



**TemperKote® 600**  
 INDUSTRIAL HI-HEAT® RESISTANT COATING  
 Air Dries for Purposes of Handling  
 \*Maximum Service Temperature 600°F (315°C)

**Product Description:**

TemperKote 600 Industrial Hi-Heat Coatings are based on a thermally stable silicone modified acrylic resins & specialized pigments to achieve maximum heat resistant properties. The drying mechanism utilizes a combination of solvent evaporation & resin cross-linking to allow handling and shipping in the air-dried state in 24 hours.

**Characteristics:**

<b>Colors</b>	Black, Silver, White, Off White, Dark Gray, Medium Gray, Light Gray, Blue, Beige, Light Beige, Dark Green, Light Green, Safety Blue, Safety Green, Safety Yellow, Safety Orange, Safety Red & Custom Colors		
<b>Finish</b>	All colors Flat, except Silver is a Semi Gloss	<b>Resin Type</b>	Silicone Acrylic
<b>Thermal Stability</b>	600°F (315°C)	<b>VOC</b>	Less Than 3.5 lbs. /gal (420 g/L)
<b>Color Stability</b>	Up to 500°F – Varies by Color	<b>Flash Point</b>	40°F (4.4°C) (PMCC)
<b>Type of Dry</b>	Solvent Evaporation/Resin cross-linking	<b>Reducer/Cleaner</b>	TemperKote Reducer
<b>Curing Schedule</b>	Air Dry	<b>Packaging</b>	1, 5 & 55 gal. containers
<b>Application Temperature</b>	50°F (10°C) to 120°F (49°C)	<b>Shelf Life</b>	2 year (unopened)
<b>Application Humidity</b>	Maximum 85% RH Temperature must be at least 5°F above the dew point	<b>Storage Temperature</b>	40°F - 100°F
<b>Solids By Volume</b>	<b>Silver</b> 25% ± 2% <b>All Other Colors</b> 31% ± 2%	<b>Solids By Weight</b>	<b>Silver</b> 37% ± 2% <b>All Other Colors</b> 50% ± 2%
<b>Weight Per Gallon</b>	<b>Silver</b> 8.6 lbs. (3.9 kg)	<b>All Other Colors</b>	12.65 lbs. (5.7 kg)
<b>Spreading Rate per Coat</b>	<b>Primer</b>	114 – 138 sq. ft./gal (2.8 – 3.4 m <sup>2</sup> /L) 12 – 14 mils wet, 5 – 6 mils dry	
	<b>Silver</b>	160 – 267 sq. ft./gal (3.9 – 6.5 m <sup>2</sup> /L) 6.0 – 10.0 mils wet, 1.5 – 2.5 mils dry	
	<b>All Other Colors</b>	198 – 333 sq. ft./gal (4.9 – 8.1 m <sup>2</sup> /L) 4.8 – 8.1 mils wet, 1.5 – 2.5 mils dry	
<b>Drying Time @ 77°F (25°C) &amp; 50% R.H.</b>	<b>To touch</b>	3/4 - 1 hour	
	<b>To Ship</b>	24 hours	

**Recommended Uses:**

Wherever maximum resistance to heat, humidity, and weather is required. Can be used on heaters, stacks, boilers, breeches, mufflers, radiators, storage tanks, pipelines, steam lines, etc., where operating temperature will not exceed 600°F (315°C). **Not recommended** for use on the **inside** of ovens, stacks, etc.

**Performance Information:**

This very unique coating performs as well as many pure silicone resins, but has the distinct advantage of drying at room or ambient temperature. It can be used over the Flame Control TemperKote 600 Primer or applied directly to clean steel for service up to 600°F (315°C). It has excellent color stability to 600°F (315°C) in Black and Silver & up to 500°F (260°C) for all other colors. Note: Color stability varies by color. Please consult with a Flame Control Technical Representative for specific color stability information.

**Test Data:**

Test Type	Reference	Specification Details	Typical Result
Salt Fog	ASTM B117	168 hrs	ASTM D714 – 10 ASTM D1654 – 8 ASTM D610 – 9-G
Adhesion	ASTM D 3359		5B
Impact, Direct/Reverse, inch/lbs	ASTM D 2794		160/160
Flexibility, Mandrel	ASTM D522		1/8" Pass
Pencil Hardness	ASTM D3363		2H



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**Surface Preparation:**

**General:**

For best results surfaces should be free from oil, grease, dirt, mill scale, rust, corrosion products, oxides, paint and foreign matter. All surfaces should be solvent cleaned per SSPC-SP1 and meet SSPC-SP3 minimums with surface profile of 1.0 - 1.5 mils.

**STEEL:**

Remove all flux, splatter and slag left from welding. Grind all welds until smooth. Remove rust, mill scale, oil grease, and other contamination by solvent cleaning per SSPC-SP1.

**For Typical Industrial Environments** a low profile, near-white metal blast, SSPC-SP10, is preferred as it will give best results, especially where higher service temperatures are anticipated. Blast profile should be 1.0 - 1.5 mils. Remove all remaining abrasive from surface by air blasting. Coat the freshly blasted surface as soon as possible. Do not allow surface to become wet. Do not wash freshly blasted surface with solvents. For small difficult to reach areas, SSPC-SP11 power tool cleaning to bare metal is acceptable.

**For Severe Environments** blast surface to a white metal blast profile per SSPC- SP5.

**NEW GALVANIZED SURFACES:**

Remove all oil, grease and flux by solvent cleaning per SSPC-SP1.

**WEATHERED GALVANIZED SURFACES:**

Remove all dirt, oil and grease by solvent cleaning per SSPC-SP1. Remove rust or foreign deposits by wire brushing per SSPC-SP2 or power tool cleaning per SSPC-SP3.

**STAINLESS STEEL SURFACES:**

Surface must be clean and dry. Remove all oil, grease, soil, drawing and cutting compounds and other foreign matter by solvent cleaning per SSPC-SP1.

**DO NOT USE CHLORINATED SOLVENTS ON STAINLESS STEEL SURFACES.**

For large areas steam clean with an alkaline detergent followed by steam or fresh water wash to remove residue.

**Application:**

Mix thoroughly by boxing or stirring. Can be applied by brush, roller or spray. Spray application is preferred, as a more uniform film is generally obtained. **Do not apply heavier film than specified, as the coating may blister when heat is applied.**

**STEEL:**

Where maximum corrosion resistance is desired, apply one coat of Flame Control TemperKote 600 Primer at approximately 5.0 – 8.3 mils wet film thickness, (193 – 321 sq.ft./gal) for service temperatures up to 600°F (260°C). After primer is dry, apply one coat of TemperKote 600 Series Hi-Heat coating at specified coverage rate (refer to characteristics section).

**AGED MASONRY:**

No priming required. Apply one uniform coat at the specified wet film thickness (refer to characteristics section).

**Application Equipment:**

**AIRLESS SPRAY:**

**Titan 740 Impact (or Equivalent)**

Fluid pressure	2700 - 3100 psi
Manifold Filter	60 Mesh
Gun Filter	60 Mesh
Hose	¼" diameter
Gun	LX-8011
Tip	.015 - .021

**FOR INDUSTRIAL USE ONLY**

**Read MSDS before opening containers**

**KEEP OUT OF THE REACH OF CHILDREN**

**Precautions:**

**DANGER! FLAMMABLE LIQUID & VAPOR: CONTAINS TOLUENE & PETROLEUM DISTILLATES. VAPOR HARMFUL. MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. CAUSES EYE, SKIN, NOSE AND THROAT IRRITATION. NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Keep away from heat, sparks and flame. VAPORS MAY CAUSE FLASH FIRE. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation.**

**USE ONLY WITH ADEQUATE VENTILATION.** Do not breathe vapors or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application. Follow respirator manufacturer's directions for respirator use. Close container after each use. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

**FIRST AID:** If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately. In case of eye contact, flush immediately with plenty of water for at least 15 minutes and get medical attention; for skin, wash thoroughly with soap and water. If swallowed, get medical attention immediately. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent container and unused contents in accordance with local, state and federal regulations.

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