

Epoxy & Polyurethane: Manufacturing and

Research

**TECHNICAL BULLETIN** SynDeck® Regular

**Underlayment (FR0499)** 

### Description

SynDeck® Regular Underlayment Systems (FR0499) are a three component, aggregate-filled, 100% solids, amine-cured epoxy flooring product that offer 0-VOC, have excellent adhesion, and are specifically designed to meet Navy standards. This class of products has over 25 years of successful field usage and is applied as an underlayment to irregular or uneven deck surfaces.

# **Applications**

SynDeck® Regular Underlayment Systems (FR0499) are applied to properly prepared and prime coated steel decks subject to continuous abrasion service, showers, heads, mess areas, machine shops, galleys and adjunct preparation areas. SynDeck® Regular Underlayment Systems are a troweled mixture of epoxy and aggregates designed to be used where irregularities, grades or contours need to be corrected. SynDeck® 100% Solids Epoxy Flooring and Underlayments meet or exceed USDA requirements for incidental food contact associated with beverage and food processing facilities.

#### **Performance**

Type 1, Class 2 of MIL Specification MIL-D-3135G (Navy) Approved by National Testing Standards #23161 & USS Leahy (CG-16) Approved by National Testing Standards #22377 & USS Constellation	
VOC	0 g/l Meets Final SCAQMD Rule 1113 (2008)
Weight	2.5 lbs./ft² @1/4 inch
Tensile Strength	8,700 psi ASTM C-307 (epoxy component)
Tensile Elongation	3.1%
Compressive Strength	13,800 psi ASTM C-579
Hardness Shore D	88

#### **Physical Characteristics**

Volume Solids	100%
Packaging	50 lb bag of aggregate, resin separate
Flash Point	>200 °F.
Gloss	N/A
Mix Ratio	2:1 (A:B) by volume.
Pot Life	1 hour (epoxy), 2 hours (epoxy/quartz) at 70°F
Dry Time	At 70°F, 50% RH Recoat in 8-24 hours. Dry for walking traffic in 16-24 hours, depending on selected cure rate. Full cure in 3 days.
Coverage	18-20 ft²/kit (See Packaging Instructions)
Thinning	None Required. Acetone or Alcohol for clean up.
Primers	Any Navy approved primer system
Colors	Natural Sand Color
Shelf Life	2 years from date of manufacture



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# **Packaging Description**

#### Resin SA1222 -

To be used in the aggregate mixes and any grout coats. The proper amount of resin needed to mix with the hardener is pre-measured in a 1 gallon can.

#### Hardener SB1222 -

Used for all functions and is pre-measured in a quart can.

#### Underlayment -

1 can each of SA1222 Resin and SB1222 Hardener with one bag of FR0499 Underlayment mix. Yields approximately 18 - 20 ft2 at  $\frac{1}{4}$ " thickness.

#### Grout Coat SS1255 -

Application of SS1255 or 1256 can be used to seal surface. See appropriate Technical Data Sheet for application instructions.

# **Surface Preparation**

Surface must be clean, dry and corrosion free.

#### Mixing -

Mix base component (SA5501 Part A Epoxy Resin) until a homogeneous mixture is obtained. Next, pour activator (SB5501 Part B Epoxy Hardener) into base component and mix using mechanical "jiffy" type mixer for 2-3 minutes or until homogeneous color mixture is achieved. Make sure all material is thoroughly mixed. Pouring mixed material into a clean container and re-mixing insures complete reaction of the epoxy.

# **Application Methods**

#### Trowel -

Trowel – Use hand trowel method to spread mixed epoxy/aggregate to desired thickness. Trowel over bond coating to fair and level deck irregularities and produce positive slopes towards drain.

#### **Environment -**

Apply between 50°F - 100°F. It can be anticipated that pot life and cure time will vary depending upon ambient temperature conditions

Storage >50°F

#### Contact EPMAR for any additional application information.

#### Warranty

The following warranty is made in lieu of all other warranties, either expressed or implied. This product is manufactured of selected raw materials by skilled technicians. Neither seller nor manufacturer has any knowledge or control concerning the purchaser's use of this product and no warranty is made as to the results of any use. The only obligation of either seller or manufacturer shall be to replace any quantity of this product, which is proved to be defective. Any claim of defective product must be received in writing within one (1) year from date of shipment. Neither seller nor manufacturer assumes any liability for injury, loss, or damage resulting from use of this product.

#### Service is part of our formula

**Epmar Corporation** 

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