



**HiShield 68R Series** is a high performance 2-K aliphatic urethane topcoat designed to be powder dry within 10-20 feet from the point of application, allowing painting to continue without the worry of overspray damage to nearby vehicles or equipment. 68R Series offers the perfect combination of color purity, flexibility, and UV & corrosion protection even when exposed to a variety of harsh climatic and chemical environments. This product meets SSPC-Paint 36 specifications for 2-K weatherable aliphatic urethanes.

<b>Vehicle Type:</b>	Aliphatic Urethane
<b>Pigmentation:</b>	Varies with Color (Lead Free)
<b>Reducer:</b>	No Reduction necessary, if desired:
Below 80°F	Highland #32-E Reducer
Above 80°F	Highland #30-E Reducer
To Maintain Wet Edge:	Highland #36-E Blending Reducer (Maximum 5%)
<b>Mix Ratio:</b>	4:1 Base to Activator
<b>Pot Life:</b>	3 Hours @77°F
<b>Volume Solids:</b>	41% +/- 1%
<b>Theoretical Coverage:</b>	658 ft <sup>2</sup> /gal. @ 1 mil DFT
<b>VOC:</b>	≤340 g/L
<b>Flash Point:</b>	-4° (Lowest Flashing Component)
<b>Recommended DFT:</b>	2-3 mils DFT = 4.8 – 7.3 mils WFT

### Dry-time:

<b>To Touch</b>	10-15 Minutes
<b>Tack Free:</b>	1 Hour
<b>To Recoat:</b>	1 Hour
<b>Dry Hard:</b>	6-8 Hours
<b>Complete Cure:</b>	5-7 Days
<b>Put in Service</b>	12 Hours

<b>Shelf Life:</b>	1 Year from DOM
<b>Finish:</b>	Gloss, Semi-Gloss, Satin
<b>Color:</b>	Selected Range

### Typical Systems

<u>Primer</u>	<u>Topcoat</u>
475R Series Dry-Fall Epoxy (2-6 mils DFT)	68R Series (2-3 mils DFT)
84-DF Series Dry-Fall Phenolic Modified Alkyd (2-3 mils DFT)	68R Series (2-3 mils DFT)
325 Series Dry-Fall Zinc Rich Epoxy (3-4 mils DFT)	68R Series (2-3 mils DFT)

### Surface Preparation

- 1) All surfaces to be painted should be dry and free of all foreign contaminants.
- 2) Apply over desired primer (See Typical Systems)

The technical data listed herein has been compiled for your convenience and guidelines are based upon our experience and knowledge. However, since we have no control over the use of this information or this product, no warranty expressed or implied is intended or given. Highland assumes no responsibility whatsoever for coverage, performance or any other damage, including injuries from use of this information or products recommended herein.

### Mixing Instructions and Reduction

1) Mix 1 Part “A” Activator with 4 Parts “B” Base. Allow a 5 minute induction period before reduction. Reduction of this product is not normally required. If desired, reduce with one of Highland’s Exempt Reducers:

#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 Blending Reducer may also be used for extremely hot temperatures (+90°F), to help overspray blend in. (Do not exceed 5% reduction)

### 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>	311-413
<b>Pump Pressure:</b>	1800 psi allowing +/- 25 psi for surges
<b>Hose:</b>	3/8 inch ID (Do not use whip lines)

**Brush or Roller:** Acceptable when reduced with Highland #105 B&R Reducer

**Clean Up:** #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

- 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.