# Rust-Oleum<sup>®</sup> Industrial Brands Specification

## Coating Specification for Rust-Oleum Virtual Solutions Coating Solution 20

A solvent based coating system

Concrete® Saver Anti-Slip High Performance Epoxy AS9100 System

Anti-Slip Floor and Deck Coating for use in a Moderate Industrial 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 Saver<sup>®</sup> AS9100 System Anti-Slip High Performance Epoxy 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 Rust-Oleum Concrete Saver® AS9100 System Anti-Slip High Performance Epoxy 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 Saver® AS9100 System Anti-Slip High Performance Epoxy 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 manufacturers 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 AS9100 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 Corporations recommendations.
- **B**. All application equipment shall be clean and maintained in proper working order in accordance with the equipment manufacturers recommendations.

C. The AS9100 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 AS9100 System has the following physical properties and these values are published on the Rust-Oleum Corporation Technical Data Sheet.

	Activated material
<u> </u>	
Solids by Volume	62%
Recommended Dry Film	17-25 mils
Thickness per Coat (DFT)	
Wet Film To Achieve DFT	27-40 mils
(Unthinned Material)	
Practical Coverage @	40-60 sq ft/gal
Recommended DFT (Assumes	
15% material loss)	
Induction Period	None Required
Pot Life	
@70-80°F (21-27°C)	4 hour
Dry Time @ 70-80°F (21-27°C)	
and 50% RH	
Light traffic	12 hours
Heavy traffic	72 hours
Coefficient of friction	
	4.05
Wet	1.05
Dry	1.05

#### 1.07 QUALITY ASSURANCE

- **A.** Applicator Qualifications:
  - 1. Shall be knowledgeable in the proper installation of AS9100 System and experienced in the application of two component, epoxy systems.
  - 2. Shall provide a minimum of one (1) year workmanship warranty for the application of the AS9100 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: AS9100 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 AS9100 System.

#### 1.09 DELIVERY STORAGE AND HANDLING

**A.** Deliver the AS9100 System on-site in Rust-Oleum Corporations 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 AS9100 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 AS9100 System shall be obtained through a Rust-Oleum distributor. To request nearest distribution source contact Rust-Oleum Corporation.

#### 2.02 MATERIALS

**A.** The AS9100 System is available in selected standard colors and an activator. The materials are packaged in pre-measured containers which yield a full gallon of activated material when mixed together. 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 AS9100 System shall meet at the project site to review procedures and time schedule proposed for application of the AS9100 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 surfaces to be coated shall have all oil and grease 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 and provide a uniform surface profile.
- **F.** Previously coated surfaces must be in good sound condition. Any loose or unsound previous coating must be completely removed. The existing coating shall be sanded or scarified to produce a profile in the finish.
- **G.** At minimal, all steel surfaces shall be cleaned in accordance to SSPC-SP-3.
- H. The coating contractor is to examine the substrate to determine if it is in satisfactory condition to receive the AS9100 System. Obtain coating contractors written report listing conditions detrimental to performance of work in this specification. Do not proceed with the application of the AS9100 System until unsatisfactory conditions have been corrected.

#### 3.03 MIXING AND THINNING

#### A. MIXING

- 1. The AS9100 System colored base component and Activator must be combined with power mixing. Hand mixing is not adequate.
- 2. Scrape out the container of Activator to transfer as much material as possible.
- 3. Application should begin soon after 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 50-100° F (10-38°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

- 1. Apply AS9100 System using a special no nap phenolic core roller. (Rust-Oleum # 6697005).
- 2. Do not use a roller pan. Simply pour a portion of the activated material onto the floor and spread out with the roller.
- 3. Spread the material out evenly until ridges begin to form in the finish. The ridges will develop in the same direction as the roller pass. If ridges do not form, the material is likely at too high of a film thickness and needs to be spread further.
- 4. 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.

#### 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**