



Product Data Sheet

SeamTek® TekCoat

1. Product Description

Composition

SeamTek TekCoat Systems are high performance coating systems consisting of VOC compliant, clear and solid colored resins designed to seal and protect a variety of substrates.

System Thickness Options

10, 20, 30 mils (.25, .51, .76 mm)

Installation Method

Squeegee, roller, spray, trowel

Skid Resistant Textures

None, stippled, mild, medium

Finishes

Standard gloss or satin, and chemical resistant (See **SeamTek Finish Selector Guide**)

Advantages

- ◆ Chemical & stain resistant finishes available
- ◆ Economical
- ◆ Improved ease of maintenance
- ◆ Increases light reflectivity
- ◆ Large areas can be installed quickly
- ◆ Prevents dusting, retards substrate wear
- ◆ Resins comply with USDA FSIS Directive 11,000.4, 1994

Limitations

- ◆ Systems follow existing contour and reflects substrate imperfections
- ◆ Requires use of effective vapor barrier on or below grade
- ◆ Movement of substrate cracks may reflect through system
- ◆ Poor impact and thermal shock protection

Specifying SeamTek Systems

Guide specifications, surface preparation requirements, and suggestions for concrete slab design are found in the **Specifying SeamTek Systems** section of your manual. Cove base, termination, and joint and crack details are important for sanitation and long term performance of **SeamTek** floor and wall installations. Consult **Architectural Details** section of the manual.

Optional Systems

Epoxy wall and ceiling finishes

Also available from **sti** for total room wraps. The floors, walls and ceilings may be integrated to provide totally seamless rooms. Specify **SeamTek GlassWall**.

Slope and fill mortars

Required to level rough slabs or create positive slope to drain in wet environments. **SeamTek UnderTop** systems are always recommended to insure the compatibility and quality of the finished floor.

Fast-Cure Systems

Most **SeamTek Systems** are available in fast cure versions to accommodate shutdown and other quick turnaround requirements.

Waterproofing

Flexible membranes, both reinforced and non-reinforced may be incorporated under **SeamTek** floor systems in wet environments over occupied or finished space. Specify **SeamTek FlexProof**.

Antimicrobial finishes

An EPA registered, USDA compliant antimicrobial agent can be incorporated to create **SeamTek AMF** antimicrobial systems in applications requiring odor or infection control, or where sanitation is important.

Typical Properties

Compressive Strength	ASTM D-695	NA
Tensile Strength	ASTM D-638	2500 psi (17.24 MPa)
Flexural Strength	ASTM D-790	5500 psi (37.92 MPa)
Flexural Modulus	ASTM C-580	2.5 x 10 ⁻⁶
Bond Strength	ACI 403	350 psi (2.41 MPa) 100% concrete failure
Flammability	ASTM D-635	Self Extinguishing
Electrical		Non-conductive

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Conductivity		
Water Absorption	ASTM D-570	.05%
Surface Hardness	ASTM D-2240	75 (Shore D)
Indentation	MIL D-3134F	None
Impact Resistance	MIL D-3134F	16 ft-lbs (21.7 J) no cracking, chipping, delamination
Thermal Coefficient of Lineal Expansion	ASTM D-696	24×10^{-6} in/in/ $^{\circ}$ F (43.2×10^{-6} cm/cm/ $^{\circ}$ C)

Chemical Resistance

SeamTek Systems are resistant to many commonly used chemicals and compounds. Please consult sti **Chemical Resistant Chart** for specific testing results. It is always suggested that a physical sample of the finish coat resin be tested in harsh environments or where there are questions about the suitability of a specific **SeamTek System**. These samples and a suggested testing protocol are available to you on request.

Substrate Design & Surface Preparation

Proper substrate design and surface preparation requires consideration of the following:

Removal of bond inhibitors

All waxes, oil, grease, curing compounds, coatings and other bond inhibitors must be removed. If penetration of contaminants is expected beyond 1/16" (.16 cm), cores should be taken to verify depth of contamination.

Surface profile

5 mils is the minimum acceptable surface profile. Vacuum-blasting is the preferred method of surface preparation to remove bond inhibitors and create the appropriate profile. For additional information, consult the **sti Guide to Surface Preparation** or your sti Associate Representative or Contractor.

Existing concrete

Remove and replace all unsound concrete. Repair all cracks and surface irregularities. "Flash patch" and self leveling underlayment materials may be too low in strength or incompatible with **SeamTek Systems**. Specify **SeamTek UnderTop** or consult your sti Associate Representative or Contractor for specific recommendations.

New concrete

New concrete shall be floated, well consolidated and given a light steel trowel finish. New concrete should be a minimum of 30 days old. Vapor barriers are required under slabs on grade. For more information, see sti **Concrete Slab Design Considerations**.

Joints & Cracks

Treatment of joints and cracks depends on numerous criteria including the eventual use of the floor, and ambient installation and ultimate temperature ranges. Consult your sti **Concrete Slab Design Considerations**, sti **Architectural Details** and your sti Associate Representative or Contractor for more information.

Installation

All **SeamTek** installations are performed by sti Associate Contractors. These experienced professionals adhere to strict and uniform guidelines established by sti designed to meet or exceed the expectations of each application.

A moisture test according to ASTM D-4263 or the Calcium Chloride Crystal Test shall be performed for all on-grade and below-grade installations.

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Job Site Conditions

Proper installation requires that the following conditions be provided by the facility owner or his prime contractor:

Drainage

Floor drains should be set flush with the final floor elevation. Substrates in wet areas should provide slope to drain or use **SeamTek UnderTop** to achieve it.

Lighting

Adequate lighting, 50-60 foot-candles (538-646 lux) min., that most closely approximates final use conditions shall be provided.

Temperature and Humidity

Minimum substrate and atmospheric temperature of 60°F (16°C) and relative humidity below 85% are required during installation and cure. Substrate and application temperatures should be as uniform as possible. Cold temperature cure systems are available.

Temporary Protection

SeamTek Systems should be protected from construction traffic and other trades prior to being subjected to its intended use. Most **SeamTek Systems** require 7 days at 70°F (21°C) before achieving complete chemical and mechanical abuse resistance. Protection methods which may trap moisture under plastic sheets should be avoided.

Maintenance

SeamTek Systems are hard seamless surfaces that will provide years of life with a 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.

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 **Custom System Selector** 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 sti Associate Contractor for the specific warranty document.

SUBSTRATE MOISTURE

sti IS AWARE THAT MOISTURE MIGRATION THROUGH SUBSTRATES CAN CAUSE DELAMINATION OF IMPERMEABLE SEAMLESS FLOORING SYSTEMS. FOR THIS REASON WE RECOMMEND TESTING ALL CONCRETE SLABS FOR MOISTURE MIGRATION USING THE CALCIUM CHLORIDE TEST (ASTM-F-1869-98). WE FURTHER RECOMMEND NEGATIVE SIDE MOISTURE PROOFING ON ALL SLABS WITH READINGS OF 3.0 POUNDS OR GREATER TO REDUCE THE POSSIBILITY OF DELAMINATION. CONSULT WITH sti OR YOUR FLOORING CONTRACTOR FOR SLAB TREATMENT OPTIONS PRIOR TO FLOORING INSTALLATION.