SECTION 09 24 16 ARDEX PANDOMO® Wall System

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 self-drying, trowel applied cement-based wall finishing compound for interior installation over a wide variety of porous surfaces, including concrete, gypsum plaster, drywall and all types of masonry surfaces. The hardened render produces high-end, creatively designed ARDEX PANDOMO® Wall surfaces.
 - 1. ARDEX PANDOMO® W1 Decorative Wall Finishing Compound
 - 2. ARDEX PANDOMO® CC, Color Concentrate
 - 3. ARDEX PANDOMO[®] SL, Stone Oil Sealer
- B. Related Sections include the following:
 - 1. [Specifier Note: If applicable, ADD ADJECENT STRUCTURE & FINISH SECTIONS]

1.3 REFERENCES

- A. ASTM C 109M, Compressive Strength Air-Cure Only
- B. ASTM C 348, Flexural Strength of Hydraulic-Cement Mortars

1.4 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. Reference Samples: Provided by Contractor and as requested by Architect
- C. Mock-up: Signed approval by Architect

D. Qualification Data: For Installer

1.5 QUALITY ASSURANCE

- A. Installation of the ARDEX PANDOMO® product must be completed by a certified ARDEX PANDOMO® Contractor using mixing equipment and tools approved by the manufacturer. Contact [Specifier Note: ENTER ARDEX CONTACT], ARDEX Engineered Cements (724) 203-5000 [Specifier Note: or MODIFY FOR CONTACT PHONE#] for a list of certified installers. Note: ONLY certified contactors are qualified to source PANDOMO® product and to perform the work of this section.
- B. Manufacturer Experience: Provide products of this section by companies which have successfully specialized in production of this type of work for not less than 5 years. Contact Manufacturer Representative prior to installation.
- C. Reference Samples: Size and quantity to be determined by Architect. Samples shall represent mix design, finish and color formula as specified [Specifier Note: ENTER COLOR FORMULA SELECTED BY ARCHITECT]. Reference samples should be approved by Architect prior to proceeding with installation.
- D. Mock-Up: Location to be determined by Architect. Mock-up shall represent mix design, finish, and color as specified by Architect. Area for mock-up shall be a minimum 4'X4'. Written approval from Architect, Designer, Owner or other as appropriate is required.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver products in original packaging, labeled with product identification, manufacturer, batch number and shelf life. ARDEX PANDOMO® products are ordered on a project basis and contractor shall allow for minimum 15 business day shipping lead time.
- B. Store products in a dry area with temperature maintained between 50° and 85° F (10° and 29° C) and Protect from direct sunlight. Prior to application, products must be acclimated to between 50° and 77° F (10° and 25° C).
- C. Handle products in accordance with manufacturer's printed recommendations.

1.7 PROJECT CONDITIONS

- A. Do not install material below 50° F (10° C) or above 77°F (25° C) surface and air temperatures and an ambient relative humidity of 40% 60% RH. These temperatures and humidity 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. When possible, ARDEX PANDOMO[®] W1 installation shall be scheduled at the end of construction to minimize potential for damage from other work.

PART 2 - PRODUCTS

2.1 SPECIAL CEMENT PLASTER

- A. Wall Compound: White, Cement-based Finishing Compound for PANDOMO® Wall
 - 1. Acceptable Products:
 - a. ARDEX PANDOMO® W1; Manufactured by ARDEX Engineered Cements: 400 Ardex Park Drive, Aliquippa, Pa 15001 USA, (724) 203-5000, www.ardex.com
 - i. Primer (porous substrates only): ARDEX P 51 PRIMER.
 - 2. Performance and Physical Properties: Meet or exceed the following values for material cured at 70° F+/-3°F (21° C+/-3°C) and 50% +/-5% relative humidity:
 - a. Application: Steel Trowel or Spatula
 - b. Working Time: 30 minutes
 - c. Compressive Strength: 1900 psi at 28 days, ASTM C109M.
 - d. Flexural Strength: 725 psi at 28 days, ASTM C348.
 - e. Base Colors: White
 - f. Coverage: 33.3 sq. ft./10 lb. bag at 1/8" thickness
- B. Dye: PANDOMO® CC Color Concentrate [Specifier Note: ADD COLOR] as selected by Architect or Designer.
- C. Equipment:
 - 1. Festool ROTEX RO 150 FEQ-Plus Hand Sander & Vacuum
 - 2. Sanding Disks Grit 120
 - 3. Other equipment as needed to properly install the PANDOMO® Wall finish
- D. Sealer: ARDEX PANDOMO® SL, Stone Oil Sealer
- 2.2 WATER: Water shall be clean, potable, and sufficiently cool (not warmer than 70°F).

PART 3 – EXECUTION

3.1 PREPARATION

- A. Prepare substrate in accordance with manufacturer's instructions and the following:
 - All substrates must be dry and solidly bonded. Existing walls should be constructed in accordance with applicable building codes, and all wall boards must be securely attached. Surface must be free of dust, dirt, and any other contaminant that may act as a bond breaker. All loose coatings, wallpaper, plaster or otherwise weak surfaces must be removed.

2. Acrylic lacquer, alkyd finishes, tile and other nonporous surfaces require pre-smoothing with skim coat of ARDEX PANDOMO[®] W1 and allowed to dry for 1 hour prior to installing the decorative finish coat.

B. Joint Preparation:

1. Moving Joints and Control Joints – must be honored up through the topping. Under no circumstances should ARDEX PANDOMO® W1 be installed over any joints or moving cracks. Failure to do so may result in cracking and/or disbonding of the topping. Joints may be filled with ARDEX ARDISEALTM Rapid Plus Semi-Rigid Joint Sealant.

C. Repair of Surface Imperfections:

1. Pre-smoothing of the existing surface and the filling in of surface imperfections should be done prior to installing the decorative. Use ARDEX PANDOMO® W1 to presmooth at depths of up to 1/2" (12 mm). Pre-smoothing layers must be allowed to dry for a minimum of 1 hour. For areas greater than ½" (12 mm), contact ARDEX Technical Services Department for recommendation.

3.2 APPLICATION OF ARDEX PANDOMO® W1

- 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 from contact due to mixing and handling of materials.
- C. Priming (porous substrates):
 - 1. Install ARDEX P 51TM primer over porous substrates such as plaster and some masonry, as well as where more than one type of surface exists in a space, prime the substrate with ARDEX P 51 PRIMER diluted 1:3 with water. Allow to dry completely prior to proceeding with the installation of ARDEX PANDOMO® W1.
- D. Mixing: Comply with manufacturer's printed instructions and the following.
 - 1. Using a gram scale, measuring & mixing bucket, add 85 oz. (2.5 liters) of clean potable water per 11 lb. (5 kg) bag of ARDEX PANDOMO[®] W1.
 - 2. Mix using an ARDEX T-2 Ring Paddle and 1/2" heavy-duty drill. The mixture should be stirred to ensure a creamy, smooth, lump-free consistency. Allow the product to stand for 1 to 3 minutes and then remix prior to applying. The working time of the material is approximately 30 minutes at 70°F. Do not overwater.
 - 3. For best results, pre-blend the total anticipated quantity of water with the prescribed amount of ARDEX PANDOMO® CC Color Concentrates to minimize color variation between batches.
- E. Application: Comply with manufacturer's printed instructions and the following.

- 1. ARDEX PANDOMO[®] W1 is installed in 2 coats. The recommended thickness for each coat is 1/16" (1.5 mm) and should not exceed a total thickness of 3/4" (18 mm).
- 2. For a smooth finish, install the first coat using a steel trowel and allow it to dry for 60 minutes before installing the second coat. After allowing the second coat to dry for 30 to 60 minutes, lightly dampen the surface using a sponge or spray mist, and then smooth it using an 18" to 24" (45 to 60 cm) drywall/plaster knife. Allow the second coat to cure a minimum of 5 hours more, and then sand the surface using the Festool hand sander with 120-grit sandpaper. Follow by buffing with burnishing pad to remove any residual dust.
- 3. For a textured finish, apply the first coat using the desired texturing technique and allow it to cure for 60 minutes. Please note that this coat must be applied at a thickness sufficient for the texturing technique being used. The second coat is then applied and allowed to dry a minimum of 5 hours more, followed by sanding with the Festool hand sander with 120-grit sandpaper and buffing with burnishing pad to remove any residual dust. If desired, the second coat can be applied using a different color to achieve a three-dimensional appearance.
- 4. Note: the ARDEX PANDOMO® W1 Technical Data Sheet offers additional tips for a successful installation.

F. Sealing

- 1. The surface of ARDEX PANDOMO[®] W1 must always be protected from oil, salt, water and surface wear by applying a suitable protection system.
- 2. All ARDEX PANDOMO[®] Wall applications must be sealed with ARDEX SL[®] Stone Oil Sealer. Follow manufacturer recommendations for the application of ARDEX SL[®] Stone Oil Sealer.

3.3 PROTECTION

A. ARDEX PANDOMO® Wall surfaces should be adequately protected from damage resulting from construction traffic or other use that can affect the finish.

3.4 MAINTENANCE

A. Once installed, any finished floor surface requires routine cleaning and maintenance. After installing the initial coats of the sealer, the best way to ensure the long-term appearance of a newly installed floor is by the use of a sacrificial floor finish ("wax" or "polish") applied over the surface of the newly installed and sealed floor. All floor coatings will wear as a function of traffic and maintenance, and the use of a sacrificial coating avoids wear on the original sealer while providing a simple maintenance solution.

END OF SECTION