



# 325R-DF Series

## Spray-Safe Dry-Fall 2-K Zinc Rich Epoxy Primer

325R Series is a high performance 2-component zinc rich epoxy primer with 84% zinc dust in dry film. Its overspray is designed to dry to a powder 10-20 feet from point of application, allowing painting to continue without the worry of paint overspray damaging nearby vehicles and equipment. 325R offers outstanding abrasion resistance and protection against undercutting and corrosion by cathodic protection.

### Tech Specs

<b>Heat Resistance:</b>	For Ambient Services Only
<b>Vehicle Type:</b>	Zinc Rich Epoxy
<b>Reducer:</b>	Not Normally Required
If desired in summer (80°F+):	Highland #30-E Reducer
If desired In Winter: (80°F-):	Highland #32-E Reducer
<b>Mix Ratio:</b>	4.5:1 (9:2) Base to Activator
Base:	325R-DF-5158
Activator:	325R-DF-100
<b>Pot Life:</b>	3 Hours @ 77°F (Decreases in higher temperatures)
<b>Volume Solids:</b>	50%
<b>Theoretical Coverage:</b>	802ft <sup>2</sup> /gal. @ 1 mil DFT
<b>VOC:</b>	340 g/L (2.84 lbs/gallon)
<b>Flash Point:</b>	70°F (Lowest Flashing Component)
<b>Dry Film Thickness:</b>	3-4 mils DFT

<b>Wet Film Thickness:</b>	6-8 mils WFT
<b>Dry-time:</b>	<b>Normal</b>
To Recoat:	Min: 2-3 hrs. Max: 28 Days
To Touch:	30 Minutes
To Topcoat:	4-6 Hours
Complete Cure:	5-7 Days @ 77°F
<b>Shelf Life:</b>	2 Years Minimum
<b>Finish:</b>	Flat
<b>Color:</b>	Gray-Green
<b>Packaging:</b>	5 Gallon Kits
<b>Storage Temperature:</b>	20°F - 110°F
<b>Application Temp:</b>	
Ambient:	45°F Minimum
Substrate:	40°F - 100°F

### Surface Preparation

All surfaces should be clean, dry and free of all foreign contaminants.

A SSPC-SP1 Solvent Cleaning with Highland 901 Cleaning Solvent is recommended before blasting or other cleaning method.

#### Carbon Steel - Immersion:

Obtain a 2-3 mil angular blast profile using one of the recommended methods below.

**Best:** A SSPC-SP5/NACE 1 White Metal Blast Cleaning is recommended for maximum coating performance and longevity.

**Good:** A SSPC-SP10/NACE 2 Near White Metal Blast Cleaning provides good results.

#### Carbon Steel - Non-Immersion:

Obtain a 2-3 mil angular blast profile using one of the recommended methods below.

**Best:** A SSPC-SP6/NACE 3 Commercial Blast Cleaning provides good results.

**Good:** A SSPC-SP3 Power Tool Cleaning, SSPC-SP2 Hand Tool Cleaning, or waterjetting per SSPC-SP 12 to WJ-4 will provide good results.

## Galvanized Steel:

Contact a Highland representative as recommendation will vary depending on substrate and exposure conditions.

## Mixing & Application

**Mixing:** Highland 325R Series needs to be thoroughly mixed using mechanical agitation. Mix entire contents of Part "A" Activator (325R-DF-100) with Part "B" Base (325R-DF-5158) (4.5:1 by volume). Allow a minimum 15 minute induction period before application.

**Reduction:** No reduction is necessary to achieve Dry-Fall properties at 20 ft. For Dry-Fall effect within 20 ft. you must reduce activated material 10%. Reduce with Highland 30-E reducer in temperatures 80°F and above or 32-E reducer in temperatures 80°F and below.

**Dry-Fall Application Instructions:** To assure Dry-Fall effect, do not apply in temperatures below 45°F, on surfaces below 40°F, or humidity above 85% Rh. When humidity is above 50%, take caution to observe the dry-fall range as it may extend slightly past the 20 foot mark, up to 50 feet depending on other weather variables. Make sure the equipment being used will give accurate psi readings so the pressure from the pump can be maintained at 1800 psi allowing a maximum +/- 25 psi for surges. Do not apply in temperatures that are 5°F or less from the dew point. Whip lines are not allowed unless they are 3/8 inch ID. Swivels are acceptable.

If "Fingering" occurs during the spray application, increase the amount of thinner which will decrease the viscosity of the coating. Do not increase the pump pressure. Maintain 1800 psi allowing +/- 25 psi for surges.

Highland 325 Series is designed for spray application. To ensure optimal performance and dry-fall properties, apply according to the following recommendations.

### Airless Applications

**Gun:** Graco 205-591 (or equivalent)

**Pressure:** Apply at 1800psi allowing for +/- 25 psi for surges

**Tip sizes:** 3.011-4.013

**Hose:** 3/8 inch ID

**Airless Pumps:** 30:1, 45:1, 60:1 (Gas Pumps are acceptable)

**Brush or Roller:** For touchup only – Requires reduction with Highland 105 Brush & Roll Reducer.

**Clean Up:** Clean all equipment with Highland #901 Cleaning Solvent

It is important to also note that due to variances in equipment, ambient conditions or other site-specific set ups, a successful dry-fall test should be confirmed for every application setup. Please contact a Highland representative to review dry-fall test standards.

## Typical Systems

Apply 1 coat of 325 Series at 2-3 mils DFT as a primer then apply a second and/or third coat one of the following options.

### Midcoats

**475R Series Primer**

Dry-Fall 2K epoxy primer

**485R Series Primer/DTM**

Dry-Fall 2K epoxy primer/DTM

### Topcoats

**65R Series Topcoat**

Dry-Fall gloss acrylic

**68R Series Topcoat**

Dry-Fall high gloss urethane

**36 Series Topcoat**

Non Dry-Fall Ultra-High gloss 2K urethane

Highland 325R Series may be topcoated with a wide variety of topcoats. For more options please call your Highland representative.

## Safety Information

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



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