

ElectroFin[®] heat transfer coatings

EFINSM Pro ShieldTM Program – Ultimate Coating Protection with the Required Warranty

The EFINSM Pro ShieldTM Program is a multi-layer coating protection program for Round Tube Plate Fin (RTPF) and Microchannel Heat Exchangers, where the customer chooses the level of warranty protection desired.



EFINSM PRO SHIELDTM 10:
TCP^{**} + ElectroFin[®] E-coat +
Insitu[®] Topcoat:

10 Year Triple Layer Coating Protection

**TCP applied when applicable

- 10 year warranty
- TCP passes 336 hours ASTM B117 Salt Spray
 - TCP passes 2,400 hours ASTM G85-A3
- ElectroFin[®] E-coat exceeds 15,000 hours ASTM B117 Salt Spray
- ElectroFin[®] E-coat passes 3,000 hours ASTM G85-A3
- Insitu[®] Topcoat exceeds 2,000 hours ASTM B117 Salt Spray
- Insitu[®] passes 500 hours minimum UV Resistance per ASTM D4587



EFINSM PRO SHIELDTM 7:
ElectroFin[®] E-coat + Insitu[®] Topcoat:

7 Year Double Layer Coating Protection

- 7 year warranty
- ElectroFin[®] E-coat Exceeds 15,000 hours ASTM B117 Salt Spray
- Insitu[®] Topcoat exceeds 2,000 hours ASTM B117 Salt Spray
- 500 hours minimum UV Resistance per ASTM D4587



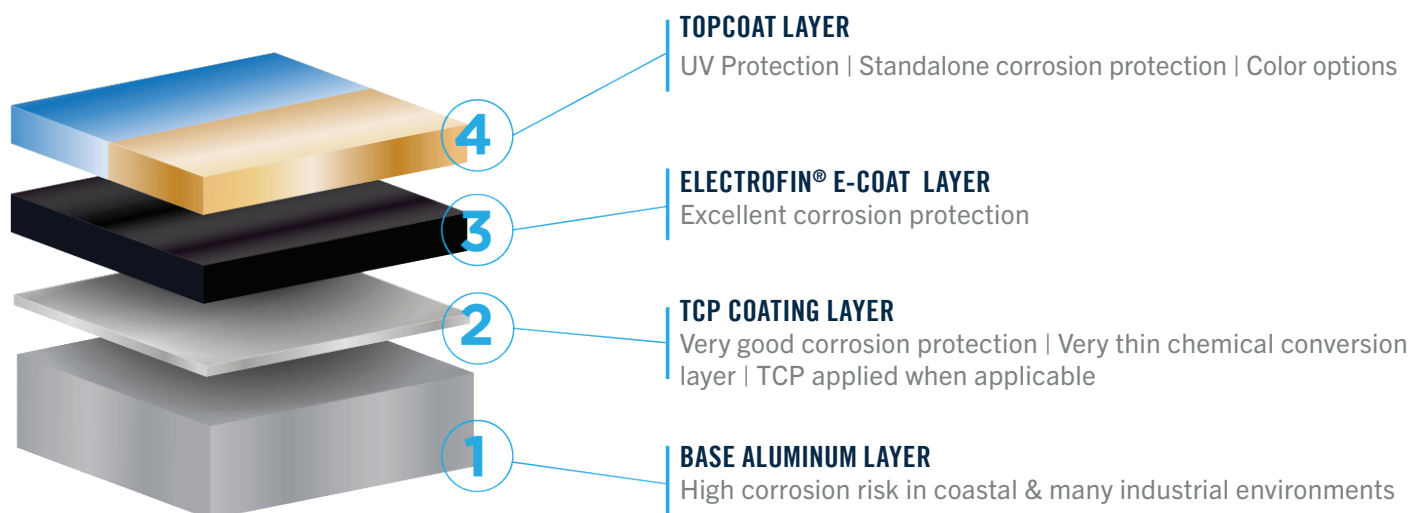
EFINSM PRO SHIELDTM 5:
ElectroFin[®] E-coat:

5 Year Single Layer Coating Protection

- 5 year warranty
- Exceeds 15,000 hours ASTM B117 Salt Spray
 - Passes 3,000 hours ASTM G85-A3
 - .5-1.6 mils Dry Film Thickness

The Best Total Corrosion Protection
SPECIFY ELECTROFIN[®] E-COAT – EFINSM PRO SHIELDTM PROGRAM

CROSS SECTION SHOWING LAYERS OF PROTECTION



TECHNICAL PERFORMANCE

PROPERTY	TEST METHOD	PERFORMANCE		
		EFIN SM PRO SHIELD™ 10	EFIN SM PRO SHIELD™ 7	EFIN SM PRO SHIELD™ 5
Salt Spray	ASTM B117	>15,000+ hours	>15,000+ hours	>15,000+ hours
SWAAT	ASTM G85-A3	>3,000 hours	>3,000 hours	>3,000 hours
Cross Hatch Adhesion	ASTM D3359	5B	5B	5B
Pencil Hardness	ASTM D3363	2H/HB	2H/HB	2H
UV Resistance	ASTM 4587	1,000 hours	1,000 hours	--
UV Resistance	ASTM G155 Xenon Arc	2,000 hours	2,000 hours	--
Direct Impact	ASTM D2794	Passed 160#	Passed 160#	Passed 160#
Mandrel Bend	ASTM D522M	Pass 1/4"	Pass 1/4"	Pass 1/4"
Humidity	ASTM D2247	1,000 hours	1,000 hours	1,000 hours
C5-I Saturated Condensation	ISO 6270	Pass C5-M	Pass CX	Pass C5-M
C5-I Salt Spray	ISO 7523	Pass C5-M	Pass CX	Pass C5-M
C5-I Chemical Resistance	ISO 28212-1	Pass C5-M	Pass CX	Pass C5-M

ELECTROFIN® E-COAT TECHNOLOGY

Our unique process provides an electro-deposition coating that involves epoxy paint particles evenly suspended in deionized water. When the E-coat immersion bath is electrically charged and energized, the epoxy paint particles are drawn to and attach with aluminum, copper, and other conductive metal surfaces that form the heat exchanger coils or casings.

This unique phenomenon is particularly important for tiny cavities where fin and tube joints, high fin densities, and enhanced fins are present. The charged molecules are drawn to the metal and form an even, continuous film over the entire surface. This coating process creates a smooth, consistent, and flexible coating that penetrates deep into all coil cavities and covers the entire coil assembly, including the fin edges.

MODINE
Coatings

Louisville
1423 West Ormsby Avenue
Louisville, KY 40210
Telephone: 502.634.9458

Jacksonville
224 Talley Nichols Drive
Jacksonville, TX 75766
Toll-Free: 877.589.0009
Telephone: 903.589.0009

Italy
Via Pinzano, 2
Zona Industriale Ponterosso
I-33078 San Vito Al Tagliamento (PN)

Mexico
Lib. Oscar Flores Tapia #1755 – 4
Parque Ind. Amistad Aeropuerto Seccion II
Ramos Arizpe, Coahuila, Mexico, 25900