Part 1 General

1.1 REFERENCES

.1 Canadian General Standards Board (CGSB)

.1 CGSB 41-GP-6M-1983, Sheets, Thermosetting Polyester Plastics, Glass Fibre Reinforced. Reaffirmation of September 1976.

.2 Health Canada/Workplace Hazardous Materials Information System (WHMIS)

.1 Material Safety Data Sheets (MSDS).

.3 South Coast Air Quality Management District (SCAQMD), California State

.1 SCAQMD Rule #1113-A2016, Architectural Coatings.

.2 SCAQMD Rule #1168-A2017, Adhesive and Sealant Applications.

.4 The Master Painters Institute (MPI)

.1 Architectural Painting Specification Manual.

.1 MPI #76, Quick Dry Alkyd Metal Primer.

.2 MPI #96, Quick Dry Enamel Gloss.

1.2 ACTION SUBMITTALS

.1 Shop Drawings:

.1 Submit shop drawings, catalogue sheets full size templates.

.2 Indicate materials, thicknesses, sizes, finishes, colours, construction details, removable and interchangeable components, electrical components specifications and power loads, wiring terminal box locations, lamp centres and overlaps, access panels, mounting methods, schedule of signs.

.3 Submit drawn-to-scale details for individually fabricated or incised lettering indicating word and letter spacing.

1.3 INFORMATIONAL SUBMITTALS

.1 Product Data:

.1 Submit manufacturer's printed product literature panel signage or components, specifications and datasheet and include product characteristics, performance criteria, physical size, finish and limitations.

.2 Manufacturer's Instructions: submit manufacturer's installation instructions and special handling criteria, installation sequence, cleaning procedures.

Part 2 Products

2.1 MATERIALS

.1 Engraving sheet: lamicoid 3.2 mm thick plastic sheet, black core.

.2 Self-stick foam tape: 1.6 mm thick, 352.4 kg/m³ density polyurethane open-cell foam tape for sign purposes, with synthetic self-stick adhesive on both sides.

.1 Width: to suit sign sizes.

2.2 SIGN GRAPHICS

.1 Sign graphics: well defined, arranged for balanced appearance, and properly word and letter spaced.

.2 Self-stick vinyl film: individual letters and numerals and symbols die cut from 0.1 mm thick black integral colour, matte finish, exterior grade PVC film, with self-stick adhesive backing.

Part 3 Execution

3.1 INSTALLATION

.1 Manufacturer's Instructions: compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and data sheets.

.2 Erect and secure signs plumb and level at elevations as directed by Departmental Representative.

.3 Comply with sign manufacturer's installation instructions and approved shop drawings.

.4 Adhesive attachment:

.1 Use self-stick adhesive foam tape to manufacturer's instructions to fix sign and prevent "rocking".

.2 Keep tape maximum 1.6 mm from edges.

3.2 CLEANING

.1 On completion and verification of performance of installation, remove surplus materials, excess materials, rubbish, tools and equipment.

.2 Leave signs clean.

.3 Touch up damaged finishes.

END OF SECTION

Part 1 General

1.1 RELATED REQUIREMENTS

.1 Section 08 80 50 - Glazing.

1.2 REFERENCES

.1 ASTM International

.1 ASTM A167-99 2009, Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.

.2 ASTM B456-17, Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium.

.3 ASTM A653/A653M-17, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

.4 ASTM A924/A924M-17a, Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.

.2 Canadian General Standards Board (CGSB)

.1 CAN/CGSB-1.81-99, 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.

.3 CSA International

.1 CAN/CSA-B651-12 R2017, 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 Product Data:

.1 Provide manufacturer's printed product literature and data sheets and include product characteristics, performance criteria, physical size, finish and limitations.

.2 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, building-in details of anchors for grab bars.

1.4 CLOSEOUT SUBMITTALS

.1 Provide maintenance data for toilet and bath accessories for incorporation into manual.

1.5 MAINTENANCE MATERIAL SUBMITTALS

.1 Tools:

.1 Provide special tools required for assembly, disassembly or removal for toilet and bath accessories.

.2 Deliver special tools to Department Representative.

1.6 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 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.

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 304, with BA finish.

.3 Sustainability Characteristics:

.1 Laminate Adhesives.

.1 Urea Formaldehyde Free.

.4 Stainless steel tubing: Type 304, commercial grade, seamless welded, 1.2 mm wall thickness.

.5 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 Toilet tissue dispenser: Satin-finish stainless steel. Equipped with tumbler lock. Spindles hold two 255mm diameter rolls with 55mm diameter core rolls; convertible for 75mm diameter core rolls. Sliding access panel exposes one roll at a time, allows easy roll change-over. Wide viewing slot in door. Quick reloading.

.2 Paper towel dispenser: for folded and roll paper towels, stainless steel cabinet, hinged front panel, refill indicator slot, surface mounted.

.3 Soap dispenser: lather push-in valve 102 mm spout, self contained 1.14 L tank, stainless steel piston and valve assembly, tamper proof filler lock, under counter mounted, exposed metal components chrome plated.

.4 Feminine napkin disposal bin: stainless steel, surface unit, continuous hinged door, self closing, embossed with "napkin disposal" and "receptacle de serviette-sanitaire" or universally accepted symbol, removable stainless steel receptacles fitted with spring clip for deodorizer block.

.5 Hand dryer: listed under re-examination service of ULC and CSA approved.

.1 Mounting surface.

.2 Wall box: 16-gauge steel.

.3 Cover: stainless steel.

.4 Motor: universal type, 74.6 kW, 7500 RPM, resilient mounting, sealed, lubricated bearings, fuse protected, 120 V, 12.5 Amp.

.5 Fan: double inlet centrifugal type, dynamically balanced, directly mounted on motor shaft, 56.6 L/s.

.6 Heating element: protected by an automatic, resetting circuit breaker, isolated from nozzle.

.7 Timer: cam operated mechanical type designed to operate hand dryer for not less than 30 seconds field adjustable.

.8 Electronic dryer: power controlled by infrared admitting, receiving electronic control device positioned to dryer on when hands are placed under nozzle. Operation to continue for no more than 80 seconds of continued use.

.9 Nozzle: stainless steel, fixed.

.6 Shower curtain: 225 g white duck anti-bacterial fire resistive self-extinguishing vinyl laminated fabric shower curtain. Provide curtain hold-back hook and chain at each curtain.

.7 Shower rods: stainless 38mm, 2 mm wall thickness 12 shower curtain hooks and curtain hold-back hook and chain. Shower rod material and anchorage to withstand downward pull of 0.9 kN.

.8 Shower seat: wall mounted fixed, moulded with anti-microbial.

.9 Towel holder: wall mounted, stainless steel rod, holding capacity of 1 wash cloths, 1 hand towels, 1 bath towels.

.10 Towel bar: 25 mm diameter stainless steel tubing, stainless steel end brackets, concealed fasteners, 600 mm long.

.11 Grab bars: 38mm, 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. Knurl bar at area of hand grips. Grab bar material and anchorage to withstand downward pull of 2.2 kN.

.12 Soap holder: surface mounted, 5 mm thick stainless steel dished tray, self draining, flush screws.

.13 Robe hook: stainless steel with 75 mm projection.

.14 Shelf surface mounted, 200 deep, 400 wide, stainless steel.

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 galvanize 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 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 Inform Departmental Representative of unacceptable conditions immediately upon discovery.

.3 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval from Departmental Representative.

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, 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 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 50 - 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 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.

END OF SECTION

Part 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 00 00 01 - Standard Contract Requirements.

.2 Product Data:

.1 Provide manufacturer's printed 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.

.4 Samples:

.1 Submit duplicate 50 x 50 mm samples of colour and finish on actual base metal.

.2 Samples will be returned for inclusion into work.

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, 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 metal lockers from nicks, scratches, and blemishes.

.3 Replace defective or damaged materials with new.

Part 2 Products

2.1 MANUFACTURED UNITS

.1 Lockers: to CAN/CGSB-44.40, Type 2 - Double tier locker, freestanding.

.1 Material Sizes: hinges 2.0 mm, frame 1.6 mm, door 1.0 mm, top 0.85 mm, top and sides 0.70 mm. Width, height and depth dimensions as indicated on drawings.

.2 Assembly types: knock down construction for onsite assembly using pop rivet fastening.

.3 Top: flat where bulkheads or ventilation chase spaces are installed, sloped elsewhere. Provide perforated tops for ventilation into bulkhead where required.

.4 Doors: one-piece double-wall envelope construction door, door swing out.

.5 Door handle: recessed handle steel with bright chromium finish.

.6 Finish ends where lockers are exposed to match fronts.

.7 Base: steel.

2.2 ACCESSORIES

.1 Locking system: padlocks supplied by others.

.2 Unobstructed ventilation through two sets of louvers.

.3 Options: To CAN/CGSB-44.40, steel end panels, (where locker ends are exposed) number pates, manufacturer’s standards, coat hooks-metal chromium finish, one book shelf per locker, width equal to locker width, depth to be 16 mm short of locker depth, two (2) per double locker.

Part 3 Execution

3.1 EXAMINATION

.1 Verification of Conditions: verify conditions of substrates and surfaces to receive metal lockers previously installed under other Sections or Contracts are acceptable for product installation in accordance with manufacturer's instructions prior to metal locker installation.

.2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.

.3 Proceed with installation only after unacceptable conditions have been remedied [and after receipt of written approval from Departmental Representative.

3.2 INSTALLATION

.1 Assemble and install lockers in accordance with manufacturer's written instructions.

.2 Securely fasten lockers to grounds and nailing strips.

.3 Install wall trim around recessed locker banks.

.4 Install filler panels (false fronts) where indicated and where obstructions occur.

.5 Install finished end and back panels to exposed ends and backs of locker banks.

.6 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:

.1 Leave Work area clean at end of each day.

.2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment.

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