

## **1 GENERAL**

### **1.01 RELATED REQUIREMENTS**

- .1 Section 06 10 00 - Rough Carpentry.
- .2 Section 04 05 00 - Common Work Results For Masonry

### **1.02 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-13, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
  - .4 ASTM A924/A924M-13, Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.
  - .5 ASTM C1503-08, Standard Specification for Silvered Flat Glass Mirror.
- .2 CSA Group (CSA)
  - .1 CSAB651-12(R2017), Accessible Design for the Built Environment.
  - .2 CAN/CSA G164-M92(R2003), Hot Dip Galvanizing of Irregularly Shaped Articles.

### **1.03 ACTION AND INFORMATION 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 Submit drawings indicating 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.
  - .2 The installed grab bars shall be able to withstand a minimum downward pull of 2.2 kN. Shop Drawings to include engineering calculations and stamps.

#### **1.04 CLOSEOUT SUBMITTALS**

- .1 Provide maintenance data for toilet and bath accessories for incorporation into manual specified in Section 01 78 00 - Closeout Submittals.
  - .1 Include list of sources for disposable supplies, replacement parts and service recommendations.

#### **1.05 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.

#### **1.06 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 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.

## **2 PRODUCTS**

### **2.01 MATERIALS**

- .1 Sheet steel: to ASTM A653/A653M with ZF001 designation zinc coating.
- .2 Stainless steel sheet metal: to ASTM A167, Type 304, with satin finish.
- .3 Stainless steel tubing: Type 304, commercial grade, seamless welded, minimum 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.
- .5 To the extent possible, supply products from a single manufacturer for all locations and components.

### **2.02 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 Paper towel dispenser: for roll paper towels, stainless steel cabinet, hinged front panel, refill indicator slot, lock and key, surface mounted.
- .3 Hand dryer: listed under re-examination service of ULC and CSA approved.
  - .1 Surface mounted, 115 Volt AC, 12.5 Amp, 900 Watts, 60 Hz, automatic sensor cycle warm air hand dryer, GREENSPEC approved and LEED Rated.
  - .2 Mounting height: as required by Manufacturer.
  - .3 Stainless steel cover.
  - .4 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. Filed adjustable.

- .4 Soap dispenser: liquid push-in valve, 102 mm spout, self-contained 340 mL translucent polyethylene 1.14 L tank, stainless steel piston and valve assembly, tamper proof filler lock, surface mounted, exposed metal components stainless steel.
- .5 Feminine napkin disposal bin: stainless steel, surface unit, continuous hinged door, self-closing, embossed with "napkin disposal", "receptacle de serviette-sanitaire" and universally accepted symbol, removable stainless steel receptacles fitted with spring clip for deodorizer block.
- .6 Grab bars: length(s) as indicated, satin finish, concealed mounting flanges, 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 shall be designed and installed to withstand downward pull of 2.2 kN.
- .7 Coat hooks: stainless steel with 75 mm projection.
- .8 Fixed mirrors: wall-mounted using hidden fastener system, frame of type 304 stainless steel, satin finish, No. 1 quality 6 mm thick select float glass mirror to ASTM C1503, 610 mm wide x 914 mm high or as otherwise indicated.

## **2.03 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 Form surfaces flat without distortion. Maintain flat surfaces without scratches or dents.
- .4 Back paint components where contact is made with building finishes to prevent electrolysis.
- .5 Hot dip galvanize concealed ferrous metal anchors and fastening devices to CAN/CSA G164.
- .6 Shop assemble components and package complete with anchors and fittings.

- .7 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.
- .8 Provide steel anchor plates and components for installation on studding and building framing.

#### **2.04 FINISHES**

- .1 Stainless steel Type 304 with satin finish.
- .2 Manufacturer's or brand names on face of units not acceptable.

### **3 EXECUTION**

#### **3.01 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.

#### **3.02 PREPARATION**

- .1 Verify wall thickness and construction that will accept recessed accessories.
- .2 Verify that solid blocking for support and anchoring of washroom accessories is installed where required. Confirm exact height and location with Consultant and Manufacturers Instructions.
- .3 Verify that frames and anchors provided, whether by this Section or others, are correctly and securely installed ready to accept the accessory scheduled for the specific location.

- .4 Verify that painting is complete and dry in area of installation before accessories are installed.

### **3.03 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 in accordance with engineered shop drawings.
- .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 manufacturer's printed installation requirements and installation details.

### **3.03 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.

### **3.04 CLEANING**

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning. 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. Remove recycling containers and bins from site and dispose of materials at appropriate facility.

### **3.05 PROTECTION**

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

### **3.06 SCHEDULE**

- .1 Locate accessories where indicated and to CSA B651. Exact locations determined by Departmental Representative.

**END OF SECTION**