Technical Data Sheet (TDS)

ERP-275 Rapid-Seal

Epoxy Based Fast-Cure Sealer (Two-Component Pail)

Special features

- Exceeds all ASTM-F3010-13 requirements
- Moisture barrier up to 25# or 100% RH
- Contains no water, solvents, or VOCs
- Use under any flooring (wood, VCT, LVT, sheet vinyl, ceramic, etc.)

Product Description

STAUF ERP-275 Rapid-Seal is a fast curing, two-component, epoxy reaction resin-based sealer for professional flooring installation over damp subfloors. It will mitigate moisture pressure from a humid subfloor to an acceptable level for any flooring installation. It will bridge minor cracks in the subfloor. ERP-275 spreads easily and creates a dust-free surface ready for the safe installation of flooring. It increases the bonding of subsequently applied primers, leveling compounds, and/or adhesives.

Pre-Installation Checklist

A successful installation requires proper preparation of the subfloor. Read and understand all applicable guidelines and technical data sheets before installation. Follow industry standards and flooring manufacturers' recommendations for subfloor moisture content, design, layout, and application of flooring materials. All flooring material's backing must be solid, sound, and free of anti-adherents. All slab constructions must meet the specific requirements of the floor covering to be installed.

Sub Floor Examination

Do not apply the product to a visibly damp surface. Examine concrete subfloor for color, cleanliness, porosity, and pre-existing residues PRIOR TO installation (for details, see Technical Information #18 @ www.staufusa.com). Concrete subfloors must be checked for contaminants and/or anti-adherents using the STAUF Epoxy Test Kit (for details, see Technical Information #16 @ www.staufusa.com).
Prior to installation, the subfloor must be checked according to applicable installation guidelines. It must be solid, sound, clean, porous, free of chaps, anti-adherents, and resistant to pressure and tension. Confirm sufficient porosity by performing a water drop test according to ASTM F3191-16. Check for missing or compromised vapor barriers and hydrostatic pressure by carrying out RH or CaCl moisture tests following ASTM standards F1869-16 or F2170-19. Results of 99% RH or 25# CaCl could indicate a higher moisture content in the slab than what tests can measure, and there might be hydrostatic pressure and/or a compromised or missing vapor barrier.

Sub Floor Preparation

The condition of the subfloor will determine which type of mechanical treatment is required (e.g. wire brushing, sanding, grinding, or shot blasting). Dust, paint, curing compounds, sealers, residual adhesives, or other surface contaminants MUST be removed and a porous surface achieved by suitable means. The extent of subfloor preparation can only be determined at the site by the installer. Clean the surface with an industrial vacuum cleaner and tack the floor with a damp microfiber mop before application. Do not use sweeping compounds unless they are water-based as most others will contain oil or wax which will act as an anti-adherent and prevent primers, sealers, leveling compounds, coatings, and/or adhesives from bonding to the concrete. Cracks and gaps must be treated prior to application of primers, sealers, leveling compounds, coatings, and/or adhesives (for details see Technical Information #19 @ www.staufusa.com).

Mixing of Components

The lid contains a hardener. Pierce all the way through the plastic disc in the center of the lid and the bottom of the lid using a long screwdriver or similar tool. Let the hardener flow into the lower part of the bucket for one minute. All of the hardener must drain into the pail before mixing Parts A&B. Open the ring, remove the lid, and mix both components with a mixing paddle for at least 3 minutes. Use an electric drill with less than 300 rpm until an even color is reached. Avoid air entrapment by mixing slowly and using an appropriate mixing paddle. Make sure to mix along the wall and bottom of the container as well. The temperature of both components should be at least 50°F before mixing.

Installation Procedure

Mix pail according to mixing instructions. Empty the pail onto the floor immediately after mixing to prevent the product from heating up and drying in the pail. Apply sealer undiluted with an approved applicator. Make sure the sealer is spread evenly and up to the perimeters. The spread rate is critical for a successful installation. Do not exceed the maximum coverage.

For subfloor moisture up to 18#/24hr/1000SF (Calcium Chloride Test) or 97% RH (in-situ probe), spread sealer over no more than 140 SF/gal. For subfloors with moisture content up to 25#/24hr/1000SF or 100% RH, spread sealer over no more than 70 SF/gal. For use under resilient flooring please see Technical Information #4 @ www.staufusa.com for details.

Limitations

When using other than STAUF products in conjunction with STAUF primers, sealers, leveling compounds, or adhesives, STAUF denies any and all responsibility for any ensuing problems and/or damages without prior written authorization from STAUF.
Do not dilute primer/sealer or mix with other products.
In case of an accident, injury, spill, or exposure, see SDS for information. Consult the Technical Data Sheet at www.staufusa.com for updated information.
Sealer will not prevent moisture damage from hydrostatic pressure, missing or compromised vapor barriers, underground springs, damaged water pipes, sinks, icemakers, faulty plumbing, flooding, etc.
The foregoing representations are based on the results of our most current product and material testing within a controlled environment and are of a non-obligatory advisory nature only. As such, they do not constitute an express or implied warranty of any kind including the Warranty of Merchantability and/or Fitness for a Particular Purpose. Because we have no control over the actual quality of workmanship, materials used, and worksite conditions, STAUF USA LLC will in no event be liable for any incidental and/or consequential damages. Therefore, we strongly recommend that prior on-site testing be conducted to refer to and study the suitability of the product for the intended purpose. With the release of this Technical Information Sheet, all its prior versions become invalid. For warranty and warranty disclaimer information please see our Limited Lifetime Warranty @ www.staufusa.com

General Features
- LEED qualified
- Seals slabs with any moisture content
- Works under any type of flooring
- Contains no water
- Contains no chlorinated solvents
- Contains no solvents
- Contains no VOC (calc. per CA Rule 1168)
- High solids content
- Ozone friendly
- Freeze/thaw stable
- Contains no isocyanates

Installation Features
- Low odor
- High spread rate
- Excellent penetration of subfloor
- Higher temp and RH will shorten drying time
- Observe pot life during installation

Long Term Features
- Resistant against aging
- Improves bonding of STAUF urethane-based adhesives
- Improves bonding of STAUF polymer adhesives
- Moisture barrier up to 18# or 97% RH w/roller
- Moisture barrier up to 25# or 100% RH using XBL10
- Suitable for radiant heat systems

Technical Values
- Average Critical Radiant Flux: passed
- Indoor Air Quality Control: passed

Viscosity [cps]
- 1400

Dry Film Thickness [mil]
- Roll:11 Trowel:22

Bond Strength [psi]
- break in concrete

Compression Strength [psi] EN ISO 604
- 31,900

Flexural strength [psi] EN ISO 178
- 14,500

Tensile Strength [psi] EN ISO 527
- 7,250

Elongation at Break [%]
- 7

Shore D Hardness (ISO 7619)
- D 80

Approved Subfloors
- Concrete Slabs
- Felt backed Sheet Vinyl (well bonded, sanded, asbestos-free)
- Ceramic Tiles
- Stone, Terrazzo
- Radiant Heated Subfloors
- Wet Concrete Slab up to 25#/24hr/1,000SF and 100% RH

Approved Trowels and Spread Rate
- Foam Roller: up to 150 SF/gal.
- XBL10 (7/64 x 5/64 in): up to 70 SF/gal.

Drying Time
- Approx. 4 hours

Temperature Range during Installation
- 50-90F (10-32C)

Relative Humidity Range during Installation
- 30% - 80%

Packing Size
- 2-1/2 gal. Metal Combo Pail (A+B)
- 60 per pallet

Density [lbs./gal.]
- 9.0

Color
- Clear

Color Hardener
- Yellow

Mixing Ratio
- 4 parts A + 1 part B by weight
- 3.8 Parts A + 1 Part B by volume

Pot Life
- Approx. 10 min. @ 70F (21C)

pH value of concrete
- Resistant up to 14

Storage
- Above 14F

Shelf Life
- 60 Months in original, unopened container

Transportation
- UN 2735 Polyamines DOT Class 8 Corrosive

Water Vapor Transmission [ASTM E-96]
- 0.002 grams / hour * m^2
- 0.009 lbs / 24h * 1000ft^2

Permeance [ASTM E-96]
- 0.004 grams / 24h * m^2 * mmHg
- 0.006 grains / h * ft^2 * inHg