



# Ceramic InsulCoat Roof

Application and Maintenance

Procedures for

Built-Up Roofing Systems

# Built-Up Roofing (BUR)

Built-Up Roofing systems range from conventional torch down asphalt systems to technically advanced modified bitumen 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

- Follow National Roofing and Contractors Association (NRCA) guidelines
  - Allow new roofing systems to cure
  - Make required repairs to existing roofing systems and allow to cure
  - Prepare the substrate to receive the coating
  - Clean, Dry and Sound

# New BUR Roof Systems

Newly installed Built-Up  
roofing systems need to be  
allowed to cure before  
the application of  
Ceramic InsulCoat Roof

# Roofs Need 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.

# Existing Built-Up Roofing Systems

Ceramic InsulCoat Roof can be applied to most typical Built-Up Roofing Systems.

Conditions we encounter:

- Have weathered over time
- Cracks, holes, leaks, rips, torn surfaces, etc.
- Dirt, stains, mold, and mildew growth
- Covered with loose granules
- They are porous

# Cracks, Holes, Joints, Leaks, Rips, Torn and Uneven Surfaces

## Use National Roofing and Contractors Association (NRCA) Guidelines

- Patch, plug, repair and/or replace damaged areas
- Select the appropriate repair or replacement material that best meets the project parameters
- Allow repaired areas to cure

# Compatibility with Building 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.

# Modifications and Repairs (Allow to Cure Completely)



Hotel: Conventional Built-Up Roof System

New BUR "Crickets" Installed to Channel Water into Drains

Manufacturer Specifications required 30 Days to Cure

Mansion: Asphalt Roof Party Deck

Cracks filled with Patching Compound

Manufacturer Specifications required 48 Hours to Cure



# After the Roof System has Cured

Thoroughly clean

the entire

Roof Surface

# Remove Fungus, Mold and Mildew

Treat areas with a bleach solution.

- Two parts water to one part bleach
- Use deck brush and/or pot brush to scrub surface - work into substrate
- Rinse off thoroughly
- Retreat as needed

# Clean and Pressure Wash

- Treat fungus, mold and mildew as shown in the previous slide.
- Remove other surface contaminants such as: dust, dirt, grime, oils, residues, etc.
- If needed, use appropriate detergent and water.
- Rinse off thoroughly.
- Pressure Wash the entire Roofing System.

# Scrub and Pressure Wash



## Recommendations:

1. Sweep Roof.
2. Remove Fungus, Mold and Mildew with Bleach Solution.
3. Scrub Heavy Dirt Areas with Detergent and Water.
4. Pressure Wash Entire Roof.

# Allow the Roof System to Dry

Typical BUR Roof Surfaces  
usually dry  
completely Overnight

# After the Roof System Dries: Loose Granules May Remain



Blow, Sweep or Vacuum to Remove

# Application Methods



# Prime and Coat the BUR System

The application of Ceramic InsulCoat Roof on a BUR System is a three-part process:

1. Primer: A single coat of **Ceramic InsulSeal**
2. Topcoat: Two coats of **Ceramic InsulCoat Roof**

# No Need to Stand Around Waiting for Paint to Dry

- The application of Ceramic InsulCoat Roof can be completed the same day.
- Many roof coating systems require 4 - 6 - 8 - 24 hours between coats.

# Begin Work First Thing in the Morning

- Start work early in the day before the roof system heats up.
- Each phase of applying the Ceramic InsulCoat Roof system will dry within 1-2 hours in light to medium humidity.
- You can then proceed with the next coat.

# 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

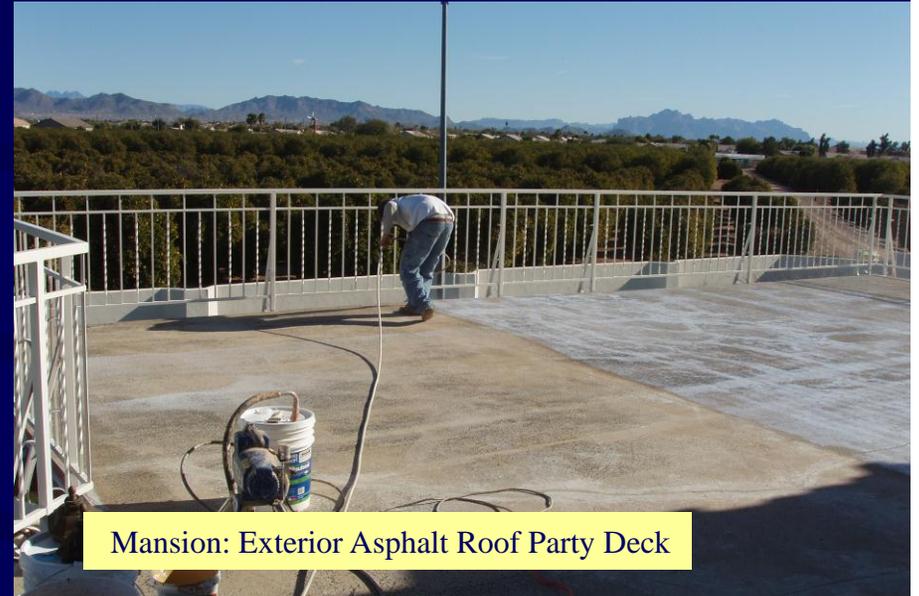
# Ceramic InsulSeal - Technical Specifications

- Use as a priming, penetrating sealant on porous substrates - Such as Built-Up (BUR) roofing systems.
- Single Coat Application.
- Coverage is 350SF to 450SF per gallon (Sold only in 5-gallon pails).
- Dries clear in 1-2 hours in low to moderate ambient humidity.

# Application of InsulSeal



Hotel: Conventional BUR System



Mansion: Exterior Asphalt Roof Party Deck



Hotel: Close-Up



Commercial: Previously Painted BUR System

# Ceramic InsulSeal Drying Time

- Will dry clear in 1 - 2 hours in low to moderate ambient humidity.
- Insure the surface is tack-free.
- Begin the application of the first coat of Ceramic InsulCoat Roof.

# Ceramic InsulCoat Roof - Technical Specifications

- Apply to a Clean, Dry and Sound Substrate.
- Ceramic InsulCoat Roof is a two-coat system.
- Coverage is 175SF to 225SF per gallon on a smooth, clean, dry, and sound substrate.
- 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.

# 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 - Application Recommendations:

- Spray the first coat and back roll -  
*In order to work the product into uneven surfaces, nooks and crannies.*



# Ceramic InsulCoat Roof - Application Recommendations:

- Spray the second coat.
- Each coat is applied at 8 - 10 wet mils.



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 reads 10 mils

# Drying Time between Coats

- Ceramic InsulCoat Roof will dry to the touch in 1 - 2 hours in light to moderate ambient humidity.
- The second coat can be applied when the surface is tack-free.



Completed Projects



# Final Drying and Cure Time

- Initial dry time after the two coats are applied is 48 hours.
- If possible, Stay off the Roof System for at least 48 hours.
- Ceramic InsulCoat Roof will completely cure in 90 to 120 days.

# Warranty Inspection

- EnviroCoatings conducts a physical inspection of all 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



# Maintenance Procedures



# Out of Sight...Out of Mind

- Roof Systems are exposed to the elements, in all climates, in every type of weather, 365 days a year.
- They become dirty.
- Especially true on Flat Roof Systems.
- Thermal capabilities are reduced - in particular - Solar Reflectance.

# Nature Leaves Its Mark

- Over time Roof Systems accumulate all sorts of debris:
  - pollution,
  - dirt,
  - grime and slime,
  - leaves,
  - mold and mildew,
  - mud, etc.

# Preventative Maintenance Schedule

- Most Facilities utilize some sort of preventative maintenance program for equipment.
- EnviroCoatings recommends incorporating the maintenance of Ceramic InsulCoat Roof (and the Roofing System) into your program.

# Easy to Maintain

- Sweep, blow or hose off (with municipal water pressure) Ceramic InsulCoat Roof to remove the accumulation of debris that nature deposits on the Roof System.
- Do not pressure wash.

## If Scrubbing is needed:

- Use dish soap and water;
- A soft-bristle brush (RV - Semi Truck scrub brush is recommended);
- Then thoroughly rinse Ceramic InsulCoat Roof with municipal water pressure.

# Mold, Mildew, Lichen, Mosses:

- Use a “Green” fungicide that is available through paint outlets;
- Follow directions;
- If scrubbing is needed, use a soft-bristle brush (RV - Semi Truck scrub brush is recommended);
- Then thoroughly rinse the roof with municipal water pressure.

# Safety Tips

- Wear sunglasses and hats on sunny days.
- Ceramic InsulCoat Roof cures to a hard finish and can be slippery.
- Be careful with Morning Dew, Rain, Snow, Ice, and similar conditions.
- Install and use walk pads to move about the Roof System.



# BEYOND COOL ROOF



California  
Title 24  
Cool Roof  
Compliant

