

## SECTION 08 35 13

### ACCORDION FOLDING DOORS

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. Section Includes:
  - 1. Accordion folding doors.
  - 2. Track and operating hardware.
- B. Related Sections;
  - 1. Structural support and backing for track.

##### 1.02 REFERENCE STANDARDS

- A. ASTM International:
  - 1. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
  - 2. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
  - 3. ASTM E413 - Classification for Rating Sound Insulation.

##### 1.03 DESIGN REQUIREMENTS

- A. Design track and anchors to support imposed loads with maximum deflection of 1/360 of span, attached to structural members indicated.

##### 1.04 PERFORMANCE REQUIREMENTS

- A. Sound Transmission Class (STC): As indicated, calculated in accordance with ASTM E413, based on tests performed in accordance with ASTM E90, on panel size of 100 square feet.

##### 1.05 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
  - 1. Coordinate Accordion folding doors details with work supporting or adjoining accordion folding doors.
  - 2. Coordinate as required for installation of cylinders in locks.
- B. [Preinstallation Meeting:]
- C. [Sequencing:]
- D. [Scheduling:]

##### 1.06 [SUSTAINABLE CHARACTERISTICS]

- A. Section 01 35 63 - Sustainability Project Requirements: Requirements for sustainable design compliance.
- B. Materials and Resources Characteristics:

1. [Recycled Content Materials: Furnish materials with maximum available recycled content including:

**SPEC NOTE** *List materials specified in this section required to have recycled content.*

a. [\_\_\_\_\_.]

2. [Regional Materials: Furnish materials extracted, processed, and manufactured within 500 miles of Project site.]

**SPEC NOTE** *List materials specified in this section required to be regional materials.*

a. [\_\_\_\_\_.]

### 1.07 SUBMITTALS

- A. Product Data.
- B. Shop Drawings: Show accordion folding door dimensions in closed and open positions, requirements of related work, and method of attachment.
- C. Samples: Vinyl fabric in manufacturer's standard size and specified range, for selection of texture, pattern, and color; other samples only as requested.
- D. Certificates: Certify compliance with specified flame spread and sound transmission class (STC) ratings.

### 1.08 [SUSTAINABLE DESIGN SUBMITTALS]

- A. Section 01 35 63 - Sustainability Project Requirements: Requirements for sustainable design submittals.
- B. Manufacturer's Certificate: Certify products meet or exceed specified sustainable design requirements.
  1. Materials Resources Certificates:
    - a. Certify source and origin for [salvaged] [and] [reused] products.
    - b. Certify recycled material content for recycled content products.
    - c. Certify source for regional materials and distance from Project site.
- C. Product Cost Data: Submit cost of products to verify compliance with Project sustainable design requirements. Exclude cost of labor and equipment to install products.
  1. Provide cost data for the following products:
    - a. [Salvage products.]
    - b. [Reused products.]
    - c. Products with recycled material content.
    - d. Regional products.

### 1.09 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience.
- B. Installer Qualifications: Company specializing in performing the work of this section with minimum 3 years documented experience.
- C. Regulatory Requirements: Vinyl fabric shall have flame spread rating of 25 or less when tested in accordance with ASTM E84.

### 1.10 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle items to prevent damage or deformation.
- B. Prior to delivery to site, identify type and size of each accordion folding door in way not to damage finish.
- C. Deliver and store packaged products in original containers with seals unbroken and labels intact until time of use.
- D. Storage and Protection:
  - 1. Store delivered products in clean, safe, dry area.
  - 2. Do not store on ground.

## **PART 2 PRODUCTS**

### **2.01 ACCORDION FOLDING DOOR**

- A. Description:
  - 1. Design: Overhead suspension without floor guides or track.
  - 2. Frame Construction: True pantograph action consisting of center double-overlap 16 gauge steel hinge plates connected vertically by 3/16 inch steel rods welded in place. Over 12 feet high, double-truss row 12-1/4 by 8-1/4 inches at top, single row at bottom, and intermediate rows approximately 42 inches on center. Trolley pins of 1/4 inch diameter high tensile alloy steel shall be encased by structural hinge plate channel.
  - 3. Sound Insulation: 22 gauge V-grooved steel panels 5-1/16 inch wide and heavy vinyl flame-resistant acoustical membrane. Each panel attached to frame with 4 steel leaf fasteners.
  - 4. Stacking Dimensions, Maximum: Width, 12-5/8 inches depth, 1-3/4 inch, per lineal foot of opening plus posts.
  - 5. Sound Transmission Class Rating (STC): Minimum 40 when tested in accordance with ASTM E90.
  - 6. Partition Finish: Vinyl fabric.
  - 7. Accessories:
    - a. Hand Pulls: As standard with manufacturer for keyed lock.
    - b. Ceiling Contact Guard (Sweep Strips) at Ceiling, Overhead Track, and Ball Bearing Carriers: As standard with manufacturer for weight and size of door.
    - c. Jambs, Meeting Posts, and Sealing Strips: As standard with manufacturer for maintenance of STC rating.
- B. Product: Modernfold Inc.'s "Modernfold Soundmaster 12M"; or equal.

### **2.02 COMPONENTS**

- A. Vinyl Fabric:
  - 1. Description: High quality pigmented resin coating, polyvinyl chloride polymer, on a heavy duty woven glass fiber backing weighing not less than 27 ounces per square yard. Fabric weight as noted, flame spread rating of 15 or less when tested in accordance with ASTM E84. Vinyl surface shall have PVF protected film (DuPont's Tedlar) for stain resistance.
  - 2. Pattern and Color: As indicated on Drawings.
- B. Hardware: Latching door handles of cast steel, satin chrome finish; lock cylinder keyed to building keying system; jamb lock and pull bars.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Examine construction to receive accordion folding doors and verify correctness of dimensions and other supporting or adjoining conditions.
- B. Do not install accordion folding doors until unsatisfactory conditions have been corrected.

### **3.02 INSTALLATION**

- A. Install accordion folding doors in accordance with manufacturer's written instructions, unless otherwise noted.
- B. Fit and align door assembly level and plumb.
- C. Install accordion folding doors square, securely anchored, free from twist and in proper alignment and relationship with adjoining and supporting work.
- D. Install track in maximum lengths placed with a minimum number of joints. Fabricate joints precisely, to produce hairline cracks.
- E. Install acoustical units with STC rating so that seals are in contact with entire perimeter when unit is in closed position, forming complete light-tight barrier.

### **3.03 ADJUSTING**

- A. Adjust accordion folding doors as necessary to assure smooth, easy, and quiet operation without warping or binding hardware for proper engagement and smooth function from stacked to full open position.
- B. Visually inspect door in fully closed position for light leaks to identify a potential acoustical leak. Adjust to achieve light tight seal.
- C. Check and readjust operating hardware so that latches engage accurately and positively without forcing and binding.
- D. Lubricate bearings and sliding parts.

### **3.04 CLEANING**

- A. Clean accordion folding door surfaces where required in accordance with manufacturer's recommendations. Avoid abrasive cleaners or solutions containing corrosive solvents.

**END OF SECTION**