

ARDEX GUIDE SPECIFICATION

High performance, high solids, water-borne acrylic concrete sealer

SECTION 03 92 50 REPAIR MORTARS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings, general provisions of the Contract, and other related construction documents such as Division 01 specifications apply to this Section

1.2 SUMMARY

- A. This Section includes a film forming, non-flammable, UV stable high solids concrete sealer
 - 1. ARDEX CG™ Concrete Guard™ High Performance, High Solids concrete Sealer
- B. Related Sections include the following:
 - 1. Section 03 30 00, Cast-In-Place Concrete

1.3 REFERENCES

- A. ASTM C 109, Compressive Strength
- B. ASTM C 293, Flexural Strength
- C. ASTM C 469, Modulus of Elasticity
- D. ASTM C 157, Length Change
- E. ASTM C 1202, Chloride Permeability
- F. ICRI Technical Guideline No. 03732 Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used. Include manufacturer's Material Safety Data Sheets.
- B. Qualification Data: For Installer

1.4 QUALITY ASSURANCE

- A. Installation of the ARDEX product must be completed by a factory-trained applicator using mixing equipment and tools approved by the manufacturer. Please contact ARDEX Engineered Cements (724) 203-5000 for a list of recommended installers.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver products in original packaging, labeled with product identification, manufacturer, batch number and shelf life.
- B. Store products in a dry area with temperature maintained between 50° and 85° F (10° and 29° and Protect from direct sunlight.
- C. Handle products in accordance with manufacturer's printed recommendations.

1.6 PROJECT CONDITIONS

- A. Do not install material below 50° F (10° C) surface and air temperatures. These temperatures must also be maintained during and for 48 hours after the installation of products included in this section. Install quickly if substrate is warm and follow warm weather instructions available from the ARDEX Technical Service Department.
- B. PROCESS: Mechanically grind with diamond tooling to remove existing coating on the concrete surface and to it's penetrated depth followed by progression of diamond tooling to the desired honed or polished level desired. Diamond tooling may include metal bonded diamonds, transitional ceramic bonded diamonds, resin bonded diamonds.

PART 2 - PRODUCTS

2.1. Repair materials:

- a. Where spalls, repair or minor patchwork is necessary apply ARDEX PC-R™ as necessary and in accordance with recommendations, applied at the appropriate time during the honeing process.
- b. If necessary, correct excessive pinholes with ARDEX PC-M™. Contact the ARDEX Technical Services department for recommendations.

2.2. Sealer:

- a. Ardex CG Concrete Guard

PART 3 – EXECUTION

3.1 PREPARATION

- A. General: Prepare substrate in accordance with manufacturer's instructions. Prior to proceeding with any repair, please refer to the International Concrete Repair Institute's ICRI 03730 Guide for Surface Preparation for the Repair of Deteriorated Concrete Resulting from Reinforcing Steel Corrosion; ICRI 03732 Guideline for Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays; and the American Concrete Institute's ACI 546R-04 Concrete Repair Guide for general guidelines for concrete repair.
 - 1. All concrete and masonry substrates must be sound, solid, dry, and completely free of all oil, grease, dirt, curing compounds and any substance that might act as a bond breaker. Overwatered, frozen or otherwise weak concrete surfaces must also be cleaned down to sound, solid concrete by mechanical methods such as scarifying, scabbling or similar in accordance with ICRI 03732. before priming. Acid etching and the use of sweeping compounds and solvents are not acceptable.

- B. Joint Preparation
 - 1. Moving Joints – A flexible sealing compound such as ARDEX ARDISEAL™ may be installed.
 - 2. Saw Cuts and Control Joints – fill all non-moving joints with ARDEX ARDIFIX™ Joint Filler.

3.4 SEALING WITH ARDEX CG™ CONCRETE GUARD™

- A. Mixing: The contents of the ARDEX CG™ container must be thoroughly stirred just prior to use to ensure a uniform consistency. For best results, mix with a mechanical mixing paddle and low speed drill.

- B. Installation:
 - 1. ARDEX Concrete Guard should be applied in two thin coats, allowing 2-4 hours between coats, depending upon atmospheric conditions. (Back-rolling is recommended when spraying to prevent puddling.)
 - 2. When outdoors, do not apply if rain, fog, or extremely high humidity is expected within 6-8 hours or if freezing temperatures could occur within 24 hours of application. Do not apply on surfaces under 50°F or over 90°F.
 - 3. Allow ARDEX Concrete Guard to cure a minimum of 24 hours before normal traffic, and a minimum of 72 hours before heavy traffic.

- C. Maintenance: In order to attain maximum life from the dressing, it is essential that the surface be properly sealed and protected. Reseal as required depending upon traffic volume and conditions.

END OF SECTION