**SPECIFICATIONS - SECTION 10 22 26 OPERABLE 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.

**1.2 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 1.4 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.

E. All electrical wiring from the motor control cabinet ro the power source and from the motor control cabinet to the key switches.

**1.3 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.

**1.4 Quality Assurance**

A. Installation shall be performed by an installer certified by the manufacturer.

B. Preparation of the opening shall conform to the criteria set forth by ASTM E557 Standard Practice for Architectural Application and Installation of Operable Partitions.

C. 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, NVLAP-accredited laboratory available to verify results.

**1.5 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.

**1.6 Warranty**

A. Partition panels shall be guaranteed for a period of two years, the compressor for a period of one year, and all mechanical parts including drive unit, track and carriers guaranteed for a period of five years. This guarantee is against defects in material or workmanship of manufacturer’s product, excluding abuse.

**Part 2 – Products**

**2.1 Manufacturers**

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

1. Moderco Inc.

**2.2 Operation**

A. Signature 843-EP electrically operated, top supported, continuously hinged panels.

B. Initial seal:

 1. Telescopic closure.

C. Final closure:

 1. Half panel hinged to a wall jamb.

**2.2 Panel construction**

A. Nominal 4" [102mm] thick panels, up to 48 1/2" [1230mm] width. Framing members to be steel-braced mechanically fastened 6065-T5 aluminum alloy extrusions. Thinnest extrusion section to be no less than 3/32" [2.5mm]. Trolley pipes welded to 1 1/2" X 1 1/2" X 3/32" [38mm X 38mm X 2.5mm] steel tube mechanically fastened to top frame extrusion. Panel cavity to be filled with acoustical insulation. Panel faces to be removable and replaceable on site to accommodate changes in room function, interior finishes, etc.

B. Acoustical rating (select one):

 1. 43 STC.

 2. 47 STC.

 3. 49 STC.

 4. 52 STC.

 5. 55 STC.

C. Panel face construction (select one):

1. STC 49, 52, 55: galvannealed steel skins laminated to 1/2" [13mm] gypsum board. Steel thickness based on STC rating.

2. STC 47, 49, 52, 55: 1/2" [13mm] tackable gypsum board with galvannealed steel liner. Steel thickness based on STC rating. (Optional)

3. STC 43: 1/2" [13mm] tackable gypsum board.

4. STC 47, 49, 52, 55 with optional plastic laminate or wood veneer finish: 1/2" [13mm] Particle board with galvannealed steel liner. Steel thickness based on STC rating.

 a. Standard Particle board.

b. ULEF/NAUF Particle board.

5. STC 43 with optional plastic laminate or wood veneer finish: 1/2" [13mm] Particle board.

 a. Standard Particle board.

b. ULEF/NAUF Particle board.

D. Hinges:

1. Discreet steel hinges blend into the shape of the frame extrusion

E. Vertical trims:

1. Protective trims cover and protect all edges of the panel faces and face finish.

F. Panel weight:

1. Between 6 to 10.5 lbs./sq.ft [29.5 to 51.5 kg/sq.m] (based on STC rating).

**2.4 Panel finishes**

A. Face finish shall be (select as required):

1. Factory applied Class A reinforced vinyl wallcovering with woven backing, weighing 21 oz/lin.yard [545 g/lin.m]. Color selected from manufacturer’s standard color selector.

2. Factory applied Class A vertically ribbed polyester carpet (NRC 0.20). Color selected from manufacturer’s standard color selector. (Optional)

3. Factory applied Class A polyester or olefin/polyester stain-resistant fabric. Color selected from manufacturer’s standard color selector. (Optional)

4. Customer's own material (C.O.M.) supplied to and applied by Moderco. (Subject to approval.) (Optional)

5. Customer's specified material (C.S.M.) procured and applied by Moderco. (Subject to approval.) (Optional)

6. Full height steel marker board. (Optional)

7. Full height porcelain marker board. (Optional)

8. Full height natural cork bulletin board. (Optional)

9. Vinyl- or fabric-covered full height natural cork bulletin board. (Optional)

10. Full height Forbo bulletin board. (Optional)

11. Wilsonart high pressure laminate (38 and 60 suffixes). (Optional)

12. Wood veneer. (Optional)

13. Uncovered. (Optional)

B. Panel frame finish shall be (select one):

1. Clear satin anodized.

2. Powder coating. Color selected from RAL Classic color system. (Optional)

3. Custom powder coating. (Color chip to be supplied to Moderco. Moderco's color-match must be approved by architect prior to any material being released for fabrication) (Optional)

**2.5 Sound seals**

A. Vertical seals:

1. Dual aluminum and pvc tongue and groove interlocking seals in each panel edge.

B. Horizontal seals:

1. Type FP: 1" [25mm] fixed pvc top sweeps and pneumatically operated bottom seals. Bottom seals extend and retract automatically by signal from the control board.

 a. FP-2: 2" [51mm] floor clearance with 1" [25mm] operating range.

b. Seals activated by a 0.5 hp / 110 V / 40 dB CSA listed compressor (existing building air line system may be used, 115 psi minimum pressure.)

**2.6 Suspension system**

A. Tracks and trolleys:

1. #55-T track: 6063-T6 aluminum alloy extrusion with integral soffit trim supported by pairs of 3/8" [10mm] dia. threaded rods connected to structural support with hanger brackets.

a. #55 trolley: Each trolley shall have four precision ground ball bearing wheels with steel tires.

b. Each panel to be supported by one trolley.

2. Drive System:

a. UL/ULC listed drive unit with NEMA-1 motor enclosure and controls and control enclosure conform to ANSI/NEMA ICS1, ICS 2 and ICS 6. Drive unit located at the storage end.

b. 1.5 HP, 208 V, 3-phase, 60 Hz motor.

c. Driven by a 3/16” [5 mm] steel cable.

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

e. Emergency release allows manual operation during power outage.

3. Operation of the partition shall require the use of two simultaneously activated control stations positioned on opposite sides of the partition with a clear unobstructed view during operation of the partition.

(Select control station layout)

 a. Control stations to be 3-position spring-loaded key switches.

b. Control stations to be one 3-position spring-loaded key switch and one push button switch.

B. Track finish:

 1. Aluminum track finish shall be (select one):

 a. Clear satin anodized.

b. Powder coating. Color selected from RAL Classic color system. (Optional)

c. Custom powder coating. (Color chip to be supplied to Moderco. Moderco's color-match must be approved prior to any material being released for fabrication) (Optional)

**2.7 Optional features**

A. ADA-compliant single pass through door:

 1. Same construction and face finish as partition panels.

2. Standard hardware:

 a. Flush pull on each side.

 b. Roller latch.

 3. Optional hardware (select as required):

a. Concealed automatic closer.

b. Self-luminous exit sign:

(i). “Running Man” exit sign with green faceplate (standard outside USA, optional in USA). \*

(ii). “EXIT” sign with red faceplate (standard in USA, optional elsewhere). \*

(iii). “EXIT” sign with green faceplate (optional). \*

c. Deadbolt lock. \*

d. Window frame (glazing by others).

e. Door viewer.

*(\* An exit sign and a deadbolt lock will not be installed together on the same door.)*

B. Work surfaces (select as required):

1. Inset steel white marker boards.

2. Inset porcelain white marker boards.

3. 1/4" [6mm] inset natural cork tack boards.

4. 1/4" [6mm] inset linoleum tack boards.

5. Full-width recessed chalk/marker trays.

6. Recessed eraser boxes.

C. Pocket door:

1. Non-acoustical pocket door of same basic construction and same finish as partition panels.

D. Safety features (select as required):

1. Photo-electric sensors on each side of the partition will stop the drive unit when either infra-red beam is disrupted.

 3. Recessed safety mats at the stack area will stop the drive unit when pressure is detected.

**Part 3 – Execution**

**3.1 Installation**

A. 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 installation instructions.

**3.2 Cleaning**

A. All track and panel surfaces shall be wiped clean and free of handprints, grease, and soil.

B. Packing and other installation debris shall be removed from the job site.

**3.3 Training**

A. Installer shall demonstrate proper operation and maintenance procedures to owner’s representative.

B. Keys and owner’s manuals shall be provided to owner’s representative.