

DESCRIPTION

PolySpec® FLEX IMO is a uniquely formulated decorative polymer deck covering system that combines aesthetics and fire safety. Through the use of proprietary technology, PolySpec® FLEX IMO meets IMO/SOLAS requirements for surface flammability, smoke and toxicity. PolySpec® FLEX IMO consists of a two-component, 100% solids epoxy resin base coat, color coat and a clear epoxy receiving and sealing coat. This tough system is finished with a scratch resistant clear polyurethane topcoat.

PolySpec® FLEX IMO has been approved as meeting parts 2 and 6 of Annex I of the IMO Fire Testing Procedures Code and is classified as a primary deck covering.

Coast Guard Approval # 164.106/18/0

TYPICAL APPLICATION

Table with 2 columns: Component and Application. Rows include Base Coat (Flex IMO @ 60 mils), Color coat (Flex IMO color @ 16 mils), Seal Coat (Flex IMO Seal Coat @ 16 mils), Broadcast (Vinyl Chips), and Polyurethane Top Coat (TuffRez® 236 @ 4-5 mils).

PERFORMANCE DATA

Table with 2 columns: Property and Value. Properties include Weight@ 125 mils (MIL-D-24613) .68 lbs/sq ft, Tensile Strength (ASTM D-638) 1,500 psi, Tensile Elongation (ASTM-D-638) 40%, Flexural Strength (2" mandrel) no cracking, Fire Resistance (IMO Res.A.687(17)) Not Readily Ignitable, Smoke and Toxicity (IMO Res.MSC-61(67))Part 2 ..Passed

STORAGE & INSTALLATION

Table with 2 columns: Condition and Requirement. Conditions include Storage Environment (Dry area, 65-80°F), Application Temperature, ambient (50-85°F), Application Temperature, substrate (Minimum 5°F above dew point), Service Temperature (Maximum 150°F), Shelf Life (12 months), Pot Life, @ 77°F (40 minutes), Foot Traffic, @ 77°F (24 hours), Full Service, @ 77°F (48 hours)

Material cures more slowly at cooler temperatures, and working time will be substantially reduced at higher temperatures. In hot weather, material should be cooled to 65°F to 80°F prior to mixing and application to improve workability and avoid shortened pot life. The data shown above reflects typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result.

CONSIDERATIONS & LIMITATIONS

- 1. Floors should be sloped to drain to prevent standing water or chemicals. As with any surface, all spills should be removed as soon as possible to prevent a slipping hazard.
2. Do not thin with solvents unless advised to do so by PolySpec.
3. Confirm product performance in specific chemical environment prior to use.
4. Prepare substrate according to "Surface Preparation" portion of this document.
5. Do not apply to slabs on grade unless a heavy unruptured vapor barrier has been installed under the slab.
6. Always use protective clothing, gloves and goggles consistent with OSHA regulations during use. Avoid eye and skin contact. Do not ingest or inhale. Refer to Material Safety Data Sheet for detailed safety precautions.
7. For industrial/commercial use. Installation by trained personnel only.

PolySpec® FLEX IMO

TECHNICAL DATA SHEET

Flexible Decorative Chip Seamless Floor

BENEFITS

- Allows for visibility and breathable air in the event of a ship fire
• Resists ignition so that fire cannot easily spread to other decks within the ship or drilling platform
• Extremely low VOC's, almost no odor
• Decorative, seamless appearance
• Easy to clean and maintain
• Endless color and texture options

RECOMMENDED USES

- Corridors
• Mess areas
• Kitchens
• Staterooms
• Infirmaries
• Passageways

GENERIC DESCRIPTION

Epoxy Flake Deck Coating

STANDARD COLORS

Medium Blue, Light Blue, Terrace Green, Light Gray, Sand, Tan

PACKAGING / COVERAGE

Table with 2 columns: Product and Coverage. Rows include Base Coat @ 60 mils (Flex IMO Base Coat 4.5 - Gallon / 120 sq. ft.), Color Coat @ 16 mils (Flex IMO Color Coat .8 - Gallon / 75 sq. ft.), Sealer Coat @ 16 mils (Flex IMO Sealer Coat .75 - Gallon / 75 sq. ft.), Vinyl Chips (flakes) (10 - Pound Bag / 60 sq. ft., 55 - Pound Bag / 330 sq. ft.), Top Coat @ 4-5 mils WFT: (TuffRez® 236 .75 - Gallon / 260 sq. ft.)



SURFACE PREPARATION

Steel: For steel surfaces, a "Near White Metal" ultra high-pressure wash or abrasive blast with anchor profile of 2–4 mils in accordance with Steel Structures Painting Council Specification SP-10 or NACE No. 2 is required.

Refer to PolySpec Surface Preparation Guidelines for more details.

INSTALLATION STEPS

1. **FLEX IMO Base Coat :** The first step is to mix Part A and Part B separately with mechanical mixer prior to combining. This is very important.

IMPORTANT: Always pour Component B into Component A to insure uniform color and consistency of mix. Using a Jiffy mixer blade and a 3/8" variable speed drill, thoroughly mix Component A and Component B together for two minutes. Stir slowly at a low speed. Do not whip bubbles into mixture. Stop and scrape the sides and bottom of the can to be sure that all the material is mixed together. Blend for an additional 30 seconds. It is important that this product be thoroughly mixed to insure uniform cure and color consistency throughout. Use a 1/4" notch trowel to apply the Base Coat evenly across the deck. Enough coating should be applied to yield 40–60 mils thickness. Allow the system to stand 15 minutes to allow any entrapped air to come to the surface. Using a spiked roller, roll the entire surface to break any bubbles and help the system fall out evenly.

Use immediately after mixing. Working time can be extended by pouring material onto the surface and spreading out to the desired thickness. If the can begins to heat up, do not use the product, as it will be difficult to spread and may result in an uneven texture. One 4.5 gallon unit will cover approximately 120 square feet. Allow to cure for 16–24 hours at 75°F (24°C).

Note: Before beginning Step 2: See PolySpec Flake and Quartz Broadcast Guidelines, depending on desired surface finish.

2. **FLEX IMO Color Coat:** The first step is to mix Component A and Component B separately with a mechanical mixer prior to combining. This is very important.

IMPORTANT: Always pour Component B into Component A to insure uniform color and consistency of mix. Using a Jiffy mixer blade and a 3/8" variable speed drill, thoroughly mix Component A and Component B together for one minute. Stir slowly at a low speed. Do

not whip bubbles into the mixture. Stop and scrape the sides and bottom of the can to be sure that all the material is mixed together. Blend for an additional 30 seconds. It is important that this product be thoroughly mixed to insure uniform color, cure, and consistency throughout. Use a red or white rubber squeegee or a flat trowel and apply at 15–20 mils. Backrolling will be necessary to eliminate trowel marks or ridges. Use immediately after mixing. Work very quickly - pot life is short, especially at higher temperatures. Working time can be extended by pouring material onto the surface and spreading out to the desired thickness. If the can begins to heat up, do not use the product, as it will be difficult to spread and may result in an uneven texture. One unit will cover approximately 80 square feet. Allow to cure for 12–16 hours at 75°F (24°C).

See PolySpec Flake Broadcast Guidelines.

3. **FLEX IMO Sealer Coat:** Do not allow the deck to become dirty from dust, dirt, oil and other contaminants by allowing the crew to walk on the deck with dirty shoes. It is important at this stage of the application to keep the deck clean and free from dirt and dust. **DO NOT WALK ON THIS SURFACE WITH DIRTY SHOES. COVER YOUR SHOES WITH PLASTIC OR OTHER PROTECTIVE MATERIALS. WIPE FEET BEFORE ENTERING SPACE AND/OR INSTALL TACK MATS.** If you are going to use more than one color of flake, pre-mix the plastic flakes together in the color combination selected.

Pour Component B into Component A to insure uniform mix. Using a Jiffy mixer blade and a 3/8-inch variable speed drill, mix Component A with Component B. Mix for one minute at low speed. Working in a small area, apply a 16-mil coat. A 3/4 gallon bucket will cover 75 square feet. Applying this coat in thicknesses greater than 20 mils can cause discoloration. Allow to cure for 12–16 hours at 75°F (24°C).

4. **FLEX IMO Top Coat(s):** AT THIS STAGE IT IS EXTREMELY IMPORTANT ONCE AGAIN TO PROTECT THE DECK FROM CONTAMINATION BY DIRTY SHOES. COVER YOUR SHOES WITH PLASTIC OR OTHER PROTECTIVE MATERIALS.

After the receiving coat has been allowed to cure for 12–16 hours at 75°F (24°C), lightly sand the deck, knocking off the edges of any flakes that may be protruding through the seal coat. Any contamination not removed will show through the seal coat(s).

Please follow precisely the following mixing instructions for TuffRez 236: Stir the A Component for one minute. Add the B component to Component A and mix well for two minutes. Add Component C and mix for additional one minute.

Caution: DO NOT WHIP BUBBLES INTO MIXTURE. Apply at 4–5 wet mils with a short nap mohair roller. Make certain to cover the area thoroughly. Crossrolling may be necessary to help eliminate trowel marks or ridges. Allow this coat to cure for 10–12 hours at 75°F (24°C).

IMPORTANT: Allow 24 hours cure time at 75°F (24°C) before opening to light foot traffic. Open to full service in 48 hours. Ultimate cure for chemical resistance and scratch resistance is 72 hours. Cure times are based on 75°F (24°C) and 50% relative humidity.

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