**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.

**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 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, 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 841 manually operated, top supported individual panels.

B. Initial seal (select one):

 1. Bulb seal.

2. Fixed wall jamb. (Optional)

C. Final closure (select one):

1. Telescopic closure panel equipped with a telescopic jamb mounted to a rack and pinion mechanism and extended with a lever handle.

2. Hinged closure panel (up to 12'-0" [3658mm] height). (Optional)

a. Same construction and face finish as partition panels.

b. Standard hardware:

 (i). Flush pulls and roller latch.

 c. Optional hardware (select one):

(i). Panic bar with non-lockable lever.

(ii). Panic bar with lockable lever.

(iii). Deadbolt lock.

**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. 53 STC.

 6. 55 STC.

C. Panel face construction (select one):

1. STC 49, 52, 53, 55: galvannealed steel skins laminated to 1/2" [13mm] gypsum board. Steel thickness based on STC rating.

2. STC 47, 49, 52, 53, 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, 53, 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. (Optional)

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. (Optional)

D. Hinges for pass door and pocket door:

1. (With protective trims) Discreet steel hinges blend into the shape of the frame extrusion.

2. (With trimless edges) Discreet steel hinges to project no more than 1/4" [6mm] from the panel face.

E. Vertical trims (select one):

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

 2. Trimless vertical edges. (Optional)

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

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

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

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

6. Full height steel marker board. (Optional)

7. Full height porcelain marker board (with protective trims only). (Optional)

8. Full height natural cork bulletin board (with protective trims only). (Optional)

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

10. Full height Forbo bulletin board (with protective trims only). (Optional)

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

12. Wood veneer. (Optional)

13. Uncovered (not available for 43 or 47 STC panels with trimless vertical edges). (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 (select one):

1. Type FA: 1" [25mm] fixed pvc top sweeps and automatically operated bottom seals. Bottom seals automatically drop as panel are positioned without use of a tool. Bottom seals retract automatically when panel is pulled away from wall or adjacent panel. (Not available on 53 and 55 STC.)

 a. FA-2: 2" [51mm] floor clearance with 1 1/2" [38mm] operating range.

2. Type FM: 1" [25mm] fixed pvc top sweeps and manually operated bottom seals. Bottom seals extend and retract with half a turn of a removable lever handle. (Optional) (Not available on 53 and 55 STC.)

(Select one)

a. FM-1: 1" [25mm] floor clearance with 5/8" [16mm] operating range.

 b. FM-1.5: 1 1/2" [38mm] floor clearance with 3/4" [19mm] operating range.

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

 d. FM-2.5: 2 1/2" [64mm] floor clearance with 2" [51mm] operating range.

 e. FM-4: 4" [102mm] floor clearance with 3 1/2" [89mm] operating range.

 3. Type MM: Manually operated top and bottom seals. Top and bottom seals extend and retract simultaneously with half a turn of a removable lever handle. (Optional)

(Select one)

a. MM-1 \*: 1" [25mm] track clearance. 1" [25mm] floor clearance with 5/8" [16mm] operating range.

b. MM-1.5: 1" [25mm] track clearance. 1 1/2" [38mm] floor clearance with 3/4" [19mm] operating range.

c. MM-2: 1" [25mm] track clearance. 2" [51mm] floor clearance with 1" [25mm] operating range.

d. MM-2.5: 1" [25mm] track clearance. 2 1/2" [64mm] floor clearance with 2" [51mm] operating range.

e. MM-4: 1" [25mm] track clearance. 4" [102mm] floor clearance with 3 1/2" [89mm] operating range.

*\* Type MM-1 horizontal seals are standard for STC 53 panels. Type MM-1 horizontal seals are standard for STC 55 panels with the addition of fixed top sweeps.*

4. Type AA: Automatically operated top and bottom seals. Top and bottom seals extend and retract simultaneously without use of a tool. Top and bottom seals retract automatically when panel is pulled away from wall or adjacent panel. (Optional)

a. AA-1.5: 1" [25mm] track clearance. 1 1/2" [38mm] floor clearance with 3/4" [19mm] operating range.

**2.6 Suspension system**

A. Track and trolleys (select one):

1. #23-T aluminum 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 or without optional hanger brackets.

a. #23 trolley: Each trolley shall have two counter-rotating precision ground ball bearing wheels with nylon tires.

b. Multi-directional design: Trolley shall allow the panel to navigate through L, T and X intersections without mechanical switching devices.

c. Usage: For panels up to 15'-3" [4648mm] height.

d. Each panel to be supported by two trolleys.

3. #72 steel track: 11 ga. roll-formed steel with integral soffit trim supported by pairs of 3/8" [10mm] dia. threaded rods connected to structural support with hanger brackets. (Optional)

a. #72 trolley: Each trolley shall have four precision ground ball bearing wheels with steel tires.

b. Multi-directional design: Trolleys shall be automatically guided through a pre-programmed stacking track switch.

c. Usage: For panels up to 15'-3" [4648mm] height.

d. Each panel to be supported by two trolleys.

4. #33-T aluminum 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 or without optional hanger brackets.

a. #33 trolley: Each trolley shall have two counter-rotating precision ground ball bearing wheels with nylon tires.

b. Multi-directional design: Trolley shall allow the panel to navigate through L, T and X intersections without mechanical switching devices.

c. Usage: For panels between 15-3" [4648mm] and 22'-3" [6781mm] height.

d. Each panel to be supported by two trolleys.

5. #55-T aluminum 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 or without optional hanger brackets.

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

b. Multi-directional design: Trolleys shall be automatically guided through pre-programmed or electrically operated track switches.

c. Usage: For panels over 22'-3" [6781mm] height.

d. Each panel to be supported by two trolleys.

B. Track finish (select applicable):

 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. Steel track finish shall be (select one):

 a. White powder coating.

 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. Panic bar:

(i). With non-lockable lever.

(ii). With lockable lever.

b. Panic bar (concealed door closer included):

(i). With non-lockable lever.

(ii). With lockable lever.

c. 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). \*

d. Deadbolt lock. \*

e. Window frame (glazing by others).

f. Door viewer.

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

B. ADA-compliant double pass through doors:

 1. Same construction and face finish as partition panels.

2. Standard hardware:

 a. Flush pulls on each side.

 b. Roller latch between doors.

 c. Double ball catch above each door.

 d. Edge-activated top sliding bolt in inactive leaf.

 3. Optional hardware (select as required):

a. Concealed automatic closer.

b. Panic bar on active leaf:

(i). With non-lockable lever.

(ii). With lockable lever.

c. Self-luminous exit sign over active leaf:

(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). \*

f. Deadbolt lock in active leaf. \*

g. Window frame (glazing by others).

h. Door viewer.

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

C. Work surfaces (select as required):

1. Inset steel white marker boards. (On trimless panels, vertical edges of marker boards will be roll-formed.)

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.

D. Pocket door (select as required):

 1. Acoustical pocket door of same construction and same finish as partition panels.

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

**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. Operating handle and owner’s manuals shall be provided to owner’s representative.