

1. GENERAL

1.1 DESIGN CRITERIA

- .1 Furnish, deliver and install all Toilet Partitions as indicated on the drawings and as required by actual conditions at the building. The Toilet Partitions shall include the furnishing of all necessary screws, special screws, bolts, special bolts, expansion shields and all other devices necessary for the proper installation and application of Toilet Partitions.

1.2 REFERENCES

- .1 All Toilet Partitions must be schedules, supplied and installed in accordance with: Local Building Code, CGSB (Canadian Government Specifications Board), CSA (Canadian Standards Association), ANSI *American National Standards Institute), ADA (Americans with Disabilities Act). In all cases the above references shall be taken to mean the latest edition of that particular standard including all revisions.

1.3 SHOP DRAWINGS

- .1 Make all submittals in accordance with Division 1, General Requirements

1.4 OPERATIONS AND MAINTENANCE DATA

- .1 Make all submittals in accordance with Division 1, General Requirements

1.5 WARRANTY

- .1 The Toilet Partition manufacturer shall warranty all Toilet Partitions by written certification, for a period of (1) year from date of certified substantial performance of the project, against any defects in design, materials and Workmanship. Any defects as described will be made good by the manufacturer at no additional cost to the City

1.6 QUALITY ASSURANCE

- .1 Manufacturer and model number listed are to establish a standard of quality. Similar items by approved manufacturers that are equal in design, function, quality and finish may be accepted upon prior written approval from the Contract Administrator/The City.
- .2 All requests for acceptable substitutions must be made in writing and submitted to the Contract Administrator at least 14 days prior to Bid closing. If requested, all requests for substitutions must be accompanied by product literature and actual product samples.

2. PRODUCTS

2.1 ACCEPTABLE PRODUCTS

- .1 Shanahan's Metal Toilet Partitions Overhead Braced Privacy – 58"
- .2 Only those manufacturers' names and product numbers listed herein are approved for use on this project. All other manufacturers must request approval as per Division 1 General Requirements. Absolutely no variations from listed and preapproved items will be permitted.

2.2 MATERIAL

- .1 **Doors, Panels and Pilasters** shall be constructed of two sheets of tension leveled steel sheet as to ASTM A653 ZF 75, pressure glue bonded to a honeycomb core for sound deadening and rigidity. Formed and finished with a double-edged self-locking edge, corners mitred – welded and ground smooth. Core constructions shall consist of resin impregnated Kraft paper and weighing minimum 26-lb./100 sq. ft. 1 ¼" cell size with compressive strength of 12 p.s.i.
- .2 **Doors** shall be 32mm (1 ¼") thick with sheets not less than 20ga.
- .3 **Panels** shall be 32 mm (1 ¼") thick with sheets not less than 20 ga. (0.9 mm). Panels shall have a minimum simple bend failure rate of 1137 lb when point loaded at 1/3 intervals on a panel size of 55" (1384.3 mm) x 58" (1447.8 mm).
- .4 **Pilasters** shall be 32 mm (1 ¼") thick with sheets not less than 20 ga. (0.9mm). Bottom of pilaster shall be secured to floor with a minimum 16 ga. (1.4 mm) Galvanneal floor channel fasted internally to pilaster. Pilaster shoe 4" (101.6 mm) high, of type 304 stainless steel having a #4 finish, shall consist of two-piece stainless steel with continuous self-locking edges. No fasteners required
- .5 **Headrail** shall be 32 mm (1 ¼") by 57 mm (2 ¼") extruded clear anodized aluminum, and temper 6063T5, with anti-grip design. Outer flanges fitting over pilaster shall be securely

attached to wall and pilasters with manufacturer's fitting in such a way as to make a strong and rigid installation. All joints in headrails shall be made at pilaster.

2.3 COMPONENTS

- .1 All door hardware, panel and pilaster brackets to be chrome plated zinc die casting (Zamac).
- .2 **Coat hook/Bumper:** Each door to be fitted with combined coast hook/bumper. The combined stop and keeper shall have a 19mm (0.75") diameter bumper locked in place.
- .3 **Door Latch/Strike:** Each door is to have a concealed door latch, vandal-proof with slotted cover plate, for emergency entrance c/w a combination doorstop and keeper. The combination doorstop and keeper shall have a slotted hole for latch bolt and have a continuous rubber stop. Barrier-free doors shall include thumbturn lever to activate latch without fingertip grip application. Both standard and barrier-free latches shall have a turn slot designed to allow emergency access from exterior.
- .4 **Hinges:**
 - .1 Upper door hinge shall be inset into the edge of the door for extra strength and flush appearance. Hinge includes a 3/8" cold rolled steel threaded barrel to secure top hinge to door within the plane of the door to create a three point support for the pin. Plastic pins are not acceptable.
 - .2 Lower door hinge shall have a gravity function and be adjustable for any open position, designed for easy installation and trouble free maintenance.
- .5 Wall brackets shall be secured to walls with anchoring and/or expansion shields.

2.4 FINISH

- .1 Doors, panels, pilasters, and urinal screens shall be cleaned for maximum finish color adhesion. All components shall be finished with a hybrid epoxy/polyester powder, electrostatically applied to ensure uniform thickness and baked to cure.

2.5 COLOR

- .1 Shall be 700 Cadet Grey

3. EXECUTION

3.1 SITE PREPARATION:

- .1 Install necessary blocking as indicated on the manufacturers approved shop drawings.

3.2 FIELD MEASUREMENTS

- .1 Examine all Site conditions for correct height and spacing of blocking, plumbing fixtures and cabinet Work that may affect installation of the partitions or screens
- .2 Take complete and accurate field dimensions of toilet partition locations
- .3 Site Preparation: The Contractor must examine all Site conditions that would prevent the proper application and installation of Toilet Partitions. Any deviation from the approved shop drawings must be immediately identified and corrected by the Contractor, prior to the installation of the Toilet Partitions

3.3 INSTALLATION

- .1 Delivery to the jobsite shall be coordinated with the Contractor. Proper storage of Toilet Partitions before installation and continued protection during and after installation shall be the responsibility of the Contractor.
- .2 Supply and install all fastenings, anchors, and accessories required for the erection and completion of the Work.
- .3 Erect in strict accordance with the manufacturers' instructions

3.4 ADJUSTMENT AND CLEANING

- .1 At final completion, Toilet Partitions shall be left clean and free from disfigurement. Make all final adjustments.

END OF SECTION

1. GENERAL

1.1 RELATED REQUIREMENTS

- .1 Section 04 22 00 – Concrete Unit Masonry
- .2 Section 05 50 00 – Metal Fabrications
- .3 Section 10 21 13 – Toilet Compartments

1.2 REFERENCES

- .1 ASTM International
 - .1 ASTM A 167-[99(2009)], Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.
 - .2 ASTM B 456-[03], Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium.
 - .3 ASTM A 653/A 653M-[09], Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - .4 ASTM A 924/A 924M-[09], Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.
- .2 Canada Green Building Council (CaGBC)
 - .1 LEED Canada NC 2009, LEED: Green Building Rating System Reference Package for New Construction and Major Renovations (including Addendum).
- .3 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-1.81-[M90], Air Drying and Baking Alkyd Primer for Vehicles and Equipment.
 - .2 CAN/CGSB-1.88-[92], Gloss Alkyd Enamel, Air Drying and Baking.
 - .3 CGSB 31-GP-107MA-[90], Non-inhibited Phosphoric Acid Base Metal Conditioner and Rust Remover.
- .4 CSA International
 - .1 CAN/CSA-B651-[04], Accessible Design for the Built Environment.
 - .2 CAN/CSA-G164-[M92(R2003)], Hot Dip Galvanizing of Irregularly Shaped Articles.

1.3 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: Include overall product dimensions, sections, details, and attachments to other Work. Include choice of options with details.

1.4 CLOSEOUT SUBMITTALS

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

1.5 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.

1.6 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 off ground indoors in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store and protect toilet and bathroom accessories from nicks, scratches, and blemishes.
 - .3 Replace defective or damaged materials with new.
- .4 Packaging Waste Management: remove for reuse and return of pallets, crates, padding, and packaging materials.

2. PRODUCTS

2.1 MATERIALS

- .1 Sustainability Characteristics:
 - .1 Solid surface Adhesives:
 - .1 Urea Formaldehyde Free.
- .2 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 IN 118 UNIVERSAL W/C

- .1 Soap Dispenser: Bobrick B-40 Automated Wall-Mounted Mounted Foam Soap Dispenser. Satin-finish stainless steel.
- .2 Toilet Paper Dispenser: Bobrick 2740 Surface Mounted Dual-Roll Toilet Tissue Dispenser. Satin-finish stainless steel.
- .3 Sanitary Napkin Disposal: Bobrick B-270 Sanitary Napkin Disposal. Satin-finish stainless steel.
- .4 Grab bars: Bobrick B-6106.99 (24, 30, 36) 1 ½" 18 ga. tube, exposed mounting flange. Peened grip.
- .5 Clothes Hook: Bobrick B-983 Vandal-Resistant Clothes Hook. Satin-finish stainless steel.
- .6 Mirror: Bobrick B-290 1836/2460 Glass Mirror w/Stainless Steel Angle Frame. 18"x36" & 24"x60".
- .7 Waste Receptacle: City supplied
- .8 Baby Change Station: Bobrick Koala KB200-00. 30"x72" Bench Seat – Accessible Design Inc. With Swing Down Leg D-101-72 Custom Depth.
- .9 Paper Towel Dispenser: Kimberly Clark Professional H-1131

2.3 COMPONENTS IN 105 MEN'S W/C, 106 SHOWERS, 107 LOCKERS & 109 WOMEN'S W/C, 102 SHOWERS, 101 LOCKERS

- .1 Soap Dispenser: Bobrick B-70 Wall-Mounted Satin-finish stainless steel.
- .2 Toilet Paper Dispenser: 274 Sureface-Mounted Dual-Roll Toilet Tissue Dispenser. Satin-finish stainless steel.
- .3 Sanitary Napkin Disposal: Bobrick B-270 Surface-Mounted Sanitary Napkin Disposal. Satin-finish stainless steel.
- .4 Grab bars: Bobrick B-6106.99 (24, 30, 36) 1 ½" 18 ga. tube, surface mounting flange. Satin-finish stainless steel.
- .5 Clothes Hook: Bobrick B-983 Vandal-Resistant Clothes Hook. Satin-finish stainless steel.
- .6 Mirror: surface mounted with aluminum frame and adhesive, height and width as drawn in drawings.
Glazing for mirror specifications and Bobrick B-290/2460 24"x60"
- .7 Waste Receptacle: City supplied

- .8 Hook Strip (3 Hooks): Bobrick B-232X24. Stainless Steel.
- .9 Stainless Steel Shelf: Bobrick B-295X16.
- .10 Clothes Hook: Bobrick B-233. Satin Stain Steel.
- .11 Shower Curtain Rod & Hooks: Single 914mm Shower. Rod B-207X36. Curtain 204-2. Hooks 204-1.
- .12 Benches: Global Industries T97B490261. 12x60 & 12x84
- .13 Bench Trapezoids: T97B490841. 3 Per Bench. Anchored to Floor.
- .14 Paper Towel Dispenser: Kimberly Clark Professional H-1131

2.4 COMPONENTS IN BO4 & 120 JANITOR

- .1 Mop and broom holder: Bobrick B-223 Wall-Mounted mop and broom holder. Satin-finish stainless steel. Holds three mops, 5" x 24".

2.5 FINISHES

- .1 Chrome and nickel plating: to ASTM B 456, satin or polished finish.

2.6 COMPONENTS IN MUD/CHANGE ROOM BO3

- .1 Bench: Global Industries T97B490261. 12x60 & 12x84
- .2 Bench Trapezoids: T97B490841. 3 Per Bench. Anchored to Floor.

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 Inform Contract Administrator of unacceptable conditions immediately upon discovery.
- .3 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval from Contract Administrator.

3.2 INSTALLATION

- .1 Install and secure accessories rigidly in place as follows:
 - .1 Stud walls: Provide 3/4" plywood backing for all wall mounted equipment.
 - .2 Hollow masonry units, existing plaster or drywall: use toggle bolts drilled into cell or wall cavity.
 - .3 Solid masonry, marble, stone or concrete: use bolt with lead expansion sleeve set into drilled hole.
 - .4 Toilet and shower compartments: use male to female through bolts.

- .2 Install grab bars on built-in anchors provided by bar manufacturer.
- .3 Install mirrors in accordance with Section 08 80 50 - Glazing.
- .4 Coordinate requirements for power supply, conduit, disconnect switched and wiring of electric hand dryer. Install electrical wiring in accordance with manufacturer's instructions.

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 Proof test grab bars to manufacturer's specifications.

3.4 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - 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 11 - 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 on drawings and as indicated in this section.

END OF SECTION

1. GENERAL

1.1. REFERENCES

- .1 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-44.40-01, Steel Clothing Locker.

1.2. ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit submittals in accordance with Section 01 33 00 – Submittal Procedures.
- .2 Product Data:
 - .1 Provide manufacturer's printer product literature and data sheets for metal lockers and include product characteristics, performance criteria, physical size, finish and limitations
- .3 Shop Drawings:
 - .1 Indicate on drawings: type and class of locker, thicknesses of metal, fabricating and assembly methods, assembled banks of lockers, tops, rods, hooks, shelves, bases, trim, numbering, filler panels, end/back panels, doors, handles, locking method, ventilation method and finishes.

1.3. DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements:
 - .1 Deliver materials to Site in original factory packaging, labeled 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 metal lockers from nicks, scratches, and blemishes.
 - .3 Replace defective or damaged materials with new.

2. PRODUCTS

2.1. MANUFACTURED UNITS

- .1 Lockers: to CAN/CGSB-44.40, Type 1-Single full-height locker.
 - .1 Deluxe Locker by Shanahan's or approved equivalent in accordance with B7
- .2 Size: 15" x 18" x 72" H. - metal base. Pre-painted Galvanized to ASTM # A653 2120.
 - .1 Top: Flat
 - .2 Doors: one-piece double-wall envelope construction
 - .1 Door Colour – 700 Cadet Gray
 - .2 Door Interior: Colour 102 – Surf White
 - .3 Frame Colour: 220 – Slate
 - .3 Door handle: recessed handle

3. EXECUTION

3.1. EXAMINATION

- .1 Verification of Conditions: Verify conditions of existing substrates and surfaces to receive metal lockers are acceptable for product installation in accordance with manufacturer's instructions prior to metal locker installation.
- .2 Inform Contract Administrator of unacceptable conditions immediately upon discovery.
- .3 Proceed with installation only after unacceptable conditions have been remedied.

3.2. INSTALLATION

- .1 Assemble and install lockers in accordance with manufacturer's written instructions.
- .2 Securely fasten lockers to base and wall.
- .3 Install filler panels (False fronts) where obstructions occur.
- .4 Install finished end panels to exposed ends of locker banks.
- .5 Install locker numbers

3.3. ADJUSTING

- .1 Adjust metal lockers 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 11 – 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 11 – Cleaning.

3.5. PROTECTION

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

END OF SECTION