

Technical Features:

EGUARD DCC Green LV (Color: Green metallic)

Performance Testing	Standard	Measure
Salt Spray Test	ASTM B117	Exceeds 10,000 hours
UV Resistance	ASTM D4587	900 hours
Cross Hatch Adhesion	ASTM D3359	5B
Mandrel Bend (Flexibility)	ASTM D522	Passed 1/12 inch (2 mm)
Cupping Test (Flexibility)	ASTM E643	Passed ¼ inch (7mm)
Persoz Pendulum Hardness Test	ASTM D4366-95	> 70 (24 hours)
Anti Microbial Test	ISO 22196 - JIS Z 2801	Passed
EIS Test (Corrosion/Impedance Test)	ISO 16773 – (1-5)	2 x 10 ⁷ (Rc after 21 days)

Description:

EGUARD DCC Green LV

EGuard DCC Green LV is Ultra Low VOC moisture curing polyurethane coating impregnated with 30% aluminum flakes specifically developed for all types of heat exchangers. Formulated with our new DCC Technology, EGuard DCC Green LV cures faster and increases adhesion, offering excellent sealing properties as well as the ultimate weathering resistance against corrosion in all types of environments and chemical vapor exposure conditions.

EGuard DCC Green LV resists microbial growth and contamination of coils by blocking dirt and dust adhesion. Micro-organisms such as fungi, mildew, stain causing bacteria, and algae can add to the corrosion process and cause unwanted odors. EGuard DCC Anti-Corrosion coatings can be applied before assembly of the unit, before or during installation or even years after installation. **EGuard** DCC Green LV used on heat exchangers maximizes ENERGY EFFICIENCY.

Application Method:

EGuard DCC Green LV coating system can be applied with high pressure air-assisted coating equipment. Total penetration on coils 6 rows or greater is achieved through the flooding process in combination with high pressure air-assisted coating equipment.

Begin by degreasing the surface with EGuard Coil Cleaner followed by the application of EGuard Fin Primer. The chemical reaction between the EGuard Fin Primer and the aluminum substrate creates the mechanical bonding for EGuard DCC Green LV to adhere to the substrate.

DCC (Dual Chemistry Curing) Patented Technology:

Fast Drying: 15 Minutes to touch.

Engineering Specification for Coil Coatings:

- The anti-corrosion treatment on the condenser coil against marine and industrial conditions must be metallic impregnated polyurethane to enhance heat conductivity. No epoxy shall be allowed to prevent UV effects.
- The UV resistance must past the ASTM D4587: 900 hours.
- The anti-corrosion treatment must be of at least two layers. It must exist of a metal oxide layer which will protect condenser coils from the corrosive conditions of marine and industrial environment.
- The anti-corrosion treatment shall be in the form of **two layers**:
 - **The conversion layer is strong and inert metal oxide. This layer is chemically bonded to the base aluminum fin material.**
 - **The top layer consists of a polyurethane metallic pigmented by a mixture of leafing and non-leafing aluminum flakes. The binding material is elastic which allows durability for expansion and contraction of the fins at temperature fluctuations. The coating is dirt repellent to prevent clogging of the fin package.**
 - **The top layer has an EPA approved low-VOC record.**
- The adhesion must past the ASTM D3359; 5B.
- The Hardness must past the ASTM D4366-95; >70 (24 hours).
- The anti-corrosion treatment is to be a post coat thereby providing a complete barrier at the bonding of the fin and tube, to prevent galvanic corrosion.
- The Coating must have passed the following accelerated corrosion tests (or equivalent):
 - ASTM B 117: Salt Spray Test: 10,000+ Hours
 - EIS Test: Electrochemical Impedance Test: $R_c 2 \times 10^7$ after 21 days
- The flexibility of the binding material must have proven properties to allow the expansion and contraction of the heat exchange surface. This is achieved by a polyurethane binding material.
 - Must past the ASTM D522: 1/12 inch (ISO 1519 (2mm mandrel))
 - Must past the ASTM E643 :1/4 inch (ISO 1520; (7mm cupping))
- The color of the coating is suitable of heat rejection and reflection. (Metallic)

Product Series:

For detailed Information visit our website at www.energyguardusa.com for product data sheets and MSDS information.

Five (5) Year Limited Warranty:

Standard