**SPECIFICATIONS - SECTION 08 35 13 ACCORDION FOLDING DOORS**

**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. 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 Insurance**

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, NIST-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. Accordion door shall be guaranteed for a period of two years with all mechanical parts including track and carriers guaranteed for a period of ten 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. Unifold 1500 manually operated, top supported accordion door.

A. Unifold 3100 manually operated, top supported accordion door.

A. Unifold 3500 manually operated, top supported accordion door.

A. Unifold 4000 manually operated, top supported accordion door.

A. Unifold 4400 manually operated, top supported accordion door.

B. Initial seal:

1. Fixed wall jamb.

C. Final closure (select one):

1. Fixed post fastened to wall.

2. Rolling post and wall jamb. (Optional)

3. Rolling post and sliding panel. Stops for sliding panel at edges of the pocket by others. (Optional)

D. Configuration (select one):

 1. Single door.

 2. Paired door.

**2.2 Door construction**

A. Internal frame made of riveted 14 ga. steel pantographs. Door face panels linked together by full-height crimped 24 ga. steel channels. Cover channels fastened to pantographs with flanged steel dowels and push nuts. Intermediate trolleys fastened to pantographs and spaced at intervals no greater than 24" [610mm]. Lead post fitted with D-shaped aluminum handles linked to slide-type latching mechanism. Posts made of 20 ga. U-shaped flanged steel channels.

B. Acoustical rating (select one based on model):

 1. Unifold 1500: 15 STC.

 2. Unifold 3100: 31 STC.

 3. Unifold 3500: 35 STC.

 4. Unifold 4000: 40 STC.

 5. Unifold 4400: 44 STC.

C. Door face panel construction (select one based on model):

1. Unifold 1500 and 3100: Wallcovering laminated to 5-ply cardboard covers.

2. Unifold 3500: Wallcovering laminated to 5-ply cardboard covers. Fiber glass acoustical insulation blanket laminated inside covers.

3. Unifold 4000: Wallcovering laminated to 5-ply cardboard covers with steel liners.

4. Unifold 4400: Wallcovering laminated to 5-ply cardboard covers with steel liners. Fiber glass acoustical insulation blanket laminated inside covers.

D. Door weight (select one based on model):

1. Unifold 1500: 2.2 lbs/sq.ft [10.8 kg/sq.m].

2. Unifold 3100: 2.8 lbs/sq.ft [13.7 kg/sq.m].

3. Unifold 3500: 3.2 lbs/sq.ft [15.7 kg/sq.m].

4. Unifold 4000: 5.9 lbs/sq.ft [28.9 kg/sq.m].

5. Unifold 4400: 7.6 lbs/sq.ft [37.1 kg/sq.m].

**2.4 Panel finishes**

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

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

3. Factory applied 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)

B. Aluminum components finish shall be:

 1. Clear satin anodized.

**2.5 Sound seals**

A. Vertical seals (select applicable):

1. (Single door) V-shaped lead post moulding fitted with four tube-shaped pvc seals tightened against matching inverted v-shaped wall jamb by the slide-type latching mechanism.

2. (Paired door) V-shaped lead post moulding of the first door section fitted with four tube-shaped pvc seals tightened against matching inverted v-shaped moulding of second door section by the slide-type latching mechanism.

B. Horizontal seals (select one based on model):

1. Unifold 1500: None required.

2. Unifold 3100, 3500, 4000, 4400: combination vinyl and felt 1/2" [13mm] top and 1 1/2" [38mm] bottom sweeps.

**2.6 Suspension system**

A. Tracks and trolleys (select applicable):

1. #15 surface-mounted aluminum track for Unifold 1500: 6063-T6 aluminum alloy extrusion fastened to wood header by #10 X 2" wood screws.

a. #15 trolley: Intermediate trolleys shall have two precision ground ball bearing wheels with nylon tires. Trolley shall have four precision ground ball bearing wheels with nylon tires at lead post, rolling post, and field-joint posts.

2. #40 recessed aluminum track for Unifold 1500: 6063-T6 aluminum alloy extrusion with soffit trims fastened to wood header by #10 X 2" wood screws. (Optional)

a. #40 trolley: Intermediate trolleys shall have two precision ground ball bearing wheels with nylon tires. Trolley shall have four precision ground ball bearing wheels with nylon tires at lead post, rolling post, and field-joint posts.

3. #40 recessed aluminum track for Unifold 3100, 3500, 4000, 4400: 6063-T6 aluminum alloy extrusion with soffit trims fastened to wood header by #10 X 2" screws.

a. #40 trolley: Intermediate trolleys shall have two precision ground ball bearing wheels with nylon tires. Trolley shall have four precision ground ball bearing wheels with nylon tires at lead post, rolling post, and field-joint posts.

B. Track finish:

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

 a. Clear satin anodized.

 b. Custom painted. (Optional)

**2.7 Optional features**

A. Lock (select as required):

a. Deadbolt lock with one keyed cylinder and one thumb turn cylinder.

b. Deadbolt lock with two keyed cylinders.

B. Lead post (select as required):

 1. Two-way post at lead end of one door section for L-shaped configuration.

 2. Three-way post at lead end of one door section for T-shaped configuration.

 3. Four-way post at lead end of one door section for X-shaped configuration.

C. Independent rolling post (select as required):

1. Three-way rolling post equipped with three wall jambs, one lead trolley and a floor bolt for T-shaped configuration. Allows use of any two out of three door sections

 2. Four-way rolling post equipped with four wall jambs, one lead trolley and a floor bolt for X-shaped configuration. Allows use of any two out of four door sections.

D. Segmented track along radius:

 1. #40 track and soffit.

2. Up to 90 degrees.

 3. Minimum 42" [1067mm] radius.

E. Glide switch with segmented track along radius:

 1. Mechanically activated track switch allows stacking of door away from main track.

 2. #40 track and soffit.

3. Up to 90 degrees.

 4. Minimum 42" [1067mm] radius.

**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. Owner’s manuals shall be provided to owner’s representative.