

Insitu® coil and cabinet protection

Spray Applied Corrosion-Resistant Coil, Component, and Cabinet Coating

Insitu[®] ES² Spray Applied Coating is available in three formulations, each is formulated to ensure the highest level of protection:

ES2 Platinum: Normal corrosive environments

ES2 HH: High humidity, high corrosive environments

ES2 EX: Special coating applications, such as copper piping







Offer the best protection available with Insitu® ES² Spray Applied Coating – a unique and proprietary coating process that offers today's HVAC&R systems the highest level of corrosion resistant protection that can withstand harsh environments, providing long-term protection.

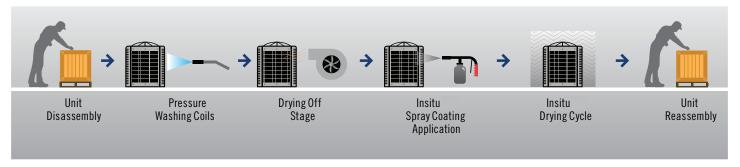
Have confidence these products have the highest quality standards and pass the most arduous industry tests ensuring top performing products you can trust.

- Insitu® ES² Spray Applied Coating has three formulations to service specific environmental conditions to provide the level of protection needed.
- Insitu® ES² Spray Applied Coating is field tested and OEM approved for superior performance you can trust.
- Insitu® ES² Spray Applied Coating is formulated with ES² technology to improve adhesion, moisture resistance, UV protection and corrosion durability.
- Insitu® ES² Spray Applied Coating is water-based (solvent free) and water-reducible synthetic flexible polymer anti-corrosion coating engineered specifically for the protection of HVAC&R coils, exposed components, and cabinets.
- Insitu® ES² Spray Applied Coating provides flexability, can be applied at your premises, or on-site after installation by our certified applicators.

INSITU® ES2 SPRAY APPLIED COATING TECHNOLOGY

Insitu® ES² Spray Applied Coating is a water-based and water-reducible synthetic flexible polymer anti-corrosion coating specifically designed for the protection of HVAC&R coils, exposed components, and cabinets. Insitu® ES² Spray Applied Coating contains ES² (embedded stainless steel pigment) technology which provides UV protection, a moisture barrier thus protecting against corrosion. ES² pigments are suitable for even the most corrosive environments and will maintain their appearance after many years of exposure.

INSITU® ES2 SPRAY APPLIED COATING PROCESS



ENVIRONMENTALLY FRIENDLY

Insitu® ES² Spray Applied Coating proprietary formulation is compliant for usage in all 50 states, has low VOC, zero HAPS, no PFAS chemicals, non-ozone depleting chemicals and is non-flammable.

SPECIFICATIONS

Insitu® ES² Spray Applied Coating contains ES² (embedded stainless steel pigment) technology, an anti-corrosion coating specifically designed for the protection of coils mounted in corrosive areas. Coils will have a permanent, water-based synthetic coating with ES² pigment applied to all coating surface areas without material bridging between fins. The coating process will ensure a uniform dry film thickness of 0.6-1.2 mils and meet 5B rating crosshatch adhesion per ASTM D3359. Corrosion durability will meet in excess of 15,000 hours salt spray resistance per ASTM B117.

RESISTANCE TO CORROSION

ES² pigments are made from a high-performance stainless alloy which is resistant to corrosive conditions. ES² pigments are therefore suitable for even the most corrosive environments, and will maintain their appearance after many years of exposure.

RESISTANCE TO UV DEGRADATION

ES² pigments form a multi-layer structure throughout the paint film. This creates a barrier layer which reflects sunlight away from the paint film, and prevents ultraviolet rays from penetrating. As a result, UV degradation of individual polymer molecules is eliminated, the film integrity is maintained, and the pigment particles are well anchored to the substrate. The resultant smooth, hard finish stops dirt from accumulating.

RESISTANCE TO MOISTURE

The multi-layer structure of the ES² pigments slows the passage of water molecules into the film and acts as an effective moisture barrier. This prevents the subsequent swelling and deterioration of the protective film.

GLOSS RETENTION

The spray applied coating offers a medium gloss finish is applied that is smooth, limits dirt and debris buildup, and allows for easy equipment cleaning.

TECHNICAL PERFORMANCE

PROPERTY	TEST METHOD	PERFORMANCE
Salt Spray	ASTM B117	Exceeds 15,000 hours
Mandrel Bend (Flexibility)	ASTM D522M	Pass 1/4"
Pencil Hardness	ASTM D3363	НВ
Cross Hatch Adhesion	ASTM D3359	5B
Humidity	ASTM D2247	1,000 hours minimum
SWAAT	ASTM G85 A3	Exceeds 2,400 hours
UV Resistance	ASTM D4587	1,000 hours minimum
UV Resistance	ASTM G155 XENON	2,000 hours
C5-I Continuous Condensation	ISO 6270	Pass
C5-I Salt Spray	ISO 7523	Pass
C5-I Chemical Resistance	ISO 2812-1	Pass
Direct Impact	ASTM D2794	Pass 160#

EQUIPMENT APPLICATIONS

- Coils (water, condenser, evaporator, DX)
- Mini-Splits
- Packaged Rooftops
- Condensing Units
- Modular Air-Handlers
- Air-Cooled Chillers
- Interior & Exterior HVAC Cabinets
- Copper Piping

FOR TECHNICAL & SALES SUPPORT:

CALL: 502.634.9458

EMAIL: Coatings@Modine.com

MODINE MANUFACTURING

Performance Technologies - Coatings

Louisville

1423 West Ormsby Ave. Louisville, KY 40210 Telephone: 502.634.9458 CERTIFIED APPLICATORS WORDWIDE