

807 Series HiTemp 1200°F

Silicone Copolymer DTM/Primer



807 HiTemp is the result of extensive research and testing into maximum paint performance under extremely elevated temperatures. It has excellent adhesion to steel surfaces and provides corrosion protection on surfaces with temperatures up to 1200°F. Additionally, 807 Series offers dry-fall capabilities eliminating overspray damage completely (see Mixing & Application for details).

Tech Specs

Heat Resistance:	1200°F Constant
Vehicle Type:	Silicone Copolymer
Reducer (Standard Applications):	
#100 Reducer for Ambient Temperatures >80°F	
#120 Reducer for Ambient Temperatures <80°F	
Reducer (Dry-Fall Applications):	
30-E for Ambient Temperatures >80°F	
32-E for Ambient Temperatures <80°F	
Mix Ratio:	Single Package
Pot Life:	N/A
Volume Solids:	36%
Theoretical Coverage:	577ft ² /gal. @ 1 mil DFT
VOC:	3.5 lbs per gallon (419 g/L)
Flash Point:	-8°F (Lowest Flashing Component)
Dry Film Thickness:	3-5 mils DFT as a DTM 2-3 mils DFT as a primer

Wet Film Thickness:	8.3-13.9 mils WFT maximum
Dry-time:	Normal
To Touch:	30 Minutes
Tack Free:	1 Hour
To Recoat:	1-2 Hours
To Handle:	1-2 Hours
To Topcoat:	1-2 Hours
Put in Service:	12 Hour Ambient Flash
Cure Requirements:	1-4 Hrs. @ Min. 250°F - Max. 500°F
Hot Application:	N/A
Shelf Life:	2 Years Minimum
Finish:	Flat
Color:	Aluminum
Packaging:	5 gallon pails
Storage Temperature:	20°F - 110°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:

Best: A SSPC-SP 10 Near White Metal Blast to achieve a low blast profile of 1.5-3.0 mils is recommended (especially for CUI services).

Good: A SSPC-SP6 Commercial Blast will provide good results in most situations.

Acceptable: While abrasive blast cleaning is preferred, when it is not an option, Hand or Power Tool Cleaning per SSPC-SP2 or SSPC-SP3 may be used and will provide good results.

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

Mixing & Application

Mixing: Highland 807 Series needs to be thoroughly mixed using mechanical agitation. It is ready to spray after proper mixing.

Reduction for Standard Spray Applications: Reduction is not required, if desired, reduce by 0% - 10% with Highland #100 or #120 reducer.

Reduction for Dry-Fall "Spray-Safe" Applications: Highland 807 Series must be reduced 10% - 20% with #30-E or #32-E reducer to achieve the dry-fall effect. Surface temperatures should not exceed 140°F when using 807 Series in a dry-fall application.

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.

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.

To ensure optimal performance, apply according to recommendations below.

Standard Airless Applications

Airless Gun: Graco 205-591
Pump: 30:1/45:1/60:1
Tip Range: 3.011 – 4.015
Pump Pressure: 1800 psi Minimum
Hose: 3/8 inch ID

Conventional Applications

Conventional Gun: DeVilbiss MBC-510
Fluid Tip: E
Air Cap: 704
Atomizing Pressure: 60 psi
Pot Pressure: 15-20 psi
Hose: 3/8 inch

Dry-Fall Airless Applications

Airless Gun: Graco 205-591
Pump: 30:1/45:1/60:1
Tip Range: 3.011 – 4.013
Pump Pressure: 1,800 psi +/- 25 psi
Hose: 3/8 inch ID

Brush or Roller Applications

Touchup Only – Must Reduce with Highland #105 Reducer
Clean Up: Highland #901 Cleaning Solvent

Typical Systems

DTM Services: Apply 1 coat of 807 Series at 3-5 mils DFT in a single uniform coat Apply
Primer/Topcoat: 1 coat of 807 Series at 2-3 mils DFT over approved Highland primer

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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