

## Ply-Guard FCE 224

## Technical Bulletin

Ply-Guard FCE 224 is a fast-curing, high-solids, high-build Epoxy that can be applied to properly prepared steel and concrete surfaces.

Ply-Guard FCE 224 is an ideal product for maintenance/repair applications where quick turnaround and return to service is required.

Ply-Guard FCE 224 is also well-suited to new product applications where its fast curing properties can lead to increased throughput and production efficiencies.

### Key Features

- Compatible with Polyset's WB HRZS® product line of High-Ratio Zinc Silicate coatings
- Quick Cure
- VOC Compliant
- Good Edge Retention

### Product Uses

- Marine Applications (Barges, Ships, Off-Shore Rigs, Buoys, etc.)
- Bridges and Support Structures
- Pipelines

### Surface Preparation

Surface must be clean, cool, dry, and free of grease, scaling paint, special surface hardeners, curing agents or other contaminants. Allow new concrete, plaster, stucco and masonry to cure for a minimum of 30 days before application.

**FOR STEEL SURFACES:** Abrasive/shot blast the surface to be coated to a minimum SSPC-SP-6 "Commercial" finish with a profile of 1.5–3.0 mils (38-75 microns). For maintenance purposes and touch up repairs, clean the surface to be coated to SSPC-SP-2 or better.

**FOR CONCRETE / MASONRY SURFACES:** Concrete must be cured for 30 days under normal conditions. Form oils, curing agents and hardeners should be thoroughly removed before coating is applied.

### Mixing

Mix both individual Ply-Guard FCE 224 components with a power mixer, then mix the two components together and power mix. Mixing partial kits is not recommended. Thinning should normally not be required when used within product limitations.

### Primer

Ply-Guard FCE 224 can be applied directly over Polyset's line of WB HRZS® products, if desired. However, no primer is required and Ply-Guard FCE 224 can be applied directly to properly prepared steel or concrete. Contact your Polyset Technical Representative for specific information and application recommendations.

### Product Data

*(All readings taken at 25°C, unless noted)*

<b>Post-Mix Induction Time:</b>	30 min. @ 35° - 55°F (2° - 13°C) 15 min. @ 55° - 85°F (13° - 29°C)
<b>Pot Life (Hours):</b>	2 Hours @ 75°F (24°C)
<b>VOC Content (Lbs./gal.):</b>	2.24
<b>VOC Content (grams/L):</b>	268
<b>Type of Material:</b>	Epoxy
<b>Color:</b>	Customer-Specified IAW Federal Color Code
<b>Finish:</b>	Semi-Gloss
<b>Volume Solids (%):</b>	68 ± 2
<b>Theoretical Estimated Coverage (ft<sup>2</sup>/gal.):</b>	1099 @ 1 mil DFT
<b>Recommended Film Thickness (mils/coat):</b>	3–9 (DFT)
<b>Method of Application:</b>	Spray, Brush, or Roll
<b>Thinner &amp; Clean-Up Solvents:</b>	42 Thinner, MEK, MIBK, Toluene, or Xylene

### Kit Weight

<b>2-Gallon Kit:</b>	27.4 Lbs. (12.4 kg)
<b>10-Gallon Kit:</b>	138 Lbs. (62.6 kg)

### Drying Time (@ 59% Rel. Humidity)

<b>To Handle / Topcoat:</b>	2 Hours @ 90°F (32°C) 8 Hours @ 35°F (2°C)
<b>Cure For Service:</b>	12 Hours @ 90°F (32°C) 3 Days @ 35°F (2°C)

### Dry Temperature Resistance

<b>Continuous:</b>	200°F (93.3°C)
<b>Intermittent:</b>	250°F (121.1°C)

*Discoloration and loss of gloss will occur at temperatures above 200°F (93° C). Epoxies will lose gloss, discolor and eventually chalk in sunlight / UV exposure.*

<b>Shelf Life:</b>	3 Years in the original, unopened containers
<b>Storage:</b>	Store between 40–95°F (4–35°C)

**FOR ADDITIONAL APPLICATION & EQUIPMENT RECOMMENDATIONS, PLEASE CONSULT YOUR POLYSET TECHNICAL REPRESENTATIVE.**

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