

The SureCoat Roof System

EZ Spec - Installation Guide for Restoration of Existing Concrete Roof Systems (Bare Concrete Finish, No Existing Coating)

10-Year System

PRELIMINARY:

- Check the moisture content of the roof and the pH of the concrete. It needs to be 10 or higher for the *Deep Penetrating Densifier (SS-1007)* to react and work. If you know there is moisture in the deck there is no need to check it until before it's ready for the *SureCoat Roof System* application.
- 2. Temperature for using the **SureCoat Roof System** needs to be 55°F and rising and no rain within 48-72 hours depending on ambient air temperature and humidity.
- 3. Perform a test pattern with **SS-1007** to see how much material it takes to do an area. It is impossible to know what the density of the concrete is from the surface. If the concrete chalks then it is soft but that still doesn't indicate the amount of product that will be needed to treat the concrete.
- 4. Perform a test pattern in at least a 4' x 4' square area first to determine what materials it will take to properly treat the entire area.
- 5. Clean roof area with HD Concrete Cleaner or SureSkrub™ depending on the amount and type of dirt on the block. If heavy effloresces has hardened and is blocking the surface then it needs to be removed. SureCoat's Efflorescence Remover is recommended. If heavy oils or other solids are blocking the surface then sand blasting might be needed to open the surface so that the products can penetrate into the concrete.
- 6. If it is less than pH10 then use the SS-1007-C (catalyst) first.
- 7. If the catalyst is needed apply 1 gal of **SS-1007-C** per 50 S.F. If no catalyst is needed go to step #9.
- 8. Mist the surface with water and let it sit for 14-16 hours-mist means a very light coat of 1 gal per 300 S.F.
- Apply SS-1007 at 1 gal per 50 S.F. in a wet on wet application approximately 3-4 passes. Let it sit 30-40 minutes and repeat.
- 10. Apply **SS-1007** at 1 gal per 50 S.F. in a wet on wet application approximately 3-4 passes. Let it sit 20-30 minutes and repeat. If it locks up then apply a light coat of water and the **SS-1007-C** at 200 S.F. per gallon.
- 11. Apply 2 more applications of the **SS-1007**.
- 12. After final coat of **SS-1007** mist with a light coat of **SS-1007-C**, if the catalyst was needed. If no catalyst was used then mist with water at approximately 300 S.F. per gallon to the surface. Wait 30-40 minutes.
- 13. Apply a light coat of potable water and let it sit for 7-10 days.
- 14. Rinse all the purge salts and check with moisture meter. In some cases there may not be any salts to purge. It will depend on the age and condition of the existing concrete.
- 15. If the moisture level is acceptable then apply the SureCoat Roof Coating systems according to instructions.
- 16. If the moisture content is still too high apply **SS-1007-C** and mist with water and apply more **SS-1007** and repeat steps 9 and 10.
- 17. The result of these steps will determine what the application steps will be on the entire project. The amount of product used in the test pattern area will help determine the amount of product that will need to be purchased to properly treat the concrete roof deck.

PREPARATION:

- All roof surfaces and substrates must be structurally sound and in water tight condition prior to application. Unsound substrates or surfaces must be repaired or replaced prior to the application of the SureCoat Roof System (SureCoat roof coating and SureCoat Poly-Mesh). In most cases, the SureCoat Roof System can be used to do repairs.
- 2. If the roof system has insulation and the insulation is retaining moisture, is saturated, or holding water, it must be replaced. This installation guide specification assumes that a plywood deck has no dry rot or a metal deck is not rusted and is in sound condition or has been repaired.



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PREPARATION CONTINUED:

- 3. Clean the roof using **SureSkrub**™ or **HD Concrete Cleaner**. Scrape any loose dried mastic off and remove any soft mastic by scraping and scrubbing with **SureSkrub** and a stiff broom. It must be clear of loose aggregate, dirt, oil, soap or any substance or circumstance that may impair adhesion. Rinse the roof thoroughly with a pressure washer and allow it to dry completely before beginning the installation or repairs.
- 4. This installation guide specification assumes that the concrete doesn't have any major cracks and if it is light weight concrete over a metal deck, the metal is not rusted and is in sound condition or has been repaired. Major cracks will have to be repaired using epoxy injection, concrete stapling and or carbon fiber reinforcement depending on the degree of damage. Once the concrete is densified and repaired then the *SureCoat Roof System* coating can be applied around the penetrations, curbs and repair areas.
- 5. Apply a 3-ply layer of SureCoat roof coating and Poly-Mesh at all penetrations in the roof, HVAC and skylight curbs, roof jacks, vents, and pipes, etc. Extend the Poly-Mesh and SureCoat roof coating a minimum of 4" up vertically and 18" 24" out horizontally into the roof field. A layer of Poly-Mesh should be embedded in all ponds and repair areas. Repairs should be done prior to installation of the basecoat of the *SureCoat Roof System*. Many repairs can be done using SureCoat Roof Coating and Poly-Mesh. Extend repairs beyond damaged area by 1-2 feet.

INSTALLATION:

- 1. First apply a basecoat of *SureCoat* by spraying or rolling at a rate of 2-2.5 gallons per 100 square feet. Immediately or simultaneously, roll a layer of 42" wide Poly-Mesh into the basecoat overlapping the Poly-Mesh 2"-3". Poly-Mesh should be saturated into the wet coating by using a 3/8" to 1/2" nap roller. Saturation of the *SureCoat* through the Poly-Mesh is necessary to ensure that the basecoat and the topcoat bond together through the Poly-Mesh to form one finished monolithic membrane. Fully encapsulate the Poly-Mesh by applying *SureCoat* at a rate of .5-1 gallon per 100 square feet for a total of 3 gallons. Allow to thoroughly dry, 24-72 hours depending on weather. Do not apply coating within 48-72 hours of freezing or precipitation.
- 2. After the basecoat is dry (the following day in ideal conditions), apply a topcoat of **SureCoat** in a cross-hatch technique at a rate of 1 gallon per 100 square feet. Allow to thoroughly dry, 24-72 hours depending on weather. Do not apply coating within 48-72 hours of freezing or precipitation.
- 3. After the SureCoat Roof System is cured, walk the roof to ensure that the entire roof is pinhole free and that no Poly-Mesh is exposed, tented or missing. Voids in the system must be addressed so that the system is a single monolithic membrane over the entire roof. All parapet walls and penetrations must be properly flashed into the field with SureCoat and Poly-Mesh. Any voids in details, penetrations, equipment curbs, skylights, etc. are to be addressed and repaired according to the recommendations of SureCoat Systems.
- 4. The roof system shall have sufficient quantities of the *SureCoat Roof System* to form a finished dry mil thickness of 52-70 DFT at penetrations and 52-60 DFT in the roof field. The Poly-Mesh produces approximately 9-11 mils of the dry film thickness in the system.

This is a short version of the **SureCoat Roof System** installation requirements over an existing Concrete roof system. Reading and becoming acquainted with the requirements outlined in the long form specification is imperative and the responsibility of the contractor before bidding a project.

If the **SureCoat Roof System** has been specified by a professional waterproofing or roofing consultant, first read their specification completely as it may have additional requirements beyond the SureCoat Systems specification. This short form EZ Scope of Work is not in substitution of the long form specification.