

## **SECTION 102239 - FOLDING PANEL PARTITIONS**

### **PART 1 - GENERAL**

#### **0.1 SUMMARY**

- A. Section Includes: Manually operated, acoustical panel partitions.

#### **0.2 PREINSTALLATION MEETINGS**

- A. Preinstallation Conference: Conduct conference at Project site.

#### **0.3 ACTION SUBMITTALS**

- A. Product Data: For each type of product.
- B. Shop Drawings: For operable panel partitions.
  - 1. Include plans, elevations, sections, attachment details, and numbered panel installation sequence if applicable.
  - 2. Indicate stacking and operating clearances. Indicate location and installation requirements for hardware and track, blocking, and direction of travel.
- C. Samples: For each type of exposed material, finish, covering, or facing.
  - 1. Include Samples of accessories involving color selection.

#### **0.4 INFORMATIONAL SUBMITTALS**

- A. Setting Drawings: For embedded items and cutouts required in other work, including support-beam, mounting-hole template.
- B. Product Certificates: For each type of operable panel partition.
- C. Product Test Reports: For tests performed by a qualified testing agency.
- D. Sample Warranty: For manufacturer's special warranty.

#### **0.5 CLOSEOUT SUBMITTALS**

- A. Operation and Maintenance Data: For operable panel partitions to include in maintenance manuals.

#### **0.6 QUALITY ASSURANCE**

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.

#### **0.7 WARRANTY**

- A. Special Warranty: Manufacturer agrees to repair or replace components of operable panel partitions that fail in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, the following:

- a. Faulty operation of operable panel partitions.
  - b. Deterioration of metals, metal finishes, and other materials beyond normal use.
- 2. Warranty Period: 2 years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 0.1 PERFORMANCE REQUIREMENTS

- A. Acoustical Performance: Provide operable panel partitions tested by a qualified testing agency for the following acoustical properties according to test methods indicated:
  - 1. Sound-Transmission Requirements: Operable panel partition assembly tested for laboratory sound-transmission loss performance according to ASTM E 90, determined by ASTM E 413, and rated for not less than the STC indicated.
- B. Fire-Test-Response Characteristics: Provide panels with finishes complying with one of the following as determined by testing identical products by a testing and inspecting agency acceptable to authorities having jurisdiction:
  - 1. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
    - a. Flame-Spread Index: 25 or less.
    - b. Smoke-Developed Index: 450 or less.
  - 2. Fire Growth Contribution: Complying with acceptance criteria of local code and authorities having jurisdiction when tested according to NFPA 265 Method B Protocol or NFPA 286.

### 0.2 OPERABLE ACOUSTICAL PANELS

- A. Operable Acoustical Panels: Partition system, including panels, seals, finish facing, suspension system, operators, and accessories.
  - 1. Basis-of-Design Products: Subject to compliance with requirements, provide Modernfold, Inc.; Acousti-Seal® Encore® with RT100 Multi-Directional Suspension System and Type III Pocket Doors, or comparable products by one of the following:
    - a. Advanced Equipment Corporation.
    - b. Hufcor, Inc.
- B. Panel Operation: Manually operated, individual panels.
- C. Panel Construction: As required to support panel from suspension components and with reinforcement for hardware attachment. Fabricate panels with tight hairline joints and concealed fasteners. Fabricate panels so finished in-place partition is rigid; level; plumb; aligned, with tight joints and uniform appearance; and free of bow, warp, twist, deformation, and surface and finish irregularities.
- D. Dimensions: Fabricate operable acoustical panel partitions to form an assembled system of dimensions indicated and verified by field measurements.
- E. STC: Not less than 56.
- F. Panel Materials:

1. Steel Frame: Steel sheet, manufacturer's standard nominal minimum thickness for uncoated steel.
  2. Steel Face/Liner Sheets: Tension-leveled steel sheet, manufacturer's standard nominal thickness for uncoated steel.
- G. Panel Closure: Manufacturer's standard unless otherwise indicated.
- H. Hardware: Manufacturer's standard as required to operate operable panel partition and accessories; with decorative, protective finish.
1. Hinges: Manufacturer's standard, full leaf butt hinges attached directly to panel frame.
- I. Finish Facing: To be determined.
- 0.3 SEALS
- A. Description: Seals that produce operable panel partitions complying with performance requirements and the following:
1. Seals made from materials and in profiles that minimize sound leakage.
  2. Seals fitting tight at contact surfaces and sealing continuously between adjacent panels and between operable panel partition perimeter and adjacent surfaces, when operable panel partition is extended and closed.
- B. Horizontal Bottom Seals: Resilient, mechanical, retractable, constant-force-contact seal exerting uniform constant pressure on floor when extended, ensuring horizontal and vertical sealing and resisting panel movement.
1. Mechanically Operated for Acoustical Panels: Extension and retraction of bottom seal by operating handle or built-in operating mechanism, with operating range not less than 2 inches (50 mm) between retracted seal and floor finish.
- 0.4 PANEL FINISH FACINGS
- A. Description: Finish facings for panels that comply with indicated fire-test-response characteristics and that are factory applied to operable panel partitions with appropriate backing, using mildew-resistant nonstaining adhesive as recommended by facing manufacturer's written instructions.
- B. Trimless Edges: Fabricate exposed panel edges so finish facing wraps uninterrupted around panel, covering edge and resulting in an installed partition with facing visible on vertical panel edges, without trim, for minimal sightlines at panel-to-panel joints.
- 0.5 SUSPENSION SYSTEMS
- A. Tracks: Steel or aluminum mounted directly to overhead structural support, or with adjustable steel hanger rods for overhead support, designed for operation, size, and weight of operable panel partition indicated. Size track to support partition operation and storage without damage to suspension system, operable panel partitions, or adjacent construction. Limit track deflection to no more than 0.10 inch (2.54 mm) between bracket supports. Provide a continuous system of track sections and accessories to accommodate configuration and layout indicated for partition operation and storage.
- B. Carriers: Trolley system as required for configuration type, size, and weight of partition and for easy operation; with ball-bearing wheels.

- C. Track Intersections, Switches, and Accessories: As required for operation, storage, track configuration, and layout indicated for operable panel partitions, and compatible with partition assembly specified. Fabricate track intersections and switches from steel or aluminum.

#### 0.6 ACCESSORIES

- A. Storage Pocket Door: Full height at end of partition runs to conceal stacked partition; of same materials, finish, construction, thickness, and acoustical qualities as panels; complete with operating hardware and acoustical seals at soffit, floor, and jambs. Full leaf butt hinges in finish to match other exposed hardware.
  - 1. Configuration: Double doors hinged to jamb on each side and closing in the center. Equip one door panel with smaller hinged panel that folds back when operable partition is extended into the storage pocket.
  - 2. Jambs: Continuous channels anchored to fixed walls. Welded hinge anchor plates support pocket door hinges and permit full 180-degree swing.
  - 3. Door Closure: Manufacturer's standard method to secure storage pocket door in closed position.

### PART 3 - EXECUTION

#### 0.1 INSTALLATION

- A. Install operable panel partitions and accessories after other finishing operations, including painting, have been completed in area of partition installation.
- B. Broken, cracked, chipped, deformed, or unmatched panels are not acceptable.
- C. Broken, cracked, deformed, or unmatched gasketing or gasketing with gaps at butted ends is not acceptable.
- D. Light-Leakage Test: Illuminate one side of partition installation and observe vertical joints and top and bottom seals for voids. Adjust partitions for alignment and full closure of vertical joints and full closure along top and bottom seals.

#### 0.2 ADJUSTING

- A. Adjust operable panel partitions, hardware, and other moving parts to function smoothly, and lubricate as recommended by manufacturer.
- B. Adjust storage pocket doors to operate smoothly and easily, without binding or warping.
- C. Verify that safety devices are properly functioning.

#### 0.3 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain operable panel partitions.

END OF SECTION