

PART 1 GENERAL

- 1.1 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 B456-03, Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium.
 - .3 ASTM A653/A653M-09, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - .4 ASTM A924/A924M-09, 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-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.
- .3 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.
- 1.2 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, 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 DCC Representative Consultant.
- 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 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 by manufacturer of pallets, crates, padding, and packaging materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

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 305, with satin finish.
 - .3 Stainless steel tubing: Type 305, 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 Toilet tissue dispenser: double roll type, surface mounted, chrome plated steel frame, capacity of 500 double ply roll, roll under spring tension for controlled delivery.
 - .2 Soap dispenser: liquid push-in valve 152 mm spout, self-contained 340 mL translucent polyethylene 1.5 L tank, stainless steel piston and valve assembly, tamper proof filler lock, surface mounted, exposed metal components chrome plated.
 - .3 Feminine napkin disposal bin: stainless steel, surface unit including rough-in frame, continuous hinged door, self closing, embossed with "napkin disposal" "receptacle de serviette-sanitaire" universally accepted symbol, removable stainless steel receptacles fitted with spring clip for deodorizer block.
 - .4 Hand dryer: listed under re-examination service of ULC and CSA approved.
 - .1 Mounting surface.
 - .2 Heavy duty one piece cover. Stainless steel with #4 brush finish (SS).
 - .3 Motor: through-flow discharge vacuum motor/blower with automatic resetting thermal protector. 5/8 HP, 24,000 RPM.
 - .4 Automatic Sensor - RoHS compliant lead-free design. Microprocessor controlled infrared sensor turns dryer on when hands are under the outlet for up to 80 seconds.

- .5 Heating: element to instantly raise the air temperature to 130oF. The heating element has an automatic thermal protector and operates in the black range for maximum life.
- .6 Dimensions: Surface: 10-1/8"W x 9-3/8"H x 5-5/8"D.
- .7 Adjustable Drying Time: 10+ seconds
- .8 Adjustable Power: 1500 - 800 Watts.
- .9 Adjustable Air Velocity: 16,000 LFM (At Nozzle). 10, 000 LFM (4" From Nozzle).
- .10 Air Temp: 135oF at 72oF Ambient.
- .11 Adjustable Sound: 83-69 dB.
- .12 Dimensions: Surface: (Fig 1.2): 25.7cm x W x 23.8cm H x 14.3 cm D.
- .13 Warranty: 5-year limited warranty.
- .14 Electrical Requirements: dedicated 15 or 20 amp line.
- .5 Grab bars: 30/32 mm diameter x 1.6 mm wall tubing of stainless steel, 76 mm diameter wall flanges, exposed 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.
- .6 Robe hook: stainless steel with 75 mm projection.
- .7 Mirror: wall mounted unit, fixed framed mirror 6 mm, stainless steel frame.
- .8 Privacy curtain and track:
 - .1 Cubicle track: the ceiling mounted, surface mounted cubicle track, and minimum of 29 mm wide x 19 mm deep, shall be anodized extruded aluminum. Track to be factory curved to the degree of angle shown on the drawings with a 300 mm radius. Track to be ceiling mounted using screws and plastic or lead plugs, or toggle bolts to suit ceiling conditions. In general the track system is to be installed by qualified trades people and meet the standards of the industry. Nylon roller carriers with swivel shall be supplied 150 mm on centre. Removable end stop with pull out for adding carriers shall be installed at one end of the track. End stop shall be installed at the other end

of the track.

- .2 Cubicle curtain: shall be 100% Treveria Polyester, 20-1/2 oz. per linear yard, inherently flameproofed in colour to be selected by the Departmental Representative. The fabric will be railroaded and seamless ion a one piece knit construction woven with an integral mesh. The header will be manufactured from a 100 mm fabric into a triple header and grommeted 150 mm o.c. with a #1 nickel plated grommet or a fully reinforced button hole. The sides and bottom hems will be 25 mm double turned, the height of the curtain will extend to just below the bottom of the track to within 25 mm of the floor. The curtain will be manufactured 10% wider than the track. Curtains shall be supplied with a permanent sew-in label indicating the height and width of each drape. The sewing workmanship of the curtains will be equal to or surpass industry standards.

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 Chrome and nickel plating: to ASTM B456, satin polished finish.
- .2 Baked enamel: condition metal by applying one coat of metal conditioner to CGSB 31-GP-107Ma, apply one coat Type 2 primer to CAN/CGSB-1.81 and bake, apply two coats Type 2 enamel to CAN/CGSB-1.88 and bake to hard, durable finish. Sand between final coats. Colour selected from standard range by Departmental Representative DCC Representative Consultant.
- .3 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 Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition 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 toilet and bathroom accessories installation.

3.6 SCHEDULE

.1 Locate accessories where indicated and as follows. Exact locations determined by Departmental Representative.

- .2 Toilet tissue dispenser: one in each toilet compartment.
- .3 Feminine napkin disposal bin: one in each female toilet compartment.
- .4 Hand dryer: one in each washroom. Maximum height of dispenser and operable part from floor 1200 mm.
- .5 Grab bar: two in each handicapped toilet compartment.
- .6 Robe hook: one in each washer.
- .7 Mirror: one at each accessible wash basin 1000 mm.
- .8 LSD: one at each washroom.
- .9 Privacy curtain and track: all around pat down area.