



Dragon Skin

WATERPROOF AND CRACK ISOLATION MEMBRANE



PACKAGING

1 gallon (3.8L) pail
3.5 gallon (13.2L) pail
5 gallon (18.9L) pail

STORAGE

Store in a cool, dry location at a temperature between 40°F (4°C) and 90°F (32°C). Do not store in direct contact with the ground or concrete. Store out of direct sunlight and protect from weather and other damage.

SHELF LIFE

Original Unopened - 2 Years

DRYING & CURING

Dry the freshly applied material for at least 1 hour before applying a highly polymer modified mortar (such as: M200, M225, M375, M400) for tile or stone installation. Dragon Skin will turn to a dark purple color when dry. Siena Dragon Skin can be flood tested for leaks 24 hours after application. Drying time may vary due to surface and area conditions, ambient temperatures and humidity.

MATERIAL CALCULATOR

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



Siena Dragon Skin is a premium, ready to use waterproofing and crack isolation membrane, manufactured with a mixture of latex polymers and other proprietary additives to produce a high quality elastomeric barrier. Dragon Skin is easily applied using a roller, trowel, paint brush or a sprayer. Dragon Skin is a light purple color when wet, and changes to a dark purple color to indicate when it is dry. Dragon Skin bonds to most surfaces, dries quickly and is ready for flood testing in 24 hours. Dragon Skin exceeds the requirements for ANSI A118.10 for waterproofing membranes and ANSI A118.12 for crack isolation membranes. It can be used in residential, commercial, interior and exterior installations. DO NOT use on exterior vertical installations. IAPMO has listed Siena Dragon Skin for use as a shower pan liner (IAPMO R&T, File # 6892).

FEATURES	BENEFITS
Waterproofing & Crack Isolation	Barrier to water migration and cracks up to 1/8"
Fast Drying, Easy to Use	Apply with a Roller, Trowel, Paint Brush or Sprayer
IAPMO R&T, File #6892	Use as a Shower Pan Liner, Hot Mop Replacement
Meets ANSI A118.10 & A118.12	Prevents Cracks from Transmitting to Finished Goods

BASIC USES

Dragon Skin is used on recommended substrates as a barrier to water migration, and as a crack isolation membrane used to prevent shrinkage and non-structural cracks up to 1/8" transmitting from the substrate through to the finished goods. Dragon Skin must not be left uncovered or exposed. A highly polymer modified mortar (such as: M200, M225, M300, M400) must be used over Dragon Skin meeting ANSI A118.11 or A118.15 for tile or stone installation.

RECOMMENDED SUBSTRATES

Suitable substrates, when properly prepared, include: Fully cured concrete (28 days), cement backer boards (per manufacturers' specifications), properly prepared existing tile and stone using Siena Gripping Primer, exterior grade plywood (interior areas only), portland cement mortar beds, concrete, masonry and exterior decks with proper drainage and slope, flashing if applicable

SURFACE PREPARATION

All surfaces to receive application must be structurally sound, stable, dry, clean and free of all contaminants that would hinder a good bond such as debris, dirt and dust, efflorescence, grease, oils, curing agents, and cleaning solutions. Use a damp sponge to clean and open pores of all surfaces that will receive Dragon Skin. Outdoor locations and any area where moisture will be present should have adequate slope and flashing if applicable to allow for proper drainage. Cracks more than 1/8" (3mm) should be treated as detailed in the Expansion Joints section. Fresh concrete must be cured for a minimum of 28 days prior to Dragon Skin being applied. 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 using Siena Floor Patch SP820 prior to applying Dragon Skin. For complete surface preparation procedures see the TCNA (Tile Council of North America) Handbook. Use a damp sponge to clean all porous surfaces prior to application. Do not use chemicals or etching agents.

MIXING

Mix thoroughly by hand to incorporate material. Do not add water to Siena Dragon Skin unless it is being used as a primer coat. To use as a primer coat, dilute 1 part Dragon Skin with 4 parts clear, cool water in a clean pail. Mix thoroughly at a low speed and apply evenly using a roller, brush or sprayer at a rate of 300 ft/gallon (20.1M/L).



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APPLICATION

The recommended tools for applying Dragon Skin are: 3/8" (9.5mm) rough textured roller, 3/16" x 1/4" (5 x 6mm) V-notch trowel, paintbrush, or sprayer that produces between 1,900 to 2,300 psi with a flow rate of 1.0 to 1.5 gpm, and a tip orifice of 0.025 to 0.029 in size. Use a damp sponge to clean all surfaces and all porous surfaces prior to application of the first coat of Dragon Skin.

- Existing, Non-Structural Cracks: Cracks up to 1/8" (3mm) must be pretreated prior to the application of Dragon Skin. To Pre-treat these areas, push and apply a liberal amount of Dragon Skin into the crack. Next, apply Dragon skin along the crack in the width of the diagonal measurement of the tile or stone that will be installed, or a minimum of 8" (20cm) 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. Membrane must have a minimum wet thickness of 30 mils per coat.

- Corners, Coves, Control Joints and Transitions: Corners, coves, control joints, cracks greater than 1/8" (3mm), and floor-wall transitions within in area to be waterproofed must be pre-treated prior to the overall application of Dragon Skin. To pre-treat these areas apply a thick coat approximately 8" (20cm) wide over corners, coves, control joints, cracks greater than 1/8" (3mm), and floor-wall transitions. Embed a minimum 6" (15cm) wide, Siena Reinforcement Fabric, or 4.5oz fiberglass open mesh into the wet membrane and smooth any wrinkles. Immediately apply a second coat over the mesh to create a uniform, void-free surface.

- Drains: Drains must have a locking (bolt-down) collar and be clean of oils, dirt and any material that would hinder a proper bond. Apply a thick coat of Dragon Skin around and over the flange and surrounding area, a minimum of 8" (20cm). Embed minimum 6" (15cm) wide, Siena Reinforcement Fabric, or 4.5oz fiberglass open mesh into the wet membrane and smooth any wrinkles. Take care not to block the weep or drainage holes. Immediately apply a second coat over the mesh to create a uniform, void-free surface. When the membrane is dry, install the upper flange by evenly tightening it to create a watertight seal. Using silicone caulking, seal the circumference where the membrane and upper flange meet. A toilet flange can be handled in a similar manner.

- Expansion Joints: For expansion joints follow instructions outlined in section EJ 171 of the TCNA (Tile Council of North America) Handbook.

As an Anti-Fracture Membrane - For use as an anti-fracture membrane to isolate shrinkage or non-structural cracks up to 1/8" (3mm), first pre-treat existing cracks as detailed in the above section titled "Existing, Non-Structural Cracks". Use a damp sponge to clean all surfaces and all porous surfaces prior to application of the first coat of Dragon Skin. Once the pre-treatment material has dried to a dark purple (approximately 30 min. - 1 hr.), apply Dragon Skin over the entire working area to an approximate thickness of 30 mils wet. When using a V-notch trowel, comb at a 45° angle and flatten the material with the flat side of the trowel. If using roller or sprayer, apply an even coat with overlapping strokes. Use polymer modified mortars (such as: M200, M225, M300, M400) meeting ANSI A118.11 or A118.15 for tile or stone installation over membrane.

As a Waterproof Membrane - Follow the pre-treating instructions for cracks, coves, corners, expansion joints, and drains sections above. Use a damp sponge to clean all surfaces and all porous surfaces prior to application of the first coat of Dragon Skin. Apply the first coat of Dragon Skin over the area to be waterproofed. When using a V-notch trowel, comb at a 45° angle and flatten the material with the flat side of the trowel. If using roller or sprayer, apply an even coat with overlapping strokes. After the first coat has dried to a dark purple color (approximately 30 min. - 1 hr.), apply a second coat at a right angles to the first. Inspect the film and add material to fill in any holes or voids to create a continuous film. Periodically check membrane thickness with a wet film gauge. Each coat should have a minimum wet thickness of 30 mils and a combined two coat wet thickness of a minimum 60 mils. Total wet thickness should not exceed 125 mils thick. Use polymer modified mortars (such as: M200, M225, M300, M400) meeting ANSI A118.11 or A118.15 for tile or stone installation over membrane.

Interior Change of Plane Commercial Waterproofing Applications

Contact Technical support before starting any commercial installation for review and recommendations.

CLEANING

Cleaning may be accomplished with water immediately after use.

TECHNICAL ASSISTANCE

Technical information is available on our web site at: SienaProducts.com, by contacting Omega Products International at: 951.737.7447, or by email at: info@omega-products.com

TECHNICAL DATA

Bucket Life at 73° F (23°C)	Indefinite
Drying Time	1 hour
ANSI A118.10 Results:	
Fungus and Micro-Organism Resistance	Passes
Seam Strength	37.4 lbs / 2 inch width (16.96kg/ 5cm)
Breaking Strength	611 psi (43.0kg/cm ²)
Dimensional Stability	-0.1% at 158°F and -0.1% at -15°F
Waterproofness	Passes
Shear Strength 12-Week dry cure	318.1 psi (22.4kg/cm ²)
Shear Strength 100 Day water immersion	326.5 psi (23.0kg/cm ²)
IAPMO/Uniform Plumbing Code 4244:	
Hydrostatic Pressure/Alkali-Resistance	Passes
Waterproofness	Passes
Elongation ASTM D-638 21 Day dry cure	235 %
VOC Content	6 g/L

COVERAGE

Dragon Skin Waterproof Membrane Coverage:

50 sq.ft. (4.6 m²) per gal., two coats at 15 mil wet thickness

25 sq. ft. (2.3 m²) per gal., two coats at 30 mil wet thickness each-ANSI A118.10

Dragon Skin Crack Isolation Membrane Coverage:

100 sq.ft. (9.2 m²) per gal. at 15 mil wet thickness

50 sq.ft. (4.6 m²) per gal. at 30 mil wet thickness

25 sq.ft. (2.3 m²) per gal., two coats at 30 mil wet thickness each-ANSI A118.12

Note: Values listed above are typical results for tests indicated and should not be considered specifications. Actual product performance will depend on job conditions, temperature, humidity and application methods.

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 over 12 lbs. DO NOT use as an adhesive. DO NOT use on exterior vertical installations.

DO NOT use as a wear surface, membrane must be covered with tile or other protective finished surface material. DO NOT use to bridge or cover any existing expansion joints, control joints, construction, cold or saw-cut joints. DO NOT leave membrane unprotected 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 or other protection if delays are expected to be longer than 72 hours.

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 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 its contents.

KEEP OUT OF REACH OF CHILDREN

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