

LOS RIOS COMMUNITY COLLEGE DISTRICT

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Purchasing Department



Sacramento City College American River College Cosumnes River College Folsom Lake College

ADDENDUM NO. 2

ISSUE DATE: June 20, 2016

SCC Davis Center Phase 2

LRCCD BID NO. 16017

Issued By:

LOS RIOS COMMUNITY COLLEGE DISTRICT
1919 Spanos Court, Sacramento, CA 95825
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This addendum forms a part to the Contract Documents. The addendum items supersede and supplement all portions of the bidding documents with which it conflicts. All workmanship, materials, appliances and equipment which may be included in the following addendum items shall be of the same relative quality as described for similar work set forth in the general or main specifications of which these addendum items shall be considered a part.

This Addendum has been acknowledged in the space provided on the Bid Form and is considered part of the bid documents.

This Addendum consists of 6 Pages.

Los Rios Community College District
Sacramento City College

**ADDENDUM NO.: 2
TO THE
CONTRACT DOCUMENTS**

June 20, 2016

GENERAL

This addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated March 15, 2016, and consists of pages AD2-1 through AD2-2, and drawings as listed below. The following changes, additions or deletions shall be made to the following documents; all other conditions shall remain the same.

ITEM NO.

I. SPECIFICATIONS

096105 Vapor Control for Flooring

New section attached.

096500 Tile Carpeting

Replace paragraph 3.2 B

- B. Ensure concrete floors are dry (maximum 7 percent moisture content) and exhibit negative alkalinity, carbonization or dusting.
 - 1. Provide fluid applied Vapor Control System as needed to meet moisture content and alkalinity requirements. Refer to Section 096105, Vapor Control for Flooring.

096813 Tile Carpeting

Replace paragraph 3.2 A

- A. Comply with carpet tile manufacturer's installation recommendations to prepare substrates indicated to receive carpet tile installation.
 - 1. Provide fluid applied Vapor Control System as needed to meet moisture content and alkalinity requirements. Refer to Section 096105, Vapor Control for Flooring.

II. ENCLOSURES

Specifications:

096105 Vapor Control for Flooring

**SECTION 096105
VAPOR CONTROL FOR FLOORING**

Δ2: Addendum #2 – 6/20/2016

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes:
 - 1. Testing of interior concrete slabs for moisture vapor and alkalinity control.
 - 2. Fluid applied concrete floor sealer for control of moisture vapor transmission and alkalinity where resilient floor tile, vinyl flooring, rubber flooring, wood, carpet, or epoxy flooring systems will be installed.
- B. Related Sections:
 - 1. Section 033000: Cast-In Place Concrete installation and curing requirements.
 - 2. Division 09: Coordinate with floor finish materials specifications for substrate preparation and installation requirements so that Work of this Section is performed prior to installation of floor finish materials without adversely affecting schedule for Work of those Sections.

1.2 REFERENCES

- A. ASTM D1308 - Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes.
- B. ASTM D1653 - Standard Test Methods for Water Vapor Transmission of Organic Coating Films
- C. ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials.
- D. ASTM F1869 – Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride
- E. ASTM F2170 – Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using *in situ* Probes

1.3 SUBMITTALS

- A. Product data for each material specified including:
 - 1. Installation Instructions.
 - 2. Independent Test Data.
 - 3. Certification Requirements.
 - 4. Warranty Information.
- B. Test results for ASTM F1869-98 performed by an independent agency.
- C. Manufacturer's certification that material for this Section has been tested in accordance with ASTM D1653 and has a perm rating of less than 0.05.
- D. List of product use and performance history, for the same formulation and system design, listing reference sources.

1.4 QUALITY ASSURANCE

- A. Qualifications of Applicator:
 - 1. Approved by manufacturer subject to inspection and control of the manufacturer, experienced in surface preparation and application of material.
 - 2. No less than 5 years experience installing materials.
- B. Manufacturer's Qualification:
 - 1. No less than 5 years experience in manufacturing materials. Produce materials specifically formulated for vapor and alkalinity control.

2. Similar projects shall have documented minimum initial moisture vapor emission rate (MVER) of 15 lbs. per 1,000 sf per 24 hrs, and have resulted in maintained MVER equal to or less than 3 lbs. per 1,000 sf per 24 hrs when tested to ASTM F1869-98 or an RH value of 95 percent or less when measured per ASTM F2170.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to the job site in their original unopened containers, clearly labeled with manufacturer's name and brand designation.
- B. Store products in an approved ventilated dry area; protect from dampness, freezing, and direct sun light in areas with temperature range between 50 and 90 degrees F.
- C. Handle product in a manner that will prevent breakage of containers and damage to products.

1.6 PROJECT/SITE CONDITIONS

- A. Do not apply materials to unprotected surfaces or when water is accumulated on surface.
- B. Do not apply materials when substrate and air temperature are lower than 50 degrees F or expected to fall below this temperature within 24 hours from time of application.
- C. Monitor working time or pot life of materials when substrate and air temperature are above 70 degrees F.
- D. Provide continuous ventilation and indirect air movement during application and curing of materials.

1.7 WARRANTY

- A. Provide manufacturer's standard 10 year warranty and provide applicator's standard applications warranty for quality of application.

1.8 COORDINATION

- A. Before installing resilient floor tile, sheet vinyl, rubber flooring, wood, carpet, or epoxy flooring systems specified in related Sections over interior concrete slabs, perform anhydrous calcium chloride testing per ASTM F1869-98 to determine level of water vapor transmission in the slab.
- B. Coordinate testing with the Owner and allow enough time to test, submit and install the vapor control system before installation of floor finish.
- C. Allow for as much time as is reasonable for concrete slab to dry before performing anhydrous calcium chloride tests. Remove mastics, glues, and contaminants to provide a clean, sound, concrete substrate prior to performing anhydrous calcium chloride tests per ASTM F 1869-98.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Vapor Control System: Provide epoxy-based materials capable of meeting or exceeding following performance criteria:
 1. ASTM E96, Water Vapor Transmission (dry and wet methods) Performance shall be documented by an independent testing laboratory at a minimum of 90 percent water vapor transmission reduction compared to untreated ACI Committee 201 durable concrete.
 2. ASTM D1308: Insensitivity to alkaline environment up to pH 9.
 3. Certify acceptance to continuous topical water exposure after final cure.
 4. Products from a single manufacturer:
 - a. Koster VAP I 2000 System by Koster American Corporation.
 - b. Ardex Moisture Control system.
 - c. Bostik Durabond D-261 Extreme Moisture Vapor Barrier Coating.

2.2 ACCESSORIES

- A. Sand: Fine sand less than 1/50 of an inch in grain size or 98.5 percent passing sieve size #35.

- B. Aggregate: Well graded, washed gravel, 1/8 inch to 1/4 inch or larger.
- C. Water for mixing the cementitious materials shall be clean, potable, and sufficiently cool (not warmer than 70 degrees F).
- D. Fill and Leveling Compounds: As recommended by material manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify results of anhydrous calcium chloride testing per ASTM F1869-98.
- B. Verify concrete substrate has tensile strength of 200 psi minimum when tested in accordance with ASTM D4541 Method 5.
- C. Verify with substrate surface moisture requirement with each finish flooring material manufacturer. Coordinate with related Sections.
- D. Examine substrate surfaces with material manufacturer's representative to determine suitability to receive materials of this Section.
 - 1. Determination of areas requiring vapor control system using results of anhydrous calcium chloride testing per ASTM F1869-98 and comparing results with substrate moisture requirements of each finish floor material.
 - a. Most finish flooring systems require concrete water vapor transmission levels to be typically less than 3 lbs or 5 lbs per 24 hrs per 1,000 square feet.
 - b. Vapor control system is not required on interior concrete slabs without floor finishes.
 - 2. Verify if concrete additives such as chlorides or other soluble compounds that can contaminate surfaces have been used in concrete mix. Notify material supplier.

3.2 PREPARATION

- A. Prior to applying materials clean and mechanically abrade surfaces to receive vapor control system. Provide concrete surfaces with minimum surface profile of ICRI CSP #3.
 - 1. Shot blast floors and clean surfaces to remove residue, dust, dirt, adhesives, leveling compounds, paint, floor hardeners, bond breakers, oil, grease, curing agents, form release agents, efflorescence, laitance, abrasive media, and other contamination or substance that will have a negative affect on material application or performance.
 - 2. Where preparation results in a surface profile that is CSP #6 or higher, use manufacturer's recommended filling or leveling product.
- B. Repair cracks, expansion joints, control joints. Fill open surface honeycombs and other surface imperfections according to vapor control system manufacturer's recommendations.
 - 1. Repair of Moving Joints: Repair expansion and isolation joints so joint movement capability is maintained throughout entire thickness of substrate.
 - 2. Saw Cuts, Control Joints and Non-moving Cracks: Fill non-moving joints and cracks greater than 1/32 inch with manufacturer recommended product. Allow to cure for a minimum of 16 hours prior to proceeding with Vapor Control System application.
- C. If concrete contains fiber reinforcing, remove fibers that extend beyond surface and vacuum. Remove fibers after mechanical abrading so no fibers remain on concrete surface. Provide uncontaminated, absorptive sound concrete surface.
- D. Adhesion tests: Verify proper adhesion of flooring adhesives, coatings, and leveling compounds to the final vapor reduction coating system for acceptability. Contact Manufacturer's Representatives for recommendations.
- E. Use clean containers and mix thoroughly per Manufacturer's written requirements to obtain a homogeneous mixture.

3.3 APPLICATION

- A. Apply materials in accordance with manufacturer's written instructions.

- B. Once vapor control system is cured test substrates again for moisture vapor in accordance with ASTM F1869 or ASTM F2170.
- C. For installation of resilient flooring directly over vapor control system, use 100 percent solids adhesives or contact type adhesives with long working times that can be applied to substrates with a maximum pH of 10. Apply contact type adhesives to substrate and allow water to evaporate prior to flooring installation. Test proper adhesion of adhesive to water vapor reduction system prior to installation of entire flooring systems.

3.4 CLEANING

- A. Clean tools and equipment immediately after use per manufacturer's recommendations.
- B. Remove debris from project site.

3.5 PROTECTION

- A. Protect applied material from rain or topical water for a minimum period of 24 hours from time of application.
- B. Protect each coat during specified cure period from traffic and contaminants.

END OF SECTION