



Epoxy &
Polyurethane
Manufacturing and
Research

TECHNICAL BULLETIN

SynDeck®
Ultra Lightweight Underlayment
SS1290FC

Description

SynDeck® Ultra Lightweight Underlayment (SS1290FC) is a three component, aggregate-filled, 100% solids amine-cured epoxy flooring product that is 0-VOC, has excellent adhesion, and is specifically designed to be less than 1 lbs/ft² at ¼ inch installed. This product can be applied as an ultra lightweight underlayment for all other approved deck systems. It may also be applied over all approved prime coats and without primer over properly prepared surfaces.

Applications

SynDeck® Ultra Lightweight Underlayment (SS1290FC) can be applied to properly prepared or prime-coated steel decks subject to continuous abrasion service, showers, heads, mess areas, berthing spaces, galleys and passageways. SynDeck® Ultra Lightweight Underlayment (SS1290FC) is a troweled mixture of epoxy and ultra lightweight aggregates designed to be used where irregularities, grades, or contours need to be corrected. SS1290 FC, when installed, exhibits little or no porosity and is an excellent choice in wet or damp spaces. SS1290 FC has passed the corrosion resistance requirements of MIL Spec 3135 without primer coating.

Performance

IMO FTP Code (Parts 2 and 6 of Annex 1)	
Type 1, Class 2 and Type III, Class 2 of Military Specification MIL-PRF-3135G	
Type 1, Class 4 of Military Specification MIL-PRF-3135H (in testing)	
VOC	0 g/l
Compressive Strength	2,800 psi ASTM D-695
Weight (1/4 in X 12 in X 12 in)	0.75 lbs
Specific Gravity	0.62

Physical Characteristics

Volume Solids	100%
Packaging	Premeasured bags of aggregate, separate resin and hardener in cans.
Flash Point	>200 °F.
Gloss	N/A
Dry Time	At 70°F, 50% RH. Recoat in 8-24 hrs. Dry for walking traffic in 16-24 hrs depending on selected cure rate. Full cure in 3 days.
Thickness	Trowel to achieve deck fairing and grade as required. Maximum 2" per application.
Thinning	None Required. Acetone or alcohol for clean up.
Colors	Blue
Pot Life	½ hour at 70°F, 50% RH
Shelf Life	2 years from date of manufacture.



Epoxy &
Polyurethane
Manufacturing and
Research

TECHNICAL BULLETIN

SynDeck® Ultra Lightweight Underlayment SS1290FC

Packaging Description

Ultra Lightweight Underlayment Mix – 1 can each of SA 1290FC Blue Epoxy Resin and SB1290FC Epoxy hardener with the SC1290 Ultra Lightweight Underlayment Aggregate Mix. Package yields approximately 18-20 ft² at ¼ inch thickness and 36-40 ft² at 1/8 inch thick. SS1290FC easily trowels to a feather edge.

Other Recommended Products Used With the SS1290FC Underlayment System:

Bond Coat – Apply SS1222 to properly prepared deck in accordance with SSPC-SP1 prior to troweled application of SS1290FC Underlayment. The proper amount of resin needed to mix with the Hardener is pre-measured in a 1 gallon can. See SS1222 Technical Bulletin for application instructions.

Grout Coat – Application of SS1255 or SS1256 Grout Sealer may be used depending on the tightness of troweled underlayment mix. See Technical Bulletin for SS1255 application instructions.

Color Coat – Apply SS50xx or SS51xx for color coat as needed if color flake or deco system is desired. See SS5000/SS5100 Technical Bulletins for application instructions of these materials.

Top Coat Sealer – Apply SS5000 or SS5100 Top Coat Sealer for final step. See SS5000/SS5100 Technical Bulletins for application instructions of these materials.

Surface Preparation

Metals –

All visible oil, grease, sludge and any other contaminants shall be removed prior to any abrasive surface preparation. Surface must be clean, dry and corrosion free.

Epoxy –

Pour hardener (SB1290FC) into resin (SA1290FC Blue) and mix using a mechanical “jiffy” mixer for 2-3 minutes. Make sure all material is thoroughly mixed. Pouring mixed material into a second, clean container and re-mixing insures complete reaction of 100% solids epoxy.

Mixing Epoxy with Aggregate - Immediately add the blended epoxy component (above) into the aggregate (SC1290), while mixing with an Epmar approved mixer. Mixing should take no more than 2 minutes. Material should be homogenous with no dry materials left. Transfer this blend into a second, clean container to insure all materials from the sides and bottom are well mixed. This material should be applied immediately after mixing (see Pot Life above).

Application Methods

Trowel -

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

Environment – Apply between 50°-100°F and 5° above dew point. 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

13210 Barton Circle, Santa Fe Springs, CA 90605-3254

Ph: 877-99-EPMAR / Fax: 562.944.9958

E-Mail: info@syndeckmarine.com Web Site: www.syndeckmarine.com Rev 09/27/2011