skin contact, wash with water, soapy water. If material is swallowed, call physician immediately. **KEEP OUT OF REACH OF CHILDREN.**

**POWDER**: May cause eye, skin or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis) and there is limited evidence the crystalline silica can cause cancer in humans. Eliminate exposure to dust. Recommend use of a NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into the 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.**