



818 S. FLORES ST. SAN ANTONIO, TEXAS 78204 www.saha.org

Procurement Department

## ADDENDUM # 2

To: 1006-909-23-3240

RFQ for: Remodeling & Renovations at Kenwood, Hermosa & Madonna Apartments

**Please make the following change to the specifications:**

Please add the attached Specification pages to Attachment F

Add the following section to **Section 3: Scope of Work**

**3.23 Training & Operation Manuals:** Where any equipment or components are changed, replaced, modified or newly installed the Contractor shall provide adequate training in the operation of the of the system to property maintenance and management staff and provide any manuals, warranty cards and parts lists related to the equipment to the Property Manager. If necessary the Contractor will develop and provide written operating instructions where no printed materials are provided by the manufacturer.

By: *Charles R Bode*  
Charles Bode Asst. Director of Procurement

Date: June 30, 2010

## SECTION 01035 - MODIFICATION PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
- B. In the event of conflicts or discrepancies among the Contract Documents, the most stringent requirements, the better quality or greater quantity of Work shall govern or be provided in accordance with Architect's interpretation.

#### 1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing contract modifications.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
  - 1. Division 1 Section "Allowances" for procedural requirements governing the handling and processing of allowances.
  - 2. Division 1 Section "Submittals" for requirements for the Contractor's Construction Schedule.
  - 3. Division 1 Section "Applications for Payment" for administrative procedures governing Applications for Payment.
  - 4. Division 1 Section "Product Substitutions" for administrative procedures for handling requests for substitutions made after award of the Contract.
  - 5. Division 1 Section "Contractor's Requirements" for requirements that apply to the overall execution and completion of the Work and is the contractor's sole responsibility to perform or to assign such requirements to the Subcontractor and to enforce the performance of his assignments of the Work in compliance with provisions of the Contract Documents

#### 1.3 MINOR CHANGES IN THE WORK

- A. The Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or Contract Time, on the Owner's Standard Supplemental Instructions form or the AIA's standard forms.

#### 1.4 CHANGE ORDER PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: The Architect will issue a detailed description of proposed changes in the Work that will require adjustment to the Contract Sum or Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
  - 1. Proposal requests issued by the Architect are for information only. Do not consider them as an instruction either to stop work in progress or to execute the proposed change.
  - 2. Within a reasonable time of receipt of a proposal request, the Contractor shall submit a written proposal for an equitable adjustment in the form of an itemized breakdown of all increases and

decreases in the cost of the Work in the following detail or in form acceptable to the Architect to execute the change for the Owner's review.

- a. Direct Cost:
  - (1) Materials (list individual items, quantities of products required and unit costs of each, with the total amount of purchases to be made) in sufficient detail to substantiate quantities;
  - (2) Transportation and delivery cost associated with the material;
  - (3) Labor Breakdown by hour or unit cost (identified with specific work to be exclusively necessary for the change; Cost for preparation and cost to performed);
  - (4) Cost of construction equipment or revision to shop drawings resulting from the change;
  - (5) Cost of insurance such as Worker's Compensation and Liability Insurance;
  - (6) Applicable taxes and employment taxes under FICA and FUTA;
  - (7) Bond Cost, if the size of change warrants revision;
  - (8) Amounts of any trade discounts.
- b. Indirect Cost; costs that may include overhead, general and administrative expenses and fringe benefits. Indirect cost shall not exceed the limits established within the Contract Documents. The Contractor shall not be allowed a profit on, not normally treated as a direct costs. Equitable adjustments for deleted work shall include a credit for indirect costs. On proposals covering increases and decreases in the amount of the contact, the application of indirect cost shall be on the net change in the indirect cost for the Contractor and Subcontractor performing the work.
- c. Profit; the amount as negotiated between the Owner and Contractor, varying according to the nature, extent and complexity of the work required by the change, not exceeding the limits established within the Contract Documents for the Contractor and Subcontractor. Equitable adjustments for deleted work shall include a credit for profit. On proposals covering increases and decreases in the amount of the contact, the application of indirect cost shall be on the net change in the profit for the Contractor and Subcontractor performing the work.
- d. The Contractor shall include in the proposal any request for time extension, and shall include sufficient information to justify the request and dates to demonstrate whether and to what extent the change will delay the completion of the Work in its entirety.

B. Contractor-Initiated Proposals: When latent or unforeseen conditions require modifications to the Contract, the Contractor may propose changes by submitting a written request for a change to the Architect. The proposal request shall be in a form acceptable to the Architect and Owner for review and include of an itemized breakdown of all increases and decreases in the cost of the Work in sufficient detail.

1. Include a statement outlining the reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and Contract Time.
2. Submit itemized breakdown of all increases and decreases in the cost of the Work in the following detail:
  - a. Direct Cost:
    - (1) Materials (list individual items, quantities of products required and unit costs of each, with the total amount of purchases to be made) in sufficient detail to substantiate quantities;
    - (2) Transportation and delivery cost associated with the material;
    - (3) Labor Breakdown by hour or unit cost (identified with specific work to be exclusively necessary for the change; Cost for preparation and cost to performed);

- (4) Cost of construction equipment or revision to shop drawings resulting from the change;
      - (5) Cost of insurance such as Worker's Compensation and Liability Insurance;
      - (6) Applicable taxes and employment taxes under FICA and FUTA
      - (7) Bond Cost, if the size of change warrants revision.
      - (8) Amounts of any trade discounts.
    - b. Indirect Cost; costs that may include overhead, general and administrative expenses and fringe benefits. Indirect cost shall not exceed the limits established within the Contract Documents. The Contractor shall not be allowed a profit on, not normally treated as a direct costs. Equitable adjustments for deleted work shall include a credit for indirect costs. On proposals covering increases and decreases in the amount of the contact, the application of indirect cost shall be on the net change in the indirect cost for the Contractor and Subcontractor performing the work.
    - c. Profit; the amount as negotiated between the Owner and Contractor, varying according to the nature, extent and complexity of the work required by the change, not exceeding the limits established within the Contract Documents for the Contractor and Subcontractor. Equitable adjustments for deleted work shall include a credit for profit. On proposals covering increases and decreases in the amount of the contact, the application of indirect cost shall be on the net change in the profit for the Contractor and Subcontractor performing the work.
    - d. The Contractor shall include in the proposal any request for time extension, and shall include sufficient information to justify the request and dates to demonstrate whether and to what extent the change will delay the completion of the Work in its entirety.
  3. Comply with requirements in Section "Product Substitutions" if the proposed change requires substitution of one product or system for a product or system specified.
- C. Proposal Request Form: Use the AIA standard forms for Change Order Proposal Requests.

## 1.5 ALLOWANCES

- A. Allowance Adjustment: For allowance-cost adjustment, base each Change Order Proposal on the difference between the actual purchase amount and the allowance, multiplied by the final measurement of work-in-place. Where applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
1. Include installation costs in the purchase amount only where indicated as part of the allowance.
  2. When requested, prepare explanations and documentation to substantiate the margins claimed.
  3. The Owner reserves the right to establish the actual quantity of work-in-place by independent quantity survey, measure, or count.
- B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or the Contractor's handling, labor, installation, overhead, and profit. Submit claims within 21 days of receipt of the Change Order or Construction Change Directive authorizing work to proceed. The Owner will reject claims submitted later than 21 days.
1. Do not include the Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in Contract Documents.
  2. No change to the Contractor's indirect expense is permitted for selection of higher or lower-priced materials or systems of the same scope and nature as originally indicated.

#### 1.6 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: When the Owner and the Contractor disagree on the terms of a Proposal Request, the Architect may issue a Construction Change Directive on the standard AIA form. The Construction Change Directive instructs the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
  - 1. The Construction Change Directive contains a complete description of the change in the Work. It also designates the method to be followed to determine change in the Contract Sum or Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
  - 1. After completion of the change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

#### 1.7 CHANGE ORDER PROCEDURES

- A. Upon the Owner's approval of a Proposal Request, the Architect will issue a Change Order for signatures of the Owner and the Contractor on the standard AIA form.
- B. The FINAL approval for ALL change orders rests solely with SAHA's Contracting Officer.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01035

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## SECTION 08141 - FLUSH WOOD DOORS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. In the event of conflicts or discrepancies among the Contract Documents, the most stringent requirements, the better quality or greater quantity of Work shall govern or be provided in accordance with Architect's interpretation.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Solid-core doors with **wood-veneer** faces.
- B. Related Sections:
  - 1. Division 06 Section "**Interior Finish Carpentry**" for wood door frames.
  - 2. Division 06 Section "**Interior Architectural Woodwork**" for requirements for veneers from the same flitches for both flush wood doors and wood paneling.
  - 3. Division 08 Section "Glazing" for glass view panels in flush wood doors.
  - 4. Division 09 Sections "**Interior Painting**" and "**Staining and Transparent Finishing**" for field finishing doors.

#### 1.3 SUBMITTALS

- A. Product Data: For each type of door indicated. Include details of core and edge construction and trim for openings. **Include factory-finishing specifications.**
- B. Shop Drawings: Indicate location, size, and hand of each door; elevation of each kind of door; construction details not covered in Product Data; location and extent of hardware blocking; and other pertinent data.
  - 1. Indicate dimensions and locations of mortises and holes for hardware.
  - 2. Indicate dimensions and locations of cutouts.
  - 3. Indicate requirements for veneer matching.
  - 4. Indicate doors to be factory finished and finish requirements.
  - 5. Indicate fire-protection ratings for fire-rated doors.
- C. Samples for Initial Selection: For **factory-finished doors**.
- D. Samples for Verification:
  - 1. Plastic laminate, **6 inches (150 mm)** square, for each color, texture, and pattern selected.

2. Corner sections of doors, approximately **8 by 10 inches (200 by 250 mm)**, with door faces and edges representing actual materials to be used.
    - a. Provide samples for each species of veneer and solid lumber required.
    - b. Provide samples for each color, texture, and pattern of plastic laminate required.
    - c. Finish veneer-faced door samples with same materials proposed for factory-finished doors.
  3. Louver blade and frame sections, **6 inches (150 mm)** long, for each material and finish specified.
  4. Frames for light openings, **6 inches (150 mm)** long, for each material, type, and finish required.
- E. Warranty: Sample of special warranty.

#### 1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A qualified manufacturer that is certified for chain of custody by an FSC-accredited certification body.
- B. Source Limitations: Obtain flush wood doors **and wood paneling** from single manufacturer.
- C. Owner's Product Source Limitations: Manufactured goods used in this project will be and/or have been produced in the United States in compliance with the follow requirements.
  1. Buy American Requirements: The Contractor hereby represents and warrants to and for the benefit of SAHA and HUD that (a) The contractor has reviewed and understands the Buy American Requirement, (b) all of the iron, steel, and manufactured goods used in the project will be and/or have been produced in the United States in a manner that complies with the Buy American Requirement, unless an exception of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support an exception of the But American Requirement, as may be requested by SAHA or HUD.
- D. Fire-Rated Wood Doors: Doors complying with NFPA 80 that are listed and labeled by a qualified testing agency, for fire-protection ratings indicated, based on testing at **positive pressure** according to **NFPA 252, UBC Standard 7-2 or UL 10B**.
  1. Oversize Fire-Rated Door Assemblies: For units exceeding sizes of tested assemblies, provide certification by a qualified testing agency that doors comply with standard construction requirements for tested and labeled fire-rated door assemblies except for size.
- E. Preinstallation Conference: Conduct conference at **Project site**.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Comply with requirements of referenced standard and manufacturer's written instructions.
- B. Package doors individually in **plastic bags or cardboard cartons**.

- C. Mark each door on **top and** bottom rail with opening number used on Shop Drawings.

## 1.6 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install doors until spaces are enclosed and weathertight, wet work in spaces is complete and dry, and HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during the remainder of the construction period.
- B. Environmental Limitations: Do not deliver or install doors until spaces are enclosed and weathertight, wet work in spaces is complete and dry, and HVAC system is operating and maintaining temperature between **60 and 90 deg F (16 and 32 deg C)** and relative humidity at operating levels percent during the remainder of the construction period.

## 1.7 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace doors that fail in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Warping (bow, cup, or twist) more than **1/4 inch (6.4 mm)** in a **42-by-84-inch (1067-by-2134-mm)** section.
    - b. Telegraphing of core construction in face veneers exceeding **0.01 inch in a 3-inch (0.25 mm in a 76.2-mm)** span.
  - 2. Warranty shall also include installation and finishing that may be required due to repair or replacement of defective doors.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, **provide products by one of the following:**
  - 1. Algoma Hardwoods, Inc.
  - 2. Ampco, Inc.
  - 3. Buell Door Company Inc.
  - 4. Chappell Door Co.
  - 5. Eagle Plywood & Door Manufacturing, Inc.
  - 6. Eggers Industries.
  - 7. Graham; an Assa Abloy Group company.
  - 8. Haley Brothers, Inc.
  - 9. Ideal Architectural Doors & Plywood.
  - 10. Ipik Door Company.
  - 11. Lambton Doors.
  - 12. Marlite.

13. Marshfield Door Systems, Inc.
14. Mohawk Flush Doors, Inc.; a Masonite company.
15. Oshkosh Architectural Door Company.
16. Poncraft Door Company.
17. Vancouver Door Company.
18. VT Industries Inc.

## 2.2 DOOR CONSTRUCTION, GENERAL

- A. Low-Emitting Materials: Provide doors made with adhesives and composite wood products that do not contain urea formaldehyde.
- B. WDMA I.S.1-A Performance Grade: **Extra Heavy Duty**.
- C. Particleboard-Core Doors:
  1. Particleboard: ANSI A208.1, **Grade LD-1**.
  2. Blocking: Provide wood blocking in particleboard-core doors **as follows**:
    - a. **5-inch (125-mm)** top-rail blocking, in doors indicated to have closers.
    - b. **5-inch (125-mm)** bottom-rail blocking, in exterior doors and doors indicated to have kick, mop, or armor plates.
- D. Fire-Protection-Rated Doors: Provide core specified or mineral core as needed to provide fire-protection rating indicated.
  1. Edge Construction: Provide edge construction with intumescent seals concealed by outer stile. Comply with specified requirements for exposed edges.
  2. Pairs: Provide fire-retardant stiles that are listed and labeled for applications indicated without formed-steel edges and astragals. **Provide stiles with concealed intumescent seals.** Comply with specified requirements for exposed edges.
  3. Pairs: Provide formed-steel edges and astragals **with intumescent seals**.
    - a. Finish steel edges and astragals with baked enamel **same color as doors**.
    - b. Finish steel edges and astragals to match door hardware (locksets or exit devices).

## 2.3 VENEERED-FACED DOORS FOR TRANSPARENT FINISH

- A. Interior Solid-Core Doors:
  1. Grade: **Premium, with Grade A faces**.
  2. Species: **Select white birch**.
  3. Cut: **Rotary cut**.
  4. Match between Veneer Leaves: **Book match**.
  5. Assembly of Veneer Leaves on Door Faces: **Balance match**.
  6. Pair and Set Match: Provide for doors hung in same opening **or separated only by mullions**.
  7. Room Match: Match door faces within each separate room or area of building. Corridor-door faces do not need to match where they are separated by **20 feet (6 m)]** or more.

8. Room Match: Provide door faces of compatible color and grain within each separate room or area of building.
9. Blueprint Match: Where indicated, provide doors with faces produced from same flitches as adjacent wood paneling and arranged to provide blueprint match with wood paneling. Comply with requirements in **Division 06 Section "Interior Architectural Woodwork."**
10. Exposed Vertical **and Top Edges: Same species as faces.**
11. Core: **Particleboard.**
12. Construction: **Five** plies. Stiles and rails are bonded to core, then entire unit abrasive planed before veneering.
13. Construction: Seven plies, either bonded or nonbonded construction.
14. WDMA I.S.1-A Performance Grade: **Heavy Duty.**

## 2.4 PLASTIC-LAMINATE-FACED DOORS

### A. Interior Solid-Core Doors:

1. Grade: **Premium.**
2. Plastic-Laminate Faces: High-pressure decorative laminates complying with NEMA LD 3.
3. Colors, Patterns, and Finishes: **As selected by Architect from laminate manufacturer's full range of products.**
4. Exposed Vertical **and Top Edges: Plastic laminate that matches faces, applied before faces.**
5. Core: **Particleboard.**
6. Construction: Five plies. Stiles and rails are bonded to core, then entire unit abrasive planed before faces and crossbands are applied. **Faces are bonded to core using a hot press.**
7. WDMA I.S.1-A Performance Grade: **Extra Heavy Duty.**

## 2.5 LOUVERS AND LIGHT FRAMES

### A. Wood Beads for Light Openings in Wood Doors: Provide manufacturer's standard wood beads as follows unless otherwise indicated.

1. Wood Species: **Same species as door faces.**
2. Profile: **Recessed tapered beads.**

## 2.6 FABRICATION

### A. Factory fit doors to suit frame-opening sizes indicated. Comply with clearance requirements of referenced quality standard for fitting unless otherwise indicated.

1. Comply with requirements in NFPA 80 for fire-rated doors.

### B. Factory machine doors for hardware that is not surface applied. Locate hardware to comply with DHI-WDHS-3. Comply with final hardware schedules, door frame Shop Drawings, DHI A115-W series standards, and hardware templates.

1. Coordinate with hardware mortises in metal frames to verify dimensions and alignment before factory machining.
  2. Metal Astragals: Factory machine astragals and formed-steel edges for hardware for pairs of fire-rated doors.
- C. Openings: Cut and trim openings through doors in factory.
1. Light Openings: Trim openings with moldings of material and profile indicated.
  2. Glazing: Factory install glazing in doors indicated to be factory finished. Comply with applicable requirements in Division 08 Section "Glazing."
- D. Exterior Doors: Factory treat exterior doors with water repellent after fabrication has been completed but before **shop priming**.
1. Flash top of outswinging doors (with manufacturer's standard metal flashing).

## 2.7 SHOP PRIMING

- A. Doors for Transparent Finish: Shop prime doors with stain (if required), other required pretreatments, and first coat of finish as specified in Division 09 Section "**Staining and Transparent Finishing**." Seal all four edges, edges of cutouts, and mortises with first coat of finish.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine doors and installed door frames before hanging doors.
1. Verify that frames comply with indicated requirements for type, size, location, and swing characteristics and have been installed with level heads and plumb jambs.
  2. Reject doors with defects.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

- A. Hardware: For installation, see Division 08 Section "Door Hardware."
- B. Installation Instructions: Install doors to comply with manufacturer's written instructions and the referenced quality standard, and as indicated.
1. Install fire-rated doors in corresponding fire-rated frames according to NFPA 80.
- C. Job-Fitted Doors: Align and fit doors in frames with uniform clearances and bevels as indicated below; do not trim stiles and rails in excess of limits set by manufacturer or permitted for fire-rated doors. Machine doors for hardware. Seal edges of doors, edges of cutouts, and mortises after fitting and machining.

1. Clearances: Provide **1/8 inch (3.2 mm)** at heads, jambs, and between pairs of doors. Provide **1/8 inch (3.2 mm)** from bottom of door to top of decorative floor finish or covering unless otherwise indicated. Where threshold is shown or scheduled, provide **1/4 inch (6.4 mm)** from bottom of door to top of threshold unless otherwise indicated.
  - a. Comply with NFPA 80 for fire-rated doors.
2. Bevel non-fire-rated doors **1/8 inch in 2 inches (3-1/2 degrees)** at lock and hinge edges.
3. Bevel fire-rated doors **1/8 inch in 2 inches (3-1/2 degrees)** at lock edge; trim stiles and rails only to extent permitted by labeling agency.

D. Factory-Fitted Doors: Align in frames for uniform clearance at each edge.

### 3.3 ADJUSTING

- A. Operation: Rehang or replace doors that do not swing or operate freely.
- B. Finished Doors: Replace doors that are damaged or that do not comply with requirements. Doors may be repaired or refinished if work complies with requirements and shows no evidence of repair or refinishing.

END OF SECTION 081416

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## SECTION 08311 - ACCESS DOORS AND FRAMES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. In the event of conflicts or discrepancies among the Contract Documents, the most stringent requirements, the better quality or greater quantity of Work shall govern or be provided in accordance with Architect's interpretation.

#### 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Access doors and frames for walls and ceilings.
- B. Related Sections include the following:
  - 1. Division 08 Section "Door Hardware" for mortise or rim cylinder locks and master keying.
  - 2. Division 09 Section "Acoustical Tile Ceilings" for suspended acoustical tile ceilings.

#### 1.3 SUBMITTALS

- A. Product Data: For each type of access door and frame indicated. Include construction details, **fire ratings**, materials, individual components and profiles, and finishes.
- B. Shop Drawings: Show fabrication and installation details of access doors and frames for each type of substrate. Include plans, elevations, sections, details, and attachments to other work.
- C. Samples: For each door face material, at least **3 by 5 inches (75 by 125 mm)** in size, in specified finish.
- D. Access Door and Frame Schedule: Provide complete access door and frame schedule, including types, locations, sizes, latching or locking provisions, and other data pertinent to installation.
- E. Ceiling Coordination Drawings: Reflected ceiling plans, drawn to scale, on which ceiling-mounted items including access doors and frames, lighting fixtures, diffusers, grilles, speakers, sprinklers, and special trim are shown and coordinated with each other.

#### 1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain access door(s) and frame(s) through one source from a single manufacturer.

- B. Owner's Product Source Limitations: Manufactured goods used in this project will be and/or have been produced in the United States in compliance with the follow requirements.
  - 1. Buy American Requirements: The Contractor hereby represents and warrants to and for the benefit of SAHA and HUD that (a) The contractor has reviewed and understands the Buy American Requirement, (b) all of the iron, steel, and manufactured goods used in the project will be and/or have been produced in the United States in a manner that complies with the Buy American Requirement, unless an exception of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support an exception of the Buy American Requirement, as may be requested by SAHA or HUD.
- C. Fire-Rated Access Doors and Frames: Units complying with NFPA 80 that are identical to access door and frame assemblies tested for fire-test-response characteristics per the following test method and that are listed and labeled by UL or another testing and inspecting agency acceptable to authorities having jurisdiction:
  - 1. **NFPA 252 or UL 10B** for vertical access doors and frames.
  - 2. **ASTM E 119 or UL 263** for horizontal access doors and frames.
- D. Size Variations: Obtain Architect's acceptance of manufacturer's standard-size units, which may vary slightly from sizes indicated.

## 1.5 COORDINATION

- A. Verification: Determine specific locations and sizes for access doors needed to gain access to concealed plumbing, mechanical, or other concealed work, and indicate in the schedule specified in "Submittals" Article.

## PART 2 - PRODUCTS

### 2.1 STEEL MATERIALS

- A. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.
  - 1. ASTM A 123/A 123M, for galvanizing steel and iron products.
  - 2. ASTM A 153/A 153M, for galvanizing steel and iron hardware.
- B. Rolled-Steel Floor Plate: ASTM A 786/A 786M, rolled from plate complying with ASTM A 36/A 36M or ASTM A 283/A 283M, Grade C or D.
  - 1. ASTM A 123/A 123M, for galvanizing steel and iron products
  - 2. ASTM A 153/A 153M, for galvanizing steel and iron hardware.
- C. Steel Sheet: **Uncoated or electrolytic zinc-coated, ASTM A 591/A 591M with** cold-rolled steel sheet substrate complying with ASTM A 1008/A 1008M, Commercial Steel (CS), exposed.

- D. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Commercial Steel (CS) with A60 (ZF180) zinc-iron-alloy (galvannealed) coating or G60 (Z180) mill-phosphatized zinc coating; stretcher-leveled standard of flatness; with minimum thickness indicated representing specified thickness according to ASTM A 924/A 924M.
- E. Steel Finishes: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
  - 1. Surface Preparation for Steel Sheet: Clean surfaces to comply with SSPC-SP 1, "Solvent Cleaning," to remove dirt, oil, grease, or other contaminants that could impair paint bond. Remove mill scale and rust, if present, from uncoated steel, complying with SSPC-SP 5/NACE No. 1, "White Metal Blast Cleaning," or SSPC-SP 8, "Pickling."
  - 2. Surface Preparation for Metallic-Coated Steel Sheet: Clean surfaces with nonpetroleum solvent so surfaces are free of oil and other contaminants. After cleaning, apply a conversion coating suited to the organic coating to be applied over it. Clean welds, mechanical connections, and abraded areas, and apply galvanizing repair paint specified below to comply with ASTM A 780.
    - a. Galvanizing Repair Paint: High-zinc-dust-content paint for regalvanizing welds in steel, complying with SSPC-Paint 20.
  - 3. Factory-Primed Finish: Apply shop primer immediately after cleaning and pretreating.
  - 4. Baked-Enamel Finish: Immediately after cleaning and pretreating, apply manufacturer's standard two-coat, baked-enamel finish consisting of prime coat and thermosetting topcoat. Comply with paint manufacturer's written instructions for applying and baking to achieve a minimum dry film thickness of 2 mils (0.05 mm).
  - 5. Powder-Coat Finish: Immediately after cleaning and pretreating, apply manufacturer's standard thermosetting polyester or acrylic urethane powder coating with cured-film thickness not less than 1.5 mils (0.04 mm). Prepare, treat, and coat metal to comply with resin manufacturer's written instructions.
- F. Drywall Beads: Edge trim formed from 0.0299-inch (0.76-mm) zinc-coated steel sheet formed to receive joint compound and in size to suit thickness of gypsum board.
- G. Plaster Beads: Casing bead formed from 0.0299-inch (0.76-mm) zinc-coated steel sheet with flange formed out of expanded metal lath and in size to suit thickness of plaster.

## 2.2 ALUMINUM MATERIALS

- A. Aluminum Extrusions: ASTM B 221 (ASTM B 221M), Alloy 6063-T6.
  - 1. Mill finish, AA-M10 (Mechanical Finish: as fabricated, unspecified).
- B. Aluminum-Alloy Rolled Tread Plate: ASTM B 632/B 632M, Alloy 6061-T6.
  - 1. Mill finish, AA-M10 (Mechanical Finish: as fabricated, unspecified).
- C. Aluminum Sheet: ASTM B 209 (ASTM B 209M), alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated, and with not less than strength and durability properties of Alloy 5005-H15; with minimum sheet thickness indicated representing specified thickness according to ANSI H35.2 (ANSI H35.2(M)).

1. Mill Finish: AA-M10 (Mechanical Finish: as fabricated, unspecified).
2. Class II, Clear Anodic Finish: AA-M12C22A31 (Mechanical Finish: nonspecular as fabricated; Chemical Finish: etched, medium matte; Anodic Coating: Architectural Class II, clear coating 0.010 mm or thicker) complying with AAMA 611.
3. Class I, Clear Anodic Finish: AA-M12C22A41 (Mechanical Finish: nonspecular as fabricated; Chemical Finish: etched, medium matte; Anodic Coating: Architectural Class I, clear coating 0.018 mm or thicker) complying with AAMA 611.
4. Baked-Enamel Finish: AA-C12C42R1x (Chemical Finish: cleaned with inhibited chemicals; Chemical Finish: acid-chromate-fluoride-phosphate conversion coating; Organic Coating: as specified below). Apply baked enamel complying with paint manufacturer's written specifications for cleaning, conversion coating, and painting.

### 2.3 ACCESS DOORS AND FRAMES FOR WALLS AND CEILINGS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
- B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Acudor Products, Inc.
2. Babcock-Davis; A Cierra Products Co.
3. Bar-Co, Inc. Div.; Alfab, Inc.
4. Cendrex Inc.
5. Dur-Red Products.
6. Elmdor/Stoneman; Div. of Acorn Engineering Co.
7. Jensen Industries.
8. J. L. Industries, Inc.
9. Karp Associates, Inc.
10. Larsen's Manufacturing Company.
11. MIFAB, Inc.
12. Milcor Inc.
13. Nystrom, Inc.
14. Williams Bros. Corporation of America (The).

- C. Flush Access Doors and Frames with Exposed Trim: Fabricated from **steel** sheet.

1. Locations: **Wall and ceiling** surfaces.
2. Door: Minimum [**0.060-inch- (1.5-mm-)**] thick sheet metal, set flush with exposed face flange of frame.
3. Frame: Minimum **0.060-inch- (1.5-mm-)** thick sheet metal with **1-inch- (25-mm-)** wide, surface-mounted trim.
4. Hinges: **Continuous piano**.
5. Latch: **Cam latch** operated by **flush key** with interior release.
6. Lock: **Cylinder**.
  - a. Lock Preparation: Prepare door panel to accept cylinder specified in Division 08 Section "**Door Hardware (Scheduled by Describing Products)**."

- D. Flush Access Doors and Trimless Frames: Fabricated from **steel** sheet.

1. Locations: **Wall and ceiling** surfaces.
  2. Door: Minimum **0.060-inch- (1.5-mm-)** thick sheet metal, set flush with surrounding finish surfaces.
  3. Frame: Minimum **0.060-inch- (1.5-mm-)** thick sheet metal with **drywall** or **plaster** bead flange as required.
  4. Hinges: **Continuous piano**.
  5. Latch: **Cam latch** operated by **flush key** with interior release.
  6. Lock: **Cylinder**.
    - a. Lock Preparation: Prepare door panel to accept cylinder specified in Division 08 Section "**Door Hardware (Scheduled by Describing Products)**."
- E. Recessed Access Doors and Trimless Frames: Fabricated from **steel** sheet.
1. Locations: **Wall and ceiling** surfaces.
  2. Door: Minimum **0.060-inch- (1.5-mm-)** thick sheet metal in the form of a pan recessed **5/8 inch (16 mm)** for **gypsum board, plaster** or **acoustical tile** infill as required.
  3. Frame: Minimum **0.060-inch- (1.5-mm-)** thick sheet metal **with drywall bead for gypsum board surfaces, with plaster bead for plaster surfaces or designed for insertion into acoustical tile ceiling** as required.
  4. Hinges: **Concealed pivoting rod hinge**.
  5. Latch: **Cam latch** operated by **flush key** with interior release.
  6. Lock: **Cylinder**.
    - a. Lock Preparation: Prepare door panel to accept cylinder specified in Division 08 Section "**Door Hardware (Scheduled by Describing Products)**."
- F. Aluminum Flush Access Doors and Frames with Exposed Trim: Fabricated from aluminum sheet and extruded-aluminum shapes.
1. Locations: **Wall and ceiling** surfaces.
  2. Door: Minimum [**0.080-inch- (2.0-mm-)**] thick aluminum sheet.
  3. Frame: Minimum [**0.060-inch- (1.5-mm-)**] thick extruded aluminum with **1-1/4-inch- (32-mm-)** wide rolled flange.
  4. Hinges: Concealed continuous aluminum.
  5. Latch: Screwdriver-operated cam latch.
- G. Fire-Rated, Insulated, Flush Access Doors and Frames with Exposed Trim: Fabricated from **steel** sheet.
1. Locations: **Wall and ceiling** surfaces.
  2. Fire-Resistance Rating: Not less than **that of adjacent construction**.
  3. Temperature Rise Rating: **250 deg F (139 deg C)** at the end of 30 minutes.
  4. Door: Flush panel with a core of mineral-fiber insulation enclosed in sheet metal with a minimum thickness of **0.036 inch (0.9 mm)**.
  5. Frame: Minimum [**0.060-inch- (1.5-mm-)**] thick sheet metal with **1-inch- (25-mm-)** wide, surface-mounted trim.
  6. Hinges: **Continuous piano**.
  7. Automatic Closer: Spring type.
  8. Latch: Self-latching device operated by **flush key** with interior release.
  9. Lock: Self-latching device with **cylinder** lock.

- a. Lock Preparation: Prepare door panel to accept cylinder specified in Division 08 Section "**Door Hardware (Scheduled by Describing Products).**"
- H. Fire-Rated, Insulated, Flush Access Doors and Trimless Frames: Fabricated from **steel** sheet.
1. Locations: **Wall and ceiling** surfaces.
  2. Fire-Resistance Rating: Not less than **that of adjacent construction**.
  3. Temperature Rise Rating: **250 deg F (139 deg C)** at the end of 30 minutes.
  4. Door: Flush panel with a core of mineral-fiber insulation enclosed in sheet metal with a minimum thickness of [**0.036 inch (0.9 mm)**].
  5. Frame: Minimum [**0.060-inch- (1.5-mm-)**] thick sheet metal with **drywall** or **plaster** bead as required.
  6. Hinges: **Continuous piano**.
  7. Automatic Closer: Spring type.
  8. Latch: Self-latching device operated by **flush key** with interior release.
  9. Lock: Self-latching device with **cylinder** lock.
- a. Lock Preparation: Prepare door panel to accept cylinder specified in Division 08 Section "**Door Hardware (Scheduled by Describing Products).**"
- I. Fire Rated, Uninsulated, Flush Access Doors and Frames with Exposed Trim: Fabricated from **steel** sheet.
1. Locations: Wall surfaces.
  2. Fire-Resistance Rating: Not less than **that of adjacent construction**.
  3. Door: Minimum **0.060-inch- (1.5-mm-)** thick sheet metal, flush construction.
  4. Frame: Minimum **0.060-inch- (1.5-mm-)** thick sheet metal with **1-inch- (25-mm-)** wide, surface-mounted trim.
  5. Hinges: **Continuous piano**.
  6. Automatic Closer: Spring type.
  7. Latch: Self-latching device operated by **flush key** with interior release.
  8. Lock: Self-latching device with **cylinder** lock.
- a. Lock Preparation: Prepare door panel to accept cylinder specified in Division 08 Section "**Door Hardware (Scheduled by Describing Products).**"

## 2.4 FABRICATION

- A. General: Provide access door and frame assemblies manufactured as integral units ready for installation.
- B. Metal Surfaces: For metal surfaces exposed to view in the completed Work, provide materials with smooth, flat surfaces without blemishes. Do not use materials with exposed pitting, seam marks, roller marks, rolled trade names, or roughness.
- C. Doors and Frames: Grind exposed welds smooth and flush with adjacent surfaces. Furnish attachment devices and fasteners of type required to secure access panels to types of supports indicated.
  1. Exposed Flanges: **Nominal 1 to 1-1/2 inches (25 to 38 mm) wide around perimeter of frame.**

2. For trimless frames with drywall bead, provide edge trim for **gypsum board and gypsum base** securely attached to perimeter of frames.
  3. For trimless frames with plaster bead for full-bed plaster applications, provide zinc-coated expanded metal lath and exposed casing bead welded to perimeter of frames.
  4. Provide mounting holes in frames for attachment of units to metal or wood framing.
  5. Provide mounting holes in frame for attachment of masonry anchors. **Furnish adjustable metal masonry anchors.**
- D. Recessed Access Doors: Form face of panel to provide recess for application of applied finish. Reinforce panel as required to prevent buckling.
1. For recessed doors with plaster infill, provide self-furring expanded metal lath attached to door panel.
- E. Latching Mechanisms: Furnish number required to hold doors in flush, smooth plane when closed.
1. For cylinder lock, furnish two keys per lock and key all locks alike.
  2. For recessed panel doors, provide access sleeves for each locking device. Furnish plastic grommets and install in holes cut through finish.
- F. Extruded Aluminum: After fabrication, apply manufacturer's standard protective coating on aluminum that will come in contact with concrete.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Comply with manufacturer's written instructions for installing access doors and frames.
- B. Set frames accurately in position and attach securely to supports with plane of face panels aligned with adjacent finish surfaces.
- C. Install doors flush with adjacent finish surfaces or recessed to receive finish material.

#### 3.2 ADJUSTING AND CLEANING

- A. Adjust doors and hardware after installation for proper operation.
- B. Remove and replace doors and frames that are warped, bowed, or otherwise damaged.

END OF SECTION 08311