

# **SECTION 10 22 19**

## **DEMOUNTABLE WALL SYSTEM**

### **PART 1 – GENERAL**

#### **1.1. RELATED SECTIONS**

- A. Section 013518 – LEED Requirements and Procedures
- B. Section 055000 – Metal Fabrication
- C. Section 061053 – Miscellaneous Rough Carpentry – for concealed blocking
- D. Section 087110 – Door Hardware
- E. Section 088050 – Glazing
- F. Section 092200 – Support for Gypsum Board Systems
- G. Section 096000 – Flooring
- H. Section 098000 – Acoustical Treatment

#### **1.2. PRE-INSTALLATION CONFERENCE**

- A. Conduct conference at project site in accordance with Division 01 Section “Project Management and Coordination.”

#### **1.3. ACTION SUBMITTALS**

- A. Product Data Sheet: For each type of product, including door schedule.  
Copies of MSDS - Material Safety Data Sheets to be provided upon request.
- B. Shop Drawings: For Demountable and/or Movable Glass Partitions.
  - 1. Include plans, sections, elevations, details and attachments to other work.
  - 2. Indicate materials, methods of construction, attachment or anchorage details, erection diagrams of pre-assembled components, connections, explanatory notes and other information necessary for completion of work. Cross reference to design drawings and specifications.
  - 3. Lead Time: Provide the lead time duration from the date of shop drawing approval to the date of product shipment.
  - 4. Do not commence manufacturing or order materials before shop drawings are reviewed and accepted by professional of record.
- C. Samples for Verification: For each type of the following:
  - 1. Linear Trim: 12” long Samples.
  - 2. Hardware and Accessories.

3. Finish Samples no less than 6" square.
4. Glazing Samples no less than 6" square.

#### **1.4. INFORMATIONAL SUBMITTALS**

- A. Coordination Drawings: Floor plans, reflected ceiling plans, and other details, drawn to scale, on which the following items are shown and coordinated with each other, using input from the installers of the items involved.
  1. Suspended-ceiling components and dimensioned ceiling-grid layout.
  2. Locations of fixed door and window mullions.
  3. Overhead bracing, seismic restraints, and related structural members.
  4. Ductwork above ceiling.
- B. Qualification Data: For Installer.
- C. Product Certificates: For each type of demountable partition.
- D. Product Test Reports: For each type of demountable-partition assembly, for tests performed by manufacturer and witnessed by a qualified testing agency.

#### **1.5. CLOSEOUT SUBMITTALS**

- A. As-Built Shop Drawings: Accurately reflecting any and all deviations from original shops due to change orders, site conditions, product limitations, or any other approved changes after original shop drawing approvals.
- B. Maintenance Data: For demountable partitions to include in maintenance manuals.
  1. Finishes for exposed trim and accessories. Include precautions for cleaning materials and methods that could be detrimental to finishes and performance. Seals, hardware, and other operating components.
- C. Product Warranty Documentation
  1. Submit manufacturer's standard limited warranty document.  
Warranty period: 5 year(s) from date of substantial completion.

#### **1.6. QUALITY ASSURANCE**

- A. Source Limitations: Obtain aluminum framed office fronts and doors from single source from single manufacturer.
- B. Manufacturer: Engage a qualified and experienced manufacturer with a minimum of 5 years successful experience providing interior office fronts and doors on projects of comparable size and scope.

- C. Installer Qualifications: Firm with 5 years experience installing selected system, and who is approved by the manufacturer for installation of the specified system.
- D. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- E. Reference Standards: Except as modified by more stringent requirements of local codes, comply with requirements of the following:
  - 1. American Architectural Manufacturers Association (AAMA)
    - a. AAMA 611.98, Voluntary specification for anodized architectural aluminum.
    - b. AAMA 2603.02, Voluntary specifications, performance requirements and test procedures for pigmented organic coatings on aluminum extrusions.
- F. Mockups: Before installing aluminum framed office fronts and doors, build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
  - 1. Remove mockups when directed.
  - 2. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

## **1.7. FIELD CONDITIONS**

- A. Finished Spaces: Do not deliver or install demountable partitions until finishes in spaces to receive them are complete, including suspended ceilings, floors, carpeting, and painting.
- B. Field Measurements: Verify demountable partition openings and storage arrangements by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- C. Maximum allowable height deviation due to floor or header level: 1/4" total height variance per 20 Linear ft.

## **PART 2 – PRODUCTS**

### **2.1 PERFORMANCE REQUIREMENTS**

- A. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
  - 1. Flame-Spread Index: 25 or less.
  - 2. Smoke-Developed Index: 450 or less.

- B. General: Provide aluminum-framed office fronts and doors of dimensions and configurations shown, complying with performance requirements indicated, based on manufacturer's testing of doors representative of those specified:
  - 1. Aluminum frames and fixed panels shall withstand gravity loads and a lateral deflection is limited to the lesser of L/175 or 3/4 inch, whichever is less, when tested under a uniformly distributed load of 5 lbs./sq. ft. (24.4 kg/sq. m) according to ASTM E 72.
  - 2. Glazing Rebates: Design glass framing system to limit lateral deflections of glass panel edges to less than 1/175 of glass-edge length or 3/4 inch (19 mm), whichever is less.
- C. Acoustical Performance: Where acoustical rating is indicated, provide demountable-partition assembly tested by a qualified testing agency for sound transmission loss performance according to ASTM E 90, calculated according to ASTM E 413, and rated for not less than the STC value indicated.
- D. Accessibility Requirements: For door hardware on doors in an accessible route, comply with the DOJ's "2010 ADA Standards for Accessible Design" ICC A117.1 and requirements of local authorities having jurisdiction.
  - 1. Provide operating devices that do not require tight grasping, pinching, or twisting of the wrist and that operate with a force of not more than 5 lbf.
  - 2. Comply with the following maximum opening-force requirements:
    - a. Interior, Non-Fire-Rated Hinged Doors: 5 lbf applied perpendicular to door.
    - b. Sliding: 5 lbf applied parallel to door at latch.
  - 3. Adjust door closer sweep periods so that, from an open position of 90 degrees, the door will take at least 5 seconds to move to a position of 12 degrees from the latch.
  - 4. Adjust spring hinges so that, from an open position of 70 degrees, the door will take at least 1.5 seconds to move to the closed position.

## 2.2 DEMOUNTABLE GLASS PARTITIONS

- A. General: Progressive demountable-partition assembly and components that are the standard products of manufacturer.
- B. Subject to requirements, provide the following:
  - 1. ZONA® 3 - Double Glazed Office Partition. Distributed by ModernfoldStyles, Inc.
- C. Acoustical Rating: STC 40-44
- D. Glass Panels: (2) Clear glass, fully tempered or laminated glass.
  - 1. Glass Thickness: Two layers of 3/8", as required to meet performance requirements.
  - 2. Glass Panel Size: Maximum 48" wide by 120" high, or as limited by access to the space by corridors, doors, receiving docks, and freight elevators.
- E. Doors: 2 1/4" thick, fully framed clear glass, fully tempered or laminated glass.
  - 1. Glass Thickness: Two layers of 1/4" glass.

2. Door Size: Maximum door size 42" x 120" or as limited by access to the space by corridors, doors, receiving docks, and freight elevators.

F. Aluminum: Alloy and temper recommended by the manufacturer for strength, corrosion resistance, and application of required finish.

1. Comply with the following:

- a. Aluminum Extrusions: ASTM B 221 (ASTM B 221M).; Alloy 6063-T5/T52
- b. Aluminum Sheet or Plate: ASTM B 209 (ASTM B 209M; Alloy 6061-T6
- c. Aluminum Bars, Rod and Wire: ASTM B 221 (ASTM B 221M); Alloy 6063-T6

## 2.3 FABRICATION

- A. Provide shop assembled panels with hardware and accessories required for a complete assembly. Provide concealed fastening devices and pressure-fit components that will not damage ceiling or floor coverings. Fabricate panels with continuous light-and-sound seals at floor, ceiling, and other locations where panels abut fixed construction.
- B. Factory prepare interior aluminum frames to receive templated mortised hardware; include cutouts, reinforcements, mortising, drilling, and tapping.
- C. Locate removable stops on the inside of spaces accessed by keyed doors.
- D. Fabricate components to allow secure installation without exposed fasteners.

## 2.4 DOOR HARDWARE

A. Pivot Hinges: BHMA A156.4, Grade 1.

Pivot Hinges: Provide top, bottom and offset pivots at each door leaf.

B. Butt Hinges: BHMA A156.1, Grade 1, radius corner. IVES 5BB1 4.5 x 4.5 Bearing Hinge.

1. Nonremovable Pins: Provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while entrance door is closed.
2. Quantities: For doors up to 87 inches high, provide three hinges per leaf. For doors more than 87 and up to 120 inches high, provide four hinges per leaf.

C. Mortise Auxiliary Locks: BHMA A156.5, Grade 1. CORBIN RUSSWIN Series ML2000, function as required.

D. Cylinders: As specified in Section 087100 "Door Hardware."

E. Operating Trim: BHMA A156.6.

F. Closers: BHMA A156.4, Grade 1, with accessories required for a complete installation, sized as required by door size, and anticipated frequency of use; adjustable to comply with field conditions and requirements for opening force.

- G. Recessed Floor Closer: BHMA A156.8, Grade 1. DORMAKABA BTS-80.
- H. Door Stops: BHMA A156.16, Grade 1, floor or wall mounted, as appropriate for door location indicated, with integral rubber bumper.

## 2.5 FINISHES

- A. Finish designations prefixed by AA conform to the system established by the Aluminum Association for designating aluminum finishes.
- B. Anodized Finishes:
  - 1. Clear Anodic Finish: AAMA 611, AA-M12C22A41, Class I, 0.07 mm or thicker.
  - 2. Color Anodic Finish: AAMA 61, AA-M12C22A42/A44, Class I, 0.07 mm or thicker.
  - 3. Anodized finishes shall be fully sealed by the manufacturer or processor according to procedures recommended by the licensor of the process.
- C. Baked-Enamel Finish
  - 1. AAMA 2603 except with a minimum dry film thickness of 0.8 mils (0.02 mm).
  - 2. PPG Duracron coating. Comply with coating manufacturer's written instructions for cleaning, conversion coating, and applying and baking finish.
- D. Protect finishes on exposed surfaces by wrapping temporary protective covering before shipping.
- E. Slight variations in appearance of abutting or adjacent pieces are acceptable. Noticeable variations in the same piece are not acceptable.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Examine substrates at the site for openings to be enclosed in the work of this section. Verify the structural integrity of substrates. Verify dimensions at rough openings. Verify that substrates scheduled to provide support to office fronts and doors, are level, plumb and square, with no unevenness, bowing or bumps in the floor.
- B. Do not install the work of this section until unsatisfactory conditions are corrected. Installation of units constitutes acceptance of existing conditions.
- C. Templates and diagrams: Furnish templates, diagrams, and other data to fabricators and installers of related work, as necessary, for coordination of the adjacent finishes.

## **3.2 INSTALLATION**

- A. Install complete system in accordance with manufacturer's recommendations and written installation instructions.
- B. Provide appropriate anchorage devices to securely and rigidly fit frames into place, absolutely level, straight, plumb and square. Install frames in proper elevation, plane and location, and in proper alignment of other work.
  - 1. Installation Tolerance: Install each demountable partition so surfaces vary not more than 1/8 inch (3 mm) from the plane formed by the faces of adjacent partitions.
- C. Install frame components in the longest possible lengths; components up to 96 inches (2450mm) long must be one piece.

## **3.3 CLEANING**

- A. Remove temporary coverings and protection. Frame should be cleaned using a soft clean cloth. Use clean warm water or mild detergent. Do not use acids, alkaline or fluorides, abrasive cleaning methods may damage surfaces of frames and or panel materials. Clean prior to Owner's acceptance. Remove construction debris from project site and legally dispose of debris.
- B. Clean exposed frame surfaces promptly after installation, using cleaning methods recommended by frame manufacturer and according to AAMA 609 & 610.
- C. Touch up marred frame surfaces so touchup is not visible from a distance of 48 inches (1220 mm). Remove and replace frames with damaged finish that cannot be satisfactorily repaired.

### **3.3.1.2 PROTECTION**

- A. Institute protective measures throughout the remainder of the construction period to ensure that panels will be without damage or deterioration, other than normal weathering, at the time of substantial completion.

**END OF SECTION 10 22 19**