



protective coatings  
and resin flooring a division of  
**STONHARD**

# PLASTIGEL ERF

PRODUCT DATA

## PRODUCT DESCRIPTION

Plastigel ERF is a 3/32 in. (2 mm) IMO-approved, decorative, epoxy-based floor surfacing system. The sealed color flake broadcast results in an attractive, slip-resistant, and cleanable surface for lightly trafficked areas such as locker rooms, restrooms, showers, and other shared spaces.

## SYSTEM OPTIONS

### Cove Base

To provide for an integral seal at the joint between the floor and the wall, cove bases in height from 2-6 in. (5-15 mm) may be specified.

## PACKAGING

Plastigel ERF is packaged in units for easy handling. Each unit consists of:

### ERF Undercoat

- 0.67 carton containing:
  - 6 poly bags of Resin
  - 6 foil bags of Amine
- 0.67 box of Undercoat Filler

### ERF Flakes

- 0.67 box of small (1/16 in.) colored flakes
- or
- 0.50 box of large (1/4 in.) colored flakes

### ERF Sealer

- (1.33) 2-gallon pails of Resin
- 0.67 box containing:
  - 2 foil bags of Amine

## COVERAGE

One unit of Plastigel ERF will cover approximately 200 ft<sup>2</sup> (18.6 m<sup>2</sup>) of surface at a 3/32 in. (2mm) nominal thickness.

## STORAGE CONDITIONS

Store all components of Plastigel ERF between 60 and 86°F (16 and 30°C) in a dry area. Avoid excessive heat and direct sunlight. Do not freeze. The shelf life of the material is 3 years in the original, unopened container.

## COLORS

Plastigel ERF is available in 16 standard colors in small (1/16 in.) or large (1/4 in.) sized flakes. Refer to the Plastigel ERF color sheet. Custom colors are available upon request.

## PHYSICAL CHARACTERISTICS

<b>Weight</b> .....	0.53 lb/ft <sup>2</sup>
<b>VOC Content</b> .....	ERF Undercoat – 34 g/L (ASTM D-2369)                      ERF Sealer – 42 g/L
<b>Percent Solids</b> .....	95%
<b>Pot Life</b> .....	20 min (@74°F/23°C)
<b>Cure Rate</b> .....	12 hours for foot traffic (@74°F/23°C)                      24 hours for normal operations 7 days for ultimate physical properties

Note: The above physical properties were measured in accordance with the referenced standards. Samples of the actual floor system, including binder and filler, were used as test specimens. All sample preparation and testing is conducted in a laboratory environment. Values obtained on field applied materials may vary, and certain test methods can only be conducted on lab-made test coupons.

## SUBSTRATE

Plastigel ERF is suitable for application over properly prepared steel, aluminum, concrete or wood surfaces. It is not recommended for use over asphalt, mastic, gypsum-based products, brick or painted surfaces. These must first be removed by mechanical means to expose the substrate prior to overlayment.

## SUBSTRATE PREPARATION

Proper mechanical preparation is critical to ensure an adequate bond and system performance. The substrate must be clean, dry, and free of contamination before material application. When applying over aluminum, stainless steel, or galvanized substrates, the use of Primer 5 is required immediately after mechanical preparation. Questions regarding substrate preparation should be directed to an API USA representative.

## PRIMING/UNDERLAYMENT

For all new applications of Plastigel ERF, the use of Apilite U070 underlayment is required. The Apilite U070 must be sanded and cleaned prior to Plastigel ERF application. If applying over an existing, prepared API USA system, the use of primer and underlayment is not required.

## MIXING ERF UNDERCOAT

Proper mixing is critical for the products to exhibit the proper application, cure and physical properties.

1. Pour the contents of the base and hardener into a clean container and mix for 60 seconds with a heavy-duty, slow-speed drill (400-600 rpm) with a Jiffy Mixer.
2. Add the Undercoat Filler and mix for an additional 60 seconds.

## APPLYING AND FINISHING ERF UNDERCOAT

1. Pour the contents of the pail into a bead on the floor where it can be applied. A 30 mil notched squeegee is used to apply the undercoat, and a brush is used for edges and hard to reach areas. Using the squeegee, slowly draw the material across the floor to cover the entire area. The action should be left to right, then the reverse, always pulling the material toward the applicator. Each pass of the squeegee should overlap the previous pass by 3-4 in. (8-10 cm) to prevent excess material from flowing back to the finished area.
2. Before broadcasting the flakes into the undercoat, the use of a saturated medium nap roller helps to level and smooth the surface of the ERF undercoat to prevent an inconsistent finish.

**Note:** Care must be taken when rolling the material. Quick turns with the roller will leave marks which may not flow out. When rolling, do not stop at the batch line. Overlap at least 10-12 in. (25-30 cm) to allow the batches to blend.

3. After rolling, allow the undercoat to completely self-level. This will happen within 5-15 minutes dependent upon installation temperature. After the material has leveled, broadcast the ERF flakes directly into the wet undercoat. Broadcasting must begin within 20 minutes of undercoat application. It is important to broadcast the aggregate until a uniform, dry surface exists.
4. After the ERF undercoat has cured, remove any excess flakes from the surface using a medium bristle nylon push broom and an industrial vacuum. The floor should be uniform in color and texture. A steel squeegee can be used to scrape the floor, removing upstanding flakes and creating a smoother texture.

## MIXING/APPLYING ERF SEALER

1. Pour the contents of one foil bag of amine directly into the 2-gallon pail of resin, and mix for 90 seconds with a heavy-duty, slow speed drill (400-600 rpm) with a Jiffy Mixer.
2. After mixing, pour the material into a bead on the floor. Using a rubber squeegee, slowly pull the liquid across the floor surface. Medium to heavy pressure should be used to pull the sealer tight. Take care when pulling the material to avoid rippling, splashing, and to remove any lap marks.

3. Backroll the material using a medium nap roller. The roller should be saturated with material at all times. This will smooth and level the sealer.
4. Once the sealer coat is fully cured, sand the surface with a rotary sanding machine.
5. Thoroughly vacuum the floor and apply a second coat of ERF Sealer in the same manner as the first coat.

## RECOMMENDATIONS

- Apply only to clean, sound, dry and properly prepared substrates.
- Application and curing times are dependent upon ambient and substrate conditions.
- Minimum ambient and substrate temperatures are 41°F (5°C) at the time of application. However, it is not advisable to apply the material if the temperature is below 50°F (10°C).
- Maximum ambient and substrate temperatures are 95°F (35°C) at the time of application.
- Substrate temperature should be greater than 5°F (3°C) above the dew point.
- Do not apply material if the relative humidity exceeds 85%.
- Dispose of waste materials in accordance with government regulations.
- Clean all equipment immediately after use with scouring pads and acetone. Hardened material will require mechanical means for removal.

## PRECAUTIONS

- The use of safety glasses and impervious gloves is required during application.
- Avoid contact with all liquids as they may cause skin and/or eye irritation. In case of contact, flush the area with copious amounts of water for at least 15 minutes and seek medical attention.
- Wash hands thoroughly with soap and warm water after use.
- Use only with adequate ventilation.

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Rev. 06/19