



# COATINGS BROCHURE

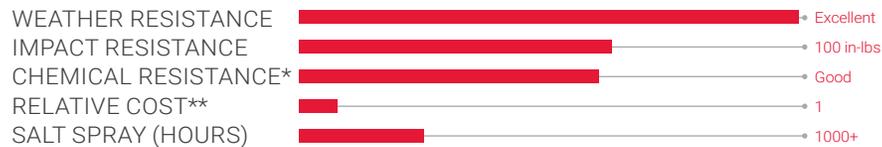
# COATINGS COMPARISON



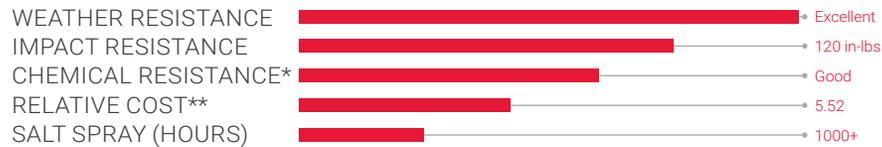
We offer a wide variety of coatings to meet the demands of your fan and application. This guide is designed to aid in the coating selection process. For more detailed information, go to the corresponding detail page.

## SUMMARIZED OFFERINGS

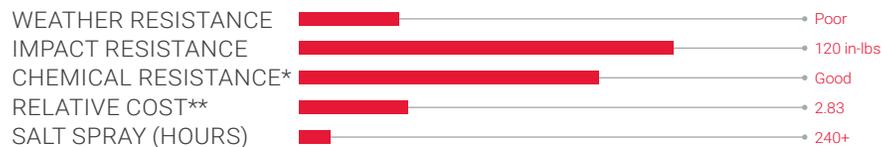
### LORENIZED™ (PAGE 4)



### COOK EASY CLEAN POWDER COATING (PAGE 6)



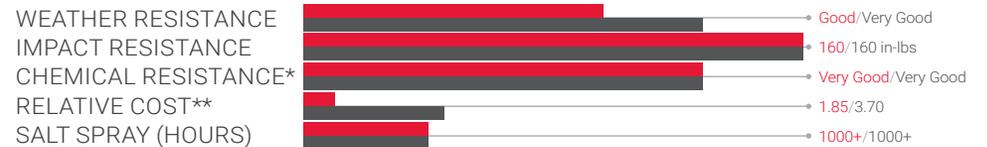
### COOK HIGH TEMP COATING (PAGE 6)



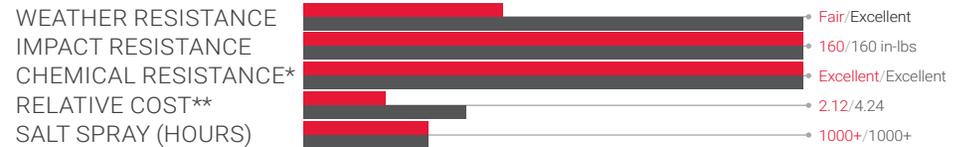
### 4000 HOUR EPOXY POWDER COATING (PAGE 8)



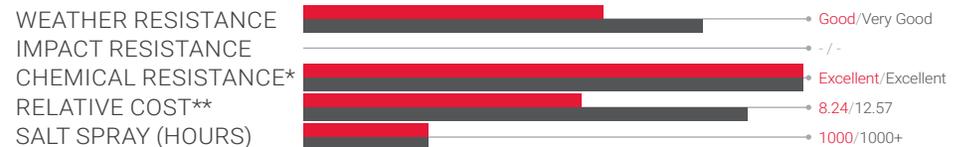
### COOK EPOXY POWDER COATING (PAGE 5)



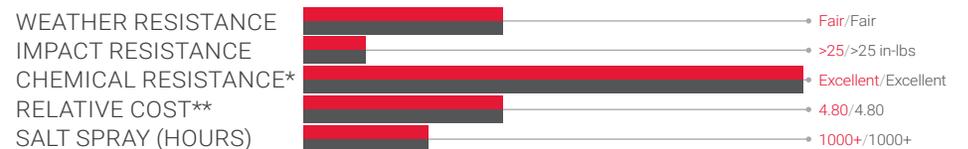
### COOK PHENOLIC EPOXY POWDER COATING (PAGE 5)



### BAKED PHENOLIC EPOXY (HERESITE® P403) (PAGE 7)



### AIR DRY PHENOLIC (HERESITE® VR-514) (PAGE 7)



\* For more information on chemical resistance, consult the Cook Chemical Resistance Guide in Compute-A-Fan® or at [lorencook.com](http://lorencook.com).  
 \*\* Actual cost relationship may vary. For general consideration only.

# LORENIZED™ BENEFITS



**LORENIZED** is an electrostatically applied, baked polyester powder coating. This coating technology offers good chemical resistance, excellent mechanical performance and excellent protection from outdoor elements.

## SUPERIOR QUALITIES

### DURABLE PROTECTION, LASTING BEAUTY

- ▶ All steel fan and blower components receive Cook's Lorenized coating as the factory standard. When this coating goes on, it stays on.
- ▶ It's the industry's most durable standard coating. It comes out sleek and smooth, and it stays that way. Cook's Lorenized coating withstands the elements and provides durable protection and lasting beauty.

### ENVIRONMENTALLY FRIENDLY COATING PROCESS

- ▶ The entire procedure occurs within a self-contained, automated system. Water used in the pretreatment recirculates and is neutralized before its release from the system. Excess powder is captured and recycled.
- ▶ No solvents are utilized so there are no polluting fumes or paint vapors to escape. There is virtually nothing in the entire process to adversely affect our environment.

#### FIVE STAGE PRETREATMENT



1 ALKALINE CLEANER

2 FRESH WATER RINSE

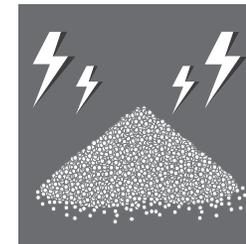
3 IRON PHOSPHATE COATING

4 FRESH WATER RINSE

5 AMBIENT CHROME-FREE SEALER



DRYING OVEN



ELECTROSTATICALLY APPLIED POWDER



CURING OVEN



- ▶ Steel components go through a five stage pretreatment process before the powder is applied. They are washed and treated until all surfaces are perfectly clean, chemically prepared and electrostatically charged—ready to bond with the powder. This ensures excellent coating adhesion, uniformity and consistent edge coverage.
- ▶ Then, a worker or an automated system of sprayers applies the powder that chemically bonds to the prepared surface. Components are then cured in a 400°F oven. This process creates adhesion, durability and a smoothness of coating not possible with conventional liquid paints.

# LORENIZED™ DETAILS



Cook's **LORENIZED** coating offers great performance at a great value. For rapid comparison to other coatings, see page 2.

## COATING DATA

### LORENIZED COATING

- ▶ An electrostatically applied, baked polyester powder coating.
- ▶ This coating technology offers good chemical resistance, excellent mechanical performance and excellent protection from outdoor elements.

PROPERTY	TEST METHOD	PERFORMANCE
Salt Spray (hrs)	ASTM B117	1000+
Humidity Resistance (hrs)	ASTM D2247	1000+
Impact Resistance (in-lbs)	ASTM D2794	100
Mandrel Flexibility	ASTM D522	1/8" pass
Pencil Hardness	ASTM D3363	2H
Crosshatch Adhesion	ASTM D3359-B	100%
Max. Service Temperature	N/A	230°F
Coating Thickness (mil)	N/A	1.5–2.5
Weather Resistance	N/A	Excellent
Chemical Resistance*	N/A	Good
Relative Cost**	N/A	1.0
Standard Color	N/A	Gray

\* For more information on chemical resistance, consult the *Chemical Resistance Guide* in Compute-A-Fan® or at [lorencook.com](http://lorencook.com).

\*\* Actual cost relationship may vary. For general consideration only.

## COLOR SELECTION

### Standard Color



GRAY



### Optional Colors



BLIZZARD WHITE



CARTHAGE STONE



STORM GRAY



ONYX BLACK



OYSTER



OATMEAL



WHEAT



SAFETY YELLOW



MIDNIGHT BLUE



PINE GREEN



COOK RED



ARCHITECTURAL BRONZE

Colors represent appearance as close as possible.  
Actual appearance may vary.

# OPTIONAL COATINGS



In some cases, an optional coating may be required to ensure adequate chemical resistance. Where more protection is needed, the first choice would be Cook Epoxy Powder.

## COATING DETAILS

### COOK EPOXY POWDER

- ▶ An electrostatically applied, baked epoxy powder coating. This coating technology offers excellent mechanical performance and very good resistance to a wide range of acids, alkalis and solvents. For outdoor applications, a UV topcoat is required to prevent coating deterioration.

PROPERTY	TEST METHOD	PERFORMANCE	
		Standard	UV Topcoat
Salt Spray (hrs)	ASTM B117	1000+	1000+
Humidity Resistance (hrs)	ASTM D2247	1000+	1000+
Impact Resistance (in-lbs)	ASTM D2794	160	160
Mandrel Flexibility	ASTM D522	1/8" pass	1/8" pass
Pencil Hardness	ASTM D3363	2H	2H
Crosshatch Adhesion	ASTM D3359-B	5B (100%)	5B (100%)
Max. Service Temperature	N/A	230°F	230°F
Coating Thickness (mil)	N/A	2.5–3.5	2.5–3.5 <sup>†</sup>
Weather Resistance	N/A	Good	Very Good
Chemical Resistance*	N/A	Very Good	Very Good
Relative Cost**	N/A	1.85	3.7 <sup>††</sup>
Standard Color	N/A	Dark Gray	Dark Gray

<sup>†</sup> For total coating thickness, add to standard base coat.

<sup>††</sup> Standard base coat is combined with UV topcoat.

#### Available Color



**DARK GRAY**

### COOK PHENOLIC EPOXY POWDER

- ▶ An electrostatically applied, high performance, baked phenolic epoxy powder coating. This coating technology offers excellent chemical resistance, to withstand severe environments containing high concentrations of acids and solvents. For outdoor applications, a UV topcoat is required to prevent coating deterioration.

PROPERTY	TEST METHOD	PERFORMANCE	
		Standard	UV Topcoat
Salt Spray (hrs)	ASTM B117	1000+	1000+
Humidity Resistance (hrs)	ASTM D2247	1000+	1000+
Impact Resistance (in-lbs)	ASTM D2794	100	100
Mandrel Flexibility	ASTM D522	1/8" pass	1/8" pass
Pencil Hardness	ASTM D3363	3H	3H
Crosshatch Adhesion	ASTM D3359-B	5B (100%)	5B (100%)
Max. Service Temperature	N/A	200°F	200°F
Coating Thickness (mil)	N/A	1.5–4.0	1.5–4.0 <sup>†</sup>
Weather Resistance	N/A	Fair	Excellent
Chemical Resistance*	N/A	Excellent	Excellent
Relative Cost**	N/A	2.12	4.24 <sup>††</sup>
Standard Color	N/A	Brown	Brown

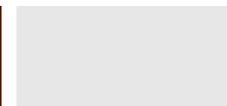
<sup>†</sup> For total coating thickness, add to standard base coat.

<sup>††</sup> Standard base coat is combined with UV topcoat.

#### Available Colors



**BROWN**



**LIGHT GRAY**

\* For more information on chemical resistance, consult the *Chemical Resistance Guide* in Compute-A-Fan® or at [lorencook.com](http://lorencook.com).

\*\* Actual cost relationship may vary. For general consideration only.



# OPTIONAL COATINGS CONTINUED

## COATING DETAILS

### COOK EASY CLEAN POWDER COATING

- ▶ An electrostatically applied, baked modified epoxy silicone powder coating.
- ▶ Provides an excellent “non-stick” coating for elevated temperature and kitchen exhaust applications.

PROPERTY	TEST METHOD	PERFORMANCE
Salt Spray (hrs)	ASTM B117	1000+
Humidity Resistance (hrs)	ASTM D2247	1000+
Impact Resistance (in-lbs)	ASTM D2794	120
Mandrel Flexibility	ASTM D522	1/8" pass
Pencil Hardness	ASTM D3363	3H
Crosshatch Adhesion	ASTM D3359-B	5B (100%)
Max. Service Temperature	N/A	500°F
Coating Thickness (mil)	N/A	1.0–2.0
Weather Resistance	N/A	Excellent
Chemical Resistance*	N/A	Good
Relative Cost**	N/A	5.52
Standard Color	N/A	Black

#### Available Color



BLACK

### COOK HIGH TEMP COATING

- ▶ A solvent-based, heat resistant liquid coating which exhibits good corrosion resistance and color stability.
- ▶ Withstands service temperatures up to 1000°F.

PROPERTY	TEST METHOD	PERFORMANCE
Salt Spray (hrs)	ASTM B117	240+
Humidity Resistance (hrs)	ASTM D2247	1000+
Impact Resistance (in-lbs)	ASTM D2794	120
Mandrel Flexibility	ASTM D522	1/8" pass
Pencil Hardness	ASTM D3363	2H-3H
Crosshatch Adhesion	ASTM D3359-B	5B (100%)
Max. Service Temperature	N/A	1000°F
Coating Thickness (mil)	N/A	0.8–1.5
Weather Resistance	N/A	Poor
Chemical Resistance*	N/A	Good
Relative Cost**	N/A	2.83
Standard Color	N/A	Black

#### Available Color



BLACK

\* For more information on chemical resistance, consult the *Chemical Resistance Guide* in Compute-A-Fan® or at [lorencook.com](http://lorencook.com).

\*\* Actual cost relationship may vary. For general consideration only.



# OPTIONAL COATINGS CONTINUED

## COATING DETAILS

### AIR DRY PHENOLIC (HERESITE® VR-514)

- ▶ A high-performance liquid coating offering excellent chemical resistance to withstand severe corrosive environments. It is recommended as a heavy duty coating for exposures to chemical splash, spillage and fumes.
- ▶ All components are cleaned and pretreated in Cook's environmentally friendly wash system. In addition, a phenolic wash primer is applied to all components to enhance coating performance. For outdoor applications, Heresite UC-5500 UV topcoat is required.

PROPERTY	TEST METHOD	PERFORMANCE	
		Standard	UV Topcoat
Salt Spray (hrs)	ASTM B117	1000	3000
Humidity Resistance (hrs)	ASTM D2247	250	250
Impact Resistance (in-lbs)	ASTM D2794	> 25	> 25
Mandrel Flexibility	ASTM D522	> 1/2"	> 1/2"
Pencil Hardness	ASTM D3363	4H	4H
Crosshatch Adhesion	ASTM D3359-B	5B (100%)	5B (100%)
Max. Service Temperature	N/A	200°F	200°F
Coating Thickness (mil)	N/A	1.5–2.5	1.5–2.5 <sup>†</sup>
Weather Resistance	N/A	Fair	Fair
Chemical Resistance*	N/A	Excellent	Excellent
Relative Cost**	N/A	4.8	4.8
Standard Color	N/A	Brown	Brown

<sup>†</sup> For total coating thickness, add to standard base coat.

#### Available Color



**BROWN**

### BAKED PHENOLIC EPOXY (HERESITE® P403)

- ▶ A high-performance liquid coating offering excellent chemical resistance in low pH environments.
- ▶ Also excellent resistance to solvents, salts and mildly alkaline solutions.
- ▶ All components are cleaned and pretreated in Cook's environmentally friendly wash system. In addition, a phenolic wash primer is applied to all components to enhance coating performance.

PROPERTY	TEST METHOD	PERFORMANCE
Salt Spray (hrs)	ASTM B117	1000
Humidity Resistance (hrs)	ASTM D2247	1000+
Impact Resistance (in-lbs)	ASTM D2794	-
Mandrel Flexibility	ASTM D522	1" pass
Pencil Hardness	ASTM D3363	6H
Crosshatch Adhesion	ASTM D3359-B	5B (100%)
Max. Service Temperature	N/A	400°F
Coating Thickness (mil)	N/A	5.0–7.0
Weather Resistance	N/A	Good
Chemical Resistance*	N/A	Excellent
Relative Cost**	N/A	8.24
Standard Color	N/A	Brown

#### Available Color



**BROWN**

Heresite® is a registered trademark of Heresite Protective Coatings.

\* For more information on chemical resistance, consult the *Chemical Resistance Guide* in *Compute-A-Fan®* or at [lorencook.com](http://lorencook.com).

\*\* Actual cost relationship may vary. For general consideration only.



# OPTIONAL COATINGS CONTINUED

## COATING DETAILS

### SEA WOLF EPOXY POWDER COATING

- ▶ Our 4000-hour salt spray coating is a two-part electrostatically applied and baked powder coating system.
- ▶ As with our standard powder coating process, the base metal is cleaned and pretreated. A base coat of epoxy primer powder is then applied and partially cured. While the coating is in this gel state, a second layer of a hybrid polyester/polyurethane powder is applied and fully cured at 385°F.
- ▶ This results in a coating with superior corrosion, chemical and UV resistance.

Available Color



SEA WOLF

PROPERTY	TEST METHOD	PERFORMANCE	
		Standard	Zinc-Rich
Salt Spray (hrs)	ASTM B117	4000+	4000+
Humidity Resistance (hrs)	ASTM D2247	4000+	4000+
Impact Resistance (in-lbs)	ASTM D2794	140	140
Mandrel Flexibility	ASTM D522	1/8" pass	1/8" pass
Pencil Hardness	ASTM D3363	2H	2H
Crosshatch Adhesion	ASTM D3359-B	5B (100%)	5B (100%)
Max. Service Temperature	N/A	230°F	230°F
Coating Thickness (mil)	N/A	4.0–6.0	4.0–6.0
Weather Resistance	N/A	Excellent	Excellent
Chemical Resistance*	N/A	Excellent	Excellent
Relative Cost**	N/A	3.46	4.69
Standard Color	N/A	Sea Wolf Gray	Sea Wolf Gray

\* For more information on chemical resistance, consult the *Chemical Resistance Guide* in Compute-A-Fan® or at [lorencook.com](http://lorencook.com).

\*\* Actual cost relationship may vary. For general consideration only.

**Loren Cook Company assumes no responsibility for the life or adequacy of the coating to provide protection for a specified time. The company does, however, accept responsibility for workmanship and application of the coating in accordance with the manufacturer's recommendations.**



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