

SeamTek® Epoxy Flake Flooring (SeamTek Type 5)

1. Product Description

Basic use

SeamTek® Type 5 epoxy flooring is composed of two component 100% solids, low-odor, low VOC resins that chemically cure to form a rigid and highly abrasion resistant binder for high performance interior floor finishes with a flake aggregate design. Type 5 is designed to be an aesthetic alternate to Types 3 & 4; otherwise it is the same flooring system except that the aggregate is acrylic flake in lieu of color quartz. Type 5 is often used when a different "look" is desired by the end user.

SeamTek® Type 5 flooring has been specifically designed to cure with no air release problems that can cause subsequent cleaning problems. The resin component (SR101) is designed to work with several selected hardeners to serve as a high performance matrix. The seal coat hardener (CRH405) assures outstanding chemical resistance when compared to other CR epoxy products. SeamTek® Type 5 flooring is ideal for Animal Holding, Laboratory, Pedestrian, Pharmaceutical, Lavatory and many other uses.

Type 5 can be installed over a sloping slab or a sloping mortar to enhance the flow of water to the drain(s). Sloping is recommended in all wet areas since flooring that is immersed under constantly ponding water and chemicals tends to deteriorate faster than flooring under alternate use conditions. Unless otherwise specified, Type 5 will follow the contour(s) of the existing substrate and can not be used as a stand alone system to correct such problems.

As with any flooring system, environmental conditions surrounding the installation are important. Ambient temperatures need to be between 65 and 80 F degrees with slab temperatures at or above 65 degrees F; humidity

must be below 70%. These conditions can be tough to achieve in certain new construction scenario but if they are not achieved the installation may suffer aesthetically and the resins may not performed as designed. Consequently LSP can not be responsible for the performance of the flooring system installed under adverse conditions.

Features and benefits include:

- Excellent Clarity of the Matrix
- Excellent Chemical Resistance
- Excellent adhesion to concrete
- Good workability – easy to spread
- 100% solids – harmful solvent free
- Low VOC
- Low odor
- Low flammability
- High Taber Resistance

The LSP SeamTek® systems in general are composed of resins and aggregates which utilize the best available technology for safety , performance and lowest environmental impact. All products and systems are extensively field tested prior to use on SeamTek® projects.

2. General Information and Handling

Limitations

Type 5 is not recommended for cage wash or wet areas. Further it is also sensitive to moisture migration through the substrate to the underside of the floor. Concrete substrates should be checked for moisture migration using ASTM F 1869-98 calcium chloride test. If moisture test results are 3 pounds and over we recommend moisture remediation. SeamTek® floors must not be used to bridge moving cracks or joints. Non-moving cracks or joints that must be over coated require rigid repairs. Epoxy flooring in general is subject to discoloration from UV light therefore care should be taken to avoid placement in from of unprotected windows and UV insect lights.

Surface or air temperature must be between 65°F minimum and 80°F maximum and relative humidity below 70%. Lower temperatures will extend cure time and higher temperatures will reduce pot and work life. Chemical resistance as depicted in the specification is a relative classification and we recommend testing the chemicals you use in your facility on test flooring samples before making your final selection.

Storage and Handling

Because SeamTek® epoxies have a flash point above 200°F (93°C), transportation, storage and handling are less restricted.

Product Health and Safety Information

Refer to container labels and Material Safety Data Sheets available from LSP for health, safety and environmental information. If necessary, call LSP at (800) 638-9874.

Applicable Standards

LSP SeamTek® clear epoxy resins have been tested in accordance with American Society for Testing and Materials (ASTM) methods. Refer to Table 1 on page 1 for more information. SeamTek® Type 4 can be used in food processing areas and other similar applications. The USDA and FDA no longer regulate coatings used on floors, walls, and ceilings in food process areas, since the surfaces are not intended for food contact.

Mixing

Caution, containers used to measure SeamTek® epoxy resin and Harder must be marked appropriately and only used to measure the indicated component. Container used to mix both resin and hardener must be cleaned or changed after mixing each batch to avoid residual material affecting viscosity and cure rates.

Measure both parts by volume 2 to 1 into plastic marked containers. Pour resin and hardener into a separate container and agitate using a jiffy paddle and low speed drill (400-600 rpm). Agitate for 2 minutes, and 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 epoxy binder resin onto the floor to be coated. Spread or finish material according to application instructions contained in LSP Technical Manual.

3. Warranty

SeamTek® Systems are installed by LSP Associate Contractors and are available with the LSP Single Source Limited Warranty for Labor and Material. This Product Data Sheet is for your information and is neither a contract nor a product warranty. Your installation contract is provided by your LSP Associate Contractor. LSP's warranty to you is made solely in the LSP Single Source Limited Warranty for Labor and Material. Contact your Associate Contractor for the specific warranty document.

4. Maintenance

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

Material Components/Ratios and Spread Rates

The resins and ratios are as follows:

- 1) Cove base mix: **SR101 and SH101 in 2:1** mix ratio as above. Mix 1 ½ quarts (three pints) of mixed liquid with 11 quarts of quartz or 50 mesh sand. Once cured, seal the cove base and broadcast flakes into the neat resin.
- 2) 1st broadcast neat resin: Mix **SR101 and SH101** at a **2:1** ratio as above and apply with a v-notch trowel @ 72 sq ft per gallon.
- 3) 2nd broadcast neat resin; **SR101 and SH101 in a 2:1** ratio and spread @ 72 sq ft/gal spread rate
- 4) Seal coat: Trowel neat **resin SR101 and hardener CRH405** in a 2:1 ratio at a spread rate of 72 sq ft/gal
- 5) Depending on the desired skid resistance there may be a second seal coat mixed as #6 above with a spread rate of 300+ sq ft/gal