

# TECHNICAL DATA SHEET

## SYNDECK™ ULTRA LIGHTWEIGHT UNDERLAYMENT (SS1290FC)

### ULTRA LIGHTWEIGHT EPOXY DECKING UNDERLAYMENT

SynDeck™ Ultra Lightweight Underlayment (SS1290FC) is a three component, aggregate-filled, 100% solids, amine-cured epoxy flooring product that meets requirements and has qualifications/certifications for IMO, ABS, MIL-SPEC (as part of a system), and Def. Stan. (as part of a system).. It is very low odor, has excellent adhesion and is specifically designed to be <1.0lbs/ft<sup>2</sup> (4.88kg/m<sup>2</sup>) at ¼" (6.3mm) installed. It can be applied as an ultra lightweight underlayment for all approved deck systems, over approved prime coats or without primer over properly prepared surfaces. SynDeck™ Ultra Lightweight Underlayment is designed as a wet-to-wet application in conjunction with SynDeck™ Bond Coat SS1222.

### Application

SynDeck™ Ultra Lightweight Underlayment SS1290FC can be applied to properly prepared or prime-coated decks, showers, heads, mess areas, shops, offices, galleys, berthing, passageways and other areas subject to continuous service. It is a troweled mixture of epoxy and special aggregates designed to be used where irregularities, grades or contours exist and where the deck is required to be fair and level.

### Packaging Description

#### SynDeck™ Ultra Lightweight Underlayment Part A Resin SA1290FC:

6.59lbs (3.0kg) / 0.59Gal (2.2L) of product in a 1 Gallon (3.8L) container

#### SynDeck™ Ultra Lightweight Underlayment Part B Hardener SB1290FC:

1.9lbs (0.86kg) / 0.23Gal (0.9L) in a 1 Quart (0.96L) container

#### SynDeck™ Ultra Lightweight Underlayment Part C Aggregate SC1290FC:

9.47lbs (4.3kg) of aggregate in a bag

### Benefits

- 100% solids, 0g/L VOC
- Less than 1.0lbs/ft<sup>2</sup> (4.88kg/m<sup>2</sup>) at ¼" (6.3mm)
- Impact resistance with flexibility

### Certification & Qualifications

- ABS Approved
- Meets parts 2 and 5 of annex 1 of the IMO FTP Code 2010 for Primary Deck Coverings
- Qualified to MIL-PRF-24613A(SH) Type I, Class 2, Grade B (DecoDeck System)
- Qualified to MIL-PRF-32584 Type IV, Class 1, Grade A, Comp E (DecoDeck System)
- Qualified to MIL-PRF-3135(H) Type I & II, Class 2, Grade B and Type I, Class 2, Grade A
- Qualified to MIL-PRF-3135(H) Type III, Class 2, Grade A and B
- Meets UK Def Stan 07-247 Annex A, Category A1 (FlexDeck System, NuFlexDeck System, and Underlayment)
- Meets UK Def Stan 07-247 Annex B, Category A2 (RediDeck System, and NuFlexDeckM System)

### Surface Preparation

**Direct to metal:** All visible oil, grease, sludge and any other contaminants must be removed prior to mixing and application. SSPC SP11 / ISO 8501-1 ST3 (power tool) at minimum, SSPC-SP10 / ISO 8501-1 SA2.5 (blasting preferable). Surface must be clean, dry, corrosion free, and have a 1-3 mil (25-75 micron) surface profile.

**Existing coatings and/or after re-coat window:** Light abrasion to achieve a 1-3 mil (25-75 micron) surface profile. Surface must be solvent cleaned, dry, and free of contaminants.

# SynDeck™

Marine Underlayment and Deck Coatings

# SYNDECK™ ULTRA LIGHTWEIGHT UNDERLAYMENT (SS1290FC)

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## Properties

PROPERTY	TYPICAL VALUE	UNIT
Colors	Blue	
VOC	0	g/L
Mix Ratio	2.64 : 1.0 : 17.8 (A:B:C)	volume
Solids	100	%
Specific Gravity	0.43	
Gloss	Not Applicable	
Abrasion	Not Applicable	
Thinning	None required. Do not thin	
Coverage at 250 mils (6.3mm) WFT	20 - 24   1.86 - 2.23	ft²   m²
Pot Life	30	minutes
Dry time - Tack Free	8-10	hours
Dry time - Light Traffic	12-14	hours
Dry time - Heavy Traffic	36-48	hours
Dry time - Full Cure	5-7	days
Dry time - Recoat Time	Within 24 hours after Tack Free	hours
Clean Up	MEK, Acetone, Denatured Alcohol	
Shelf Life	24 months from date of manufacture	

Product tested at 70°F (20°C) and 50% RH. Pot life, dry time, and recoat times will depend on temperature, humidity and other conditions relative to the environment.



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### Mixing

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Using a mechanical jiffy mixer, mix Part A Resin until a homogenous mixture is obtained. Next, pour Part B Hardener into the premixed Part A Resin. Blend the two components together for 1-2 minutes at a slow to medium speed. Take care not to introduce excessive air into the material. Scrape sides and bottom of container during the mixing process to ensure a completely homogenous mixture.

Carefully transfer Part C aggregate into a large container at least 8 gallons (30 liters). Next, transfer the mixed Part A & B resin blend into the tub. Using a cement-type variable speed mixer with concrete spiral blade, slowly blend components together for 1-2 minutes. Scrape the sides and bottom of tub and continue mixing until all aggregate has been uniformly coated with the resin blend.

### Application Methods

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**Trowel** Apply SynDeck™ Ultra Lightweight Underlayment over wet or tacky SynDeck™ Bond Coat SS1222. Use a high quality flat hand trowel to spread material to the desired thickness. Trowel to fair and level deck irregularities and produce positive slopes toward drains. Maximum 2.0in (5.1cm) per application.

**Application note:** Pot life is dependent on the size of mixed material. Do not mix more material than can be applied within 30 minutes.

### Clean Up

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Clean hands and skin with warm water and mild soap. Clean tools and equipment with MEK, denatured alcohol, or acetone.

### Environment

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Substrate temperature should be between 50 - 90°F (10 - 32°C). The temperature of the substrate should exceed the “dew point” by 37°F (3°C) during application and hardening. Temperatures should not fall below 41°F (5°C) in the 24 hours after application. Ambient humidity should be between 30 and 70% RH during application and cure.

### Storage

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Store between 50 - 100°F (10 - 38°C). Keep in a cool, well-ventilated area, away from direct sunlight and heat. Store in a segregated and safe area, avoiding all possible sources of ignition. To maintain stated shelf life and the performance of the product the resins must be kept in original sealed containers at ambient temperature at all times. Avoid low temperature exposure, which may induce adverse effects typical of epoxy materials.

### Safety

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Refer to SDS for the detailed instruction for safe handling. Use in a well-ventilated area. Do not allow uncured epoxy to be in contact with skin for prolonged periods of time. If contact occurs, wash affected area immediately with soap and water. If eye contact occurs, flush with plenty of warm water. See a physician.

### Warranty

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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 that 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.

All reasonable care has been taken to ensure this publication is accurate upon issue. Such information may be affected by changes subsequent to issue. This Technical Data Sheet is to be used solely for this product. Prior to any use, consult the Safety Data Sheet (SDS) for information on hazard risks and product use parameters. All liability and all warranties express or implied are hereby excluded as to product performance results, the accuracy of these data including any warranty of merchantability or fitness for any purpose. SS1290FC

The SynDeck logo features the brand name in a bold, black, sans-serif font. It is positioned between two horizontal green bars of equal length, one above and one below the text.