
Part 1 General

1.1 REFERENCE STANDARDS

- .1 Aluminum Association (AA)
 - .1 Aluminum Association Designation System for Aluminum Finishes -2008.
- .2 ASTM International (ASTM)
 - .1 ASTM A653/A653M-20, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - .2 ASTM C1396/C1396M-17, Standard Specification for Gypsum Board.
 - .3 ASTM E90-09(2016), Standard Test Method for Laboratory Measurement of Airborne - Sound Transmission Loss of Building Partitions, and Elements.
- .3 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-1.88-92, Gloss Alkyd Enamel, Air Drying and Baking.
 - .2 CAN/CGSB-1.104-M91, Semigloss Alkyd, Air Drying and Baking Enamel.
 - .3 CAN/CGSB-12.20-M89, Structural Design of Glass for Buildings
- .4 Underwriters Laboratories of Canada (ULC)
 - .1 ULC 102-2011, Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies (ULC S102)

1.2 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's printed product literature and data sheets for post and panel demountable partitions and include product characteristics, performance criteria, physical size, finish, and limitations.
- .3 Shop Drawings:
 - .1 Submit complete shop drawings for each type of partition.
 - .1 Indicate basic construction, glazed sections, door frames, trim, and finishes.
 - .2 Submit duplicate 200 x 300 mm samples of panel colours, textures and finishes and 300 mm long samples of trim options for colour selection by Departmental Representative.
 - .3 Submit sample of ceiling fixing device.
 - .4 Ensure critical dimensions and hold-to measurements are indicated for coordination.

1.3 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:

- .1 Store materials in dry location, off ground, indoors and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
- .2 Store and protect post and panel demountable partitions from nicks, scratches, and blemishes.
- .3 Replace defective or damaged materials with new.

1.4 QUALITY ASSURANCE

- .1 Manufacturer Qualifications: Primary products specified to be supplied by a single manufacturer with a minimum of ten (10) years experience.
- .2 Installer Qualifications: Products listed within this section shall be installed by a manufacturer-certified installation company.

1.5 WARRANTY

- .1 Submit, for Departmental Representative's acceptance, manufacturer's standard limited warranty document executed by authorized company official.
- .2 Warranty period: Ten (10) years from date of substantial completion.
- .3 Installer Qualifications: Minimum of two (2) year's documented experience in the installation of products in this section and must be approved by the manufacturer.

Part 2 Products

2.1 DESIGN REQUIREMENTS

- .1 Unitized Demountable System: full-height unitized wall system, non-progressive, factory fabricated panels.
 - .1 Acceptable Manufacturers
 - .1 Haworth, Enclose
 - .2 Teknion, Altos
 - .3 Or Approved Equivalent.
- .2 Systems are to be erected and disassembled in a manner that prevents damage to building surfaces including flooring, walls, ceilings, columns and window mullions.
- .3 Components: non-combustible, fire resistant, distortion free, uniform in dimension, construction and appearance, made to suit specific function and to have been proven in use. Components are to be factory-finished and require minimum on-site assembly.
- .4 Panels to accommodate electrical outlets, data outlets and wiring in panels as required.

2.2 FABRICATION

- .1 Fabricate demountable partition systems off-site in a controlled factory environment and deliver panels fully finished to site for installation with no additional assembly, construction or finishing required.
- .2 Fabricate demountable partitions for installation with concealed fastening devices, pressure-fit members. Fabricate systems to accept installation of continuous light and sound seals at floor, ceiling, and other locations where partitions abut fixed construction.

2.3 UNITIZED PANEL COMPONENTS

- .1 Site-erected demountable partition assembly and components are standard products of manufacturer.
- .2 Core Framing Components: manufacturers standard, extruded aluminum within manufacturers tolerance free from defects impairing strength and/or durability.
- .3 Insulation: Factory-installed in all solid panels, urea-formaldehyde free batt insulation.
- .4 Combination Panel Faces: Full height, extruded aluminum frame, with horizontally segmented solid panel faces and glazed panels. Refer to interior elevations for additional information.
 - .1 Wood Composite Panels: Factory-finished wood composite with high pressure laminate to manufacturer's standard.
 - .1 Colour to be selected from manufacturers standard range.
 - .2 Glazing: Fully tempered clear float glass. Minimum thickness 6mm.
 - .3 Aluminum Frame and Trims: Powder coated.
 - .1 Colour to be selected from manufacturers standard range.

2.4 POWER AND COMMUNICATION

- .1 In solid panels, provide a factory-installed modular power system including conduit, power feeds, power distribution assembly and panel mounted boxes with 20 amp triplex receptacles. Locate devices in accordance with electrical drawings and reviewed Shop Drawings.
- .2 Modular electrical components conforming to UL 183 / CAS C22.2 #203.1 Standard for Manufactured Wiring Systems.
- .3 Supply power to panel power distribution assembly via horizontal/panel base.
- .4 Provide horizontal, solid panel-to-solid panel power distribution by the use of internal jumpers in the panel base cavity.
- .5 Provide device boxes containing receptacles to provide voice/data housing with faceplate knock-out. Voice/Data cabling, devices, faceplates, and other devices installed by others.
- .6 Provide modular power/communication devices on panel faces at height of 420 mm (16 ½") from finished floor to center of neutral blade.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify conditions of substrates and surfaces to receive post and panel demountable partitions previously installed under other Sections or Contracts are acceptable for product installation in accordance with manufacturer's instructions.
 - .1 Visually inspect substrate.
 - .2 Inform Consultant of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied.

3.2 ERECTION

- .1 Finished spaces: delivery and installation of demountable partition components shall not be completed until building is enclosed and finishing, including installation of ceilings, floor coverings, mechanical and electrical fixtures are completed.
- .2 Install system after floor finishes and in accordance with manufacturer's instructions.
- .3 Fasten runners to floors, ceiling and abutting vertical surfaces at 600 mm on centre or as recommended by manufacturer.
 - .1 At ceilings use fasteners that rigidly support partition without damaging or defacing ceiling panels or grid system members.
- .4 Erect partitions plumb, square and level.
 - .1 Accurately fit and fasten to abutting surfaces.
 - .2 Adjust partitions at uneven floors to ensure level installation.
 - .3 Installation Tolerance: Install each demountable partition so surfaces vary not more than 1/8 inch (3 mm) from the plane formed by the faces of adjacent partitions.
- .5 Install continuous light/sound seal at junction of ceiling height partitions with floors, ceilings and abutting walls and vertical surfaces.

3.3 ADJUSTING

- .1 Adjust post and panel demountable partitions fit accurately in accordance with manufacturer's written recommendations.

3.4 CLEANING

- .1 Progress Cleaning:
 - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools, and equipment in accordance with Section 01 74 00 - Cleaning.
- .3 Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 74 19 - Waste Management and Disposal.
 - .1 Remove recycling containers and bins from site and dispose of materials at appropriate facility.

3.5 PROTECTION

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by demountable partitions installation.

END OF SECTION

Part 1 General

1.1 REFERENCE STANDARDS

- .1 Aluminum Association (AA)
 - .1 AA DAF 45-03 (R2009), Designation System for Aluminum Finishes.

1.2 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for wall and corner guards and include product characteristics, performance criteria, physical size, finish, and limitations.
- .3 Installation Drawings:
 - .1 Indicate on drawings large scale details, materials, finishes, dimensions, anchorage, and assembly.
- .4 Samples:
 - .1 Submit duplicate 300 mm long samples of profiles and colours for wall guards and corner guards.

1.3 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements and with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Store materials in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store and protect wall and corner guards from damages.
 - .3 Replace defective or damaged materials with new.

Part 2 Products

2.1 MATERIALS

- .1 Stainless steel corner guards: 1.2 mm (18ga) thick, 51 x 51 mm size, 1219 mm long, with 2 mm corner radius, bevelled edge, type 304 satin finished stainless steel. Field applied adhesive mounted.

2.2 ACCESSORIES

- .1 Adhesive: water resistant type as recommended by manufacturer for substrate.

2.3 FINISHES

- .1 Finish: Type 304 satin finished stainless steel.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for wall and corner guard installation in accordance with manufacturer's written instructions.
 - .1 Proceed with installation only after unacceptable conditions have been remedied.

3.2 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

3.3 INSTALLATION

- .1 Install units on solid backing and erect with materials and components straight, tight and in alignment.
- .2 Adhere wall guards where indicated with construction adhesive as recommended by manufacturer. Install straight and level to variation plus or minus 3 mm over 3000 mm straight edge, non-cumulative.

3.4 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 00 - Cleaning.
 - .1 Leave Work area clean at end of each day.
- .2 Perform cleaning after installation to remove construction and accumulated environmental dirt.
- .3 Clean surfaces after installation using manufacturer's written recommended cleaning procedures.
- .4 Upon completion of installation, remove surplus materials, rubbish, tools, and equipment barriers.
- .5 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 00 - Cleaning.

3.5 PROTECTION

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by wall and corner guards installation.

END OF SECTION

Part 1 General

1.1 REFERENCE STANDARDS

- .1 ASTM International (ASTM)
 - .1 ASTM A167-99 (2009), Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.
 - .2 ASTM A653/A653M-20, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - .3 ASTM B456-17, Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium.
- .2 CSA Group (CSA)
 - .1 CAN/CSA-G164-M92 (R2003), Hot Dip Galvanizing of Irregularly Shaped Articles.

1.2 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
 - .1 Provide manufacturer's printed product literature and data sheets and include product characteristics, performance criteria, physical size, finish, and limitations.
- .3 Shop Drawings:
 - .1 Indicate size and description of components, base material, surface finish inside and out, hardware and locks, attachment devices, description of rough-in-frame, and building-in details of anchors for grab bars.

1.3 CLOSEOUT SUBMITTALS

- .1 Provide maintenance data for toilet and bath accessories for incorporation into manual specified in Section 01 78 00 - Closeout Submittals.

1.4 MAINTENANCE MATERIAL SUBMITTALS

- .1 Tools:
 - .1 Provide special tools required for assembly, disassembly or removal for toilet and bath accessories in accordance with requirements specified in Section 01 78 00 - Closeout Submittals.
 - .2 Deliver special tools to Departmental Representative.

1.5 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements and with manufacturer's written instructions.

- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Store materials in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store and protect toilet and bathroom accessories from damages.
 - .3 Replace defective or damaged materials with new.

Part 2 Products

2.1 MATERIALS

- .1 Sheet steel: to ASTM A653/A653M with ZF001 designation zinc coating.
- .2 Stainless steel sheet metal: to ASTM A167, Type 302, with satin finish.
- .3 Stainless steel tubing: Type 302, commercial grade, seamless welded, 1.2 mm wall thickness.
- .4 Fasteners: concealed screws and bolts hot dip galvanized, exposed fasteners to match face of unit. Expansion shields fibre, lead, or rubber as recommended by accessory manufacturer for component and its intended use.

2.2 COMPONENTS

- .1 All washroom components shall be supplied by the same manufacturer, from the same design series wherever possible.
- .2 Toilet tissue dispenser: double roll type, surface mounted, heavy duty cast aluminum with satin finish, capacity of two standard-core toilet tissue rolls up to 152 mm diameter (2000 sheets.) Theft-resistant spindles shall be molded high-impact ABS with retractable pins and concealed locking mechanism.
 - .1 Bobrick B-2740
 - .2 Frost 150
 - .3 Gamco
 - .4 Approved alternate.
- .3 Paper towel dispenser: for roll paper towels, stainless steel cabinet, hinged front panel with full length piano hinge, lock and key, surface mounted, touch free pull dispensing mechanism dispenses one 305 mm towel per pull (pull force 1.8 pounds (8.0N), minimum capacity 205 mm wide x 205 mm diameter non-perforated paper tower rolls.
 - .1 Bobrick B-2860
 - .2 Frost 109-70S
 - .3 Gamco
 - .4 Approved alternate.
- .4 Soap dispenser: automatic, stainless steel with satin finish, 800 ml tank, stainless steel valve assembly, sensor activated, tamper proof filler lock, refill indicator window, surface mounted, approximate size 108 mm wide x 268 mm high x 107 mm deep.

- .1 Bobrick B-2013
- .2 Frost 714-S
- .3 Gamco
- .4 Approved alternate.
- .5 Feminine napkin disposal bin: stainless steel, surface unit, continuous hinged door, self closing, embossed with universally accepted symbol, removable plastic receptacles fitted with spring clip for deodorizer block.
 - .1 Bobrick ConturaSeries B-270
 - .2 Frost 622
 - .3 Gamco
 - .4 Approved alternate.
- .6 Mirror: Frame: heavy-gauge, one piece, roll-formed stainless steel with bright polished stainless steel finish. Channel shall be minimum 13 mm x 13 mm x 9.5 mm with 90 degree mitred corners. Continuous integral stiffeners on all sides. Back of unit to be galvanized steel.
 - .1 Mirror: 6 mm tempered glass set on neoprene tubing in frame
 - .2 Attachment clips: Vandal resistant stainless steel clips with concealed fasteners. Mirror support brackets sized to suit mirror size.
 - .3 Size: 610 mm wide x 1220 mm height, or equivalent, in configurations shown on drawings.
 - .4 Acceptable material:
 - .1 Bobrick B-165
 - .2 Frost 941-6MM
 - .3 Gamco
 - .4 Approved alternate.
- .7 Grab bars (GB1 & GB2): 30/32 mm wall x 1.6 mm wall tubing of stainless steel, 76 mm diameter wall flanges, concealed screw attachment, flanges welded to tubular bar, provided with steel back plates and all accessories. Peened surface at area of hand grips. Grab bar material and anchorage to withstand downward pull of 2.2 kN.
 - .1 GB1: 610 mm (24") straight
 - .1 Bobrick B-5806.99 x 24
 - .2 Frost 1001 – SP 24
 - .3 Approved alternate.
 - .2 GB2: 762 x 762 mm (30" x 30") L-shaped
 - .1 Bobrick B-5898.99
 - .2 Frost 1003 – SP 30x30
 - .3 Gamco
 - .4 Approved alternate.
- .8 Coat hook:
 - .1 Bobrick B-233

- .2 Frost 1138
- .3 Gamso
- .4 Approved alternate.
- .9 Waste receptacle: semi-recessed, size 440 mm wide x 225 mm deep x 705 mm high, stainless steel with satin finish, removable plastic receptacle, and tamper resistant screws.
 - .1 Bobrick ConturaSeries B-43644
 - .2 Frost 330
 - .3 Gamso
 - .4 Approved alternate.

2.3 FABRICATION

- .1 Weld and grind joints of fabricated components flush and smooth. Use mechanical fasteners only where approved.
- .2 Wherever possible form exposed surfaces from one sheet of stock, free of joints.
- .3 Brake form sheet metal work with 1.5 mm radius bends.
- .4 Form surfaces flat without distortion. Maintain flat surfaces without scratches or dents.
- .5 Back paint components where contact is made with building finishes to prevent electrolysis.
- .6 Hot dip galvanized concealed ferrous metal anchors and fastening devices to CAN/CSA-G164.
- .7 Shop assemble components and package complete with anchors and fittings.
- .8 Deliver inserts and rough-in frames to job site at appropriate time for building-in. Provide templates, details, and instructions for building in anchors and inserts.
- .9 Provide steel anchor plates and components for installation on studding and building framing.

2.4 FINISHES

- .1 Chrome and nickel plating: to ASTM B456, satin finish.
- .2 Manufacturer's or brand names on face of units not acceptable.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify that conditions of substrates and surfaces to receive toilet and bathroom accessories previously installed under other Sections or Contracts are acceptable for product installation in accordance with manufacturer's instructions prior to toilet and bathroom accessories installation.
- .2 Proceed with installation only after unacceptable conditions have been remedied.

3.2 INSTALLATION

- .1 Install and secure accessories rigidly in place as follows:
 - .1 Stud walls: install steel back-plate to stud prior to plaster or drywall finish. Provide plate with threaded studs or plugs.
 - .2 Hollow masonry units, existing plaster, or drywall: use toggle bolts drilled into cell or wall cavity.
 - .3 Solid masonry or concrete: use bolt with lead expansion sleeve set into drilled hole.
- .2 Install grab bars on built-in anchors provided by bar manufacturer.
- .3 Use tamper proof screws/bolts for fasteners.
- .4 Fill units with necessary supplies shortly before final acceptance of building.
- .5 Install mirrors in accordance with Section 08 80 00 - Glazing.

3.3 ADJUSTING

- .1 Adjust toilet and bathroom accessories components and systems for correct function and operation in accordance with manufacturer's written instructions.
- .2 Lubricate moving parts to operate smoothly and fit accurately.

3.4 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 00 - Cleaning.
 - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools, and equipment in accordance with Section 01 74 00 - Cleaning.

3.5 PROTECTION

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by toilet and bathroom accessories installation.

3.6 SCHEDULE

- .1 Locate accessories where indicated. Exact locations determined by Departmental Representative.
- .2 Room 150.14
 - .1 1 toilet tissue dispenser
 - .2 1 paper towel dispenser
 - .3 1 soap dispenser
 - .4 1 feminine napkin disposal bin
 - .5 1 mirror at sink
 - .6 1 grab bar – GB1
 - .7 1 grab bar – GB2

- .8 1 clothes hook
- .9 1 waste receptacle
- .3 Room 150.15
 - .1 1 paper towel dispenser
 - .2 1 soap dispenser

END OF SECTION