

Addendum

No. TWO Date: 09.13.18

Project: A NEW PRE-K BUILDING FOR BIG SPRING LAKE
KINDERGARTEN SCHOOL
FOR
THE ALBERTVILLE CITY BOARD OF EDUCATION
ALBERTVILLE, ALABAMA

PROJECT NO. 18-134
BC # 2018343

A2.1 GENERAL

- A. The following changes and/or substitutions to the plans and specifications are hereby made a part of same and are incorporated in full force as part of the contract.
- B. Bidders shall acknowledge receipt of this Addendum in writing on his Proposal Form.
- C. Refer to the **Advertisement for Bids**, change as follows:

The sealed proposal shall be received by Dr. Boyd K. English, Superintendent, at The Albertville City Board of Education Board Room, located at 105 West Main Street, Albertville, Alabama until **2:00 PM, Tuesday, September 25, 2018**, then opened and read aloud.

D.

A2.2 SPECIFICATIONS

- A. **Clarification**
At rooms A107 and A111 FEMA louvers (see specs) (**not shown on plans for clarity**) provided for indoor wall packs shall be designed and sized accordingly with manufactures mechanical unit. Louvers shall be designed in accordance to air requirements provided by the mechanical engineer. Contractor is to coordinate size of louvers with mechanical engineer prior to installation. An architectural louver (see specs) shall be provided and installed in front of the FEMA louver. Size shall be determined by mechanical engineer to allow proper air flow.
- B. **Clarification**
Spray foam insulation value shall be provided as per energy study and

specs R43.

- C. **Clarification**
Delete reference to extruded aluminum coping on drawings. Coping is to match spec section 07410 in material and finish.
- D. The following manufactures are hereby approved subject to the plans and specifications:

Section 12304 Laminate Clad Casework,
ACS Plastic Laminate Casework, 1629 South Joaquin Drive |
Marion, IN 46953 | 765.677.8000 | advancedcabinetsystems.com
- E. Refer to **Section 10200**, Louvers, herein
- F. Refer to **Section 10201**, Stationary Blade Wall Louvers (FEMA Approved), herein.
- G. See attached letter from Zgouvas, Eiring & Associates

A2.3 DRAWINGS – NO CHANGES

END OF ADDENDUM TWO

SECTION 10200 – LOUVERS

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract including General and Supplementary conditions and Division 1 Specification sections apply to work of this section.

DESCRIPTION OF WORK:

Extent of louvers and vents is indicated on drawings, including indications of sizes and locations.

Types of louvers and vents include the following:

1. Fixed Wall Louvers.

QUALITY ASSURANCE:

Performance Requirements: Where louvers are indicated to comply with specific performance requirements, provide units whose performance ratings have been determined in compliance with Air Movement and Control Association (AMCA) Standard 500.

Comply with SMACNA "Architectural Sheet Metal Manual" recommendations for fabrication, construction details and installation procedures, except as otherwise indicated.

Field Measurements: Verify size, location and placement of louver units prior to fabrication, wherever possible.

Shop Assembly: Coordinate field measurements and shop drawings with fabrication and shop assembly to minimize field adjustments, splicing, mechanical joints and field assembly of units. Pre- assemble units in shop to greatest extent possible and disassemble as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation.

SUBMITTALS:

Product Data: Submit manufacturer's specifications; certified test data, where applicable; and installation instructions for required products, including finishes.

Shop Drawings: Submit shop drawings for fabrication and erection of louver units and accessories. Include plans, elevations and details of sections and connections to adjoining work. Indicate materials, finishes, fasteners, joinery and other information to determine compliance with specified requirements.

PART 2 – PRODUCTS

MANUFACTURERS:

The following manufacturers' products have been used to established minimum standards for materials, workmanship and functions:

#SPA-11 by Arrow United Industries, Inc.
#K-638 by the Airlite Co.
#BB445CF by Reliable Metal Products, Inc.
#4L(S)C by Metal-Aire Louver Co.

Equal products of other manufacturers may be used in the work provided such products have been approved by the Architect not less than five (5) days prior to scheduled bid opening.

MATERIALS:

Frames and Blades: All fabricated of 6063-T5 or T6 extended aluminum with minimum thickness of .081.

Flashings: .040 Aluminum.

Fastenings: Use same material as items fastened, unless otherwise indicated. Fasteners for exterior applications may be hot-dip galvanized, stainless steel or aluminum. Provide types, gages and lengths to suit unit installation conditions. Use Phillips flat-head machine screws for exposed fasteners, unless otherwise indicated.

Anchors and Inserts: Use metal anchors and inserts for exterior installations and elsewhere as required for corrosion resistance. Use steel or lead expansion bolt devices for drilled-in-place anchors. Furnish inserts, as required.

Bituminous Paint: SSPC-Paint 12 (cold-applied asphalt mastic).

FABRICATION, GENERAL:

Provide louvers and accessories of design, materials, sizes, depth, arrangement, and metal thicknesses indicated, or if not indicated, as required for optimum performance with respect to airflow; water penetration; air leakage where applicable (for adjustable units, if any); strength; durability; and uniform appearance.

Fabricate frames including integral sills to suit adjacent construction with tolerances for installation, including application of sealants in joints between louvers and adjoining work.

Include supports, anchorages, and accessories required for complete assembly.

Provide sill extensions and loose sills made of same material as louvers, where indicated, or required for drainage to exterior and to prevent water penetrating to interior.

Maintain equal blade spacing, including separation between blades and frames at head and sill, to produce uniform appearance.

LOUVER SCREENS:

Provide screens for exterior louvers.

1. Provide frames consisting of U-shaped metal for permanently securing screen mesh. Frames shall be aluminum with aluminum 3/4" mesh bird screen mounted on inside of louvers.

METAL FINISHES:

General: Comply with NAAMM "Metal Finishes Manual" for finish designations and application recommendations, except as otherwise indicated. Apply finishes in factory after products are assembled. Protect finishes on exposed surfaces with protective covering, prior to shipment. Remove scratches and blemishes from exposed surfaces which will be visible after completing finishing process.

Baked Enamel Finish: AA-C12kC42R1X (cleaned with inhibited chemicals, conversions coated with an acid-chromate-fluoride-phosphate treatment and painted with organic coating specified below). Apply in strict accordance with manufacturers' specifications.

Organic Coating: Manufacturer's standard thermo setting acrylic enamel, 0.8 mil minimum dry film thickness.

PART 3 – EXECUTION

PREPARATION:

Coordinate setting drawings, diagrams, templates, instructions and directions for installation of anchorages which are to be embedded in concrete or masonry construction. Coordinate delivery of such items to project site.

INSTALLATION:

Locate and place louver units plumb, level and in proper alignment with adjacent work.

Use concealed anchorages wherever possible. Provide brass or lead washers fitted to screws where required to protect metal surfaces and to make a weathertight connection.

Form tight joints with exposed connections accurately fitted together. Provide reveals and openings for sealants and joint fillers, as indicated.

Repair finishes damaged by cutting, welding, soldering and grinding operations require for fitting and jointing. Restore finishes so there is no evidence of corrective work. Return items which cannot be refinished in field to shop, make required alterations, and refinish entire unit, or provide new units, at contractor's option.

Provide concealed gaskets, flashings, joint fillers, and insulations, and install as work progresses to make installations weathertight.

END OF SECTION 10200

SECTION 10201 – STATIONARY BLADE WALL LOUVERS (FEMA APPROVED)

PART 1 - GENERAL

RELATED DOCUMENTS:

Drawings and general provisions of Contract including General and Supplementary conditions and Division 1 Specification sections apply to work of this section.

DESCRIPTION OF WORK:

Extent of louvers and vents is indicated on drawings, including indications of sizes and locations.

Types of louvers and vents include the following:

1. FEMA 361 Approved Stationary Blade Louver.

RELATED SECTIONS

1. Section 03300 - Cast-In-Place Concrete.
2. Section 04200 - Masonry Units.
3. Section 05100 - Structural Metal Framing.
4. Section 06100 - Rough Carpentry.
5. Section 07600 - Flashing and Sheet Metal.
6. Section 07900 - Joint Sealants.
7. Section 09900 – Paints

REFERENCES

1. AAMA 2604 – High Performance Organic Coatings on Architectural Extrusions and Panels.
2. ASCE 7 - Minimum Design Loads for Buildings and Other Structures.
3. D822 - Standard Practice for Filtered Open-Flame Carbon-Arc Exposures of Paint and Related Coatings
4. D4214 - Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films.
5. D2244 - Standard Test Method for Calculation of Color Differences From Instrumentally Measured Color Coordinates.
6. Federal Emergency Management Agency (FEMA) 361 - Design and Construction Guidance for Community Safe Rooms.

DEFINITIONS

Louver Terminology: Definitions of terms for metal louvers contained in AMCA 501 apply to this Section unless otherwise defined in this Section or in referenced standards.

Horizontal Louver: Louver with horizontal blades; i.e., the axes of the blades are horizontal.

SUBMITTALS

Submit under provisions of Section 01330.

Product Data:

For each product to be used, including:

1. Manufacturer's product data including performance data.
2. Preparation instructions and recommendations.
3. Storage and handling requirements and recommendations.
4. Installation methods.

Shop Drawings:

Submit shop drawings indicating materials, construction, dimensions, accessories, and installation details.

Product Schedule: For louvers. Use same designations indicated on Drawings.

Samples: Submit sample of louver to show frame, blades, bird screen, gutters, downspouts, vertical supports, sill, accessories, finish, and color.

INFORMATIONAL SUBMITTALS

Qualification Data: For manufacturer and Installer.

Product Test Reports: For each type of louver, for tests performed by a qualified testing agency.

Field quality-control reports.

Sample Warranties: For manufacturer's warranties.

QUALITY ASSURANCE

Manufacturer Qualifications:

The manufacturer shall have implemented the management of quality objectives, continual improvement, and monitoring of customer satisfaction to assure that customer needs and expectations are met.

Manufacturer shall be International Organization for Standardization (ISO) 9001 accredited.

Product Qualifications:

Manufacturer shall design and furnish all supports required to comply with FEMA 361 Design and Construction for Community Shelters, Zone IV criteria, 250 MPH wind, 15 lb. 2x4 impact at 100 mph.

DELIVERY, STORAGE AND HANDLING

Store products in manufacturer's unopened packaging until ready for installation.

Store materials in a dry area indoors, protected from damage and in accordance with manufacturer's instructions.

Handling: Protect materials and finishes during handling and installation to prevent damage.

Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

PROJECT CONDITIONS

Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

WARRANTY

Manufacturer shall provide standard limited warranty for louver systems for a period of one year from date of installation, no more than 18 months after shipment from manufacturing plant. When notified in writing from the Owner of a manufacturing defect, manufacturer shall promptly correct deficiencies without cost to the Owner.

PART 2 – PRODUCTS

MANUFACTURERS:

The following manufacturers' products have been used to established minimum standards for materials, workmanship and functions:

FEMA APPROVED STATIONARY BLADE LOUVER - Model: XP500 as manufactured by Ruskin Company, Greaves Road, Kansas City, Missouri

Equal products of other manufacturers may be used in the work provided such products have been approved by the Architect not less than five (5) days prior to scheduled bid opening.

MATERIALS:

Fabrication: Steel stationary horizontal chevron louver style.

1. Frame:
 - a. Frame Depth: 8 inches (203 mm).
 - b. Wall Thickness: 0.25 inch (6 mm), nominal.
 - c. Material: Hot rolled steel.
2. Blades:
 - a. Style: Horizontal mounted chevron style.
 - b. Material: Hot rolled steel.
 - c. Wall Thickness: 0.25 inch (6 mm), nominal.
3. Minimum assembly size: 12 inches (305 mm) length by 12 inches (305 mm) high.
4. Maximum shipping size: 80 inches w by 60 inches h or 60 inches w by 80 inches h (2032 mm by 1524 mm or 1524 mm by 2032 mm).
5. Maximum assembly size: Unlimited length by one section high.

Performance Data:

1. Maximum Recommended Air Flow through Free Area: 900 feet per minute (4.57 m/sec).
2. Air Flow: 7600 cubic feet per minute (215 cu. m/min).
3. Maximum Pressure Drop (Intake): 0.20 inches w.g. (0.05 KPa).
4. Performance Ratings: Not certified. No AMCA rating.

Design Loads:

1. Designed Windload: +266 PSF (12.73 kPa) and -266 PSF (-12.73 kPa).
2. Designed Windload: Per Code.

ACCESSORIES

Bird Screen:

1. Aluminum: Aluminum, 5/8 inch by 0.040 inch (16 mm by 1 mm), expanded, flattened.
2. Frame: Removable, rewireable.

Extended Sills:

1. Galvanized steel, 20 gage (1 mm).

FINISHES

70 percent Floropolymer-Based Painted Finishes: Finish shall be applied at 1.2 mil total dry film thickness.

Coating shall conform to AAMA 2605. Apply coating following cleaning and pretreatment. Cleaning: AA-C12C42R1X.

50 percent Floropolymer-Based Painted Finishes: Finish shall be applied at 1.2 mil total dry film thickness.

Coating shall conform to AAMA 2604, sections 4.2 and 4.3. Apply coating following cleaning and pretreatment.

Cleaning: AA-C12C42R1X.

Color: Manufacturer's standard in paint system specified.

PART 3 – EXECUTION

EXAMINATION

Inspect areas to receive louvers. Notify the Architect of conditions that would adversely affect the installation or subsequent utilization of the louvers. Do not proceed with installation until unsatisfactory conditions are corrected.

If opening preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

PREPARATION

Clean opening thoroughly prior to installation.

Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

INSTALLATION

Install louvers at locations indicated on the drawings and in accordance with manufacturer's instructions.

Install louvers plumb, level, in plane of wall, and in alignment with adjacent work.

Install joint sealants as specified in Section 07900.

Secure louver to structure to comply with FEMA 361 and the following:

1. Substrate: CMU, Grout filled. 1500 Min. PSI
 - a. Anchor Type: 3/4 inch (19 mm) diameter Hilti Kwik Bolt III Expansion Anchor.
 - b. Spacing: 8 inches (203 mm) maximum on center and 3 inches (176 mm) from ends.
 - c. Embedment: 4-3/4 inches (121 mm).
 - d. Edge Distance: 4 inches (102 mm).
2. Substrate: Steel or Aluminum Frame.
 - a. Anchor Type: 5/8 inch (16 mm) diameter Hilti Kwik Bolt Expansion Anchor.
 - b. Spacing: 8 inches (203 mm) maximum on center and 3 inches (176 mm) from ends.
 - c. Embedment: 4 inches (102 mm).
 - d. Edge Distance: 2 inches (51 mm).

CLEANING

Clean louver surfaces in accordance with manufacturer's instructions.

Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION 10201



ZGOUVAS, EIRING & ASSOCIATES
CONSULTING ENGINEERS, INC.

HVAC Addendum Big Spring Lake School

September 13, 2018

1. Refer to the specifications Section 15700-33, Para. 18.9. The outdoor louvered grille with 2" frame is not required. See Architectural plans and specifications for required louvers. Louvers are furnished and installed by the General Contractor.
2. Refer to the Plans, Sheet M-2, Wall Mounted Packaged Heat Pump Units Schedule, Note #6, Clarification:

Indoor mounted units basis of design shall be MarvAir Series Scholar III. Outdoor mounted units basis of design shall be Marvair Series Classic. Characteristics for all units shall be as specified.

END OF ADDENDUM

