

**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 A653/A653M-08, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- .2 Canadian Standards Association (CSA)
  - .1 CAN/CSA G164-M92 (R2003), Hot Dip Galvanizing of Irregularly Shaped Articles.

**1.2 SUBMITTALS**

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data: Provide manufacturer's printed product literature and data sheets; 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.
- .4 Samples:
  - .1 Clothes hook: Submit product for review.
    - .1 Acceptable product will be returned for installation in Project.
  - .2 Shower curtain: Submit duplicate samples of curtain material, minimum 100 x 100 mm.
  - .3 Shower curtain track: Submit duplicate manufacturer samples of shower curtain track, illustrating profile, material, and finish.

**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 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 and 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 satin finish.
- .3 Stainless steel tubing: Type 304, 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 Bariatric shower seat: Heavy duty, all stainless steel, with locking hasp; capable of supporting 220 kg (500 lbs) load.
  - .1 Construction: Fully welded, with no open ends.
  - .2 Seat top: One piece, 2 mm (14 gauge) thickness, satin finish.
  - .3 Main frame and support arms: 1.65 mm (16 gauge) thickness.
  - .4 Flanges, wall brackets, hinges, hasp: 4.57 mm (7 gauge) thickness, with pre-drilled mounting holes.
    - .1 Hinge assembly: Lockable, with padlock hasp.
- .2 Clothes hook: Stainless steel, satin finish, anti-ligature, maximum 12 kg nominal load capacity, tamper-resistant mounting screws.
- .3 Mirror: Stainless steel sheet, 0.95 mm (20 gauge) thickness, polished to No. 8 bright finish, 6 mm (1/4 inch) return to conceal hardboard backing. Pre-drill corner holes, countersunk, for flush fit of mounting screws.
- .4 Sanitary product disposal: Stainless steel sheet, 0.8 mm (22 gauge) thickness, welded construction, flip-top cover with full-length stainless steel piano-style hinge. Provide disposal unit with radiused corners and edges.

- .5 Shower curtain track: Extruded aluminum, 6063-T5 alloy, ceiling mounted; complete with safety disengagement tabs for attachment of shower curtain.
  - .1 Aluminum thickness: Minimum 1.57 mm (1/16 inch).
  - .2 Tabs: Hook and loop ("Velcro") attachment strips that disengage when subjected to downward force exceeding 10 kg (22 lbs). Provide tabs at 100 mm (4 inch) spacing.
  - .3 Finish: Satin anodized.
- .6 Shower curtain: Nylon, vinyl, or polyester; opaque, anti-bacterial, flame-resistant. Provide shower curtain with 500 mm (20 inch) wide mesh visibility strip at top.
  - .1 Mesh: #50 nylon, 12.7 mm (1/2 inch) hole size.
  - .2 Curtain length: Equal to floor-to-ceiling height minus 12 inches above finished floor.
  - .3 Curtain width: Equal to track length plus 150 mm (6 inches).
  - .4 Top hem: Triple thickness, lock-stitched, with sewn-on 38 mm (1-1/2 inch) wide hook and loop strip for attachment to curtain track tabs.
  - .5 Bottom hem: Minimum 75 mm (3 inch) wide, lock-stitched; provide hem with weights.
  - .6 Colour: As selected by Departmental Representative.

## **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.

**Part 3 Execution**

**3.1 EXAMINATION**

- .1 Verify that conditions of substrates and surfaces to receive toilet and bathroom accessories are acceptable for product installation in accordance with manufacturer's instructions.
- .2 Inform Departmental Representative of unacceptable conditions.
- .3 Proceed with installation only after unacceptable conditions have been remedied.

**3.2 INSTALLATION**

- .1 Locate accessories where indicated. Confirm exact locations with Departmental Representative.
- .2 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 bolts with lead expansion sleeves set into drilled holes.
- .3 Use tamper proof screws/bolts for fasteners.

**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.
- .2 Leave Work area clean at end of each day.
- .3 Final Cleaning: Upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.
- .4 Waste Management: Remove waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

**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.

**END OF SECTION**