

Part 1 General**1.1 SYSTEM DESCRIPTION**

- .1 Basic systems to be non-progressive, moveable, ceiling height, reconfigurable component based partition system, from single manufacturer, where components can be assembled, disassembled, relocated, and reassembled in different layouts, with all parts reusable.

1.2 RELATED SECTIONS

- .1 Section 01 33 00 SUBMITTAL PROCEDURES
- .2 Section 08 14 16 FLUSH WOOD DOORS
- .3 Section 08 71 00 DOOR HARDWARE
- .4 Section 08 80 50 GLAZING
- .5 Division 26 ELECTRICAL

1.3 REFERENCES

- .1 Aluminum Association (AA):
 - .1 AA DAF45-R03, Designation System for Aluminum Finishes, 9th Edition
- .2 American National Standards Institute (ANSI):
 - .1 ANSI A208.1-2009, Particleboard
 - .2 ANSI HP-1-2004, Standard for hardwood and Decorative Plywood
 - .3 ANSI LD-3-2005, High Pressure Decorative Laminates
- .3 American National Standards Institute (ANSI)/ Business and International Furniture Manufacturers Association (BIFMA International):
 - .1 ANSI/BIFMA X5.6-2003, American National Standard for Office Furnishing - panel systems
- .4 American Society for Testing and Materials International (ASTM);
 - .1 ASTM B221-06 Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles and Tubes.
 - .2 ASTM E90-04, Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
 - .3 American Woodwork Manufacturer's Association of Canada (AWMAC) and Architectural Woodwork Institute (AWI)
 - .1 Architectural Wood Standards, 2009 Edition 1.

- .5 Underwriters Laboratories of Canada (ULC):
 - .1 CAN/ULC-S102-10, Surface Burning Characteristics of Building Materials and Assemblies.
- .6 Health Canada/ Workplace Hazardous Materials Information System (WHMIS):
 - .1 Material Safety Data Sheets (MSDS).

1.4 DESIGN CRITERIA

- .1 Sound transmission rating of installed solid panel partitions to be a minimum STC 45 with insulation when tested to ASTM E90.
 - .1 STC rating to be without scribing system to floor.
- .2 Maximum Class C/Type III fire rating when tested to CAN/ULC-S102.
- .3 Structural Performance:
 - .1 Design and size Moveable Partition System and components to withstand dead and live loads as calculated in accordance with OBC
 - .2 Design and size Moveable Partition System and components to withstand seismic loads and sway displacement as calculated in accordance with OBC.
 - .3 Load-bearing capacity of Moveable Partition System: not less than 136kg concentrated load.
 - .4 Design moveable partition system and components to allow any furniture manufacturer's upper storage units and work surfaces to be hung off of and supported by moveable partition system enclosed offices. See Furniture drawings for locations.
 - .5 Moveable partition system to be able to support upper millwork cabinets - refer to Architectural Drawings.
 - .6 Moveable partition system and components must be installed without any drilling or screwing into floors or gypsum board partitions.
- .4 Modular:
 - .1 Refer to architectural drawings for panel widths.
- .5 Partition Thickness: 100 mm Minimum
- .6 All Partitions to contain acoustic insulation unless otherwise indicated.
- .7 Electrical and Communications:
 - .1 See Division 26 for Electrical Specifications.

- .2 Moveable Partition system to come with all electrical outlets, back boxes, conduit and flex as required. Refer to Departmental Representative's drawings.
- .3 Moveable Partition electrical (and lighting switches) system to stub up into ceiling plenum no less than 100mm, and provide whip for Electrical connection to junction box (by others).
 - .1 Whip to be minimum 4572 mm long.
 - .2 All electrical, conduit and components to be run vertically in wall and never horizontally in base.
 - .3 All power outlets (unless otherwise noted) to be mounted at 400 mm A.F.F.)
 - .4 All light switches (unless otherwise noted) to be mounted at 1170 mm A.F.F.
- .4 Moveable Partition system to come with chase for communication wiring if required (by others).
- .5 Moveable Partition system to be prepped to receive card readers, keypads and any other hardware provided by others as outlined in Door Hardware Schedule. See Architectural Drawings for locations, coordinate with Contractor.
- .6 Refer to Electrical Drawings for electrical and communication outlet requirements and locations.
- .8 Hardware:
 - .1 Sliding door handles must be exposed and useable from both sides.
 - .2 Sliding doors must operate with a maximum force of 22 newtons.

1.5 SUBMITTALS

- .1 Provide required information in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Action Submittals: Provide the following submittals before starting any work of this Section:
 - .1 Product Data: Submit manufacturer's printed product literature, Specifications and datasheets including product characteristics, performance criteria, physical size, finish and limitations.
 - .2 Shop Drawings: Submit drawings stamped and signed by professional Departmental Representative registered or licensed in the Province of Quebec, Canada. Indicate location and extent of partitions including; but not limited to, the following:
 - .1 Plans, elevations, sections, details, and attachments to other construction.

- .2 Indicate system dimensions, material descriptions, profiles of all components and finishes.
- .3 Submit wiring diagrams and installation details of equipment indicating proposed location, layout and arrangement, control panels, accessories, piping, ductwork, and other items that must be shown to ensure coordinated installation.
 - .1 Submit factory test results of installed electrical systems and instrumentation.
- .4 The review is for the sole purpose of ascertaining conformance with the general design concept, and does not mean approval of the design details inherent in the shop drawings, responsibility for which shall remain with the Contractor. Such review shall not relieve the Contractor of responsibility for errors or omissions in the shop drawings or of his responsibility for meeting all requirements of the Contract Documents.
- .5 Do not commence manufacture or order materials before shop drawings are reviewed and accepted.
- .3 Samples:
 - .1 Submit 300 mm x 300 mm samples of specified panel materials and 300 mm long sections of frame and trim items to Departmental Representative for confirmation of material selection. Submit full sample card showing complete range of colour pattern and texture finish options available for selection by the Departmental Representative.
 - .2 Partition sample to show basic construction, connections methods, glazed sections, door frames, trim and finishes.
 - .3 Submit sample of floor and ceiling fixing device.
 - .4 Submit test reports from approved independent testing laboratory, certifying moveable partition system complies with non-combustible construction and sound transmission rating as specified.
 - .5 Submit copies of WHMIS MSDS - Material Data Sheets.

1.6 PROJECT CLOSEOUT SUBMITTALS

- .1 Operation and Maintenance Data: Submit manufacturer's written instructions for operations and maintenance procedures include name of original installer and contact information in accordance with Section 01 78 00 - Closeout Submittals.

1.7 DELIVERY, STORAGE AND HANDLING

- .1 Delivery and Acceptance Requirements: Deliver moveable partition system with protective wrapping on perimeters of panels, doors, glass and exposed framing components designed to prevent damage to materials during transit and on site storage.
- .2 Storage and Handling Requirements:
 - .1 Inventory moveable partition system components when delivered to project site and confirm that materials required for installation are accounted for on the delivery manifest.
 - .2 Deliver keys to Departmental Representative.

1.8 SITE CONDITIONS

- .1 Site Measurements: Verify dimensions by site measurements before fabrication and indicate measurements on shop drawings where moveable partitions are indicated to fit between or around other construction; coordinate fabrication schedule with construction progress to avoid delaying the Work.
- .2 Established Dimensions: Establish dimensions and proceed with fabricating moveable partitions without site measurements where site measurements cannot be made without delaying the Work; coordinate construction to ensure that actual site dimensions correspond to established dimensions; allow for trimming and fitting.

Part 2 Products**2.1 DESIGN REQUIREMENTS**

- .1 Sound Transmission:
 - .1 Rating of installed solid panel partitions to be a minimum STC 45 with insulation when tested to ASTM E90.
 - .1 STC rating to be without scribing system to floor.
 - .2 Insulate all partitions.
 - .2 Glass partitions to achieve a minimum STC rating of 38
- .2 Structural Performance:
 - .1 Design and size Moveable Partition System and components to withstand dead and live loads as calculated in accordance with all Federal, Provincial, municipal and local Codes, Laws, by-laws, guidelines and in accordance with the local Authority Having Jurisdiction.

- .2 Design and size Moveable Partition System and components to withstand seismic loads and sway displacement as calculated in accordance with Federal, Provincial, municipal and local Codes, Laws, by-laws, guidelines and in accordance with the local Authority Having Jurisdiction.
 - .3 Load-bearing capacity of Moveable Partition System: not less than 136kg concentrated load.
 - .4 Design moveable partition system and components to allow any furniture manufacturer's upper storage units and work surfaces to be hung off of and supported by moveable partition system in closed offices. See Furniture drawings for locations.
 - .5 Moveable partition system to be able to support upper millwork cabinets in equipment rooms, in Coat closets and as required.
 - .6 Moveable partition system and components must be installed without any drilling or screwing into floors or gypsum board partitions.
- .3 Electrical and Communication:
- .1 Refer to Division 26 for Electrical requirements.
 - .2 Provide Moveable Partition systems as a complete system including but not necessarily limited to the following:
 - .1 Electrical outlets,
 - .2 Back boxes,
 - .3 Conduit: Rigid and flexible as required and as acceptable by the applicable Codes, Laws, by-laws, recommendations and guidelines.
 - .4 Moveable Partition electrical (and lighting switches) system to stub up into ceiling plenum no less than 100mm, provide whip for Electrical connection to junction box and as follows:
 - .1 Minimum Whip Length: 4572 mm and as follows:
 - .1 Where two (2) separate circuits are indicated for a single wall panel provide two (2) separate whips, coordinate requirements with Electrical Drawings.
 - .2 All electrical, conduit and components to be run vertically in wall and never horizontally in base; except as indicated otherwise on the Drawings.
 - .3 All power outlets to be mounted at 400 mm A.F.F. unless otherwise noted.

- .4 All light switch boxes to be mounted at 1170 mm A.F.F. unless otherwise noted. Switches and Cover plates will be provided and installed by the Electrical Sub Contractor.
- .5 Provide prefabricated wire management chase for data and communication wirings for all Moveable Partition systems.
- .6 Coordinate location of and Prepare Moveable Partition system components to receive card readers and keypads. Refer to Drawings for locations, coordinate with the Departmental Representative.
- .7 Refer to Electrical Drawings for electrical and communication outlet requirements and locations.

2.2 MATERIALS

- .1 Pre-manufactured, component based, non-progressive wall system consisting of framing members, wall panels and glazing, floor, wall and ceiling mounting materials, acoustic fillers, doors and hardware; fully moveable and reusable in reconfigured layouts and spaces, and as follows:
 - .1 Floor Tracks: Manufacturer's standard continuous track with carpet grippers or non-slip pads; fabricated to meet project requirements; fill adjustment space with acoustic insulation.
 - .2 Wood Composite Panels: factory finished NAUF wood composite with low pressure laminate. Pattern, colour, texture and finish to later selection by the Departmental Representative, from manufacturers full range.
 - .3 Panel Sizes:
 - .1 Design Panel width to accommodate partition layout shown on Drawings.
 - .2 Panel height: adjustable to account for floor variations, using manufacturer's standard materials for solid and glazed panel configurations indicated.
 - .3 Panels to be one section full height monolithic unless otherwise shown on Architectural drawings to accommodate whiteboards and other accessories.
 - .4 Panel Connections: Manufacturer's standard for panel and framing attachments.
 - .5 Trim and Base: Manufacturer's standard for complete installed system.
 - .6 Acoustic Insulation: Glass fibre, containing post-consumer and post- industrial recycle content.

- .7 Door Frames: Extruded aluminum; Door configuration using manufacturer's standard attachment hardware. Include continuous vinyl seal on door stop.
- .8 Wood Doors:
 - .1 Solid core wood as specified in Section 08 14 16 - Flush Wood Doors, and as indicated on Drawings using manufacturer's standard components.
 - .2 Wood Door Hardware: Provided by Moveable Partition Supplier and as specified in Section 08 71 00 - Door Hardware.
- .9 Sliding Glass Doors:
 - .1 Glass: Fully tempered, single pane glass 10mm.
 - .2 Door Seals: to include brush and foam receiver at closer side for light and sound seal.
 - .3 Glass Door Hardware: provided by Moveable Partition Supplier and as selected by the Departmental Representative from the manufacturer's complete range. Provide hardware capable of locking on sliding doors whether they sit on inside of room or outside of room.
 - .4 Track Assembly: Manufacturers standard assembly with slow down mechanism.
- .10 Glass Windows:
 - .1 Fully tempered glass in single pane.
 - .2 Where indicated: Fully Tempered glass in double pane.
- .2 Performance:
 - .1 Structural: Fabricated as a self-supporting, structurally stable and vibration free system when subject to impact loads occurring as a result of normal usage.
 - .2 Fire: Provide exposed panel finishes and surfaces meeting fire hazard classification requirements in accordance with CAN/ULC S102 as follows:
 - .1 Flame Spread: Class C Flame spread 150 or less as tested to ASTM E-84.
 - .2 Fuel Contributed: 10 maximum.
 - .3 Smoke Developed: 40 maximum
 - .3 Acoustical: Provide system assembly components having a minimum STC 45 when tested in accordance with ASTM E90.
- .3 Components:

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- .1 Aluminum Extrusions: Powder coated, match requirements and Custom components using AA6063-T54 or 6061-T6 anodizing quality aluminum meeting the requirements of ASTM B429, and ANSI H35.1.
 - .2 Steel Components:
 - .1 Lightweight Framing: 0.455 minimum base steel thickness in accordance with CSA S136, Z180 galvanized in accordance with ASTM A653M.
 - .2 Reinforcing: 0.866 mm minimum base steel thickness in accordance with CSA S136, Z180 galvanized in accordance with ASTM A653M.
 - .3 Flexible Plastic Components: Manufacturer's standard PVC Free components including; but not limited to, zipper connections, ceiling and wall trims and glass retainers; colour black and custom coloured as selected by the Departmental Representative from the manufacturer's complete range of colours.
 - .4 Shop Fabrication:
 - .1 Fabricate moveable partition components at manufacturer's shop facilities to the greatest extent possible using components of sizes not less than those specified and in modules as recommended by moveable partition manufacturer.
 - .4 Accessories:
 - .1 Acoustical Insulation and Sealant:
 - .1 Types as recommended by partition manufacturer to achieve STC 45 unless otherwise specified
 - .2 Sound and Light Seal:
 - .1 PVC and neoprene free, available in not less than three (3) colours from the manufacturers complete range of colours.
 - .3 Miscellaneous Trim:
 - .1 Aluminum extrusions or flexible plastic for miscellaneous trim, battens, fasteners, clips, runners or tracks, leveling devices, and other accessories required for installation as recommended by partition manufacturer.
 - .4 Blocking:
 - .1 Provide plywood or metal blocking in locations indicated on drawings. Blocking must be able to support monitors and mounting brackets up to 158 kg.
 - .2 Blocking must be sufficient to mount display screens at height determined by the Departmental Representative.

- .3 Blocking must be wide sufficient to support a bracket minimum 1200 long with 200 from top to bottom and allow for a 75mm variation in the location of the bracket.
 - .4 Coordinate exact location of blocking with Audio-Visual supplier.
 - .5 Indicate exact location of blocking on face of panel with removable non- marking tape.
- .5 Finishes:
- .1 To be selected by the Departmental Representative from the Manufacturers full range of finishes and colours.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: Verify that substrates and services required for moveable partition systems are in place, and that installation tolerances are acceptable before beginning of installation of products specified in this Section.
- .2 Installation of products specified in this Section will denote acceptance of site conditions.

3.2 INSTALLATION

- .1 Manufacturer's Instructions: Install moveable partitions in accordance with manufacturer's written instructions and shop drawing requirements; braced and supported to meet requirements of local Authority Having Jurisdiction using fasteners and anchorages that will not permanently damage ceiling, wall and floor materials installed by other Sections.
- .2 Erect partitions plumb, square and level; accurately fitted and fastened to adjacent construction; adjust for floor irregularities and maintain level lines relative to ceiling construction.
- .3 Erect partition systems conforming to acoustical requirements for the project; do not modify wall systems that have an effect on acoustical performance of installed system; install closed cell foam tape at perimeter of each partition; excluding carpeted floor, as a continuous strip compressed between partition materials and adjacent construction.

3.3 CLOSEOUT SUBMITTALS

- .1 Adjusting:

- .1 Adjust doors and operating hardware to operate easily without binding; leave work in complete and proper operating condition; remove and replace defective work including doors and framing that are warped, bowed or otherwise unacceptable.
- .2 Adjust misaligned trim and base materials.
- .2 Touch-Up Finishing: Repair or replace abraded or damaged finishes to match adjacent materials; remove and replace panels and other components that are damaged, improperly installed or soiled beyond satisfactory cleaning.

END OF SECTION

PART 1 - GENERAL**1.1 REFERENCES**

- .1 Health Canada/Workplace Hazardous Materials Information System (WHMIS)
 - .1 Material Safety Data Sheets (MSDS).
- .2 National Fire Protection Association (NFPA)
 - .1 NFPA (Fire) 10, Standard for Portable Fire Extinguishers, 2018 Edition.
- .3 Underwriters Laboratories of Canada (ULC)
 - .1 CAN/ULC S508-12, Standard for the Rating and Fire Testing of Fire Extinguishers.

1.2 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's printed product literature and datasheet and include product performance characteristics, criteria, physical size, finish and limitations.
 - .2 Submit two copies WHMIS MSDS - Material Safety Data Sheets.
- .3 Provide shop drawings.
- .4 Closeout Submittals:
 - .1 Provide operation and maintenance data for incorporation into manual specified in Section 01 78 00 - Closeout Submittals.

1.3 DELIVERY, STORAGE AND HANDLING

- .1 Packing, shipping, handling and unloading:
 - .1 Deliver, store and handle materials in accordance with manufacturer's written instructions.
- .2 Waste Management and Disposal:
 - .1 Separate waste materials for reuse and recycling.

PART 2 - PRODUCTS**2.1 MULTI-PURPOSE DRY CHEMICAL EXTINGUISHERS**

- .1 Cartridge operated type or Stored pressure rechargeable type with hose, bracket and shut-off nozzle, ULC labelled for A, B and C class protection.
 - .1 3A-40BC rating.

2.2 IDENTIFICATION

- .1 Identify extinguishers in accordance with recommendations of NFPA (Fire) 10 & CAN/ULC-S508.
- .2 Attach bilingual tag or label to extinguishers, indicating month and year of installation. Provide space for service dates.

PART 3 - EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written recommendations, including product technical bulletins, handling, storage and installation instructions, and datasheets.

3.2 INSTALLATION

- .1 Install or mount extinguishers in cabinets or on brackets in accordance with NFPA (Fire) 10.