

Specification - Section 10 22 26 (10650) Operable Partitions Acousti-Seal®

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Manually operated, paired panel operable partitions.
- B. Related Sections include the following:
 - 1. Division 03 Sections for concrete tolerances required.
 - 2. Division 05 Sections for primary structural support, including pre-punching of support members by structural steel supplier per operable partition supplier's template.
 - 3. Division 06 Sections for wood framing & supports, and all blocking at head and jambs as required.
 - 4. Division 09 Sections for wall and ceiling framing at head and jambs.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who is certified in writing by the operable partition manufacturer, as qualified to install the manufacturer's partition systems for work similar in material, design, and extent to that indicated for this Project.
- B. Acoustical Performance: Test operable partitions in an independent acoustical laboratory in accordance with ASTM E90 test procedure and classified in accordance with ASTM E413 to attain no less than the STC rating specified. Provide a complete and unedited written test report by the testing laboratory upon request.
- C. Preparation of the opening shall conform to the criteria set forth per ASTM E557 *Standard Practice for Architectural Application and Installation of Operable Partitions*.
- D. The operable wall must be manufactured by a certified ISO-9001-2015 company or an equivalent quality control system.

1.4 REFERENCE STANDARDS

- A. ASTM International
 - 1. ASTM E557 Standard Practice for Architectural Application and Installation of Operable Partitions.
 - 2. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
 - 3. ASTM C1036 - Standard Specification for Flat Glass.
 - 4. ASTM C1048 - Heat-Treated Flat Glass—Kind HS, Kind FT Coated and Uncoated Glass.
 - 5. ASTM E84 - Surface Burning Characteristics of Building Materials.
 - 6. ASTM E413 - Classification for Rating Sound Insulation
- B. Health Product Declaration Collaborative
 - 1. Health Product Declaration Open Standard v2.1
- C. International Standards Organization
 - 1. ISO 14021 - Environmental Labels and Declarations - Self-Declared Environmental Claims (Type II Environmental Labeling).
 - 2. ISO 14025:2011-10, Environmental Labels and Declarations - Type III Environmental Declarations - Principles and Procedures.
 - 3. ISO 14040:2009-11, Environmental Management - Life Cycle Assessment - Principles and Framework.
 - 4. ISO 14044:2006-10, Environmental Management - Life Cycle Assessment - Requirements and Guidelines.

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- 5. ISO 21930 – Sustainability in Buildings and Civil Engineering Works — Core Rules for Environmental Product Declarations of Construction Products and Services.
- D. Other Standards
 - 1. ADA – Americans with Disabilities Act.
 - 2. ANSI Z97.1 - Safety Glazing Materials Used in Buildings.
 - 3. CPSC 16 CFR 1201 - Safety Standard for Architectural Glazing Materials.
 - 4. NEMA LD3 - High Pressure Decorative Laminates.

1.5 SUBMITTALS

- A. Product Data: Material descriptions, construction details, finishes, installation details, and operating instructions for each type of operable partition, component, and accessory specified.
- B. Shop Drawings: Show location and extent of operable partitions. Include plans, elevations, sections, details, attachments to other construction, and accessories. Indicate dimensions, weights, conditions at openings, and at storage areas, and required installation, storage, and operating clearances. Indicate location and installation requirements for hardware and track, including floor tolerances required and direction of travel. Indicate blocking to be provided by others.
- C. Setting Drawings: Show imbedded items and cutouts required in other work, including support beam punching template.
- D. Samples: Color samples demonstrating full range of finishes available by architect. Verification samples will be available in same thickness and material indicated for the work.
- E. Reports: Provide a complete and unedited written sound test report indicating test specimen matches product as submitted.
- F. Create spaces that are healthy for occupants.
 - 1. Furnish products and materials with Health Product Declaration (HPD), Manufacturer Inventory, or other material health disclosure documentation. Products without an HPD or other disclosure documentation are not acceptable.
- G. Furnish materials that generate the least amount of pollution.
 - 1. Furnish products and materials that have third party verified environmental product declarations (EPD's). Consider products and materials that have optimized environmental performance (reduced life cycle impacts). Products without an EPD or other disclosure documentation are not acceptable.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Clearly mark packages and panels with numbering systems used on Shop Drawings. Do not use permanent markings on panels.
- B. Protect panels during delivery, storage, and handling to comply with manufacturer's direction and as required to prevent damage.

1.7 WARRANTY

- A. Provide written warranty by manufacturer of operable partitions agreeing to repair or replace any components with manufacturing defects.
- B. Warranty period: Two (2) years.
- C. Suspension System Warranty: Five (5) years.

PART 2 – PRODUCTS

2.1 MANUFACTURERS, PRODUCTS, AND OPERATION

- A. Manufacturers: Subject to compliance with requirements, provide product by the following:
 - 1. Modernfold, Inc.
- B. Products: Subject to compliance with the requirements, provide the following product:
 - 1. OP-01: Acousti-Seal #932 manually operated paired panel operable partition.

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2.2 OPERATION

- A. OP-01: Acousti-Seal #932: Series of paired flat panels hinged together in pairs, manually operated, top supported with operable floor seals.
- B. Final Closure:
 - 1. OP-01: Horizontally expanding panel edge with removable crank

2.3 PANEL CONSTRUCTION

- A. Nominal 3-inch (76mm) thick panels in manufacturer's standard 48-inch (1220mm) widths. All panel horizontal and vertical framing members fabricated from minimum 18-gage formed steel with overlapped and welded corners for rigidity. Top channel is reinforced to support suspension system components. Frame is designed so that full vertical edges of panels are of formed steel and provide concealed protection of the edges of the panel skin.
- B. Panel skin shall be:
 - 1. OP-01: 0.50-inch (13mm) tackable 100% recycled gypsum board, class "A" rated single material or composite layers continuously bonded to panel frame. Acoustical ratings of panels with this construction minimum:
 - a. 50 STC
- C. Hinges for Panels, Closure Panels, Pass Doors, and Pocket Doors shall be:
 - 1. OP-01: Full leaf butt hinges, attached directly to the panel frame with welded hinge anchor plates within panel to further support hinge mounting to frame. Lifetime warranty on hinges. Hinges mounted into panel edge or vertical astragal are not acceptable.
- D. Panel Trim: No vertical trim required or allowed on edges of panels; minimal groove appearance at panel joints.
- E. Panel Weights:
 - 1. OP-01: 50 STC - 8 lbs./square foot

2.4 PANEL FINISH

- A. Panel finish shall be:
 - 1. OP-01: Reinforced vinyl with woven backing weighing not less than 21 ounces (595 grams) per lineal yard.
- B. Panel Trim: Exposed panel trim of one consistent color:
 - 1. OP-01: To Be Advised

2.5 SOUND SEALS

- A. Vertical Interlocking Sound Seals between panels: Roll-formed steel astragals, with reversible tongue and groove configuration in each panel edge for universal panel operation. Rigid plastic or aluminum astragals or astragals in only one panel edge are not acceptable.
- B. Horizontal Top Seals: Continuous contact extruded vinyl bulb shape with pairs of non-contacting vinyl fingers to prevent distortion without the need for mechanically operated parts.
- C. Horizontal bottom floor seals shall be:
 - 1. OP-01: Modernfold IA2 Bottom seal. Automatic operable seals providing nominal 2-inch (51mm) operating clearance with an operating range of +0.50-inch (13mm) to -1.50-inch (38mm) which automatically drop as panels are positioned, without the need for tools or cranks.

2.6 SUSPENSION SYSTEM

- A. OP-01: #17 Suspension System
 - 1. Suspension Tracks: Minimum 11-gauge, 0.12-inch (3.04mm) roll-formed steel track, suitable for either direct mounting to a wood header or supported by adjustable steel hanger brackets, supporting the load-bearing surface of the track, connected to structural support by pairs of 0.38-inch (10mm) diameter threaded rods. Aluminum track is not acceptable.
 - a. Exposed track soffit: Steel, integral to track, and pre-painted off-white.

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2. Carriers: One all-steel trolley with steel tired ball bearing wheels per panel (except hinged panels). Non-steel tires are not acceptable.

2.7 OPTIONS

- A. (NONE SELECTED)

PART 3 – EXECUTION

3.1 INSTALLATION

- A. General: Comply with ASTM E557, operable partition manufacturer's written installation instructions, Drawings and approved Shop Drawings.
- B. Install operable partitions and accessories after other finishing operations, including painting have been completed.
- C. Match operable partitions by installing panels from marked packages in numbered sequence indicated on Shop Drawings.
- D. Broken, cracked, chipped, deformed or unmatched panels are not acceptable.

3.2 CLEANING AND PROTECTION

- A. Clean partition surfaces upon completing installation of operable partitions to remove dust, dirt, adhesives, and other foreign materials according to manufacturer's written instructions.
- B. Provide final protection and maintain conditions in a manner acceptable to the manufacturer and Installer that ensure operable partitions are without damage or deterioration at time of Substantial Completion.

3.3 ADJUSTING

- A. Adjust operable partitions to operate smoothly, easily, and quietly, free from binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Lubricate hardware and other moving parts.

3.4 EXAMINATION

- A. Examine flooring, structural support, and opening, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of operable partitions. Proceed with installation only after unsatisfactory conditions have been corrected.

3.5 DEMONSTRATION

- A. Demonstrate proper operation and maintenance procedures to Owner's representative.
- B. Provide Operation and Maintenance Manual to Owner's representative.

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