

Rust-Oleum® Industrial Brands Specification

Coating Specification for Rust-Oleum Virtual Solutions Coating Solution 22 A solvent based coating system

Concrete Saver® AS5400 Anti-Slip High One-Step Epoxy
System

Anti-Slip Floor and Deck Coating for use in a Mild 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® AS5400 System Anti-Slip One-Step 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 Concrete Saver® AS5400 System Anti-Slip One-Step Epoxy is a single component, epoxy coating manufactured by Rust-Oleum Corporation, located at 11 Hawthorn Parkway, Vernon Hills, IL 60061 (847) 367-7700. The Concrete Saver® AS5400 System Anti-Slip One-Step Epoxy refers to a coating system composed of a selection of standard colors.

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 AS5400 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 AS5400 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 AS5400 System has the following physical properties and these values are published on the Rust-Oleum Corporation Technical Data Sheet.

	Properties
Solids by Volume	60-62%
Recommended Dry Film Thickness per Coat (DFT)	17-20 mils
Wet Film To Achieve DFT (Unthinned Material)	30-35 mils
Practical Coverage @ Recommended DFT (Assumes 15% material loss)	50 sq ft/gal
Dry Time for traffic @ 70-80°F (21-27°C) and 50% RH	12-24 hours
Coefficient of friction	
Wet	1.00
Dry	1.17

1.07 QUALITY ASSURANCE

- A. Applicator Qualifications:
1. Shall be knowledgeable in the proper installation of AS5400 System and experienced in the application of epoxy ester coating systems.
 2. Shall provide a minimum of one (1) year workmanship warranty for the application of the AS5400 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: AS5400 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 the AS5400 System.

1.09 DELIVERY STORAGE AND HANDLING

- A. Deliver the AS5400 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 AS5400 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 AS5400 System shall be obtained through a Rust-Oleum distributor. To request nearest distribution source contact Rust-Oleum Corporation.

2.02 MATERIALS

- A.** The AS5400 System is available in selected standard colors. Contact Rust-Oleum Corporation for availability of colors and container size.

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 AS5400 System shall meet at the project site to review procedures and time schedule proposed for application of AS5400 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 AS5400 System. Obtain coating contractor's written report listing conditions detrimental to performance of work in this specification. Do not proceed with the application of AS5400 System until unsatisfactory conditions have been corrected.

3.03 MIXING AND THINNING

A. MIXING

The Concrete Saver Anti-Slip One-Step Epoxy requires power mixing to ensure all of the aggregate is properly dispersed. Hand mixing is not adequate.

B. THINNING

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 AS5400 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.

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