

# Rust-Oleum® Industrial Brands Specification

## Coating Specification for Rust-Oleum Virtual Solutions Coating Solution 53

A 100% solids epoxy coating system

Concrete Protective Systems  
9600 System BriteCast<sup>i</sup> Decorative Quartz

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 9600 System BriteCast® Decorative Quartz 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 9600 System BriteCast Decorative Quartz 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 9600 System BriteCast Decorative Quartz refers to a coating system composed of base component, activator and a selection of pre-blended colored aggregate.

### **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.
- D.** The BriteCast 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 BriteCast 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 BriteCast system has the following physical properties and these are published on the Rust-Oleum Corporation Technical Data Sheet.

	<b>Primer*</b>	<b>BriteCast HD*</b>	<b>Sealer*</b>
Solids by Volume	89%	100%	100%
Recommended Dry Film Thickness per Coat (DFT)	6-9 mils	16 mils	16 mils
Wet Film To Achieve DFT (Unthinned Material)	180-260 sq ft/gal	16 mils	16 mils
Practical Coverage @ Recommended DFT (Assumes 15% material loss)	None Required	100 sq ft/gal	100 sq ft/gal
Induction Period	30 minutes	None Required	None Required
Pot Life @70-80°F (21-27°C)	NA 6-8 hours NA	30 minutes	30 minutes
Dry Times @70-80°F (21-27°C) 50% RH Light Traffic Recoat Full Service	89%	10 hours 10-24 hours 48-72 hours	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 BriteCast system and experienced in the application of a two component, 100% solids epoxy system.
2. Shall provide a minimum of one (1) year workmanship warranty for the application of the BriteCast 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: BriteCast 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 BriteCast system.

**1.09 DELIVERY STORAGE AND HANDLING**

- A. Deliver the BriteCast 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 BriteCast 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. BriteCast system shall be obtained through a Rust-Oleum distributor. For a complete listing or to request nearest distribution source please contact Rust-Oleum Corporation.

### **2.02 MATERIALS**

- A. The BriteCast system is available in selected standard colors, a Clear Sealer and activators. 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 BriteCast system shall meet at the project site to review procedures and time schedule proposed for application of BriteCast 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 BriteCast system. Obtain coating contractor's written report listing conditions detrimental to performance of work in this specification. Do not proceed with the application of BriteCast 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 BriteCast system base coat 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 BriteCast system base coat by back rolling with a lint free 3/8 nap roller cover with a phenolic core. Change roller cover every 30 minutes.
3. Evenly broadcast the selected colored aggregate onto the wet coating until refusal and the base coat is completely covered with the colored aggregate.
4. After the base coat has cured, sweep and/or vacuum off the excess aggregate.
5. Apply BriteCast system Sealer 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 Sealer 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.
6. Additional seal coats may be applied to reduce surface texture of the 9600 System BriteCast finish.
7. Optional finish 8100 System OverKrete Xtra OP can be used.

**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 removed at the conclusion of the job in a timely manner.

**END OF SECTION**