

SYSTEM BULLETIN



High performance floor systems

FLEX-GRID® for Standard Systems

Product Description

General Polymers FLEX-GRID is a crack isolation system for use beneath General Polymers standard systems. It utilizes 3552 EPO-FLEX®, 100% solids flexible epoxy which combines the toughness, adhesion and durability of epoxies with the degree of flexibility common to alternative systems. Flexibility is achieved without the use of plasticizers or other additives which can separate or migrate out of the epoxy complex as the material ages or is degraded due to environmental conditions.

Through the incorporation of fiberglass scrim into the FLEX-GRID system, a point of maximum tensile strength is created. This helps prevent substrate reflective cracking.

Advantages of FLEX-GRID

- Bridges hairline cracks, thereby aiding in suppression of cracks reflecting through the system due to substrate movement
- -0- VOC (Volatile Organic Content)
- Excellent adhesion
- Compatible with epoxy systems
- Fiberglass scrim optional for maximum tensile strength
- Thermal shock resistant

Uses

- FLEX-GRID system may be used under all General Polymers seamless flooring systems to minimize reflective cracking from substrate movement.

System Specification

FLEX-GRID for Standard Systems consists of 3552 EPO-FLEX Flexible Epoxy as membrane, FS38- 4.4 oz. Fiberglass Scrim, and the appropriate protective system. See the following pages for details.

Typical Physical Properties of 3552

Hardness, Shore D ASTM D 2240	23
Tensile Strength ASTM D 412	1,200 psi
Elongation ASTM D 412	145%
Adhesion ACI 503R	350 psi 100% concrete failure
Flammability	Self-Extinguishing over concrete
Thermal Cycling ASTM C 884 (24 hours, 6°F to 77°F)	No Cracking

Installation

General Polymers materials shall only be installed by approved contractors. The following information is to be used as a guideline for the installation of the FLEX-GRID for Standard Systems. Contact the Technical Service Department for assistance prior to application.

Surface Preparation - General

General Polymers systems can be applied to a variety of substrates, if the substrate is properly prepared. Preparation of surfaces other than concrete will depend on the type of substrate, such as wood, concrete block, quarry tile, etc. Should there be any questions regarding a specific substrate or condition, please contact the Technical Service Department prior to starting the project. Refer to Surface Preparation (Form G-1).

Surface Preparation - Concrete

Concrete surfaces shall be abrasive blasted to remove all surface contaminants and laitance. The prepared concrete shall have a surface profile equal to CSP 3-5. Refer to Form G-1.

After initial preparation has occurred, inspect the concrete for bug holes, voids, fins and other imperfections. Protrusions shall be ground smooth while voids shall be filled with a system compatible filler. For recommendations, consult the Technical Service Department.

Temperature

Throughout the application process, substrate temperature should be 60°F - 90°F. Substrate temperature must be at least 5°F above the dew point. Applications on concrete substrate should occur while temperature is falling to lessen offgassing. The material should not be applied in direct sunlight, if possible.

Application Information

Material	Mix Ratio	Theoretical Coverage Per Coat Concrete	Packaging
3552	1:1	40 sq. ft. / gal	2 or 10 gals
FS38 4.4 oz. Fiberglass Scrim		475 sq. ft. / roll	150 lin. ft / roll
Apply Appropriate General Polymers Standard System			

Base Coat

Mixing and Application - If priming is done to reduce outgassing , allow to cure overnight before topping

1. Premix 3552A (resin) and 3552B (hardener) separately, using a low speed drill and Jiffy mixer. Mix for three minutes and until uniform, exercising caution not to whip air into the materials.
2. Add 1 part 3552A (resin) to 1 part 3552B (hardener) by volume. Mix with low speed drill and Jiffy mixer for three minutes and until uniform.
3. Immediately pour the mixed material onto the substrate and pull out using a 1/4" v-notched red rubber squeegee to yield 40 mils WFT and cross roll with a 3/8" nap roller. Readings must be taken continuously during application with a wet mil gauge to verify material is being applied at the proper thickness. Allow to cure overnight at 73°F surface temperature. Material cures slower at lower temperatures.
4. The optional scrim should be laid into the wet surface of the 3552 EPO-FLEX. **DO NOT** push the scrim to the substrate. The pattern of the scrim should be visible. Allow to cure overnight before standard system placement.

Wearcourse

See Standard Epoxy System Bulletin

Cleanup

Clean up mixing and application equipment immediately after use. Use toluene or xylene. Observe all fire and health precautions when handling or storing solvents.

Safety

MSDS (Material Safety Data Sheets) must be read and understood by personnel responsible for supervision and installation of General Polymers materials. In particular, PPI (Personal Protection Index) data should be consulted to help insure safe handling. All applicable federal, state, local and particular plant safety guidelines must be followed during the handling and installation and cure of these materials.

Safe and proper disposal of excess materials shall be done in accordance with applicable federal, state, and local codes.

Material Storage

Store materials in a temperature controlled environment (50°F - 90°F) and out of direct sunlight.

Keep resins, hardeners, and solvents separated from each other and away from sources of ignition. One year shelf life is expected for products stored between 50°F - 90°F.

Maintenance

Occasional inspection of the installed material and spot repair can prolong system life. For specific information, contact the Technical Service Department.

Shipping

- Destinations East of the Rocky Mountains are shipped F.O.B. Cincinnati, Ohio.
- Destinations West of the Rocky Mountains are shipped F.O.B. Victorville, California.

For specific information relating to international shipments, contact your local sales representative.

Warranty

The sale of General Polymers Brand products is governed by the Standard Terms and Conditions of Sale. Sherwin-Williams has no knowledge or control concerning buyer's use for the product nor over the quality of the concrete or substrate to which they are applied. Sherwin-Williams assumes no responsibility for any loss or damage resulting from the handling or use of the products by the buyers. Sherwin-Williams makes the following **LIMITED WARRANTY** that its products have been supplied free from manufacturing defects, and will conform to Sherwin-Williams manufacturing standards. Technical data furnished is true and accurate to the best of our knowledge; however, no guarantee of accuracy is given or implied.

SHERWIN-WILLIAMS' LIABILITY SHALL NOT EXCEED REPLACEMENT OF OR RETURN OF THE PURCHASE PRICE FOR THE PRODUCTS WHICH IT MAY SELL WHICH MAY PROVE TO BE DEFECTIVE UNDER NORMAL USE AND SERVICE WITHIN ONE YEAR FROM DATE OF SALE AND WHICH UPON EXAMINATION BY SHERWIN-WILLIAMS SHALL DISCLOSE, TO SHERWIN-WILLIAMS' SATISFACTION, TO BE DEFECTIVE. IN NO EVENT SHALL SHERWIN-WILLIAMS BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, BUYERS LOSS OF MATERIAL OR PROFITS, INCREASED EXPENSE OF OPERATION, BODILY INJURY, LOSS OF USE OF PROPERTY, OR DOWNTIME. SHERWIN-WILLIAMS MAKES NO IMPLIED WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE. THE BUYER HEREBY EXPRESSLY WAIVES ANY CLAIM TO ADDITIONAL DAMAGES.

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