RESFLOOR-TL/FS #2000

Technical Data Sheet

Description

ResFloor-TL/FS is a high quality trowel-able, versatile, and fast-setting 100% solids epoxy floor system, designed for heavy traffic areas in Industrial, Food, Beverage, and Pharmaceutical plants. ResFloor-TL/FS is designed to be a SELF-PRIMING system over old or fresh (day old) concrete, and can meet the most rigorous demands for thermal shock and mechanical loading. ResFloor-TL/FS has very low odor, excellent chemical resistivity, and allows for a walk-able surface in less than 4 hours.

Features & Benefits

- Excellent adhesion to "**GREEN**" concrete, no primer needed
- Passes **ASTM C-884** test for thermal compatibility with concrete
- Resilient; helps to absorb concrete movement, impact, and steam cleaning
- **Less than 4 Hour Set Time at 73°F**; fast turn-around time
- Easy to trowel; epoxy does not stick to trowel
- Resin-rich; does not require a sealer
- Application indoors or outdoors
- V.O.C. compliant / low odor / solvent free
- USDA compliant
- Outstanding resistance to a wide range of chemicals and cleaning products
- Also available as self-leveling (ResFloor-SL/FS #2002)
- Made with materials produced in North America

Applications

- Food & beverage plants
- Meat & dairy plants
- Breweries
- Battery factories
- Pharmaceuticals
- Heavy industrial
- Secondary containments

Mechanical Properties

Property	ASTM	Result: Unfilled (Liquids Only)	ASTM	Result: Filled
Compression Strength % Compression Resiliency Ratio of Force to % Resiliency Compress Strength @ Yield % Compressive Resiliency @ Yield	D695	7004 psi 49.54% 141:1 3153 psi 10.14%	C579	5381 psi 7.9% 681:1 3546 psi 3.52%
Tensile Strength Percent Tensile Elongation Ratio of Tensile Stress to % Elongation	D638	1893 psi 19% 100:1	C307	1915 psi 6.47% 296:1
Flexural Strength Flexural Modulus of Elasticity	D790	4560 psi 1.64 x 10^5	C580	3544 psi 8.22 x 10^5
Water Absorption	C413	0%	C413	<1%
Bond Strength to Concrete	D4541	Failure in Concrete	C321	Failure in Concrete
Thermal Compatibility to Concrete	C884	No Delamination	C884	No Delamination

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Product Details

Packaging	Pre-measured 4 Gallon Kit consisting of: Part A - 7.19 lbs., Part B – 3.41 lbs., Part C – 50 lbs. A small bag of Tint is supplied with the Filler. Please note that coverage will vary depending on surface texture. Contact RESIN8 for bulk kit requests.
Color	Gray, Dark Gray, and Brick Red (special colors available upon request at additional charge)
Shelf Life	24 months in unopened containers
Set Time Guidelines	

`	60°F	73°F	90°F
Pot Life	50 minutes	40 minutes	20 minutes
Foot Traffic	6 hours	4 hours	2 hours
Heavy Traffic	14 hours	12 hours	10 hours
Full Chemical Resistance	8 days	7 days	5 days

Theoretical Coverage	4 Gallon Kit = 25 sf @ ¼" Thick
Application Temperature Range	Recommended for surface temperatures above 40°F; consult RESIN8 for applications below 40°F
Mix Ratio by Volume	Part A:Part B - 2:1 A&B Mixed:C - 1:2.5
Density (lbs./gallon	Part A: 9.49 Part B: 9.17 Mixed A&B: 10.60
VOC Content	<32g/L

Preparation

Note that in general ALL substrates must be clean, sound, and have minimum 250psi tensile bond strength when tested per ASTM D4541. Remove ALL oil, grease, curing compounds, urethane, paint, adhesive, underlayment or any contaminate that will act as a bond breaker by mechanical means such as shot-blasting or diamond grinding. Do not apply to concrete that has hardeners or densifiers. ResFloor-TL/FS should not be applied over slabs subject to Hydrostatic Pressure.

CONTRETE FINISH: Must be applied to a wood float or textured finish (not smooth). Smooth concrete must be shot-blasted or scarified prior to application. Concrete must be clean, solid, and porous. Profile depth should equal approximately 25% of the thickness of the applied floor.

Mixing

When mixing pre-measured kit, start by adding Part B to Part A and mix for 20-30 seconds in order to achieve uniform consistency. Next, add Part C with pigment to the above, and mix for 30 seconds to a uniform consistency. Avoid any mixing action that would entrap air; be sure that ALL material on the sides and bottom is thoroughly incorporated. Do not over mix; immediately pour out mixed material in the designated areas.

For mixing, use a variable speed drill, with a mixing blade (similar to a drywall mixing blade) that is 1/3 the diameter of the mixing bucket. Do not thin or alter ResFloor-TL/FS.

Installation

Immediately after mixing, pour out the mix in ribbon fashion in the defined area and quickly distribute it evenly with a notched trowel, gauge rake or screed box to required thickness. Smooth off with a steel trowel and lightly back-roll with a short-nap paint roller. For texture, broadcast Silica Sand onto the wet floor. Refer to Detailed Installation instructions.

Review *Important Application Notes* section prior to installation. To ensure proper coverage, measure and mark out sections for each kit of ResFloor-TL/FS, depending on the application.

Contact RESIN8 for details related to coving, drains, metal plates, posts, corners, or other design details.

Clean Up

ResFloor-TL/FS while still wet, can be cleaned up with a scouring pad and warm soapy water. If allowed to set, then mechanical cleaning or the application of a suitable paint stripper is required. Dispose of excess material in accordance with local, state, and federal regulations.

Priming

ResFloor-TL/FS does not require a primer on clean or green concrete. However, priming can help reduce out-gassing or blistering. When floors are installed outdoors, try not to install in direct sunlight. When applying indoors, try to prevent air movement, which can force out-gassing from the floor.

*Refer to Primer Product ResPrime-FS #3000

Crack Repair

It is important to repair floor cracks, which are wider than 1/16", prior to installation of ResFloor-TL/FS. To repair such cracks, first route out the crack ¼" wide by ½" deep. Next, fill crack with a paste-like mixture of ResPrime-FS #3000 and Silica Sand. As a final step, cover the crack with a 2" wide fiberglass mesh tape saturated with ResPrime-FS #3000.

Expansion Joints

Install trowel-able floor system over the existing expansion joints, making sure to mark where the joints are located in the floor. After floor system is set, mark, cut out, and remove the ResFloor-TL/FS, where the expansion joint resides. Install a backer rod into the expansion joint, at a depth not greater than 50% of the joint width. Finally, install a flexible expansion joint caulk like ResCaulk #5004.

Control Joints

Fill control joint crack with a paste-like mixture of ResPrime-FS #3000 and Silica Sand. As a final step, cover the crack with a 2" wide fiberglass mesh tape saturated with ResPrime-FS #3000. Continue filling control joint crack until completely packed.

Construction (Cold) Joints

Refer to *Crack Repair* section above.

Important Application Notes

Post-cracking of the concrete, slab warping or warping relaxation at joints or cracks after installation may cause a breach in RESFLOOR and void warranty.

Safety Precautions

HEALTH CONSIDERATIONS

As with all epoxies, good hygienic habits must be observed and the wearing of protective clothing and gloves is advised. Before using any RESIN8 product, please read and follow the product Safety Data Sheet (SDS). Use this product only as directed. KEEP OUT OF REACH OF CHILDREN.

FOR YOUR PROTECTION

The data, statements and recommendations set forth in this product information sheet are based on research and development work which has been carefully conducted by Resin8 and we believe such data, statements and recommendations will serve as reliable guidelines. This product is subject to numerable uses under varying conditions over which we have no control, and accordingly, we do NOT warrant that this product is suitable for any particular use. Users are advised to test the product in advance to make certain it is suitable for their particular production conditions and particular use or users.

WARRANTY

All products manufactured by us are warranted to be first class material and free from defects in material and workmanship. Liability under this warranty is limited to the net purchase price of any such products proven defective, or, at our option to the repair or replacement of said products upon their return to us transportation prepaid. All claims hereunder on defective products must be made in writing within 30 days after the receipt of such products in your plant and prior to further processing or combining with other materials and products. WE MAKE NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE SUITABILITY OF ANY OF OUR PRODUCTS FOR ANY PARTICULAR USE, AND WE SHALL NOT BE SUBJECT TO LIABILITY FROM ANY DAMAGES RESULTING FROM THEIR USE IN OPERATIONS NOT UNDER OUR DIRECT CONTROL. THIS WARRANTY IS EXCLUSIVE OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND NO REPRESENTATIVE OF OURS OR ANY OTHER PERSON IS AUTHORIZED TO ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF OUR PRODUCTS. THIS WARRANTY DOES NOT COVER DAMAGE DUE TO PHYSICAL IMPACTS, HYDROSTATIC PRESSURE, FORCE MAJURE, ACTS OF GOD, OR ANY OTHER CAUSE OUTSIDE OF RESIN8s KNOWLEDGE.