



Highland International, Inc.

Engineered Paint Systems

335 Series HiTemp Inorganic Zinc-Rich Primer

335 Series is a self-curing, corrosion-resistant coating with tenacious bonding and abrasion resistance. Its galvanic action resists undercutting. 335 Series exhibits excellent stand-alone performance in high temperature or long-term atmospheric exposures. Finish with specialized Highland Epoxy and/or Urethane topcoats to improve aesthetics, increase long-term performance or protect the primer from attack in aggressive environments.

Vehicle Type:	Ethyl Silicate Inorganic Zinc-Rich
Pigmentation:	Zinc Pigment 88% by weight in dried film
Reducer:	Up to 5% with: Highland # 75 for >80°F (27°C) Highland # 85 for <80°F (27°C)
Pre-Measured Components:	Use entire contents of Part "A" & "B"
Pot Life:	12 Hours @77°F (Decreases in higher temperatures)
Volume Solids:	65% +/- 2% (mixed) void content method
Theoretical Coverage:	1040 ft ² /gal. @ 1 mil DFT
VOC:	<472 g/L
Flash Point:	53°F (Lowest Flashing Component)
Recommended DFT:	2-3.5 mils per coat
Temperature Resistance:	Dry 750°F Continuous with excursions to 950°F. NOTE: Color changes from greenish-gray to reddish-gray in temperatures above 450°F
Cure Time in 50% Relative Humidity 75°F:	
To Handle:	1 Hour
To Recoat:	16 Hours (at 0°F 7 days minimum)

Moisture is required to achieve proper cure. Curing time will vary with temperatures and humidity. At relative humidities below 30% it may be necessary to gently spray the coated surface with water to achieve proper cure and to minimize recoat time. Consult your Highland representative for specific recommendations.

Ventilation: When used as a tank lining or in enclosed areas, provide adequate ventilation during application and cure. Reference ventilation guidelines contained in the latest edition of AWWA D 102.

Topcoats:	Highland Epoxies & Urethanes only
Shelf Life:	1 Year Minimum
Finish:	Flat
Color:	Gray

Coverage Rages

Suggested:	2.5 Dry mils	4.0 Wet mils	417 sq. ft/Gal
Minimum:	2.0 Dry mils	3.0 Wet mils	521 sq. ft/Gal
Maximum:	3.5 Dry mils	5.5 Wet mils	298 sq. ft/Gal

Special Qualifications

Series 335 meets AISC requirements of Class B surface with a mean slip coefficient no less than 0.60 and a tension creep not in excess of 0.015 inches (0.38mm). Zinc content surpasses requirements of ANSI N101.2 and SSPC-PS12.

Surface Preparation

- 1) For severe exposure a Near White Metal Blast Cleaning (SSPC-SP10) is recommended.
- 2) For moderate exposure a Commercial Blast Cleaning (SSPC-SP6) is recommended.
- 3) All surfaces to be painted should be dry and free of all foreign contaminants.
- 4) Surface temperature should be at least 5°F above the dew point. At temperatures below 32°F the surface should be free of ice and/or frost.

Mixing Requirements

Mix entire contents of Parts "A" and Part "B" components. Use an air-driven power mixer and keep material under constant agitation while mixing. Slowly sift powder (Part B) into liquid (Part A). **Do Not Reverse This Procedure** – Adjust mixer speed to break up lumps and mix until the two components are thoroughly blended. Strain through a 35-50 mesh (300 to 600 microns) screen before using. Keep under agitation to prevent settling. Do not use mixed material beyond pot life.

Application Equipment & Requirements

Conventional Gun:	Binks 62 (1)
Fluid Tip:	66SS
Air Cap:	67 PD
Atomizing Pressure:	30-40 psi
Pot Pressure:	10-20 psi (2)
Air Hose:	5/16" or 3/8" ID
Material Hose:	3/8" or 1/2" ID

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Low temperatures or longer hoses will require additional pressure. Use pressure pot equipped with an agitator and keep pressure pot at same level or higher than the spray gun. If work is stopped for 10-15 minutes, do not allow material to remain in hose. Shut off pot pressure at the fluid regulator and open pressure relief valve. Loosen spray gun cap ring three turns, hold cloth over air cap and pull trigger to force the material in the hose back into the pot. Keep material under agitation during shut-down, but do not repressurize pot until ready to resume work.

Airless Gun: Graco 205-591
Pump: 30:1/45:1/60:1, Gas Pump Acceptable
Tip Range: .021-.023
Pump Pressure: 1800-3000 psi
Hose: 1/4 or 3/8 inch ID

Use appropriate tip/atomizing pressure for equipment, applicator technique and weather conditions. Keep material agitated to prevent settling. If work is stopped for 15 minutes or more, recirculate material to assure that only well-agitated material is in fluid lines before spraying is resumed.

NOTE: When applying epoxies over this primer, apply a wet mist coat and allow tiny bubbles to form. When bubbles disappear in 1-2 minutes, apply a full wet coat at specified mil thickness.

Roller Application: Not Recommended
Brush Application: Touch up only. Use high quality natural or synthetic bristle brush.
Clean Up: 1:1 Blend MEK & Xylene

Safety Precautions

- 1) Use normal precautions such as gloves, facemasks and barrier creams.
- 2) Adequate ventilation must be maintained. In confined areas, workmen must wear constant flow airline respirators.
- 3) If product comes into contact with skin, wash thoroughly with lukewarm water or diluted Boric Acid, and obtain immediate medical attention.
- 4) This product contains **FLAMMABLE** materials. Keep away from sparks and open flames. Observe **NO SMOKING** regulations.
- 5) All electrical **equipment and installations should conform to NEC regulations**. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools, and to wear conductive, non sparking shoes.
- 6) Observe low flash regulations.
- 7) Refer to Material Safety Data Sheet (MSDS) for complete safety instructions.

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