



Epoxy &
Polyurethane
Manufacturing and
Research

TECHNICAL BULLETIN

SynDeck® Ultra Lightweight Underlayment SS1290

Description

SynDeck® Ultra Lightweight Underlayment (SS1290) is a three component, aggregate filled, 100% solids amine cured epoxy flooring products that offer 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 light weight 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 (SS1290) 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 is a troweled mixture of epoxy and ultra lightweight aggregates designed to be used where irregularities, grades, or contours need to be corrected. SS1290 when installed, exhibits little or no porosity and is an excellent choice in wet or damp spaces. SS1290 has passed the corrosion resistance requirements of mil spec 3135 without primer coating.

Performance

Type 1, Class 2 and Type II, Class 2 of Military Specification MIL-PRF-3135G	
VOC	0 g/l Meets Final SCAQMD Rule 1113 (2008)
Compressive Strength	2,800 psi ASTM D-695
Hardness Shore D	55
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	@70°F. 50% RH Recoat in 8-24 hours Dry for walking traffic in 16-24 hrs depending on selected cure rate. Full cure in 3 days.
Thickness	Easily trowelable to achieve deck fairing and grade as required.
Thinning	None Required. Acetone or alcohol for clean up.
Colors	Blue
Pot Life	1 hour (Epoxy), 2 Hours (Epoxy/Aggregate) 70 degrees 50%RH
Shelf Life	12 months from date of manufacture.



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SA 1290 Epoxy Resin – Contains flameout material in the resin. To be used in the aggregate mixes. The proper amount of resin needed to mix with the hardener is pre-measured in a one gallon can.

SB 1290 Epoxy Hardener – Used with Epoxy resin is pre-measured in a quart can.

Ultra Lightweight Underlayment Mix – 1 can each of SA1290 Epoxy Resin and SB1290 Epoxy Hardener with the SC1290 Ultra Lightweight Underlayment aggregate Mix. Package Yields approximately 18 - 20 ft² at ¼" thickness and 36 to 40 ft² at 1/8 inch thick. SS1290 easily trowels to a feather edge.

Surface Preparation

Metals –

All visible oil, grease, sludge, and any other contaminants shall be removed prior to any surface preparation in accordance with SSPC-SP1. Power Tool Clean deck surfaces in accordance with SSPC-SP11. Prepared surface may be prime coated with any approved Primer Coating or SS1290 may be applied without primer. Apply (Bond Coat) to prepared steel deck with SynDeck SS1222 (mixed SA1222 and SB1222), prior to flooring application. For best results in troweling, allow Bond Coat to be slightly tacky.

Mixing –

To ensure the SC1290 Aggregate is not stratified and an even particle distribution is obtained, pre-mix the aggregate before adding the mixed resin. Mix base component (SA 1290 – Blue Epoxy Resin) until a homogeneous mixture is obtained. Next, pour activator (SB 1290 – Epoxy Hardener) into base component and mix using mechanical jiffy mixer for 2-3 minutes or until homogenous color mixture achieved. Make sure all material is thoroughly mixed. Pouring mixed material into a clean container and re-mixing insures complete reaction of 100% solids epoxy. Once the epoxy component is mixed, add to the Ultra Lightweight aggregate – (Ultra Lightweight Underlayment Mix) and immediately mix until a uniform blue color is obtained and pour onto floor as soon as possible. Mixing until uniform "Blue" is achieved will ensure no "dry spots".

Application Methods

Trowel -

Trowel over "tacky" bond coating to fair deck irregularities and produce positive slopes toward drains. Use hand trowel to effectively spread mixed epoxy Ultra Lightweight aggregate and spread to a thickness to fair the deck.

Environment –

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

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: 562.946.8781 / Fax: 562.944.9958

E-Mail: epmar@quakerchem.com Web Site: www.epmar.com