



84-DF Series  
Dry-Fall Phenolic Modified Alkyd Primer

84-DF Series is a rust inhibitive phenolic modified alkyd surface tolerant structural primer that is 2.8 lbs VOC per gallon. It features an elaborate system of rust inhibitors to assure outstanding corrosion protection even in rugged climatic environments. 84-DF also offers maximum adhesion and corrosion protection even in limited surface preparation areas. 84-DF may be topcoated with a wide range of topcoats (silicone alkyds, alkyds, epoxies, urethanes and acrylics). Its overspray is designed to dry to a powder within 10-20 feet from point of application. The light color scheme is designed to show shadows in steel surfaces until proper film thickness has been achieved to assure maximum corrosion protection.

<b>Vehicle Type:</b>	Phenolic Modified Alkyd
<b>Pigmentation:</b>	Zinc Phosphate (Lead & Chromate Free)
<b>Reducers for:</b>	
Summer (above 80°F):	#30-E Exempt Warm Weather Reducer
Winter (below 80°F):	#32-E Exempt Cold Weather Reducer
<b>Mix Ratio:</b>	Single Package
<b>Pot Life:</b>	Not Applicable
<b>Volume Solids:</b>	61%
<b>Theoretical Coverage:</b>	976 ft <sup>2</sup> /gallon @ 1 mil DFT
<b>VOC:</b>	<335 g/L
<b>Flash Point:</b>	24° (Lowest Flashing Component)
<b>Recommended DFT:</b>	2-3 mils
<b>Dry-time:</b>	
<b>To Touch</b>	20-30 Minutes
<b>Tack Free:</b>	1 Hour
<b>To Topcoat:</b>	Minimum 1 Hour/Maximum – No Limit
<b>To Handle:</b>	4-6 Hours
<b>Put In Service:</b>	12 Hours
<b>Shelf Life:</b>	1 Year Minimum
<b>Finish:</b>	Flat
<b>Color:</b>	Off-White

**Typical Systems**

<u>Primer</u>	<u>Topcoat</u>
84-DF Series (2-3 mils)	68R Series Dry-Fall Aliphatic Urethane (2-3 mils)
84-DF Series (2-3 mils)	720 Series Dry-Fall Modified Silicone Alkyd (2-3 mils)
84-DF Series (2-3 mils)	65R Series Dry-Fall Modified Acrylic (2-3 mils)

**Surface Preparation**

- Commercial Blast SSPC-SP6 is recommended for steel when practical. Where blast cleaning is not practical, SSPC-SP3 Power Tool or SSPC-SP2 Wire Brushing is acceptable and provides excellent results. Also, Water Jetting in accordance with SSPC-SP12 is acceptable.
- All surfaces to be painted should be dry and free of all foreign contaminants.

**Mixing Instructions and Reduction**

84-DF must be reduced 20% with one of the following:

#30-E Highland VOC Exempt Warm Weather Dry-Fall Reducer for temperatures 80°F and above.

**OR**

#32-E Highland VOC Exempt Cold Weather Dry-Fall Reducer for temperatures below 80°F.

#36-E Highland VOC Exempt Blending Reducer may also be used in extreme temperatures above 90°F to help overspray blend in (Do not exceed 5% reduction)

**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.**

**Application Requirements**

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.** The product will continue curing to temperatures of 30°F. Do not apply in temperatures that are 5°F or less from the dew point. Contact a Highland representative to further review your specific spray conditions.

**Method of Application**

<b>Airless Gun:</b>	Graco 205-591
<b>Pump:</b>	30:1/45:1/60:1, Gas Pump Acceptable
<b>Tip Range:</b>	3.011 – 4.013
<b>Pump Pressure:</b>	1800 psi allowing +/- 25 psi for surges
<b>Hose:</b>	3/8 inch ID (Do not use whip lines)

<b>Brush or Roller:</b>	Both are acceptable
<b>Clean Up:</b>	#30-E, #32-E or 1:1 Blend MEK & Xylene

**NOTE:** Electric pumps are NOT recommended. Contact a Highland Representative to review the use of conventional guns.

**Safety Precautions**

- Use normal precautions such as gloves, facemasks and barrier creams.
- Adequate ventilation must be maintained. In confined areas, workmen 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, workmen should be required to use non-ferrous tools, and to wear conductive, non sparking shoes.
- Observe low flash regulations.
- Refer to Material Safety Data Sheet (MSDS) for complete safety instructions.

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