

ARDEX GUIDE SPECIFICATION**ARDEX TWP™**Tilt Wall Patch and Finishing Compound for Vertical Concrete Walls

**SECTION 03 01 30
MAINTENANCE OF CAST-IN-PLACE CONCRETE****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 trowel-grade, Portland cement-based, polymer modified, finishing compound for vertical and overhead concrete.
 - 1. ARDEX TWP™ Tilt Wall Patch and Finishing Compound for Vertical Concrete Walls
- B. Related Sections Include the Following
 - 1. Section 03 30 00, Cast-In-Place Concrete

1.3 SUBMITTALS

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

1.4 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: The manufacturer shall be a company with at least five years' experience and regularly engaged in the manufacture and marketing of products specified herein.
- B. Installer Qualifications: For best results, installation of the ARDEX product should 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.

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ARDEX ENGINEERED CEMENTS

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° C) 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.

PART 2 - PRODUCTS

2.1 FINISHING COMPOUND

- A. Portland cement-based, polymer modified, finishing compound for interior or exterior vertical applications such as tilt-up walls, pre-cast or poured in place concrete panels, or other concrete or masonry surfaces prior to sealing or painting.
 - 1. Acceptable Products:
 - a. ARDEX TWP™; Manufactured by ARDEX Engineered Cements: 400 Ardex Park Drive, Aliquippa, Pa 15001 USA 724-203-5000
 - 2. Performance and Physical Properties: Meet or exceed the following values for material cured at 73° F (23° C) and 50 percent relative humidity:
 - a. Application: Trowel
 - b. Pot Life: 15 to 20 minutes
 - c. Time to Seal or Paint: 15 to 60 minutes, depending on jobsite conditions
 - d. VOC: 0 g/L, calculated SCAQMD 1168
 - e. Color: Gray

PART 3 – EXECUTION

3.1 PREPARATION

- A. General: Prepare substrate in accordance with manufacturer's instructions.

1. All concrete surfaces must be structurally sound, solid and free of any contaminant that might act as a bond breaker, including, but not limited to, form release agents, existing sealers or paints, patching compounds, weak or loose concrete, dust, dirt or oils. If necessary, mechanically clean the surface down to sound, solid concrete by sandblasting or grinding. Overwatered, frozen or otherwise weak concrete surfaces must also be mechanically prepared down to clean, sound and solid concrete. Acid etching, adhesive removers, solvents and sweeping compounds are not acceptable means of cleaning the substrate. Sanding equipment is not an effective method for removing curing and sealing compounds.
2. Surfaces must be dry for a successful installation. Surface and air temperatures must be a minimum of 50°F (10°C) for the installation of ARDEX products. For further information, please refer to the ARDEX Substrate Preparation Brochure.

3.2 APPLICATION OF ARDEX TWP™ :

- A. Examine substrates and conditions under which materials will be installed. Do not proceed with installation until unsatisfactory conditions are corrected.
- B. Coordinate installation with adjacent work to ensure proper sequence of construction. Protect adjacent areas and landscaping from contact due to mixing and handling of materials.
- C. Mixing: Comply with manufacturer's printed instructions and the following.
 1. Mix each 10 lb. (4.5 kg) bag of ARDEX TWP with 2½ quarts (2.4 liters) of clean water.
 2. For best results, mix using a ½" (12 mm) heavy-duty mixing drill (min. 650 rpm) with an ARDEX T-2 mixing paddle. Do not overwater. Mix thoroughly to obtain a lump-free consistency.
 3. The pot life of ARDEX TWP is approximately 15-20 minutes at 70°F (21°C). If the product begins to set in the bucket, remix before using. Do not add additional water.
- D. Application: Comply with manufacturer's printed instructions and the following.
 1. Do not apply in freezing conditions or when the installation area is being subjected to precipitation.
 2. Comply with manufacturer's guidelines for hot and cold weather application.
 3. Apply the compound to the prepared surface with a steel trowel. Apply sufficient pressure to fill in all surface defects. Where necessary, minor touch-up work can be accomplished using a rubber float or slightly dampened sponge once the surface has started to harden. If the material has already fully set, the surface can be smoothed with fine sandpaper or re-skimmed.
 4. ARDEX TWP contains no sand or gritty fillers and can be placed to a true featheredge for perfectly smooth transitions. Use ARDEX TWP in small areas to fill in gouges, dents or holes of any depth. Thicker areas will take longer to harden.

E. Sealing and Painting

1. ARDEX TWP requires no special curing or drying procedures. Due to its unique formulation, the application of a latex paint or water-borne sealer can begin as soon as the surface has hardened – it does not need to be completely dry.
2. Drying time and the hardening of the surface will vary with jobsite conditions, the type of substrate and the thickness of installation. Thinner applications will require less drying time, while thicker applications, as well as those at cooler temperatures, may take 1 hour or more.

F. Color

1. ARDEX TWP is formulated from Portland cement and is gray when dry. As concrete color and jobsite conditions vary widely, it is not intended that this product will match the color of the concrete being resurfaced or an adjacent concrete pad. Jobsite conditions such as direct sunlight, wind or exposure to moisture before completely set can lead to color variations. If this is undesirable, a pigmented sealer should be used. Consult the ARDEX Technical Service Department for additional information.

END OF SECTION