



## Product Data Sheet

### SeamTek® Mechanical Waterproofing System 2

#### 1. Product Description

##### Basic use

SeamTek® Waterproofing and Containment System2 is a multi-component low-odor and low VOC waterproofing system incorporating flexible epoxy resins and wear-course epoxy resins to form a monolithic waterproofing flooring surface. It has been specifically designed to exhibit crack bridging characteristics for leak protection while at the same time providing a working surface for heavy traffic containment areas. This system is compatible with most aggregates used to achieve skid, impact or wear resistance and exhibits better inter-coat bond strength between the epoxy components than other systems. It may also be used to incorporate decorative aggregates for areas where aesthetics are more important. Recommended for areas in which movement is expected to be minimal.

##### System Components:

**EPOXY PRIMER:** Two component 100% solids epoxy primer designed for resinous flooring systems.

**FLEXIBLE EPOXY WATERPROOFING:** Neat application of two component 100% solids epoxy resin with 139% elongation.

**FABRIC:** Fabric to be applied at all through "system" penetrations and cracks greater than 1/8" wide.

**EPOXY WEAR COURSE:** Two component 100% solids epoxy resin; choice of pigmented or clear resin for broadcast.

**AGGREGATE:** Choice of washed dried silica or decorative quartz aggregate

**SEAL COAT:** Two component 100% solids epoxy; choice of clear or pigmented resin

**COVE BASE:** A cove base of appropriate height is recommended for areas needing water proofing and containment. Cove

base should be applied to all vertical surfaces around equipment pads as well.

##### Features and benefits include:

- Crack bridging capability
- Fiberglass through floor penetrations
- Dike forming to produce containment
- Excellent adhesion to concrete
- Can slope the floor area to direct the flow of spills
- 100% solids – solvent free
- Low VOC
- Low odor
- Low flammability

The STI SeamTek systems are composed of resins and aggregates which utilize the best available technology for safety and performance. All products and systems are extensively field tested prior to use on SeamTek projects.

##### Composition and Materials

SeamTek waterproofing system is composed of a series of resins designed to enhance crack bridging as well as load bearing characteristics.

##### Limitations

Surface or air temperature must be between 65°F minimum and 80°F maximum and relative humidity below 80%. Lower temperatures will extend cure time and higher temperatures will reduce pot and work life. The system as described in this publication is not recommended for containment of strong chemicals however minor modifications can be made to accommodate such situations. If containment of strong chemicals is required, contact STI for recommendations on specific seal coat resins and modifications. The system has limited in crack bridging capability as compared to elastomeric urethane based systems and is not recommended for areas expecting exaggerated movement.

The long term bonding of the WC system to the substrate is subject to negative side moisture vapor transmission.

Moisture testing of the substrate prior to installation for the purpose of determining the rate of moisture vapor transmission is essential for warranty consideration. Readings in excess of

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3 pounds of water per 24 hour period per 1000 square feet will need remediation prior to installation of the waterproofing system.

### Product Health and Safety Information

Refer to container labels and Material Safety Data Sheets available from STI for health, safety and environmental information. If necessary, call STI at (800) 666-6216.

### Applicable Standards

STI SeamTek products have been tested in accordance with American Society for Testing and Materials (ASTM) methods. Refer to accompanying Tables for more information.

## 2. Installation

### Preparatory Work

Preparatory work must be done in accordance with procedures described in STI Technical Manual.

### Mixing

Caution: Containers used to measure system components must be marked appropriately and only used to measure the indicated component. Container used to mix components must be cleaned or changed after mixing each batch to avoid residual material affecting viscosity and cure rates.

Measure each component by volume as recommended by STI. Pour components into a separate container and agitate using a jiffy paddle and low speed drill (400-600 rpm). Agitate for 2 minutes, then scrape sides of container and mix for an additional minute. Avoid generating air bubbles and foam. Consider mixing small batches to reduce potential waste. To avoid exothermic reaction in mixing container, do not let mixed

components sit in container. Immediately pour the mixed components onto the floor to be coated. Spread or finish material according to application instructions contained in STI Technical Manual.

## 3. Warranty

STI Flooring Systems are installed by STI Associate Contractors and are available with the STI Single Source Limited Warranty for Labor and Material. This Product Sheet is for your information and is not a contract nor a product warranty. Your installation contract is provided by your STI Associate Contractor. STI's warranty to you is made solely in the STI Single Source Limited Warranty for Labor and Material. Contact your Associate Contractor for the specific warranty document.

## 4. Maintenance

SeamTek Systems are seamless surfaces that will provide years of life with little maintenance. For more detailed maintenance instructions, please request STI Floor Maintenance Instructions. Periodic inspections by your STI Associate Contractor are recommended to discuss ways to extend the life of the floor care.

**Table 1 – Typical Performance Properties (Flexible Epoxy)**

Property	Results Part A/Part B
Elongation of (neat resin)	135 %
Mandrel Bend	1/8" no crack
Tensile Strength	1390 psi (15 days)
Modulus of Elasticity	331 psi (15 days)
Shore D Hardness	52
Adhesion (aged)	100% @ 730 psi

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**Table 2 – Typical Performance Properties (Wear-course Resin)**

<b>Property</b>	<b>Measuring Standards and Conditions</b>	<b>Binder Resin Results Only See Note 1 below</b>
<b>Drying time</b>	ASTM D 1475 77°F (25°C)	To Touch: 8 to 12 hrs., max. To complete: 24 hrs. max.
<b>Hardness (indentation)</b>	ASTM D 2240 Rex D Model 1700	65-70 resin only 80-85 with aggregate
<b>Elongation</b>	ASTM D 638	Less than 0.1%
<b>Tensile Strength</b>	ASTM D 638	4500 psi (31 MPa)
<b>Water Absorption</b>	ASTM D 570-95	Less than 0.2%
<b>Indentation Resistance</b>	Mil. Std. D-3134	Zero
<b>Water Vapor Transmission</b>	ASTM E 96-94	Less than 0.10 U.S. perms
<b>Weathering Resistance</b>	ASTM G 26 Type B, BH, 300 hrs	Slight Yellowing
<b>Abrasion Resistance</b>	ASTM C 501, CS-17 Wheel, 1000 rev. with 1000 gram weight	Less than 0.1 grams weight loss
<b>Bond Strength to Concrete</b>	ASTM D 4541	350 to 500 psi (2.4 to 3.4 MPa) epoxy holder fails
<b>Electrical Conductivity</b>		Non conductive
<b>Flammability</b>	ASTM D 635	Self-Extinguishing