

## HVAC/R Surface Protection Treatment

### MicroGuard1™ 3500 (or approved equal)

*Corrosion and Mold protection, with energy enhancing characteristics:*

**Scope:** Provide surface protection to **HVAC/R** components, (specify components), that seals the surface against moisture intrusion, prevents oxidation and corrosion of surface material and provides a final surface that will not support the growth of mold, fungus, or algae. Protection must include coils, fans, piping, compressors, dampers and cabinet.

**Product Description:** The surface protection treatment must be an inorganic product. Performance characteristics must include:

- Passes ASTM B117 Corrosion test – **25,000 hours**
- Resistant to UV radiation and chemicals between pH of 3 to 11
- Independent **lab certification for ASTM G21 Mold Growth** rated at '0' (zero)
- Covalent bonding (chemical bond - 33% Stronger than a mechanical bond)
- ISO 16773-3 Ion Barrier Resistance Rated @ 8+ (penetration of coating against corrosion)
- Enhances heat transfer of both evaporator and condenser coils. (products supported by PUC energy rebate programs are recommended)
- Energy savings

**Product Application Process:**

Surface treatment may be applied by roller, brush, spray, or wiping. The use of a certified applicator is required.

**Acceptable Surfaces Materials:**

Surface treatments must be capable of adhering to and performing on **exterior paint, aluminum, copper, anodized metal, painted metal, brass, bronze, stainless steel, and galvanized steel (with primer).**

**Curing Times and Conditions:**

The surface treatment must cure in ambient air temperatures between 60F to 95F where the difference between dew point temperature and ambient temperature is greater than 5F. Tacky cure must occur within 4 hours and the surface must be dry to use within 6 hours after application.

**Physical Characteristics:**

The surface treatment must be clear, have a viscosity less than 1, inorganic, hydrophobic and oleophobic when dry, with a dry film thickness of less than 15 microns and have a pencil hardness of 9H+.