VLW IMO Self-Prime

Coast Guard Approval Number: 164.106/72/0

VLW IMO Self Prime is an advanced underlayment material made from 100% solids; IMO-approved epoxy resin combined with high-performance lightweight aggregate. This innovative formulation creates a seamless, smooth, and highly effective base layer ideal for various IMO deck covering systems.

A key benefit of VLW IMO Self Prime is its increased resin volume per kit, which significantly reduces installation time by allowing the user to apply both a bond coat and the aggregate base coat simultaneously. This versatility makes it suitable for direct application on clean metal or steel surfaces. Whether used for lightweight filling, sloping, or leveling, it is ideal for quick maintenance and repair tasks.

USCG Standard- *minimum* application thickness

1/8 inch	**3.175 mm**	**125 mils**
50 ft^2 (4.645 m^2) Per Kit		

Recommended *average* application thickness for deck leveling

1/4 inch	**6.35 mm**	**250 mils**
25 ft^2 (2.323 m^2) Per Kit		

USCG Standard- *maximum* system thickness

2 inches	50.80 mm	2000 mils
3 ft^2 (0.279 m^2) Per Kit		

Kit and Packaging

(1 kit = Resin Self-Prime Part. A + Catalyst Self-Prime Part. B + Self Prime Aggregate)

Item Number	Description	Weight
0656N-IMO	VLW IMO Resin Self-Prime Part. A	8.0 lbs / 3.63 kg
0657-IMO	VLW IMO Catalyst Self-Prime Part. B	2.0 lbs / 0.91 kg
0658-IMO	VLW IMO Self Prime Aggregate	17.0 lbs / 7.71 kg

Installation Steps for VLW IMO Self-Prime

Step 1: Apply VLW IMO Resin as Bond Coat

1. **Pre-mix components A and B thoroughly for 2 minutes.**
2. **Pour a small amount of the combined resin onto the working surface.**
3. **Spread the mix evenly using a notched squeegee or an epoxy roller.**

Step 2: Mix Underlayment Resin Components with Aggregate

1. **Pour the remaining combined resin into a separate, larger bucket to blend in the aggregate.**
2. **Slowly add the aggregate to the combined resins and mix until the blend resembles wet pumice sand.**

Step 3: Apply the Underlayment Mixture

1. **Pour the underlayment mixture onto the working surface.**
2. **Trowel the mixture smooth to the desired thickness, typically around 1/8 inch to 1/4 inch (3.175 mm to 6.35 mm).**

Step 4: Cure and Grout the Underlayment

1. **Once the VLW IMO Self-Prime Underlayment is fully cured, scrape it with a dry trowel to remove any excess material. Vacuum any loose material.**
2. **Mix and pour TM Grout Resin onto the cured surface.**
3. **Work the TM Grout Resin into the cured material using a flexible squeegee trowel.**
4. **Remove any excess TM Grout Resin and allow it to cure.**
5. **Reference TM Grout TDS for detailed application instructions.**

Step 5: Apply Primary Decking System

1. **Apply the desired primary decking system over the fully cured and grouted underlayment.**

Surface Preparation and Site Readiness

Surface Preparation

Metal deck surfaces must be cleaned of rust, loose scale, and dirt following SSPC SP11/NACE No. 6 standards. Grease and oil should be removed with approved solvents and clean rags as per SSPC SP-1 standards. The resulting surface should be clean, bright, and protected against corrosion before applying Dex-O-Tex materials. The Very Lightweight Underlayment system can be applied to a cured Navy Formula 150 Primer, MIL-DTL-24441, MIL-PRF23636, Manufacturer Bond Coat, or VLW Primer. Consult your local Dex-O-Tex Marine Representative when dealing with wood or other deck surfaces.

Job Site Survey

Measure and record ambient temperature, humidity, surface temperature, and the temperature of the materials being used. Do not proceed with the application if conditions are outside the recommended parameters. Inspect all materials to be used to ensure they are the correct type and size and verify that all components are present. Check all containers to ensure they have a proper factory seal with no signs of damage or leakage. Pre-mix liquid materials into a smooth, homogeneous blend before use.

Environmental Conditions for Application

All materials must be mixed, applied, and cured at the job site under specific environmental conditions to ensure proper curing and performance. Make sure conditions comply with the following requirements:

1. **Temperature: The ideal application and curing temperature range for the materials should be adhered to, both in metric and US customary units. (e.g., 15°C to 30°C / 59°F to 86°F)**
2. **Humidity: Monitor and maintain the relative humidity within the specified range suitable for the material being used.**
3. **Ventilation: Ensure adequate ventilation to facilitate the curing process and to maintain a safe working environment.**

Substrate temp.	**Min. 50°F (10°C)**	**Max. 80°F (26.66°C)**
Relative Humidity	**Min. <90% (32.22°C)**	**Max. 85% (29.44°C)**
Ambient Air Temp.	**Min. 50°F (10°C)**	**Max.90°F (32.22°C)**

Min. Re-Coat Window	**12Hrs at 60°F (15.55°C)**	**24Hrs at <40°F (4.44°C)**
Max. Re-Coat Window	**24Hrs at 60°F (15.55°C)**	**48Hrs at <40°F (4.44°C)**
Cure to Full Service	**48Hrs at 60°F (15.55°C)**	**96Hrs at <40°F (4.44°C)**

Material Handling and Application Guidelines

Material Disclosure

Materials should arrive in their original packaging and containers, with unbroken seals and manufacturer's labels containing brand names and storage directions. Upon receipt, immediately check the materials to ensure all the correct items are present and in good condition. Sort and store materials in a temperature-controlled storage area.

Applicator Notes

For optimal workability, Dex-O-Tex materials should be stored and mixed within a temperature range of 18°C-27°C (65°F-80°F). A warmer substrate can shorten the material's pot life and cause stickiness, while a cooler substrate may prolong curing time and lead to resin blush. Maintain a deck and room temperature of at least 18°C (65°F) throughout the curing process until reaching full-service time. When mixing polymeric resin components, use all provided resins as they are premeasured to the correct ratios. Scrape all hardener from its container into the resin; avoid draining unmixed resin onto the flooring surface, as this can result in soft or uncured spots. Keep the unfinished flooring surface clean to prevent contamination that could affect the final appearance. Ensure good ventilation during application, especially in confined spaces. Always refer to and follow the manufacturer's Safety Data Sheets (SDS) for handling polymeric materials.