1. General

1.1. RELATED SECTIONS

.1	Doors	Section 08 30 00.
.2	Door Hardware	Section 08 71 00.
.3	Glazing	Section 08 80 00.
.4	Gypsum Board	Section 09 25 00.
.5	Acoustical Ceilings	Section 09 51 00.
.6	Carpet	Section 09 68 00.
.7	Open office Furniture	Section 12 61 00.
.8	Electrical	Section 16 40 00.

1.2. REFERENCE DOCUMENTS

- .1 Americans with Disabilities Act (ADA).
- .2 ANSI/BIFMA x-5.6-2003, Panel Systems.
- .3 ASTM B221: Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
- .4 ASTM E84-05, Standard Test Method for surface burning characteristics of building materials.
- .5 ASTM E72, Standard Test Method of conducting strength tests of panels for building construction.
- .6 ASTM E90-04, Standard Test Method for laboratory measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
- .7 ASTM E413: Standard Classification for Rating Sound Insulation.
- .8 AWI: Quality Standards
- .9 CSA STD C22.1: Canadian Electrical Code, Part 1.
- .10 CSA STD C22.2: Canadian Electrical Code, Part 2.
- .11 NFPA 70: National Electrical Code.
- .12 Underwriters Laboratories, UL183 Manufactured wiring systems.

1.3. SYSTEM DESCRIPTION

- .1 Unitized, Demountable Movable Wall Partition System:
 - .1 A Unitized, movable partition system for interior use, designed to permit replacement of finishes, relocation of wall sections, and reuse of all parts.
 - .2 Non-progressive, allowing for removal and reinstallation of wall sections from either side of partition and at any point in the panel field, without disturbance of adjacent panels.
 - .3 Erected and disassembled in a manner preventing damage to adjacent building surfaces and elements, including floors (tile or carpet), walls, ceilings, columns and window mullions.
 - .4 Permits two, three, and four-way panel connections using a common post connector system.
 - .5 Interchangeable finished surfaces can be rearranged in any desired combination within a given wall space. Dissimilar finishes and arrangements are possible on each side of the wall system.
 - .6 Glazing system capable of being configured with either single glazed framing or double glazed. Single glazing configuration to accept 4, 6, or 10mm Tempered glass, Double glazing to accept 4 and/or 6mm tempered glass.
 - .7 Partition system shall be nominally 4-1/4" (108mm) thick and provide a clear and accessible 3" (76mm) wall cavity.
 - .8 Partition system capable of accommodating floor and ceiling height variations of 3" (76mm). Frame will permit the on site addition or removal of vertical frame extensions for reconfiguration to a location with an alternate ceiling height, in a non-seismic zone.
 - .9 All vertical frame joints to provide concealed integral slotting for the attachment of system furniture mounting adapters.
 - .10 Partition system shall provide a continuous, full height sound and light seal at the panel to panel connection.
 - .11 Ceiling track to be a one piece (up to 10'[3048mm]) continuous aluminum extrusion, complete with continuous resilient light and sound seals recessed from the panel face. Ceiling track is to be attached to underside of suspended ceiling grid without the use of destructive fasteners.
 - .12 Floor attachment to be achieved without mechanical fastening (in non-seismic zones).
 - .13 All glazed sections shall be factory glazed. Partition system to be capable of site installation of glazing.
 - .14 Door units are interchangeable with solid or glazed units of like size.
 - .15 Partition system to be able to accommodate the following door types:
 - .1 Solid core wood, for both swing and sliding applications
 - .2 Aluminum framed glass, for both swing and sliding applications
 - .3 Frameless glass, for sliding door applications

- .16 Partition system to be capable of being dismantled into component parts for ease of distribution, installation and storage, or moved as assembled units.
- .17 Partition system accommodates field installed power and communication wiring without damage to the wall structure.

.2 Performance Requirements:

- .1 Acoustic attenuation: Solid full height wall sections to have an STC rating of 46 within the speech privacy range when tested in accordance with ASTM E90 Sound Transmission Test by Two-Room Method and classified in accordance with ASTM E413.
- .2 Acoustic attenuation: Double Glazed full height wall sections consisting of 5mm clear tempered and 6mm clear tempered to have an STC rating of 43 within the speech privacy range when tested in accordance with ASTM E90 Sound Transmission Test by Two-Room Method and classified in accordance with ASTM E413.
- .3 Vertical Load capacity: Comply with ANSI/BIFMA X5.6. Functional load capacity of 400 lbs (182 Kg) per panel to a maximum of 800 lbs (364 Kg) per 12'-0" (3.66 m) wall run. And a Proof load of 400 lbs (182 Kg) per panel to a maximum of 1200 lbs (545 Kg) per 12'-0" wall run.
- .4 Flame spread rating: Able to achieve up to a Class A rating (less than 25 flame spread rating), when tested in accordance with ASTM E84.
- .5 Transverse Load capacity: partition shall be able to sustain a 5 psf (240 Pa) minimum transverse loading, with panel deflection no greater than 1/120th of the vertical span when tested in accordance with ASTM E72.

1.4. SUBMITTALS

- .1 Submit under the provisions of Section 01 34 00.
- .2 Shop drawings: Confirm panel layouts shown on the plan and elevation.
- .3 Samples: Submit 8-1/2" x 11" (216mm x 279mm) face panel material, finished and complete with trim colors.
- .4 Provide manufacturer's installation instructions.

1.5. QUALITY ASSURANCE

.1 Installation will be performed by manufacturer's personnel or by others authorized by partition system manufacturer.

- .2 Factory-installed electrical components to meet or exceed CAN/CSA-C22.2 and certified under CSA/NRTL/C.
- .3 Site measurements are to be taken by Supplier, where possible, prior to preparation of shop drawings and fabrication to ensure proper fitting of the work.
- .4 Supplier shall train the user's maintenance personnel and supply special tools which are required for the maintenance and relocation of the partition system.

1.6. DELIVERY, STORAGE AND HANDLING

.1 Do not begin delivery or installation until site conditions provide protection from weather, and environmental conditions within the building are approximately equivalent to those that will exist when occupied.

1.7. WARRANTY

.1 Provide manufacturer's warranty against defects in material and workmanship for a period of Ten (10) years, excluding fabrics and other finish materials that shall be guaranteed for 3 years.

1.8. ENVIRONMENTAL QUALIFICATIONS

- .1 The system shall contribute to LEED Commercial Interior's certification.
- .2 Ability to separate and recycle finished product at recycling facilities located in or near major cities in North America.

2. Products

2.1. MANUFACTURER

.1 Contract documents are based on the Executive Series as manufactured by:

PSL Partition Systems Ltd.

1647 – 70 Avenue

Edmonton, Alberta

CANADA T6P 1N5

Telephone: (780)465-0001

(800)567-2454

Fax: (780)466-7535

E-mail: <u>mail@partitions.com</u>
Website: <u>www.partitions.com</u>

.2 Substitutions: Products by other manufacturers require prior approval under provisions of Section 01 60 00.

2.2. MATERIALS

- .1 Aluminum extrusions to be ASTM B221 aluminum alloy suited to the application.
- .2 Particle board: particle board to maintain flatness of 1/8" (3mm) maximum deviation, 5/8" (16mm) thick.
- .3 Glazing: shall be Tempered or Laminated
- .4 Sound/light seals: Inner ceiling track Self adhesive, closed cell, inorganic, permanently elastic, sponge type stipping, Grey; Outer ceiling and Base track Flexible Thermoplastic sealing strip, black.
- .5 Acoustical insulation: 2" (51mm) thick, 1.0 lb/cu.ft. (18 Kg/cu.m) density glass fibre batt, unfaced, formaldehyde free.

2.3. FABRICATION

- .1 Panels
 - .1 Aluminum extrusions fastened together forming a rigid frame.
 - .2 One set of two (2) adjustable levelling legs with 3" of adjustment per unitized frame.
 - .3 Base track, pre-assembled with frame and attached to levelling legs
 - .4 Base track, comes with flexible thermoplastic sealing strip attached
 - .5 Sound attenuation insulation in panel cavities

.2 Ceiling track

- .1 Continuous extruded aluminum designed to accept non-marring ceiling clip attachment.
- .2 Complete with self adhesive, closed cell, inorganic, permanently elastic, sponge type stripping, inner seals, and flexible thermoplastic outer sealing strips attached.

.3 Wall starts

- .1 Extruded aluminum channel designed to allow for wall length and surface variations.
- .2 Compression member allows for the channel to be held tight to the existing wall without the use of mechanical fastening.
- .3 Complete with self adhesive, closed cell, inorganic, permanently elastic, sponge type stripping, inner seals and flexible thermoplastic outer sealing strips attached.

.4 Frame connectors

.1 Interlocking metal clips connect the unitized frames to one another while maintaining the proper spacing.

.5 Door and Window Frames

- .1 Factory-fabricated extruded aluminum units assembled for site installation.
- .2 Clear anodized or powder coated in standard stocked color.
- .3 Glazing stops to be systems aluminum snap-lock for double glazed type.
- .4 Glazing bead to be extruded flexible plastic of proper type for glazing configuration and glass thickness.
- .5 Swing Door frames to include continuous resilient gasket to seal door against frame.
- .6 Door frames are pre-machined for door hardware
- .7 Sliding door frame to include a flexible seal on the verticals to seal door against frame.
- .8 Sliding door to include eddy current speed limiting mechanism along with soft stop function integral to the sliding hardware

.6 Solid face panels

- .1 Low Pressure Laminate, High pressure laminate or veneer faced particle board.
- .2 Fabric or vinyl covered cork faced fiberboard panel.
- .3 Dry erase panels: 4mm thick back painted glass mounted onto ½" (13mm) MDF.

.7 Solid core doors

- .1 1-3/4" (45mm) thick, architectural quality.
- .2 Core: low density particle board
- .3 Stiles: solid finger jointed pine lumber, clear grade, 2" (50mm) thick both sides; blocking added if design requires.
- .4 Rails: solid finger jointed pine lumber, clear grade, 2-3/8" (60mm) thick top and bottom.
- .5 Sub faces: 1/4" (6mm) high density overlay for maximum durability and freedom from telegraphing
- .6 Edges: 3/8" (10mm) solid wood edge matching face veneer
- .7 Surface: premium face veneers or plastic laminates applied.

.8 Aluminum framed glass doors

- .1 1-3/4" (45mm) thick aluminum frame
- .2 Capable of using 1/4" (6mm) or 3/8" (10mm) tempered glass
- .3 Frame prepped for hardware

.9 Frameless glass doors

- .1 3/8" (10mm) or ½" (12mm) Tempered or laminated tempered glass
- .2 3-1/2" (90mm) tall top and bottom rail system
- .3 Glass prepped for hardware

.10 Electrical and communication services

- .1 Panels shall be fully accessible from either side to allow for direct access to clear 3" (76mm) interior cavity space.
- .2 Panel system to allow for wire management distribution throughout panel cavity.
- .3 Cutouts in horizontal framing members to allow for easy wire management distribution.
- .4 Power boxes are attached to the framing structure.

3. Execution

3.1. EXAMINATION

.1 Verify that the building conditions are ready to receive partitions and that dimensions are as instructed by the manufacturer.

3.2. INSTALLATION

.1 Install partition system in accordance with manufacturer's instructions.

- .2 Install ceiling track continuously and secure with non-marring attachment clips.
- .3 Install wall start channels where required.
- .4 Lift wall start panel frames into ceiling track, and engage side extension into wall start channel. Ensure frame is plumb and level; adjust as required.
- .5 Lift solid panel frames into ceiling track, and place the base track so that the panel is plumb; adjust as required.
- .6 Lift door or glazing frame into ceiling track, and place base track or door base plates so that the frame is plumb; adjust as required.
- .7 Connect the unitized frames together with joint clips to ensure proper spacing.
- .8 Feed power or communication cables through framing as required.
- .9 Snap on face panels as instructed by the manufacturer.

3.3. ADJUSTING

- .1 Replace damaged components with new to match.
- .2 Touch up minor scratches to match factory finish.
- .3 Adjust doors to operate smoothly.

3.4. CLEAN UP

.1 Upon completion of work, the contractor shall remove all of the associated cartons, trash, crates, etc. and leave the premises broom clean.

END OF SECTION