

SECTION 10651

OPERABLE PANEL PARTITIONS

PART 1 - GENERAL

1.1 DESCRIPTION

A. General

1. Furnish and install operable partitions and suspension system. Provide all labor, materials, tools, equipment, and services for operable walls in accordance with provisions of contract documents.

B. Related Sections:

1. Division 9 Section "Gypsum Board Assemblies."
2. Division 9 Section "Painting."

1.2 SUBMITTALS

- A. Product Data:** Material descriptions, construction details, finishes, hardware, installation details, and operating instructions for each type of operable panel partition, component, and accessory specified. Include data on acoustical performance, surface-burning characteristics, and durability.

- B. Shop Drawings:** Submit Shop Drawings showing location and extent of operable partitions. Submittal of Shop Drawings shall be coordinated by the manufacturer with the Contractor's construction schedule to ensure that production, delivery, and installation of partitions will not cause any delay to the completion of the Work.

1. Include plans, elevations, numbered panel sequence, large-scale details of anchorages, and accessory items.
2. Provide dimensions; weights; conditions at openings and for storage; typical and special details; and required installation, storage, and operating clearances. Indicate location and installation requirements for hardware, track, and operators.
3. Provide detailed drawings of internal mechanical construction of components.
4. Show blocking to be provided by others.

1.3 QUALITY ASSURANCE

- A. Manufacturer's Qualifications:** Provide operable panel partitions produced by a manufacturer specializing in their design and fabrication with at least ten (10) years' experience and record of satisfactory in-use performance with work similar in material, design, and scope to that indicated for this Project.

- B. Installer Qualifications:** Engage an installer who is certified in writing by the operable panel partition manufacturer as qualified to install the manufacturer's partition systems and who has at least five (5) years' experience installing operable panel partitions produced and assembled by the manufacturer.

- 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 partition STC (Sound Transmission Classification) shall be achieved per the standard test method ASTM E90.
- E. Noise isolation classifications shall be achieved per the standard test method ASTM E336.
- F. Noise Reduction Coefficient (NRC) ratings shall be per ASTM C423.
- G. The manufacturer shall have a quality system that is registered to the ISO 9001 standards.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. **General:** Comply with instructions and recommendations of manufacturer for special delivery, storage, and handling requirements. Protectively package and sequence panels in order for installation.
- B. **Delivery:** Deliver materials to project site in original factory wrappings and containers, clearly labeled with identification of manufacturer, brand name, quality or grade, fire performance characteristics, and lot number, same as numbering system used on Shop Drawings. Do not use permanent markings on panels.
- C. **Storage:** Store partitions only on edge, blocked off ground to prevent sagging and warping, in original undamaged packages and containers, inside well-ventilated area protected from weather, moisture, soiling, extreme temperatures, and humidity.

1.5 WARRANTY

- A. **Written Warranty:** Submit written warranty signed by authorized representatives of the operable panel partition manufacturer and installer that the partitions and their installation are of the quality specified and free from defects in materials and workmanship. Warranties taking exception to either "normal wear and tear" or requiring preventive maintenance are not acceptable.
 - 1. Written warranty shall provide replacement or repair, without expense to the Owner and to the satisfaction to the Owner, of all defects in materials and workmanship which appear during the warranty period which are not caused by accident, abuse, improper cleaning, or structural movement.
 - 2. Under the terms of the Warranty, defects include, but are not limited to: difficult or noisy operation; failure to resist lateral pressure specified; tearing or deterioration of acoustic seals; track out of tolerance for straight and level; operating defects in trolleys or mechanical seals.
- B. **Warranty Period:** Not less than two (2) years, beginning on the date (or dates) of Substantial Completion of the Work, or portions of the Work in case of partial acceptance and use by the Owner.

1.6 PROJECT CONDITIONS

- A. **Field Measurements:** Verify operable panel 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.

PART 2 - PRODUCTS

2.1 MANUFACTURERS/PRODUCT

- A. **Manufacturers/Product:** Subject to compliance with requirements, provide the following:
 - 1. Hufcor Inc., "TOP SUPPORTED SERIES 6503 PAIRED PANELS"
- B. The following manufacturers are acceptable provided their products comply with Drawings and Specifications:
 - 1. Advanced Equipment Corp.
 - 2. Modernfold, Inc.

2.2 OPERABLE PANELS

- A. Product to be top supported Series 6503 paired panels as manufactured by Hufcor Inc.
 - 1. Panels shall be nominally 3" [76] thick, to 48" [1219] in width, and hinged in pairs.
 - 2. Panel faces shall be of roll formed min. 20 gage [.89] electro-galvanized steel laminated to gypsum backing.
 - 3. Frames shall be of 18 gage [1.42] painted steel.
 - 4. Face finish shall wrap around the vertical panel edges and require no vertical trim.
 - 5. Vertical interlock between panels shall be dual durometer polyvinylchloride in a tongue and groove configuration. Design shall provide minimum 1-1/4" [32] panel-to-panel interlock. The lead panel shall seal against the adjacent wall without the need for wall mounted jambs.
 - 6. Horizontal top seals shall be retractable, provide 1" [25] nominal operating clearance, and exert upward force when extended.
 - 7. Horizontal bottom seals shall be retractable, provide a maximum 2" [50] nominal operating clearance, and exert downward force when extended .
 - 8. Horizontal trim shall be of aluminum.
 - 9. Hinges on basic panels shall be of steel and project no more than 1/4" [6] beyond panel faces. Each pair of panels to have a minimum of three hinges.
- B. **Weight** of the panels shall be 8.9-11.5 lbs. per sq. ft. [43.6-56.1kg/sq.m] based on options selected.
- C. **Suspension system:**
 - 1. Track shall be of clear anodized architectural grade extruded aluminum alloy 6063-T6. Track design shall provide integral support for adjoining ceiling, soffit, or plenum sound barrier. Track shall be connected to the structural support by min. 3/8" [10] dia. threaded steel hanger rods. Guide rails and/or track sweep seals shall not be required.
 - a. Each panel shall be supported by one 4-wheeled carrier. Wheels to be of hardened steel ball bearings encased with molded polymer tires.
- D. **Finishes**
 - 1. Face finish shall be:
 - a. Factory applied 100% polyolefin stain resistant fabric, weighing not less than 15 oz. per lineal yard [465 gram/lm]. Color shall be Transformations, Tessera Shadow 38-19.

2. Frame and trim color shall be:
 - a. Gray powder coated
3. Aluminum track shall be clear anodized

2.3 OPERATION

- A. Panels shall be manually moved from the storage area, positioned in the opening, and seals set.
- B. Horizontal seals shall be activated by pressing the edge of the panel into the edge of the adjacent panel or wall.
- C. Final partition closure to be:
 1. Expanding jamb. Panel construction shall be the same as basic panels but with an expanding jamb. Jamb compensates for minor wall irregularities and provides a minimum of 250 lbs. [113.4kg] seal force against the adjacent wall for optimum sound control. The jamb activator shall be located approximately 45" [1143] from the floor in the panel face and be accessed from either side of the panel. The jamb is equipped with a mechanical rack and pinion gear drive mechanism and shall extend 4"-6" [100-152] by turning the removable operating handle.
- D. Stack/Store Panels
 1. Retract seals and move to storage area.

2.4 ACOUSTICAL PERFORMANCE

- A. Acoustical performance shall be tested at a laboratory accredited by the U.S. Dept. of Commerce, National Institute of Standards and Technology, under the National Voluntary Laboratory Accreditation Program (NVLAP) and in accordance with ASTM E90 Test Standards. Standard panel construction shall have obtained an STC rating of 49.
 1. Complete, unaltered written test report is to be made available upon request.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. **Examination:** Examine flooring, structural support, openings, wall surfaces, and other related work with Installer present, for compliance with requirements for installation tolerances and other conditions affecting the installation and performance of operable panel partitions.
- B. **Acceptance:** Do not proceed with installation until unsatisfactory conditions have been corrected. Commencement of installation shall be evidence of acceptance of conditions in that area.
- C. **Installation.** The complete installation of the operable wall system shall be by an authorized factory-trained installer and be in strict accordance with the approved shop drawings and manufacturer's standard printed specifications, instructions, and recommendations.

3.2 ADJUSTING AND CLEANING

- A. **Adjustments:** Adjust operable panel 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.

1. All track and panel surfaces shall be wiped clean and free of handprints, grease, and soil.
2. Cartoning and other installation debris shall be removed from the job site.
3. Replace panels that cannot be cleaned and repaired, in a manner approved by Architect, before time of Substantial Completion.

3.3 DEMONSTRATION

- A. **Engage a factory-authorized service representative** to train Owner's maintenance personnel to adjust, operate, and maintain operable panel partitions.
 1. Test and adjust seals, hardware, carriers, tracks, pocket doors, exit signs, operators, safety devices, and other operable components. Replace damaged or malfunctioning operable components.
 2. Train Owner's maintenance personnel on procedures and schedules for starting and stopping, troubleshooting, servicing, and maintaining equipment and schedules.
 3. Review data in operating and maintenance manuals. Refer to Division 1 Section "Closeout Submittals."
 4. Owners manuals shall be provided to Owner's Representative.

END OF SECTION