ALCUM

HVAC/R Coating Services



Insitu® coil and cabinet protection

EXTEND EQUIPMENT LIFETIME. REDUCE ENERGY CONSUMPTION.

High-performance corrosion protection coatings engineered for air conditioning and refrigeration systems.

alcumusa.com

SPECIALIZED SOLUTIONS FOR ANY ENVIRONMENT

Three types of anti-corrosion shielding designed to maximize the lifespan and operational efficiency of your HVAC/R assets.

Insitu® Ex

ES2 TECHNOLOGY

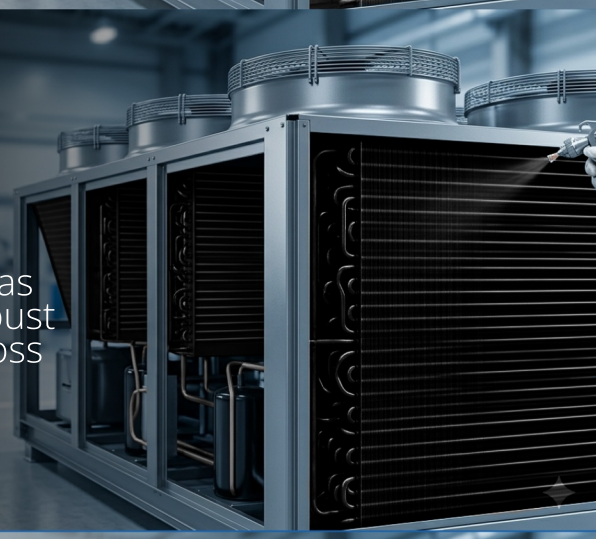
Formulated with **ES2 (Stainless Steel) technology** to deliver superior adhesion, moisture resistance, UV protection, and long-term anti-corrosion durability. It is specifically engineered to safeguard equipment operating in highly corrosive and harsh environments.



Insitu® Black

FACTORY-MATCH FINISH

This coating is color-matched to identical specifications as our factory-applied **ElectroFin® E-coat.** Featuring a robust multi-polymer blend, Insitu® Black ensures excellent gloss and appearance retention even after years of severe environmental exposure.



Insitu® Clear

TRANSPARENT PROTECTION

A water-borne, low-VOC, highly flexible synthetic polymer coating providing **industry-leading UV protection.** This clear coat option is ideal when you need to maintain the original OEM color and aesthetic of the unit's cabinet.



TECHNICAL PERFORMANCE & ENGINEERING STANDARDS

Insitu coatings are water-borne and formulated with a high-performance, flexible synthetic polymer matrix. Specially engineered to withstand severe environments without compromising the equipment's thermal efficiency.

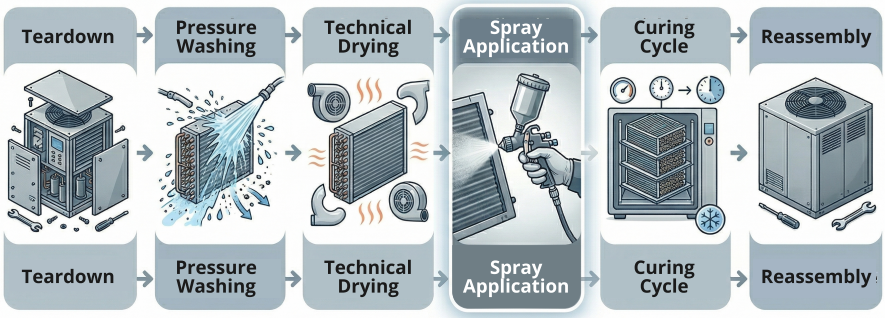
PROPERTY	TEST METHOD	RESULTS
Salt Spray	ASTM B117	Exceeds 15,000 hours
Mandrel Bend (Flexibility)	ASTM D522M	Passed (1/4")
Pencil Hardness	ASTM D3363	HB
Cross-Hatch Adhesion	ASTM D3359	5B
Humidity Resistance	ASTM D2247	1,000 hours
SWAAT	ASTM G85 A3	Exceeds 2,400 hours
UV Resistance	ASTM D4587	1,000 hours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

Technical Note:
All processes guarantee a uniform dry film thickness (DFT) of **0.6 to 1.2 mils.**

This ensures full protection without bridging the fins, maintaining original OEM airflow and heat transfer capabilities.

PROFESSIONAL APPLICATION CYCLE

Our service features a controlled 6-stage process that guarantees superior adhesion (5B rating per ASTM D3359).



1. **Teardown (Unit Prep):** Prepping the unit for full component access.
2. **Pressure Washing:** Removing contaminants and debris from the unit.
3. **Drying:** Removing all moisture from the surfaces to be coated.
4. **Coating Application:** Precision spray coating using specialized equipment.
5. **Curing:** The drying stage where the coating cures, allowing for safe subsequent handling.
6. **Reassembly:** Putting the unit back together, ready for delivery.

ENVIRONMENTAL COMPLIANCE & SAFETY

Regulatory Compliance:
Formulated and approved for use across all 50 US states.

Low Environmental Impact:
Low VOC content, PFAS-free, and zero ozone-depleting substances (ODS).

Safety First:
Non-flammable and free of Hazardous Air Pollutants (HAPs).



PERFORMANCE REPAIR AEROSOL

IMMEDIATE CORRECTIVE MAINTENANCE AT YOUR FINGERTIPS.

Engineered for quick, minor repairs and immediate touch-ups on coils and cabinets. This convenient aerosol format allows technicians to maintain total coating integrity in the field without the need for specialized spray equipment.

Key Features.

- Available Formats: Offered in EX (Gray) and Black versions to seamlessly match your equipment's original factory finish.
- Identical Formula: Utilizes the exact same flexible synthetic polymer technology as our industrial-applied coatings, delivering high resistance to UV rays and moisture.
- Easy Application: Standard aerosol can design for practical, fast, and efficient field use.

When to Use It.

- Post-installation touch-ups or after equipment relocation.
- Repairing small areas exposed by abrasion, scuffs, or impact.
- Protecting exposed hardware, fasteners, and copper piping.



Prevent Minor Damage From Becoming Major Corrosion. Maintaining the coating integrity preserves your unit's original energy efficiency and prevents localized failures.

WARRANTY-APPROVED CLEANERS

LONG-TERM PROTECTION: THE GULFCLEAN® SYSTEM

Keep your equipment operating like new. Modine's® advanced cleaning system is the perfect ally to ensure your anti-corrosion coating delivers maximum performance.

GulfClean COIL CLEANER

Risk-Free Deep Cleaning.

- Advanced Foaming Action: Lifts and removes deep-seated dirt and organic contaminants through a mild, precision foaming action.
- Metal-Safe Formula: Non-acidic, non-caustic formula specifically engineered to protect the integrity of both the raw metals and the equipment's anti-corrosion coating.

GulfClean SALTL REDUCER

The Ultimate Shield Against Salt Air Corrosion.

- Salt Neutralizer: Chemically neutralizes and removes salt build-up, chlorides, and sulfates from the surface.
- Coastal Environment Essential: Crucial for preventing aggressive pitting and corrosion in coastal regions where sea breeze is the equipment's greatest enemy.



The Bottom Line:
A system that breathes better, consumes less energy, and significantly extends its operational lifespan.

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TOTAL PROTECTION. ANYWHERE.












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Protection you can see, touch, and trust.
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