

1.1 General

1.2 REFERENCE STANDARDS

- .1 ASTM International (ASTM).
 - .1 ASTM A123/A123M-17, Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
 - .2 ASTM A240/A240M-20, Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.
 - .3 ASTM A653/A653M-20, Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .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 EXTRA MATERIALS

- .1 Provide keys and special tools required for accessing, assembly/disassembly or removal for washroom accessories.
- .2 Deliver special tools to Departmental Representative.

2 Products

2.1 MATERIALS

- .1 Sheet steel: to ASTM A653/A653M with ZF001 designation zinc coating.
- .2 Stainless steel sheet metal: to ASTM A240/A240M, Type 304, with No.4 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 Model numbers listed herein may not contain all prefix, suffix or other variations/designations that may be required to conform to product description. Indicate full model number on shop drawings including required prefixes, suffixes and model number variations/designations to accommodate description of product.
- .2 Locks: locks for all washroom accessories to be keyed alike.
- .3 Coat hooks (CH): single hook, maximum 40 mm projection, fabricated from 2.8 mm thick stainless steel.

- .4 Grab bars (GB1 & GB2):
 - .1 Wall mounted: 38 mm o.d. x 1.2 mm wall tubing of stainless steel, length and shape indicated, 75 mm diameter wall flanges welded to tubular bar, concealed screw attachment using snap flange cover, provided with steel back plates and all accessories. Peened finish. Grab bar and anchorage to withstand a force of 1.3 kN applied in any direction.
 - .2 Grab bar anchoring devices:
 - .1 Stud partition: 3 mm thick steel plate; 100 mm high; length to suit grab bar and attach to a minimum of two (2) studs.
 - .2 Hollow block: toggle bolts or sleeve anchors.
 - .3 Poured concrete or solid block: wedge anchors.
 - .4 Toilet partition: stainless steel plate system with internally threaded posts to prevent exposed fasteners on side opposite grab. Fabricated from 18-8, Type 304 stainless steel. Fasteners to be stainless steel.
 - .5 Any substrates: Manufacturer's proprietary anchoring devices designed specifically for grab bar installation on applicable substrate.
- .5 Hand dryer (HD): CSA approved, cUL listed, GreenSpec listed.
 - .1 Application: surface mounted, fixed nozzle.
 - .2 Operation: touchless infrared sensor; operates while hands are under air outlet, with time delayed automatic shut-off if an inanimate object is used to activate dryer.
 - .3 Drying time: less than 15 seconds.
 - .4 Cover: cast metal, enamel/epoxy finish.
 - .5 Air flow: minimum 16,000 LFM (linear feet per minute).
 - .6 Heating element: minimum 400 watts.
 - .7 Filter: HEPA.
 - .8 Electrical requirements: 120V, 15A, 60Hz.
- .6 Hand sanitizer dispenser (HSD): salvaged from existing.
- .7 Mirrors (M1 & M2): fixed channel frame.
 - .1 Frame: stainless steel channel frame, 13 mm x 13 mm x 9.5 mm; bright polished finish. One-piece frame with 90° degree mitred corners.
 - .2 Mirror:
 - .1 No. 1 quality, 6 mm thick, guaranteed for 10 years against silver spoilage. Provide shock absorbing material.
 - .2 Galvanized steel back with integral hanging brackets.
 - .3 Hanging: concealed wall hanger and bracket assembly of either:
 - .1 Snap lock design: designed to automatically lock mirror into hanger without use of set screws or,
 - .2 Set screws.
 - .3 Accessories:
 - .1 Mirror removal tool: where required, manufacturer's special tool for removal of mirrors.
- .8 Paper towel dispenser (PTD): salvaged from existing.
- .9 Sanitary napkin disposal (SND): container and cover fabricated from 0.8 mm stainless steel; equip cover with full-length stainless steel piano hinge; container shall have radiused corners.
- .10 Soap dispenser (SD): salvaged from existing.

- .11 Toilet tissue dispenser (TTD): double roll type, surface mounted, chrome plated steel frame, capacity of 500 double ply roll, roll under spring tension for controlled delivery.
- .12 Waste receptacle (WR): Semi-recessed type, open top.
 - .1 Cabinet: 0.8 mm stainless steel construction; 25 mm wide, one-piece seamless flanges.
 - .2 Waste receptacle: Open top, exposed edges hemmed; fabricated from 0.8 mm thick stainless steel; 45 litre capacity. Secure waste receptacle with lock.
 - .3 Size: overall 438 mm x 775 mm. Projecting no more than 101 mm from wall.

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 ASTM A123/A123M.
- .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.
- .10 Manufacturer or brand names on face of units not acceptable.

3 Execution

3.1 INSTALLATION

- .1 Install and secure accessories rigidly in place as follows:
 - .1 Stud walls: install steel anchor plate to stud prior to plaster or drywall finish. Provide plate with threaded studs or plugs.
 - .2 Hollow masonry units or existing plaster/drywall: use toggle bolts drilled into cell/wall cavity.
 - .3 Solid masonry, marble, stone or concrete: use bolt with lead expansion sleeve set into drilled hole.
 - .4 Toilet/shower compartments: use male/female through bolts.
- .2 Install grab bars using same materials and methods as those used for mock-ups.
- .3 Use tamper proof screws/bolts for fasteners.
- .4 Fill units with necessary supplies shortly before final acceptance of building.

3.2 FIELD TESTING OF GRAB BARS

- .1 Test each grab bar installation by applying design load for a minimum one-minute duration. Have Departmental Representative present during test.
- .2 Work which does not pass test will be rejected, taken down and installed to make compliant.
- .3 Departmental Representative's decision as to compliance will be final.

3.3 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.

3.4 PROTECTION

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

3.5 SCHEDULE

- .1 Refer to drawings for location and quantities of washroom accessories.

END OF SECTION