

## PART 1 - GENERAL

### 1.1 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 456-11, Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium.
  - .3 ASTM A 653/A 653M-15, 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-16, Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.
- .2 Canada Green Building Council (CaGBC)
  - .1 LEED Canada 2009 for Design and Construction-2010, LEED Canada 2009 for Design and Construction Leadership in Energy and Environmental Design Green Building Rating System Reference Guide.
- .3 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.
- .4 CSA International
  - .1 CAN/CSA-B651-12, 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.

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| 1.2 ACTION AND<br>INFORMATIONAL<br>SUBMITTALS<br>(Cont'd) | .2 | Product Data:<br>.1 Provide manufacturer's printed product literature and data sheets and include product characteristics, performance criteria, physical size, finish and limitations.   |
|   | .3 | Shop Drawings:<br>.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 | Samples:<br>.1 Submit samples for approval.<br>.2 Samples will be returned for inclusion into work.   |
|   | .5 | Sustainable Design Submittals:<br>.1 LEED Canada-NC Version 1.0 in accordance with Section 01 35 21 - LEED Requirements.  |
| 1.3 CLOSEOUT<br>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<br>MATERIAL SUBMITTALS                    | .1 | Tools:<br>.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.<br>.2 Deliver special tools to Departmental Representative. |
| 1.5 DELIVERY,<br>STORAGE AND<br>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   |
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| 1.5 DELIVERY,<br>STORAGE AND<br>HANDLING<br>(Cont'd) | .2 (Cont'd)<br>packaging, labelled with manufacturer's name<br>and address.  |
|  | .3 Storage and Handling Requirements:<br>.1 Store materials off ground and indoors<br>in dry location and in accordance with<br>manufacturer's recommendations in clean, dry,<br>well-ventilated area.<br>.2 Store and protect toilet and bathroom<br>accessories from nicks, scratches, and<br>blemishes.<br>.3 Replace defective or damaged materials<br>with new. |
|  | .4 Packaging Waste Management: remove for reuse<br>or return of pallets, crates, padding,<br>banding, and packaging materials as specified<br>in Construction Waste Management Plan in<br>accordance with Section 01 74 21 -<br>Construction/Demolition Waste Management and<br>Disposal and Section 01 35 21 - LEED<br>Requirements.                                |

## PART 2 - PRODUCTS

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| 2.1 MATERIALS | .1 Sheet steel: to ASTM A 653/A 653M with ZF001<br>designation zinc coating.   |
|               | .2 Stainless steel sheet metal: to ASTM A 167,<br>Type 304.  |
|               | .3 Sustainability Characteristics:<br>.1 Laminate Adhesives.<br>.1 Urea Formaldehyde Free.   |
|               | .4 Stainless steel tubing: Type 304, commercial<br>grade, seamless welded, 1.2 mm wall thickness.  |
|               | .5 Fasteners: concealed screws and bolts hot dip<br>galvanized, exposed fasteners to match face of<br>unit. Expansion shields fibre, lead or rubber<br>as recommended by accessory manufacturer for<br>component and its intended use. |

## 2.2 COMPONENTS

- .1 Toilet tissue dispenser: jumbo-roll surface mounted toilet tissue dispenser door and cabinet shall be type 304 stainless steel with satin finish: door shall be 1.2 mm; cabinet shall be 1.0 mm. Cabinet shall be equipped with keying locking. Door shall have a wide viewing slot to reveal toilet tissue supply inside cabinet. Dispensing mechanism shall be constructed of high-impact ABS shall accommodate two toilet tissue rolls up to 230 mm diameter with 75 mm diameter core. Spindles shall be convertible in the field to dispense 55 mm diameter core rolls.
- .2 Paper towel dispenser: for single roll paper towels, durable high impact resin construction lock and key, surface mount. Towel mechanism to accommodate up to 205mm wide, 205 diameter paper towel rolls. Hands free dispenser. Pulling exposed towel causes dispenser to cut a 270 mm to 305 mm length, leaving 75 mm to 90 mm length of towel to grab for next action. Equipped with feed paddle to advance paper if necessary.
- .3 Soap dispenser: liquid push-in valve spout, self contained 1.2 L tank, surface mounted, metal components 304 stainless steel.
- .4 Feminine napkin disposal bin: stainless steel surface unit, continuous hinged door, self closing, embossed with universally accepted symbol, removable plastic receptacles fitted, surface mount.
- .5 Shower curtain: anti-bacterial fire resistive self extinguishing vinyl laminated fabric shower curtain. Complete with nickel-plated brass grommets at top every 150 mm and stainless steel curtain hooks. Provide curtain hold-back hook and chain at each curtain.
- .6 Shower rods: 25 mm diameter x 1.2 mm wall thickness stainless steel tubing of required length with satin chrome finished flanges. Shower rod material and anchorage to withstand downward pull of 0.9 kN.
- .7 Grab bars: 32 mm diameter x 1.6 mm wall tubing of peened finish Type 304 stainless

## 2.2 COMPONENTS (Cont'd)

- .7 Grab bars: (Cont'd)  
steel, 76 mm diameter wall flanges, 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 408 kg. Lengths of grab bar types as noted on drawings. Where wall mounted, have a space between 35 mm and 45 mm between wall and bar. Bar shall not rotate within its fittings.
- .8 Robe hook: Type 304 stain finish stainless steel with concealed mounting bracket, that is secured to steel wall plate. Double ended hanger; 100mm wide, with 50 mm projection. Face to be rectangular non-impaling type.
- .9 Shelf: surface mounted, 125 mm wide x 405 mm long, of 1.2 mm thick Type 304 stainless steel, satin finish. Return and hem edges. Complete with support brackets.
- .10 Mirror: Mirror to be 610 mm wide by 915 mm tall. One piece roll formed 19 mm x 19 mm angle frame of satin finish Type 304 stainless steel, complete with welded, ground, and smooth corners. Mirror shall be 6 mm tempered glass, all edge protected. Secure to wall hanger with concealed fasteners.

## 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.

- 2.3 FABRICATION  
(Cont'd)
- .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 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.

- 3.2 INSTALLATION (Cont'd)
- .1 (Cont'd)
  - .2 Solid masonry, marble, stone or concrete: use bolt with lead expansion sleeve set into drilled hole.
  - .3 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 to meet requirements of CAN/CSA B651.
  - .6 Install to meet requirements of manufacturer's best practices and written instructions.

- 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 and Section 01 35 21 - LEED Requirements.
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- 3.4 CLEANING                      .3    Waste Management: (Cont'd)  
    (Cont'd)
- .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 the  
   drawings. Exact locations determined by  
   Departmental Representative.