Ceramic InsulCoat Roof

Application and Maintenance Procedures for Metal Roofing Systems
Metal Roofing Systems

Ceramic InsulCoat Roof can be applied to galvanized steel, aluminum, and enameled steel roof systems.
Topcoat

Ceramic InsulCoat Roof

is intended to be a topcoat providing an extension to the existing roof system and is not a stand-alone roof product.
A Rainbow of Colors

- Many roof coating products are available only in white or a handful of colors.
- Ceramic InsulCoat Roof can be tinted just like paint to any light color.
- Tinting completed through our distribution partners.
Preparation Methods
Straight Forward Process

• Clean, Dry and Sound

• Use National Roofing and Contractors Association (NRCA) guidelines for:
  – New metal roofing systems
  – Existing metal roofing systems
New Metal Roofing

New aluminum and galvanized metal must be:

- Cleaned,
- Etched,
- and then Primed

before applying

Ceramic InsulCoat Roof
Existing Metal Roofing Systems

Ceramic InsulCoat Roof can be applied to existing galvanized steel, aluminum, and enameled steel roof systems.

Conditions we encounter:

- Have weathered over time
- Bent edges, holes, leaks, uneven joints and seams
- Dirt, stains, mold, and mildew growth
- Rust
Conditions We Encounter

This Quonset Hut had been painted on numerous occasions over 40 years.

The exterior membrane had chipped, peeled off and generally degraded on the structure exposing the various layers of paint buildup and bare metal. Metal had sections that were bent and separated.
Remove Fungus, Mold and Mildew

Treat areas with a bleach solution.

- Two parts water to one part bleach
- Use deck brush or pot brush to scrub surface
- Rinse off thoroughly
- Retreat as needed
Clean the Surface

Pressure Wash the Entire Roofing System

- Treat fungus, mold and mildew as shown in the previous slide

- Remove other surface contaminants such as: corrosion, dust, dirt, grime, oils, residues, etc.

- If needed, use appropriate detergent and water

- Rinse off thoroughly
Pressure Wash the Metal Roof
Compatibility with Building Patching and Repair Materials

• Like all water-based paints and coatings, Ceramic InsulCoat Roof will not adhere to silicone.

• Questions about Building Materials compatibility should be directed to your EnviroCoatings Factory Representative.
Cracks, Gaps, Holes, Joints, Leaks, Seams, and Uneven Surfaces

Use National Roofing and Contractors Association (NRCA) Guidelines

– Patch, plug, repair and/or replace damaged metal

– Metal fasteners should be checked, tightened and sealed as needed

– Allow repaired areas to cure
Allow Repairs to Cure - Why?

• As building materials dry they exhaust gases and vapors (water, chemical, etc.) to the atmosphere - referred to as off-gasing.

• When the building material has completely dried (and hardened) - it has cured.

• If Ceramic InsulCoat Roof is applied over a building material before it has fully cured - Ceramic InsulCoat Roof could blister and/or bubble.
California: Military Quonset Hut

Preparation included caulking of uneven surface seams and penetrations into the structure.

Manufacturer Specifications required 12-24 Hours to Cure.
Metal Primers

• EnviroCoatings does not manufacture a metal primer.

• **Ceramic InsulCoat Roof** is compatible with all oil and water-based metal primers.

• Select the appropriate metal primer that best meets the project parameters.
Rust

Follow National Roofing and Contractors Association (NRCA) guidelines

– Clean with a wire brush

– Encapsulate as needed

– Use an appropriate metal primer

– Allow to cure
Treat and Prime Rusted Areas

California: Military Quonset Hut

Structure had slight rusting around the base. Pressure washed, scraped off loose rust and then applied metal primer.

Manufacturer Specifications required **24 Hours to Cure.**
Unusual Condition - Lead Paint Abatement

• Existing paint on a Military Quonset Hut was tested and confirmed to contain lead.

• Lead paint was removed following approved environmental regulations and procedures.

• The lead abatement exposed bare metal in some areas and lead paint that remained on the surface needed to be encapsulated.

• Therefore, the entire structure was primed with an appropriate metal primer.
Entire Structure was Primed
Ceramic InsulCoat Roof - Technical Specifications

• Apply to a Clean, Dry and Sound Substrate.

• Ceramic InsulCoat Roof is a two-coat system.

• Each coat is applied at 8 -10 wet mils.
Ceramic InsulCoat Roof - Installation Specifications

- Sold in 5-Gallon Pails
- **Do not** alter product
- **Do not** add water or thinners
- Stir or shake container before application
- Box product to ensure uniformity of color
Application Methods

• **Brush or Roll** - Medium to Heavy Nap Roller

• **Spray** - Commercial Airless Sprayer

  **Pump Specifications:**
  - 2.5 gallons per minute
  - 3,000 PSI

  **Hose:**
  - 3/8” Hose

  **Gun and Tip:**
  - Airless Spray Gun
  - Roof Tip: 0.23” - 0.584mm tungsten-carbide tip

• **Easy to apply and easy to clean up**

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Ceramic InsulCoat Roof - A *Thixotropic* Product

What?

- The product has a natural appearance similar to yogurt.
- Like yogurt, viscosity will appear to vary by age, temperature and agitation.
- To obtain workable viscosity always shake or stir before use.
Shake or Stir Container before Application

Drill Paint Mixer used to Stir Product On-Site
Ceramic InsulCoat Roof can be applied via brush, roller or sprayer

Safety Recommendation: Wear dark sunglasses
Ceramic InsulCoat Roof specifications call for 8 - 10 wet mils per coat.

Wet Mil Gauge used to measure the applied coating thickness.
Completed projects
Warranty Inspection

• EnviroCoatings conducts a physical inspection of warranty projects.

• An Ultra-Sonic Gauge is used to measure the dry film thickness of the membrane.

• A minimum of 11-12 dry mils are required to meet our specifications.
Ultra-Sonic Readings

A series of Ultra-Sonic readings are taken to measure dry film thickness.
Easy to Maintain

• Roof systems are exposed to the elements and become dirty over time.

• Thermal capabilities are reduced - especially Solar Reflectance.

• Incorporate periodic sweeping, hosing off and/or power washing to remove accumulations of dirt, pollution, leaves, mud, etc.
BEYOND COOL ROOF

California Title 24 Cool Roof Compliant
EnviroCoatings

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