

Rust-Oleum® Industrial Brands Specification

Coating Specification for Rust-Oleum Virtual Solutions Coating Solution 56

A 100% solids epoxy coating system

Concrete Protective Systems
VinylCast OP Finish

Using
8100 System OverKrete® Xtra S
And
8100 System OverKrete® Xtra OP

For Concrete Floors in a Moderate Chemical Environment

Specification Prepared by: Rust-Oleum Technical Service, March 2011

This is a general coating specification. Changes to this specification may void any product warranties. Contact your Rust-Oleum representative or Rust-Oleum Technical Service if modifications are required to better meet your needs.



PART I GENERAL

1.01 SCOPE OF WORK

- A.** Provide all materials and labor necessary to install Rust-Oleum® Concrete Protective Systems VinylCast using the 8100 System OverKrete® Xtra S and 8100 System OverKrete® Xtra OP in strict accordance with project drawings, specifications and current Rust-Oleum application instructions.

1.02 RELATED WORK BY OTHER (SELECT AS NEEDED)

- A.** Division 3 Concrete
- B.** Division 4 Masonry
- C.** Division 5 Metals
- D.** Division 6 Wood
- E.** Division 7 Thermal & Moisture Protection
- F.** Division 10 Specialties
- G.** Division 11 Special Construction

1.03 SYSTEM DESCRIPTION

- A.** The Concrete Protective Systems VinylCast OP is a decorative vinyl chip concrete floor finish using the 8100 System OverKrete® Xtra S as a base coat with a selection of pre-bled colored vinyl chips and the OverKrete® Xtra OP Clear as a finish coat. The OverKrete® Xtra OP develops a textured orange peel finish. The 8100 System is a two component, epoxy coating manufactured by Rust-Oleum Corporation, located at 11 Hawthorn Parkway, Vernon Hills, IL 60061 (847) 367-7700. The Concrete Protective Systems 8100 System refers to a coating system composed of base component standard colors and an activator.

1.04 ENGINEERING AND DESIGN REQUIREMENTS

- A.** The Design Architect and Project Engineer shall be responsible for all decisions pertaining to design, detail, structural capability and the like. Rust-Oleum Corporation has prepared guidelines in the form of specifications, technical data and application information to assist in the design and engineering processes.
- B.** Equivalent materials of other manufacturers may be substituted on approval of the engineer or designer. These requests for substitution shall include manufacturer's literature for each product giving the name, generic type, descriptive information, solids by volume, recommended dry film thickness and a list of a minimum of ten (10) projects where the coating system has been applied and performed to expectations for at least three (3) years service. No requests for substitution shall be considered that lower system film thickness, number of coats and/or offer a change in the generic type of coating herein specified. Requests for review of equivalency will be accepted only from the Contractor and will be considered only after the contract has been awarded. Request for review submitted directly to the Engineer by coating suppliers will not be considered.
- C.** The 8100 System shall be used only in conformance to the air quality legislation applicable at the location of use.

1.05 SURFACE PREPARATION AND APPLICATION DESCRIPTION

- A.** Substrate cleaning, surface preparation, coating application and dry film thickness shall be as specified herein and shall meet or exceed Rust-Oleum Corporation's recommendations.

- B. All application equipment shall be clean and maintained in proper working order in accordance with the equipment manufacturer's recommendations.
- C. The 8100 System shall be applied in accordance with the air and surface temperature limits and work areas shall be reasonably free of airborne dust during application and drying time.

1.06 PERFORMANCE REQUIREMENTS

- A. The 8100 System has the following physical properties and these are published on the Rust-Oleum Corporation Technical Data Sheet.

	Primer*	OverKrete Xtra S*	OverKrete Xtra OP*
Solids by Volume	89%	100%	100%
Recommended Dry Film Thickness per Coat (DFT)	6-9 mils	16 mils	5-8 mils
Practical Coverage @ Recommended DFT (Assumes 15% material loss)	180-260 sq ft/gal	100 sq ft/gal	200-320 sq ft/gal
Induction Period	None Required	None Required	None Required
Pot Life @70-80°F (21-27°C)	30 minutes	30 minutes	30 minutes
Dry Times @70-80°F (21-27°C) 50% RH Light Traffic Recoat Full Service	NA 6-8 hours NA	10 hours 10-24 hours 48-72 Ours	10 hours 10-24 hours 48-72 hours

* Activated material

1.07 QUALITY ASSURANCE

- A. Applicator Qualifications:
 1. Shall be knowledgeable in the proper installation of 8100 System and experienced in the application of two component, 100% solids epoxy systems.
 2. Shall provide a minimum of one (1) year workmanship warranty for the application of the 8100 System.
 3. A list of Certified Rust-Oleum Corporation Coating Applicators is available from Rust-Oleum Corporation.
- B. Pre-, Mid-, and Post-Job Conferences shall be scheduled at discretion of the Project Engineer and/or Design Architect.

1.08 SUBMITTALS

- A. Product Data: 8100 System, application and related equipment information.
- B. Color Cards: Supply color cards of specified materials showing range of colors.
- C. Applicator: If applicable, provide certified contractor documentation showing proof of familiarity with Rust-Oleum 8100 System.

1.09 DELIVERY STORAGE AND HANDLING

- A. Deliver the 8100 System on-site in Rust-Oleum Corporation's labeled, original, unopened containers.

- B.** Store materials inside or under cover at ambient temperature. Keep materials dry, protected from weather, direct sunlight, surface contamination, aging corrosion, extreme temperatures and other damage.

1.10 PROJECT CONDITIONS

- A.** Protect adjacent work from damage, splash, and spillage during application of the 8100 System.

1.11 WARRANTY

- A.** The technical data and suggestions for use contained herein are correct to the best of our knowledge, and offered in good faith. The statements of this specification do not constitute a warranty, expressed, or implied, as to the performance of these products. As conditions and use of our materials are beyond our control, we can guarantee these products only to conform to our standards of quality, and our liability, if any, will be limited to replacement of defective materials. All technical information is subject to change without notice.
- B.** Special project warranties may be issued on a request basis at the discretion of the Rust-Oleum Corporation Technical and Legal Departments and would not be contained within this specification document.

2. PRODUCTS

2.01 MANUFACTURER

- A.** The 8100 System shall be obtained through a Rust-Oleum distributor. To request nearest distribution source contact Rust-Oleum Corporation.

2.02 MATERIALS

- A.** The OverKrete Xtra S is available in selected standard colors, a Clear and an activator. Contact Rust-Oleum Corporation for availability of colors.
- B.** The OverKrete Xtra OP is available in selected standard colors, a Clear and an activator. Contact Rust-Oleum Corporation for availability of colors.
- C.** The VinylCast is a selection of pre-blended colored vinyl chips. Contact Rust-Oleum Corporation for availability of colors.

3. EXECUTION

3.01 JOB CONFERENCES

- A.** A pre-job conference shall be at the discretion of the architect, engineer or general contractor. Coating contractor, substrate installer and other trades whose work effects the application of the 8100 System shall meet at the project site to review procedures and time schedule proposed for application of the 8100 System and related work. Additional conferences are at the discretion of the architect, engineer, general contractor and/or owner.

3.02 SURFACE PREPARATION

- A.** All cleaning and surface preparations specified herein are minimums.

- B.** All surfaces to be coated shall be free of cracks, pits, fins, projections, or other imperfections that would interfere with the formation of a uniform, unbroken coating film.
- C.** All oil and grease shall be completely removed with biodegradable degreasers prior to mechanical cleaning begins.
- D.** New concrete shall have cured for a minimum 30 days prior to coating application. If a cure and seal agent was added to the concrete or applied after initial cure, the concrete must be abrasive blast cleaned or mechanically abraded to remove the sealer and expose fresh concrete.
- E.** Concrete surfaces shall be acid etched, mechanically abraded, or abrasive blast cleaned to remove all laitance to provide a uniform surface profile with a profile depth of 1½ - 3 mils.
- F.** The coating contractor is to examine the substrate to determine if it is in satisfactory condition to receive the 8100 System. Obtain coating contractor's written report listing conditions detrimental to performance of work in this specification. Do not proceed with the application of 8100 System until unsatisfactory conditions have been corrected.

3.03 MIXING AND THINNING

A. MIXING

1. The base component and activator must be combined with power mixing. Hand mixing is not adequate.
2. Scrape out the container of the activator to transfer as much material as possible.
3. Use a suitable mixing blade which will not entrain air. Mix at 500-750 RPM for 1-3 minutes.
4. Application must begin as soon as the material has been completely mixed.

B. THINNING

1. Thinning is not required. Do not thin.

3.04 APPLICATION

A. Weather Conditions

1. Apply when air and surface temperatures are between 60-80° F (15-27°C) and surface temperature is at least 5° F (3°C) above the dew point.
2. The relative humidity should not be greater than 85%.

B. Coating Application

Note: DO NOT attempt to work out of the container. Immediately after mixing material, pour out the activated material in a long thin stripe across the top of the work section of floor. Use only the material that flows naturally out of the container.

Do not scrape out the container of activated material. Doing so may result with transfer of un-activated material to the floor which will result with soft spots in the coating.

Consult the Rust-Oleum Concrete Protective Systems Product Application Guide for this coating system for complete and detailed application information.

1. Apply Concrete Protective Systems Penetrating Prime & Seal Primer at a rate of one activated gallon per 180-260 sq ft of floor area. Use a rubber squeegee to spread the material over the entire section of floor, then even out the primer by back rolling with a lint free short nap roller cover with a phenolic core. Change roller cover every 30 minutes.
2. Apply one coat of the selected finish color of OverKrete Xtra S (Concrete Protective Systems 8000 System OverKrete S may be substituted if a full broadcast is going to be done) at a rate of one activated gallon per 100 sq ft of floor area. Use a rubber squeegee to spread the material over the entire section of floor, then even out the OverKrete Xtra S by back rolling with a lint free 3/8 nap roller cover with a phenolic core. Make all final passes in the same direction. Do not over roll. Change roller cover every 30 minutes.
3. Immediately after final back rolling is completed, evenly broadcast the VinylCast chips onto the wet coating;
 - a. For a sparse finish, evenly broadcast $\frac{1}{4}$ - $\frac{1}{2}$ pounds of the selected colored vinyl chips onto the wet coating per 100 square feet.
 - b. For a full broadcast finish use 18 to 20 pounds per 100 square feet and completely cover the area to refusal.
4. After the coating has cured, sweep and/or vacuum off the excess aggregate.
5. If a full broadcast of chips is applied, scrape the surface with an upright floor scraper to cut off any chips that may be orientated on edge rather than flat. Re-sweep or vacuum the surface.
6. Apply a coat of OverKrete Xtra OP Clear at a rate of one activated gallon per 200-320 sq ft of floor area. Use a rubber squeegee to spread the material over the entire section of floor, then even out the 8100 System OverKrete Xtra OP Clear by back rolling with a lint free 3/8 nap roller cover with a phenolic core. Make all final passes in the same direction. Change roller cover every 30 minutes.

C. Protection of surfaces

1. The Coating Contractor shall be responsible for protecting all adjacent surfaces from spills, drips, or any other form of coating damage.
2. The coating contractor and its subcontractors shall be responsible for removing spots or repairing damaged surfaces to the satisfaction of the project engineer, design architect and/or owner.

3.05 CLEAN-UP

- A. Clean-up shall be done to remove all spills, drips, overspray, or other unwanted coating from all surfaces not intended to be coated.
- B. All used rags, brushes, roller covers, and other application related materials shall be removed from the work site and disposed in a proper manner and in accordance with local waste regulations.
- C. All equipment, staging, ladders, and other contractor materials brought onto the jobsite by the contractor shall be remove at the conclusion of the job in a timely manner.

END OF SECTION