

## **SPECIFICATION: PS 350 GRAVITY LOCK MOVABLE WALL SYSTEM**

### **DEMOUNTABLE AND STEEL STUD AND GYPSUM BOARD PARTITIONS**

#### **1.0 GENERAL**

##### **1.1 RELATED WORK SPECIFIED IN OTHER SECTIONS**

##### **1.2 DESCRIPTION OF SYSTEM**

- .1 **GENERAL**: Floor to ceiling height movable partition system consisting of pre-finished gypsum board panels applied to both sides of steel stud framing including door and window frames.
  
- .2 **CONSTITUENT PARTS**
  - .1 Tree studs, base track and top track.
  - .2 Tree stud brackets.
  - .3 Pre-finished gypsum board panels.
  - .4 Retainer clips and fasteners.
  - .5 Acoustical insulation where required.
  - .6 Sound/light seals.
  - .7 Glazing frames with glazing beads.
  - .8 Trim components.
  - .9 Base
  - .10 Monolithic corners and surface mounted terminal partition end caps.
  - .11 Other miscellaneous components and accessories.
  - .12 Cable Management Modules [ CSA approved ] as required.
  - .13 Pivot door and frame complete with pivot hardware as required.
  
- .3 **ERECTION**: Non-Progressive Butt Joint
  
- .4 **ADJUSTABILITY**: Partition System shall be capable of adjusting to irregularities in level of floor and ceiling surface up to 25mm in 3m.
  
- .5 **DEMOUNTABILITY**: Partition System shall be fully demountable and re-locatable with near-total salvage-ability of all components.
  
- .6 **PARTITION SYSTEM DIMENSIONS**
  - .1 Panel module: (4'-0") 1219mm.
  - .2 Total thickness of standard partition: (3 1/2") 89mm.
  - .3 Total thickness of acoustically treated partitions: as standard partition.
  - .4 Height: As indicated on drawing.

.7 APPEARANCE

- .1 Joints: Hairline Butt joint resulting in a flush vertical plane throughout.
- .2 Panels: Factory pre-finished with a decorative vinyl film.
- .3 Outside corners: Monolithic Radius extruded aluminium semi flush with factory pre-finished decorative vinyl film.
- .4 Inside Corners: PVC Milcore type panel edge trim with factory pre-finished decorative vinyl film in matching panel finish.
- .5 Wall Starts: PVC Milcore type panel edge trim with factory pre-finished decorative vinyl film in matching panel finish.
- .6 Other trim: All horizontal ceiling, door and window frame trim standard PVC colour as per finish schedule.
- .7 All trims on Door and Glazing frames mitred to form 90 degrees

.8 COMPATIBILITY: Partition System shall accommodate the following:

- .1 Concealed electrical wiring.
- .2 Concealed thermostat wiring and tubing.
- .3 Wall mounted thermostats.
- .4 Independent cable management modules.
- .5 Window and door frames.

1.3 ACCEPTABLE MANUFACTURERS

- .1 PS 350 Gravity Lock Movable Partition System as the standard of quality and performance required.

1.4 PERFORMANCE REQUIREMENTS

- .1 STRUCTURAL: Partition System shall be structurally stable and vibration-free when subjected to impact loads of type occurring under normal use.

- .2 FIRE PROTECTION:

- .a Major components of the system shall be non combustible.
- .b Exposed panel surfaces shall meet the following fire hazard classification requirements:

Flame Spread	max. 25
Fuel Contributed	max. 35
Smoke Development	max. 50

- .3 ACOUSTICAL: Partition System shall provide the following minimum sound transmission ratings when laboratory tested to ASTM E90.

- .a Standard partition STC 35
- .b Acoustically treated STC 46

## 1.5 SUBMITTALS

- .1 PRODUCT DATA: Submit product data in accordance with Section 01300. Data shall include plans, elevations and sections of panels, connection installation procedures.
- .2 SAMPLES: Submit duplicated 200mmx300mm samples of panel finishes and textures and 300mm long samples of each colour trim.
- .3 MAINTENANCE DATA: Submit complete maintenance data for Partition System including instructions for dismantling and reassembling Partition System components.

## 1.6 SOURCE OF SUPPLY

- .1 The Partition System shall be part of a single, established, pre-designed and manufactured demountable Partition System provided by a single supplier. To insure continuity of colours, panel and component trim vinyl origination is to be from the same production run.

## 1.7 DELIVERY, STORAGE AND HANDLING

- .1 Prevent damage to gypsum board panels during delivery, storage and handling.
- .2 Store gypsum board panels flat, indoors. Protect carpet and other floor finishes from damage and soiling.

## 1.8 SITE CONDITIONS

- .1 Protection: Protect floor, ceiling and wall finishes from damage and soiling resulting from work of this section.

## 1.9 CO-ORDINATION

- .1 Co-ordinate erection of Partition System with installation of mechanical, electrical and telephone services.

## 1.10 SEQUENCING AND SCHEDULING

- .1 Install Partition System after carpet has been installed.

## 2.0 **PRODUCTS**

### 2.1 **PRODUCT MANUFACTURER**

**CALGARY**  
1043 26 Street N.E.  
Calgary, AB, Canada  
T2A 6K8  
Phone 403-272-7600  
Fax 403-272-6490

**EDMONTON**  
1220 70 Avenue N.W.  
Edmonton, AB, Canada  
T6P 1P5  
Phone 780-465-9327  
Fax 780-465-2195

**VANCOUVER**  
108, 6871 Elmbridge Way  
Richmond, BC, Canada  
V7C 5A4  
Phone 604-270-8926  
Fax 604-270-2911

**Web Site: [www.partitions.com](http://www.partitions.com)**

**E-Mail: [mail@partitions.com](mailto:mail@partitions.com)**

### 2.2 **COMPONENTS**

- .1 TOP TRACK: 26 ga. steel with hemmed legs designed to accept independent snap-on and off partition finish trim from either wall side.
- .2 TREE STUD: Hot dipped galvanized steel having G-60 wiped zinc coating to ASTM 525. Rolled formed from ASTM A-446 Grade A, .053mm base metal. Hemmed flange depth of 32mm minimum.
- .3 VINYL-FACED GYPSUM BOARD: to CSA A82.27-M-1977, standard 12.7 mm thick. Vinyl film to be factory bonded to face side with approved adhesive. Finished board product shall meet the standards for surface burning characteristics specified under fire protection authority.
- .4 BRACKETS: PS-350 Tree Stud Brackets.
- .5 ACOUSTICAL INSULATION: Type recommended by partition manufacturer to achieve specified STC rating.
- .6 RETAINER CLIPS, FASTENERS AND CONNECTORS: As recommended by Partition manufacturer.
- .7 SOUND/LIGHT SEAL: Closed cell, inorganic permanently elastic, sponge type stripping with adhesive one side, minimum 19mmx3mm thick.
- .8 DOOR FRAMES: Aluminium Association Alloy 6063-T5, .080 minimum thickness extruded aluminium frames and PVC stops. Complete with pivot door hardware.
- .9 GLAZING FRAMES: Aluminium Association Alloy 6063-T5, .080 minimum thickness, extruded aluminium frames, PVC glass stops and glazing beads designed to accept 6mm glass.
10. PIVOT DOORS: Partition Systems Pivot Door 3' x full height, Solid core: Flat Cut Red Oak, 3 coats of clear lacquer finish.
- .11 BATTEN TRIM: Snap-on PVC type as per finish schedule.

- .12 EDGE TRIM: Milcore type PVC friction to fit to all inside corners with factory applied vinyl.
- .13 PARTITION BASE: Snap-on PVC type. Colour as per finish schedule.
- .14 CEILING AND BASE OUTSIDE CORNERS: Snap-on PVC type 300x300mm factory manufactured.
- .15 MONOLITHIC CORNERS: Extruded aluminium with factory applied vinyl film.
- .16 MISCELLANEOUS ACCESSORIES: Miscellaneous trim, rail caps, fasteners, clips and other accessories for installation as recommended by partition manufacturer.
- .17 FACTORY FABRICATED CABLE MANAGEMENT MODULE: Unitized electrical /computer wall module, factory built as indicated on drawings.
- .18 BASE TRACK: 2 1/2 Wide x 2" deep.

### 2.3 FINISHES

- .1 VINYL FACED PANELS: Colours and textures as per finish schedule.
- .2 INSIDE CORNER PVC EDGE TRIM: Factory applied vinyl to match adjacent wall finish.
- .3 MONOLITHIC CORNERS: Factory applied vinyl to match adjacent wall finish.
- .4 PVC CEILING TRIM: Standard 1 3/8" PVC covered with Factory Applied Vinyl
- .5 PVC BASE TRIM: Standard PVC colour as per finish schedule.
- .6 WALL TERMINATION END CAPS: Semi-Flush aluminium with factory applied vinyl to match adjacent wall finish.
- .7 ALUMINUM DOOR AND WINDOW FRAMES: As per finish schedule.
- .8 PVC DOOR & WINDOW FRAME TRIMS: Standard PVC colour as per finish schedule.
- .9 Glass Stops: To suit 6mm glass. Colour as per finish schedule.

### 3.0 EXECUTION

#### 3.1 SITE MEASUREMENTS

- .1 Take site measurements of existing building to confirm dimensions prior to starting work.

#### 3.2 INSTALLATION

- .1 Installed by manufacturer's approved applicator.
- .2 Install partitions and all component parts in accordance with the manufacturer's instructions.
- .3 Erect Partitions, plumb, square and level: Accurately fit and fasten to abutting surfaces. Adjust to irregularities in floor levels to ensure level installation.
- .4 Position Partition Ceiling Track where cable management units are located **3/4" OFF CENTRE FROM CEILING GRID SYSTEM** to allow a clear vertical access for electrical between ceiling space and partition cavity unless otherwise indicated.
- .5 Install cable management modules in conjunction with partition studding at locations indicated on drawing.
- .6 At carpeted floors use, to extent possible, a hooked fastener tape that rigidly secures partition without damaging or defacing carpet. Fasten base track directly to substrate, through carpet, at door openings and other locations where additional rigidity is required.
- .7 At suspended ceilings use fasteners as required that rigidly support partition without damaging or defacing ceiling panels or grid system members.
- .8 Position Tree studs vertically in base and top tracks at 600mm on centre maximum. Do not break module at door and window openings.
- .9 Permanently fix each stud in place using 5/8" fasteners to restrain from horizontal movement prior to gypsum board attachment:
- .10 Install 6 carrying brackets per tree stud. Ensure all brackets are fully engaged into tree stud slots.
- .11 Install continuous closed cell foam tape at perimeter of each partition including junction of partition with ceilings, other partitions, existing walls, window mullions, and other appurtenances. Included is a seal at carpeted floors.
- .12 Ensure movement free contact is achieved between studs and back of panel by fully engaging all finger clip attachments onto the carrying brackets.
- .13 Cut and fit panels accurately to fit neatly where panels abut to existing walls, window mullions or other appurtenances.

- .14 Install concealed panel clip fasteners in accordance with manufacturer's instructions. Panels sustaining core fractures that telegraph clip location as in bulges or blisters onto the panel face will be rejected.
- .15 Butt panels together to achieve a continuous moderate edge contact. Attach panels securely against studs ensuring a flush panel surface along the hairline joint.
- .16 Fasten door and glazing frames securely to studs. If necessary, reinforce doorjamb framing to insure structural stability.
- .17 Install monolithic corners as per manufactured instruction. Use of adhesives will not be allowed.
- .18 Install base at all floor junctions.

### 3.3 INSTALLATION OF ACOUSTICALLY TREATED PARTITIONS

- .1 Install acoustically treated partitions to conform to tested assembly.
- .2 Fill stud cavities completely with 2" acoustical batt insulation; recommended for movable partitions; including around openings, in corners, and in studs adjacent to door and glazing frames.
- .3 Ensure that closed cell foam tape at partition perimeter is continuous and under compression when installed. Ensure that all potential sound transmission leaks are completely sealed.
- .4 If Partition System design or installation has been modified from that of the tested assembly, ensure that such modifications do not compromise the acoustical performance characteristics of the Partition System. Such modifications shall be subject to the consultant's approval.

### 3.4 ADJUSTMENT

- .1 Correct misalignment of expose trim.

### 3.5 PATCHING AND CLEANING

- .1 Remove and replace panels and other components which are:
  - .a Damaged,
  - .b Improperly installed, or
  - .c Soiled Beyond satisfactory cleaning.
- .2 Clean soiled panel and trim surfaces after installation.
- .3 Clean all floor, ceiling and wall surfaces soiled as a result of work of this Section.

**END OF SECTION**