

1.0 GENERAL

1.1 RELATED REQUIREMENTS

- .1 Rough Carpentry Section 06 10 11
- .2 Finish Carpentry Section 06 20 00

1.2 REFERENCES

- .1 ASTM International
 - .1 ASTM A 167-99(2009), Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.
 - .2 ASTM B 456-03, Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium.
 - .3 ASTM A 653/A 653M-09, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - .4 ASTM A 924/A 924M-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.

1.3 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.
- .4 Sustainable Standards Certification:
 - .1 Low-Emitting Materials: submit listing of laminate adhesives used in building, verifying that they contain no urea-formaldehyde.

1.4 CLOSEOUT SUBMITTALS

- .1 Provide maintenance data for toilet and bath accessories for incorporation into manual specified in Section 01 78 00 - Closeout Submittals.

1.5 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. Provide the following extra number of spare accessories for maintenance use in addition to what is shown on drawings as indicated in Appendix of this specification. Hand over to Departmental Representative in their original unopened packages. Refer to Appendix 5 – Extra Parts, Material and Equipment List.

1.6 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - 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 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 of pallets, crates, padding, and packaging materials in accordance with Section 01 74 19 - Waste Management and Disposal.

2.0 PRODUCTS

2.1 MATERIALS

- .1 Sheet steel: to ASTM A 653/A 653M with ZF001 designation zinc coating.
- .2 Stainless steel sheet metal: to ASTM A 167, Type 304, with satin 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 INTERIOR FINISH MATERIAL & COLOUR SCHEDULE

- .1 This schedule is included in the appendix of this specification and list specific manufacturers related to style and quality upon which the scheme for the project is based.
- .2 The following component specifications, which are prescriptive in nature, are presented in order to establish a quality of product upon which a price can be tendered.
- .3 The Departmental Representative will consider substitute Products which meet or exceed the properties of the specified Product and are similar in material, construction, thickness, colour, texture, and overall quality, provided that proposals are submitted to the Departmental

Representative complete with samples and whatever other data the Departmental Representative may require in order to evaluate the proposed substitute Product. If the Departmental Representative approves the proposed substitute Product, the Contractor will have the option of providing Product listed in the Finish schedule or an approved alternative.

2.3 COMPONENTS

- .1 Toilet Tissue Dispenser (TTD): Side by side double roll type with utility shelf, surface mounted, type 304 stainless steel with satin-finish. Theft-resistant spindles with heavy-duty internal spring, hold standard core tissue rolls up to 140mm diameter (1800 sheets).
- .2 Soap Dispenser (SD): Lavatory-mounted soap dispenser, Type 304 stainless steel with bright polished finish piston and spout assembly. 360° spout rotation. Concealed locking mechanism escutcheon ABS cylinder valve with stainless steel spring, u-packing seal and duckbills. Translucent, shatter-resistant polyethylene container with 1.0-L capacity.
- .3 Grab Bars (GB): 30/32 mm dia x 1.6 mm wall tubing of stainless steel, peened gripping surface, 38 mm diameter wall flanges, concealed screw attachment, flanges welded to tubular bar, provided steel back plates and all accessories. Knurl bar at area of hand grips. Grab bar material and anchorage to withstand downward pull of 2.2kN. Configurations and sizes as indicated.
 - .1 GB1 (Toilet Side Wall Grab Bar): 915mm L.
 - .2 GB2 (Toilet Back Wall Grab Bar): 610 mm L, horizontal installation.
 - .3 GB3 (Urinal Side Grab Bars, 2 nos.): 610 mm L, vertical installation.
- .4 Sanitary Napkin Disposal (ND): Type 304 stainless steel surface-mounted sanitary napkin disposal with all-welded construction; satin-finish for all exposed surfaces. Drawn, one-piece, seamless construction cover, secured to container with a full-length stainless steel piano-hinge. Integral finger depression on container for opening cover.
- .5 Mirror (MR): One-piece roll-formed construction Type 304 stainless steel channel frame is 13 x 13 x 9.5 mm with vertical-grain satin finish and mitred corners. No.1 quality, 6mm glass mirror electrolytically copper plated; guaranteed against silver spoilage for 10 years. Mirror corners and back protected by shock absorbing material. Back is galvanized steel, secured to concealed wall hanger with two theft-resistant locking screws. Mirror size to be 460mm wide x 760 mm high.
- .6 Baby Changing Station (BCS): Recess-mounted wall unit brushed 20 gauge stainless steel exterior with bacterial-resistant polyethylene body. To support static load of 250 lbs minimum. To ASTM F2285. Liner dispenser, cam-buckle safety belt, pneumatic gas shock mechanism for smooth, safe open and close motion. Safety instructions in both official languages, graphic illustration, labeled with universally accepted symbol.
- .7 Hook – Single (HC-1): All construction Type 304 stainless steel satin finish surface-mounted hook. Hook to be 12 gauge (2.8 mm), welded to the support arm. 22 gauge flange and support arm with 16 gauge concealed mounting bracket and wall plate.
- .8 Hook-Strip: Type 304 stainless steel satin finish surface-mounted hook strip. Back plate to be 22 gauge and hooks 14 gauge.
 - .1 (HK-3) – 3 hooks strip for individual shower.
 - .2 (HK-6) – 6 hooks strip for family shower.

- .9 Waste Receptacle (WR): 22 gauge (0.8 mm) satin-finish stainless steel floor-standing waste receptacle, equipped with vinyl bumper strip and rubber feet. Open top, no cover, 79.5 litre capacity, with hooks for removable liner at upper interior corners. Size to be 760 mm high x 355 mm wide x 355 mm deep.
- .10 Hand-dryer (HD): Touch-free infra-red activation operation. Polycarbonate – ABS casing with antimicrobial coating. Colour to be sprayed nickel. Hepa filter. Hand dry time 12 seconds. 30 seconds operation lock-out period. 675 km/h airspeed at apertures. Up to 28 L/s operating airflow. 81 db(A) rated operating noise power, 5 year parts, 1 year labour warranty.

2.4 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.

2.5 FINISHES

- .1 Chrome and nickel plating: to ASTM B 456, satin finish, U.O.N.
- .2 Manufacturer's or brand names on face of units not acceptable.

3.0 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.

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 19 - 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 on drawings. Exact locations to be confirmed by Departmental Representative.

END OF SECTION 10 28 10