



Fracture Shield

TILE & STONE INSTALLATION PRODUCTS

DESCRIPTION

Siena Fracture Shield is a ready to use anti-fracture, crack isolation and water resistant membrane, manufactured with a mixture of latex polymers and other proprietary additives to produce a high quality elastomeric barrier that protects tile floors from cracks due to minor surface movement. Fracture Shield is easily applied with a trowel, roller or brush, and appears glossy white when wet and becomes a flat white upon drying. Fracture Shield exceeds the requirements for ANSI A118.12 for crack isolation and can be used in residential, commercial, interior and exterior tile and stone applications.

BASIC USES

Siena Fracture Shield is used on recommended substrates as an anti-fracture and crack isolation membrane used to prevent shrinkage or non-structural cracks up to 1/8" transmitting from the substrate through the finished goods. Use polymer modified mortars meeting ANSI A118.4 or A118.11 for tile or stone installations over membrane.

STORAGE

1. Store containers un-opened in a cool, dry location.
2. Store temperatures between 40°F (4°C) and 90°F (32°C).
3. Store out of direct sunlight.
4. Protect containers from weather and other damage.
5. Keep from freezing

RECOMMENDED SUBSTRATES

Suitable substrates, when properly prepared, include: Fully cured concrete (28+ days), cement backer units (per manufactures' specifications), exterior grade plywood, interior grade plywood (dry areas), fully cured portland cement mortar beds (28+ days), and exterior decks with proper drainage.

SURFACE PREPARATION

All surfaces to receive application must be structurally sound, stable, dry, clean, and free of all contaminants that would diminish a good bond such as debris, dirt and dust, efflorescence, grease, oils, curing agents, and cleaning solutions that would hinder a proper bond. Texture fresh concrete to a fine broom finish and cure for a minimum of 28 days. All fresh concrete substrates must be able to accept water penetration. Existing cementitious substrates can be cleaned by mechanical means such as sanding, scraping or chipping. Smooth surfaces must be roughened to promote proper bond, and all substrate defects should be repaired prior to membrane application. Plywood surfaces must meet all ANSI and deflection requirements. Slightly moisten all porous surfaces prior to application of the first coat of Fracture Shield.

MIXING

Mix thoroughly by hand or use a mixer of less than 300 rpm to avoid too much entrapped air. Do not add water to Fracture Shield.

APPLICATION

Cracks up to 1/8" (3mm) must be pretreated prior to the application of Siena Fracture Shield. To Pre-treat these areas, push and apply a liberal amount of Fracture Shield into the crack. Next, apply Fracture Shield along the crack in the width of the diagonal measurement of the tile or stone that will be installed, or a minimum of 8" (20 cm) wide, centered over the crack. When using a V-notch trowel, comb at a 45° angle and flatten the material using the flat side of the trowel. If using a roller or brush, apply an even coat with overlapping strokes. The membrane must have a minimum wet thickness of 30 mils per coat. Slightly moisten all porous surfaces prior to the application of the first coat of Fracture Shield. Once the pre-treatment material has dried to a flat white (approximately 1.5 to 2 hours), apply Fracture Shield over the entire working area to an approximate thickness of 30 mils wet. Use the same application technique for each coat. Use polymer modified mortars meeting ANSI A118.4 or A118.11 for tile or stone installation over membrane.

DRYING

Dry the freshly applied material for at least 4 hrs. Fracture Shield will turn to a flat white when dry. Drying time may vary due to surface and area conditions, ambient temperatures and humidity.

COVERAGE

1 gallon (3.78 L) pails: 65-70 sq. ft. (4.96 m²) at 30 mil thickness when wet
3.5 gallon (13.3 L) pails: 225-245 sq. ft. (17.36 m²) at 30 mil thickness when wet
5 gallon (18.9 L) pails: 325-350 sq. ft. (24.8 m²) at 30 mil thickness when wet

MATERIAL CALCULATOR

Visit the Siena web site at www.SienaProducts.com and click on the "Material Calculator" tab for recommended products and to calculate the amount of materials needed for each project. Always follow all manufacturers' recommendations and warranty information prior to any tile or stone installation.

PACKAGING

1 Gallon (3.78 L) pails
3.5 Gallon (13.3 L) pails
5 Gallon (18.9 L) pails

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TECHNICAL DATA

Pot Life @ 70°F (21°C)	Indefinite	
System Crack Resistance Test (ANSI A118.12 Section 5.4)	Passes	
Drying Time Before Floor Covering Installation	1.5 - 2.0 Hours or up to 12 Hours	
Fungus and Micro-Organism Resistance ANSI A118.10 Sect # 4.2	Passes	
Seam Strength width ANSI A118.10 Sect # 4.2	37.4 lbs/2 inch width (16.96 kg/5cm)	
Breaking Strength ANSI A118.10 Sect # 4.3	611 psi (42.96 kg/cm ²)	
Dimensional Stability ANSI A118.10 Sect # 4.4	-0.1% @ 158°F -0.1% @ -15°F	
Shear Strength 12-Week dry cure ANSI A118.10 Sect # 5.6	318.1 psi (22.36 kg/cm ²)	
Elongation ASTM D-638 (Internal Lab Results)	21 Day dry cure	330%
	7 Day dry cure/ 21 Day wet cure	600%

LIMITATIONS

DO NOT apply to surfaces that may go below 40°F (4°C) during the first 72 hours after application.

DO NOT apply over wet surfaces or surfaces subject to hydrostatic pressure.

DO NOT use as an adhesive.

DO NOT use as a wear surface, membrane must be covered with tile or other protective surface

DO NOT use to bridge or cover over any existing expansion, control, construction, and cold or saw-cut joints.

DO NOT leave membrane to be soiled or punctured during and after application.

Membrane should be protected from rain, direct sunlight and inclement weather for 72 hours after application. Cover with felt paper if delays are expected to be longer than 72 hours.

CLEANING

Cleaning of tools and hands may be accomplished with water before material dries. All spray equipment should be cleaned immediately after use.

SAFETY

Avoid contact with eyes or prolonged contact with skin. Wash thoroughly after handling. In case of eye contact, flush immediately with running water for at least 15 minutes. Consult a physician immediately. Do not take internally. Be sure to provide adequate ventilation in enclosed areas. Use of an approved respirator is recommended.

WARNING

Omega Products International, Inc., as a blender of processed material in the State of California, is required by Proposition 65 to warn that one or more of the components contained in this product, could contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. The State of California (Proposition 65) requires this warning in the absence of definitive testing to prove that the defined risks do not exist. We believe this product complies with all other applicable state and federal laws and regulations governing manufacturing, distribution and intended use. User is solely responsible for the legal disposal of this container and/or its contents.

KEEP OUT OF REACH OF CHILDREN

DISCLAIMER

Omega Products International, Inc. [Manufacturer] MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE PRODUCT SOLD HEREIN. The recommendations, suggestions and technical data are based on the best knowledge available to Manufacturer and are given for informational purposes ONLY and without any responsibility for their use. It is expressly understood and agreed, as a condition of the use of this product, that the buyer's sole and exclusive remedy for any claimed defective product against Manufacturer shall be the replacement of products actually proven to be defective. Handling and use of the products are beyond the control of Manufacturer; 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 use of the product. Under no circumstance shall Manufacturer be liable for incidental or consequential damages arising out of the use or the improper application of the product. Before applying the product, the user shall determine the suitability of the product for his/her independent use, assuming all risks and liability whatsoever in connection therewith. This writing constitutes a complete and exclusive statement of the understanding between Manufacturer and Buyer.

CLAIMS

Any Claimant shall notify Manufacturer immediately in writing of any alleged defect in the material. Claimant will provide Manufacturer with a reasonable and exclusive opportunity to investigate and test for the alleged defect. For any claim that is not valid Claimant agrees to pay Omega's reasonable charges, including travel and labor associated with investigation of such claim.

TECHNICAL ASSISTANCE

Technical assistance and information is available by calling Omega Products International, Inc. at (800) 600-6634 or FAX (951) 520-2594 or by e-mail at "info@omega-products.com".

WARRANTY

The following is made in lieu of all expressed and implied rights, warranties and conditions, statutory or otherwise. The Manufacturer's only obligation shall be to replace such quantity of products proven to be defective within one year following the date of manufacture, provided that the alleged defective product is returned prepaid to the Manufacturer's plant and is accompanied with proof of purchase and batch number.

Manufactured by



The Professional's Choice

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