**Signature 842 Paired 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. 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 shall be guaranteed for a period of two years with all 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 Signature 842 paired panels as manufactured by Moderco Inc.

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

 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.

 *Or (if the no vertical trim option is used):*

 Panel faces shall be of roll formed steel backed with gypsum. Panel faces shall be mechanically fastened to the frame. *or*

 *Optional*

Panel faces shall be of gypsum laminated to appropriate substrates to meet the STC requirement and laminated to two vertical full height steel angles. Panel faces shall be mechanically fastened to the frame.

 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. *or*

 *Optional (if the no vertical trim option is used):*

 Frames shall be a composite of steel and aluminum alloys, formed to protect the panel edges. No vertical face trim shall be allowed.

 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 without the use of top guide rails.

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

 *Optional:*

 Horizontal top seals shall be retractable and operate simultaneously with the bottom seals. Top seals which can make contact with track soffit or ceiling during movement of the panels will not be permitted.

1. Horizontal bottom seals shall be automatically setting and retracting, providing 2” [50mm] nominal clearance, and exert downward force when extended. *Or*

 *Optional:*

 Horizontal bottom seals shall be mechanically retractable, providing *(select one)* 1” [25mm], 1 ½” [38mm], 2” [50mm], 2 ½” [64mm] or 4” [100mm] nominal operating clearance, and exert downward force when extended. Crank type seals requiring more than one rotation of the actuator to set or release or the use of a fixed sweep on any panel shall not be acceptable.

 *or*

 Horizontal top & bottom seals shall automatically operate as the panels are positioned. Automatic seals requiring a projection beyond the panel edge shall not be acceptable.

 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. Track model selection based on weight of panels.

 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. Trolley model to be adapted to selected track.

 *Optional under 16'-3" ceiling height only:*

 1. Track shall be heavy gage steel supported by support brackets and hanger rods, spaced to manufacturer’s standards for height and STC specified.

 a. Each panel shall be supported by one 4-wheeled carrier. Wheels to be of hardened steel ball bearings with steel tires.

 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 *(with vertical trim only).*

 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. Track finish:

 a. Aluminum track shall be clear anodized. *or*

 *Optional upgrade:*

 - Custom Anodized. *or*

 - Custom Color Painted.

 *Optional:*

 a. Steel track shall be painted white.

 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 Panic Bar *(lockable on lever side if required).*

 d. 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. Acoustical Pocket doors of same construction as panels. *or*

 *Optional:*

 - Non-Acoustical Pocket doors.

 *Optional:*

 a. Dead bolt Lock.

2.03 OPERATION

 A. Panels shall be manually operated, top supported, moved in pairs from the storage area, positioned in the opening, and seals set.

 B. Retractable Bottom Seals

 1. Bottom seals shall automatically activate as panels are deployed / positioned without the use of any handle or action by the operator and shall automatically retract when panels are moved to be stored. *or*

 *Optional:*

1.Retractable Mechanical Bottom seals shall be activated by a removable operating handle located approximately 40” [1050mm] from the floor in the panel edge.

 2. Seal activation shall not require more than one rotation of the removable handle.

 *or*

1. Retractable Top and Bottom Seals
2. Retractable Mechanical Top and Bottom seals shall be activated by a removable operating handle located approximately 40” [1050mm] from the floor in the panel edge.
3. Seal activation shall not require more than one rotation of the removable handle. *or*

 *Optional:*

 1. Top & Bottom seals shall automatically activate as panels are deployed / positioned without the use of any handle or action by the operator and shall automatically retract when panels are moved to be stored.

 2. Automatic seal actuator shall not project beyond the nominal edge of the panel nor require additional pocket clearance.

 C. Final partition closure to be by :

 1. Telescopic closure panel incorporating an expanding jamb member operated from either side of the panel with a removable handle. Panel shall be capable of compensating for minor out-of-plumb wall conditions and provide a positive vertical seal between partition and building structure. *or*

 *Optional:*

 1. *Available under 12’-3” [3730mm]:*  Hinged Closure Panel permanently attached to the structural wall. Panel permits access between adjacent rooms and shall be of the same finish as basic panels. Top and bottom seals shall be continuous contact multi-ply vinyl. Hardware shall be recessed.

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, 53 or 55.

 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.