**Signature Series 8760 Continuously Hinged**

**Electrically Operated Panels**

**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. Pre-punching of support structure in accordance with approved shop drawings.

 D. All electrical wiring from the motor control cabinet to the source and from the motor control cabinet to the key switches.

 E. All pneumatic piping from compressor to control panel.

 F. 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 60 days after receipt of signed contract.

1.04 QUALITY ASSURANCE

 A. 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 test method ASTM E90-99 and E413-87. Test run under ASTM procedures prior to E90-99 shall not be permitted. All tests must be from an independent, currently operating, NIST-accredited Laboratory available to verify results.

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 Panels and Seals shall be guaranteed for a period of two years (compressor for one year) with Drive Unit, mechanical parts including track and carriers guaranteed for a period of five years. This guarantee is against defects in material or workmanship of manufacturer’s product.

**Part 2 - Products**

2.01 MANUFACTURERS

 A. Manufacturers: Subject to compliance with requirements, provide products by the following:

 1. Moderco Inc.

2.02 MATERIALS

 A. Product to be top supported Series 8760 Continuously Hinged, Electrically Operated panels as manufactured by Moderco Inc.

 1. Panels shall be nominally 4” [102mm] thick, in manufacturer’s standard widths up to 48” [1230mm], and continuously hinged, electrically operated.

 2. Panel faces shall be of gypsum laminated to appropriate substrates to meet the STC requirement. *or*

 *Optional*

 Panel faces shall be of steel backed with gypsum.

 Panel faces shall be removable and replaceable on site to accommodate future décor / finish changes.

 3. Frames shall be a composite of steel and aluminum alloys, formed to protect the edges of the face material.

 4. Interlocking vertical seals between the panels shall consist of tongue and groove aluminum and vinyl astragals creating a shock-absorbing, deep nesting, impact resistant acoustical interlock between panels. Each pair of panels shall be equipped with a concealed panel locking device, such that, when engaged will result in a uniform & interlocked unit.

 5. Horizontal top seals shall be continuous contact multi-fingered vinyl.

1. Horizontal bottom seals shall be pneumatically operated by a compressor, providing 2” [50mm] nominal operating clearance, and exert downward force when extended.

 7. The panel hinges used on the panels shall be of steel and project no more than 1/4” [6mm] beyond panel faces. Panels shall be connected with a minimum of three hinges.

 B. Weight of the panels shall be between 6 to 9,5 lbs./sq. ft. [29 to 46 kg/sq.m] *(based on STC value selected)* plus or minus 1 lb. based on options selected.

 C. Suspension system:

 1. Track shall be tempered aluminum with integrated soffit trims providing a transition to the ceiling. Track shall include support brackets and rods, spaced to manufacturer’s standards.

 a. Each panel shall be supported by one 4-wheeled carrier. Wheels to be of hardened steel ball bearings. Carrier design shall ensure that all wheels remain in contact with the track during normal movement of the panels.

 2. Drive System:

 a. The drive unit (located at the storage end of the unit) shall be equipped with a C.S.A. (UL) approved 1.5 HP, 120 V, 1 phase, 60 Hz motor.

 b. The drive unit shall be equipped with an endless 3/16” [5 mm] aircraft type cable and limit switches.

 c. Operation of the partition shall require the use of two (2) simultaneously operated key switches positioned on opposite sides of the partition with a clear unobstructed view during operation of the partition.

 d. The travel limits of the partition shall be controlled by limit switches positioned on the track system, thereby ensuring full travel before shut off.

 3. Bottom Seal System

 a. The bottom seals shall operate by means of an pneumatic system driven by a control panel.

 b. The seals shall be driven by a C.S.A. (UL) approved ½ HP, 120 V, 60 Hz compressor working at 4.2 Amps. The compressor located in the pocket area shall be equipped with a 2-gallon tank and develop 0.9 CFM @ 100 P.S.I..

 c. The compressor shall be furnished, by others, a 120V AC, 60 Hz, 15 Amps alimentation.

 d. All pneumatic piping shall be ¼” [6 mm] interior pipe dimension.

 D. Finishes:

 1. Face finish shall be *(select as required)*:

 a. Factory applied reinforced vinyl wall-covering with woven backing, weighing 21 oz. or more per lineal yard [545 g/m]. Color shall be selected from manufacturer’s standard color selector. *or*

 *Optional*

 Standard up-grade finishes. Color shall be selected from manufacturer’s standard color selector. *(select one)*

 - Factory applied vertical ribbed carpet (N.R.C. .20). *or*

 - Factory applied 100% polyolefin stain resistant fabric. *or*

 - Factory applied high pressure laminate *(with vertical trim only).*

 *or*

 *Custom options*

 - C.O.M. / Customer’s Own Material; Customer supplied & factory applied *(requires factory approval for manufacturing compatibility). or*

 - C.S.M. / Customer’s Specified Material; Factory supplied & factory applied *(requires factory approval for manufacturing compatibility). or*

 - Wood veneer *(specify species and grade). or*

 - Customer selected high pressure laminate*.*

 2. Frame color shall be *(select as required)*:

 a. Clear Anodized Aluminum *(standard) or*

 *Optional:*

 - Dark Bronze Painted. *or*

 - Custom Color Painted *(optional upgrade). or*

 - Custom Anodized *(optional upgrade).*

 3. Aluminum track and soffit shall be clear anodized. *or*

 *Optional upgrade:*

 - Custom Anodized. *or*

 - Custom Color Painted.

 E. Accessories/Options *(select as required)*

 1. ADA-compliant pass door of the same thickness, acoustical construction and finish as the basic panels. Locate where shown on the plans.

 *Optional (select as required):*

 a. Concealed Automatic Door Closer.

 b. Dead bolt Lock *(not available on egress doors).*

 c. Inset Self-Illuminated Exit Sign *(above door).*

 2. Inset chalk/dry marker boards. Location and height as indicated on drawings.

 3. Inset tack boards. Location and height as indicated on drawings.

 4. Non-Acoustical Pocket doors.

 *Optional:*

 a. Dead bolt Lock.

2.03 OPERATION

 A. Panels shall be electrically operated, top supported, continuously hinged.

 B. Retractable Seals

 1. Bottom seals shall be pneumatically activated after the panels are deployed / positioned.

2.04 ACOUSTICAL PERFORMANCE

 A. Acoustical performance shall have been tested at an NIST-accredited, independent laboratory in accordance with ASTM E90-99 or more recent Test Standards. Standard panel construction shall have obtained an STC rating of *(select one)* 43, 47, 49, 52 or 53.

 1. Copies of the written test report are to be made available upon request. Tests must have been conducted at a laboratory available for verification of results.

**Part 3 - Execution**

 A. Installation.

 1. 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. Packing 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 owner’s manuals shall be provided to owner’s representative.