SURECRETE®

ELASTO SHEILD

ELASTOMERIC WATERPROOFING CRACK PREVENTION MEMBRANE

DESCRIPTION

ElastoShield™ is a ready-to-use waterproofing and crack suppression elastomeric liquid membrane that provides water-proofing for all SureCrete overlay systems, both horizontal and vertical. This water borne system has no solvents and requires no catalyst, which eliminates pot-life problems. No special safety equipment or respirators are required (unless sprayed). The single component formulation may be applied by brush, roller, or airless sprayer to many construction substrates, including (but not limited to):

- Concrete & Concrete Block
- Polystyrene (including ICF)
- Plywood, OSB
- Cement Backer Boards

Although specifically created for SureCrete overlays, ElastoShield™ is also ideally suited for use with:

- Ceramic Tile
- Stone
- EFIS & Foam Applications

It provides superlative flexibility and elongation with water-proof properties that allow the span of cracks and voids in the substrate. ElastoShield™ reduces crack transmission in floors and walls and forms a continuous water-proofing barrier with outstanding adhesion. Quick dry times between coats reduce job time. Upon cure the membrane will not soften with high temperatures or become brittle with lower temperatures.

SURFACE PREP

Elasto-Shield™ is not a shortcut for poor surface preparation. The principles for surface preparation for Elasto-Shield™ are addressed with the required surface preparation for the overlay being installed.

1. Clean: The surface must be free of dust, dirt, oil, grease, paints, glues, sealers, curing agents, efflorescence, chemical contaminants, rust, algae, mildew and other foreign matter that may serve as a bond breaker.
2. Cured: Any concrete must be sufficiently cured to have sufficient hydration, approximately 7 - 14 days depending on temperatures and humidity.
3. Sound: No system should be placed upon a substrate that is flaking, spalling, or has hibernating spalling.

TEMPERATURE / CURE

Apply when surface and ambient temperatures range between 50°F (10°C) and 90°F (32°C) and will remain that way for 72 hours. Elas-to-Shield™ may receive an overlay when it will not emulsify when wetted. No standing water or wet conditions can be tolerated during application or curing of membrane.

APPLICATION

Planning Completed projects must slope to proper drain or drain completely to grade. No standing water can be tolerated. Cracks or voids in excess of 1/8" must be treated independently prior to application of membrane. Refer to SCT-22 Crack and Spall Treatment and SCT-EP Epoxy Crack Treatment TDS. Construction joints should never be bridged.

Joints, Splices, Penetrations
Sheet or panel products (e.g. plywood, OSB, polystyrene panels) require coating at all joints and splices including floor to wall junction prior to coating the "field" of the sheet or panel. Concrete floors and walls likewise require coating at their junctions prior to coating the "field". Additionally, any penetrations in the "field" likewise require prior attention.

Joints and Splices
- Utilize a ¾" (19 mm) nap roller and apply an even liberal coat of Elasto-Shield a minimum of 3" (7.6 cm) either side of the splice. A chip brush may be more effective at a wall to floor splice.
- Before membrane dries lay minimum 6" (15 cm) width polyester stitch bond material into wet membrane and smooth out, leaving no wrinkles.
- Allow product to dry completely to the touch, no longer tacky, changing from pink to red in color (approximately 1 to 2 hours.)
- Apply 2nd coat over dried membrane to create a "sandwich" of fabric.

Penetrations
- All penetrations should be flashed per industry accepted standards.
- Those portions of flashing that are to be covered by an overlay must be addressed similar to above.
- Brush Elasto-Shield onto the flashing material and extend into field.
- Overlapping strokes will provide an even film.
- Before membrane dries lay polyester stitch bond material into wet membrane and smooth out, leaving no wrinkles.
- Allow product to dry completely to the touch, no longer tacky, changing from pink to red in color (approximately 1 to 2 hours.)
- Apply 2nd coat over dried membrane to create a "sandwich" of fabric.

Main Field
After all joints, splices, and penetrations have dried completely to the touch no longer tacky (approximately 1 to 2 hours.) The field may receive its 1st coat

QUICK FACTS

PRODUCT NAME Elasto-Shield™

PACKAGING
3.5-gallon pail (13.25 L)
5-gallon pail (18.9 L)

COVERAGE
Varies upon substrate porosity, texture, and application method: 150 ft² per gal (14 m² per 3.8 L)

SHELF LIFE
Under normal conditions Elasto-Shield™: when kept dry and moisture free, out of direct sunlight, the shelf life of an unopened container is 1 year from the date of purchase. Storage must be under roof, off the floor, and protected from freezing. Rotate inventory to maintain product that is within limits.

First Coat

- Commonly applied by ¾" (19 mm) nap roller, creating an even coat.
- Alternatively may be applied by airless sprayer
- Equipment must be able to produce 1900—2300 psi (13,100 – 15,900 kPa) and provide an orifice size 0.025"—0.029" (.635 mm - .735 mm)
- Provide a NIOSH approved respirator to prevent inhalation of atomized particulate.
- Allow product to dry completely to the touch, no longer tacky, changing from pink to red in color (approximately 1 to 2 hours.)
- Carefully inspect membrane for any bare spots or holes.
- Fill and cover any voids or pinholes with additional material.

Second Coat

- Applies identical to first coat.
- Elasto-Shield™ may receive an overlay once it is fully cured and will not emulsify when wetted.

CLEAN-UP

ElastoShield™ can be cleaned up with soap and water before product cures.

DISPOSAL

Contact your local government household hazardous waste coordinator for information on disposal of unused product.

LIMITATIONS

- For use by trained professionals that have read the complete SDS.
- Do not use as a wear surface.
- Do not use below grade.
- ElastoShield™ is NOT allowed to freeze.
- Do not apply over wet surfaces or surfaces subject to hydrostatic pressure.
- Concrete slabs must range <75% RH.
- Never use to bridge construction joints.

WARRANTY

Warranty of this product, when used according to the directions, is limited to refund of purchase price, or replacement of product (if defective), at manufactures/seller's option. SureCrete Design Products shall not be liable for cost of labor or direct and/or incidental consequential damages. consequential damages.

WARNING

KEEP OUT OF REACH OF CHILDREN. Inhalation: Avoid prolonged breathing of airborne dust, particularly present during mixing. Use NIOSH approved respirator for nuisance if threshold limit values are unsafe. Skin Contact: Skin contact may cause irritation. Remove contaminated clothing and wash affected skin with soap and water. Launder clothing before reuse. If symptoms persist, seek medical attention. Eyes: Wear safety eye protection when applying. Contact with eyes may cause irritation. Flush eyes with water for 15 minutes. If symptoms persist, seek medical attention.

TEST DATA

ELONGATION ASTM D-638
7—day dry 580% 7—day dry / 21 day wet 657%

PERMEABILITY ASTM E-96:
0.013

TENSILE ASTM E-96:
7—day dry 335 psi (2310 kPa)
7—day dry / 21 day wet 562 psi (3875 kPa)

PROPERTIES

Appearance	Pink
Storage Stability	1 year
Odor	Faint Ammonia
Application Temperature	40°F – 85°F (4°C - 29°C)

SAFETY DATA SHEETS (SDS)

The following are links to all available safety data sheets related to this product:
SDS ElastoShield.pdf

MANUFACTURER PART

3.5-gallon pail (13.25 L)	SKU # 15102010
5-gallon pail (18.9 L)	SKU # 15102009

Micro-Tek™ SG

Technical Information Sheet

Decorative Composition Cementitious Floor Traffic Coating System

DESCRIPTION

Micro-Tek™ Micro-Topping is a single-component polymerized thin-section decorative cementitious coating system available in white and gray. Micro-Tek™ Micro-Topping can give the appearance of smooth concrete while being flexible, resilient and paper thin. Tight, flat surfaces are easily produced in a fraction of the time it may take with standard grouts.

Due to their unique consistency, these surfaces are easy to clean and maintain. They produce an extremely durable, low-cost, yet attractive appearance. Micro-Tek™ Micro-Toppings will accept a limited amount of deflection in the substrate, compensating for concrete movement without sacrificing durability.

Important characteristics of Micro-Tek™ Micro-Toppings are their extraordinary adhesion, coupled with their ability to withstand prolonged pedestrian and vehicular traffic when properly sealed. In these respects the material is far superior to conventional cementitious coatings used to resurface old or worn concrete.

Each application of a Micro-Tek™ Micro-Topping is a unique expression of the installation contracting artist and is not a manufactured look, but rather a compilation of materials, color, skills and experience that combine to tailor an attractive architectural design accent to compliment any surrounding environment.

USES

Ideal for use in restoring damaged concrete for application of VIVID™ Acid Stains, QuickDye™ or GraniteLook™. Can also be integrally colored with C-Series™ Liquid Colorants for a clean look.

ADVANTAGES

- **Unlimited colors, design and texture**
- **Variegated hues, concrete-like look**
- **Excellent adhesion and weathering resistance**
- **Long wearing under traffic**
- **Conventional floor cleaning methods at a lower life cycle cost**
- **Topping can be buff shined**
- **Retards water and waterborne salt penetration**
- **Resists ultra-violet degradation from long-term exposure to sunlight**
- **Skid resistant underfoot**
- **Single Component**
- **Unique designs**

Typical Data for Micro-Tek™ SG Micro-Topping

(Material and Curing Conditions at 73°F unless noted, 50% R.H.)

Set Time Initial ASTM C-266	3 hours
Set Time Final ASTM C-266	6 hours
Compressive ASTM C-579(28 Day)	4097 psi
Tensile Strength ASTM C-307(28 Day)	443 psi
Tensile Modulus ASTM C-307(28 Day)	21,154 psi
Flexural Strength ASTM C-580(28 Day)	645 psi
Flexural Modulus ASTM C-580(28 Day)	572 psi
Modulus ASTM C-580(7 Day)	897 kpsi
Modulus ASTM C-580(28 Day)	833 kpsi
Flexural Secant Modulus ASTM C-580(28 Day)	932 kpsi
Mod Bond Test ASTM C-932(7 Day) (Unprimed dry mortar substrate no prep)	200 psi
Shrinkage ASTM C-531(28 Day) (Curing Conditions 72F, 85% R.H.)	0.19%
Shelf Life	6 months (dry)
Packaging	40 lb (22.68 kg) bags 60 bags per Pallet
Colors	Gray, White

LIMITATIONS

The average typical thickness is approximately 3/32 inch (2.4 mm) and is light in weight at approximately 1.2 lbs per ft². Since most applications accomplish a smooth texture, and must be sealed in order to be integral, they can become slippery. Care should be taken to be aware of this, or an aggregate should be incorporated onto the seal coat to prevent slipping in areas where water is common, or safety is a concern.

SURFACE PREPARATION

Surface must be clean and reasonably dry. All crack repair etc, should have taken place prior to pressure washing, scarifying, grinding or shot blasting. Cut new control joints as required to prevent cracks transferring through the overlay. Pressure-wash all dust and latents from the surface to ensure a clean surface. If high temperatures are imminent, the substrate may be misted with water immediately before the installation to cool the concrete.

MIXING

Each bag of Micro-Tek™ Micro-Topping powder requires 8-10 quarts of water. **Do not add additional polymers!** Pour ¾ of the 8-10 quarts of water into an empty 5-gallon bucket. Add the entire contents of the powder and blend briefly with a drill-powered mixer to wet out the material. Wait 5-10 minutes, and then add the remaining water and mix at medium speed until the material is homogenous and free of all lumps. A mix similar to the consistency of buttermilk is ideal. If desired, any **Concrete Coatings Inc C-Series Colorants** may be added at this time at a rate of ¾-1 cup per batch. Mix until color is uniform.

APPLICATION

Micro-Tek™ SG **MUST** be applied over Micro-Tek™ RG or G-100 Pro Series Grout™. Refer to appropriate TDS for installation instructions for these products. Pour ¼ to 1/3 of the mix onto the surface. At this point, the material may be applied to large areas using a squeegee to spread the material and finished by hand or "funny trowel", or simply spread and troweled by hand. In either case, a thin coating is recommended. Material builds over 1/8" are discouraged. If more build is required, contact Concrete Coatings, Inc. technical support. Let Micro-Tek™ Micro-Topping dry completely and sand the surface between layers, if desired. Remove all dust and debris. For a smooth, power-troweled look, trowel the material near to final thickness and then flat trowel again after a few minutes much like you would regular concrete. Sweat and broom finishes can be accomplished in much the same manner.

Concrete Coatings, Inc. Micro-Tek™ SG Micro-Topping should be applied prior to staining, sealing and waxing.

STAINING

All Concrete Coatings, Inc. Micro-Tek™ Micro-Toppings are compatible with all Concrete Coatings, Inc. VIVID™ Acid Stains and QuickDye™ products. If the surface is to be acid stained, surface MUST be sanded, and applying a light mist of water is recommended immediately before stain application using a plastic pump sprayer. **The absolute maximum allowable burn time for VIVID™ Acid Stains applied to Micro-Tek™ Micro-Toppings is 4 hours.**

SEALING

Although Micro-Tek™ Micro-Toppings are very durable, they must be sealed to maintain their integrity. Allow the overlay to cure for a minimum of 24 hours and protect the surface with SuperSeal™ 2000, GemKote™ 400, GemKote™ 350, GemKote™ 100, UV Shield™, Shield 50™, SuperSeal™ 20WB, SuperGlaze™ 3600 or SuperGlaze WBU. Please consult Concrete Coatings, Inc Technical Support at 800-443-2871 for best sealer options. Apply DuraWax™ to sealed surface for better wear resistance.

MAINTENANCE

The sealed surface should be inspected periodically for areas of thin or traffic-worn sealer. Worn areas may be resealed as needed. A thorough cleaning is recommended prior to resealing to ensure debris or contaminants are not embedded in the subsequent sealer coat(s). Concrete Coatings, Inc. DuraWax™ is suggested as a sacrificial coat on a sealed surface. DuraWax™ may be re applied as needed.

COVERAGES

One bag of Concrete Coatings, Inc. Micro-Tek™ Micro-Topping (SG) will cover approximately 150-400 ft² depending on actual application.

For the location of your nearest Concrete Coatings Inc. representative, CALL NATIONWIDE TOLL-FREE 1-800-443-2871