

## Part 1 – General

## **1.01 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.

## 1.02 RELATED WORK BY OTHERS

- A. Preparation of opening will be by General Contractor. Any deviation of site conditions contrary to approved shop drawings must be called to the attention of the architect.
- B. All header, blocking, support structures, jambs, track enclosures, surrounding insulation, and sound baffles as required in 1.04 Quality Assurance.
- C. Prepunching of support structure in accordance with approved shop drawings.
- D. Paint or otherwise finishing all trim and other materials adjoining head and jamb of operable partitions.
- 1.03 SUBMITTALS
  - A. Complete shop drawings are to be provided prior to fabrication indicating construction and installation details. Shop drawings must be submitted within 10 days after receipt of signed contract.
- 1.04 QUALITY ASSURANCE
  - Preparation of the opening shall conform to the criteria set forth per ASTM E557 Standard Practice for Architectural Application and Installation of Operable Partitions
  - B. The partition STC (Sound Transmission Classification) shall be achieved per the standard ASTM E90 test method.
  - C. Noise Reduction Coefficient (NRC) ratings shall be per ASTM C423.
  - D. The manufacturer shall have a quality system that is registered to the ISO 9001 standards.

## 1.05 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Proper storage of partitions before installation and continued protection during and after installation will be the responsibility of the General Contractor.

## 1.06 WARRANTY

A. Partition shall be guaranteed for a period of Two years.



## Part 2 - Products

#### 2.01 ACCEPTABLE MANUFACTURERS

A. Upon compliance with all of the criteria specified in this section, Manufacturers wishing to bid products similar to the product specified must submit to the architect 10 days prior to bidding complete data in support of compliance and a list of three past installations of products similar to those listed. The submitting manufacturer guarantees the proposed substituted product complies with the product specified and as detailed on the drawings.

## 2.02 MATERIALS

A. Product to be top supported Series 7660 individual, Omni-directional panels as supplied and installed by GIBCA:

GIBCA Furniture Industry Co. Ltd. (LLC)

P.O. Box 20923, Ajman, United Arab Emirates

Tel : +971-6-7436888

Fax : +971-6-7436903

Email : <u>marketing@gfiuae.com</u>

- 1. Panels shall be nominally 4" [100] thick and to 1219 mm in width.
- 2. Panel construction should facilitate access to internal components, in case of any maintenance requirement.
- 3. Panel faces shall be of gypsum laminated to appropriate substrates to meet the STC requirement in 2.04 Acoustical Performance.
- 4. Frames shall be of aluminum alloy 6063-T6 formed to capture and protect edges of the face material.
- 5. Vertical interlock between panels shall be dual durometer polyvinylchloride in a tongue and groove configuration. Design provides panel-to-panel interlock. The lead panel shall seal against the adjacent wall without the need for wall mounted jambs. Vertical sealing using magnetic strips not permitted.
- 6. Horizontal top seals shall be retractable, provide 1-1/4" [32] nominal operating clearance, and exert upward force when extended.
- Horizontal bottom seals shall be retractable, provide up to 1-3/4" [44] / 4" [102] (as per site conditions) nominal operating clearance, and exert downward force when fully extended.
- 8. Top rail shall incorporate shock absorbing leveler beam.
- B. Weight of the panels shall be 53.2 kg/sq.m for the unfinished panels.



#### C. Suspension system:

1.1. Track shall be Hufcor Type 36 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. 1/2" [12] dia. threaded steel hanger rods.

a. Each panel shall be supported by two 2-wheeled counter-rotating horizontal carriers. Wheels to be of precision ground steel ball bearings with heat treated and hardened races encased with molded polymer tires, steel banded and reinforced.

1.2. Track Type Hufcor- 57 shall be of clear anodized architectural grade extruded aluminum Alloy 6063-T6. Track design shall provide integral support for adjoining ceiling, soffit, and 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 note be required.

a. Each panel shall be supported by two 2-wheeled carriers. Wheels to be of hardened steel ball bearings encased with molded polymer tires.

1.3 Track Type Hufcor capable of supporting panel weight upto 1364 Kg per panel. The track is of 1/4" [6] slotted structural steel tubing, painted black. The track trim is clear anodized aluminum. All intersections are factory assembled and welded. Curves, diverters or switches are available. Track design shall provide integral support for adjoining ceiling, soffit, or plenum sound barrier. Track shall be connected to the structural support by min. 5/8" [16] dia. threaded steel hanger rods.

- a. Each panel shall be supported by two Type 11 carriers. Each carrier has four steel wheels with precision-ground radial bearings. Bearings are inserted into a steel tire. The steel tire rim fully captures the bearing. Carriers may be programmed for self-directing and sorting. Minimum dimension from the ceiling to the structure is 12" [305].
- 2. Plenum closure (by others): Design of plenum closure must permit lifting out of header panels to adjust track height. Plenum closure required for optimum sound control of partition.
- D. Face finish shall be: Unfinished ready to accept finishes by other.
  - 1. Face finish shall be: (select as required):



- a. Factory applied reinforced vinyl fabric with woven backing, weighing not less than 15 oz. per lineal yard (465 g/m). Color shall be selected from manufacturer's standard color selector.
- b. Standard upgrades fabrics (color shall be selected from manufacturer's standard color selector):
  - 1. Factory applied vertical ribbed carpet.
  - 2. Factory applied 100% polyolefin stain resistant fabric.
- c. Optional:
  - 1. Customer selected (requires factory approval for manufacturing compatibility)
  - 2. Unfinished for field decoration.
  - 3. High pressure laminate
- E. Available Accessories/Options
  - 1. ADA compliant single leaf/ Double leaf pass door of the same thickness and finish as the basic panels. (*No. and position as per drawing*)
- 2.03 OPERATION
  - A. Panels shall be manually moved from the storage area, positioned in the opening, and seals set.
  - B. Retractable Horizontal Seals
    - 1. Retractable horizontal seals shall be activated by a removable quick-set operating handle located approximately 42" [1067] from the floor in the panel edge. Cranking based sealing mechanisms (manual or motorized) not allowed.
    - 2. Top and bottom retractable seals shall be operated simultaneously.
    - 3. Seal activation should require no more than 180 degree half turn of the removable handle.
  - C. Final partition closure to be by Expanding Jamb Closure Panel. 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. Fixed wall jamb not allowed.



D. Stack/Store Panels

1. Retract seals with removable operating handle and move to storage area. 2.04 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 <u>STC rating of 53</u>.
  - 1. Complete, unaltered written test report is to be made available upon request.

# Part 3 - Execution

- A. 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.
- B. Cleaning
  - 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.
- C. Training
  - 1. Installer shall demonstrate proper operation and maintenance procedures to owner's representative.
  - 2. Operating handle and owners manuals shall be provided to owner's representative.