

## **PART 1 - GENERAL**

### **1.1 RELATED REQUIREMENTS**

- .1 Section 10 28 10 – Toilet and Bath Accessories.

### **1.2 REFERENCE STANDARDS**

- .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 A 240/A 240M-17, Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.
  - .3 ASTM A 653/A 653M-17, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) 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-1.104M-91, Semigloss Alkyd, Air Drying and Baking Enamel.
- .3 CSA International
  - .1 CSA B651-12(R2017), Accessible Design for the Built Environment.

### **1.3 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
  - .1 Submit manufacturer's instructions, printed product literature and data sheets for metal toilet compartments and include product characteristics, performance criteria, physical size, finish and limitations.
- .3 Installation Drawings:
  - .1 Indicate fabrication details, plans, elevations, hardware, and installation details.
- .4 Samples:
  - .1 Submit duplicate 300 x 300 mm samples of panel showing finished edge and corner construction and core construction.
  - .2 Submit duplicate representative samples of hardware items, including brackets, fastenings and trim.

### **1.4 QUALITY ASSURANCE**

- .1 Test Reports: submit certified test reports showing compliance with specified performance characteristics and physical properties.

- .2 Certificates: submit product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.

### **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 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 metal toilet compartments from nicks, scratches, and blemishes.
  - .3 Replace defective or damaged materials with new.

## **PART 2 - PRODUCTS**

### **2.1 SUSTAINABLE REQUIREMENTS**

- .1 Materials and products in accordance with Section 01 47 15 – Sustainable Requirements.

### **2.2 MATERIALS**

- .1 Metal toilet partitions.
- .2 Sheet steel: commercial quality to ASTM A653/A653M with ZF001 designation zinc coating.
- .3 Minimum base steel thickness:
  - .1 Panels and doors: 0.8 mm.
  - .2 Pilasters: 1.0 mm.
  - .3 Reinforcement: 3.0 mm.
- .4 Stainless steel sheet metal: to ASTM A167, Type 304 with BA finish.
- .5 Headrails: 25 mm x 41 mm x 1.5 mm thick, clear anodized, extruded aluminum, anti grip design.
- .6 Pilaster shoe: 0.8 mm stainless steel chrome plated non-ferrous, 75 mm high.
- .7 Attachment: stainless steel tamperproof type screws and bolts.

### **2.3 COMPONENTS**

- .1 Hinges:
  - .1 Heavy duty, non-lubricating nylon bushings.

- .2 Material/finish: chrome plated non-ferrous casting.
- .3 Swing: inward, outward for barrier free stalls.
- .4 Return movement: gravity.
- .5 Adjustable to hold door open at any angle up to 90 degrees.
- .6 Emergency access feature.
- .2 Latch set: built-in, combination latch, door-stop, keeper and bumper, chrome plated non-ferrous.
- .3 Wall and connecting brackets: chrome plated non-ferrous extrusion or casting.
- .4 Coat hook: combination hook and rubber door bumper, chrome plated non-ferrous.
- .5 Door pull: barrier-free type suited for out swinging doors, chrome plated non-ferrous.

## **2.4 FABRICATION**

- .1 Doors, panels and screens: 2 mm thick, two steel sheets faces pressure bonded to honeycomb core, to sizes indicated.
- .2 Pilasters: 32 mm thick, constructed same as door, to sizes indicated.
- .3 Include formed and closed edges for doors, panels and pilasters.
  - .1 Miter and weld corners and grind smooth.
- .4 Include internal reinforcement at areas of attached hardware and fittings.
  - .1 Temporarily mark location of reinforcement for [tissue holders] [and grab bars].

## **2.5 FINISHES**

- .1 Clean, degrease and neutralize steel components with phosphate or chromate treatment.
- .2 Spray apply primer to CAN/CGSB-1.81, 1 coat.
  - .1 Primer: VOC limit 250 g/L maximum to SCAQMD Rule 1113.
- .3 Spray apply finish enamel to CAN/CGSB-1.104, Type 2, semi-gloss, 2 coats and bake to smooth, hard finish 0.025 mm thick.
- .4 Finish: doors and pilaster/panels same colour as selected from manufacturer's standard colours.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- .1 Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for metal toilet compartment installation in accordance with manufacturer's written instructions.
  - .1 Visually inspect substrate in presence of Departmental Representative.

- .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 to proceed from Departmental Representative.

### **3.2 MANUFACTURER'S INSTRUCTIONS**

- .1 Compliance: comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

### **3.3 PREPARATION**

- .1 Ensure supplementary anchorage, if required, is in place.

### **3.4 ERECTION**

- .1 Do work in accordance with CSA B651.
- .2 Partition erection.
  - .1 Install partitions secure, plumb and square.
  - .2 Leave 12 mm space between wall and panel or end pilaster.
  - .3 Anchor mounting brackets to hollow walls using bolts and toggle type anchors, to steel supports with bolts in threaded holes. Blocking/backing must be provided
  - .4 Attach panel and pilaster to brackets with through type sleeve bolt and nut.
  - .5 Allow for adjustment of floor-braced pilasters variations with screw jack through steel saddles made integral with pilaster.
    - .1 Conceal floor fixings with stainless steel shoes.
  - .6 Equip doors with hinges, latch set, and each stall with coat hook mounted on door, mounting heights 1200 mm.
    - .1 Adjust and align hardware for easy, proper function. Set door open position at 30 degrees to front.
    - .2 Install door bumper wall mounting.
  - .7 Equip outswinging doors with door pulls on inside and outside of door in accordance with CSA B651.
  - .8 Install hardware.
- .3 Floor supported and overhead braced partition erection.
  - .1 Attach pilasters to floor with pilaster supports and level, plumb, and tighten installation with levelling device.
    - .1 Secure pilaster shoes in position.
    - .2 Secure headrail to pilaster face with not less than two fasteners per face.
    - .3 Set tops of doors parallel with overhead brace when doors are in closed position.
  - .2 Floor supported partition erection.
    - .1 Secure pilasters to floor with pilaster supports anchored with minimum 50 mm penetration in structural floor.
    - .2 Level, plumb and tighten installation with levelling device.
    - .3 Secure pilaster shoes in position.

- .4 Set tops of doors level with tops of pilasters when doors are in closed position.
- .3 Screens erection:
  - .1 Include urinal stall screens consisting of panel and post, pilaster and headrail as specified for toilet compartments.
  - .2 Anchor [wall-hung] screen panels to walls with 3 panel brackets and pilaster complete with floor, anchored to floor.

### **3.5 ADJUSTING**

- .1 Adjust doors and locks for optimum, smooth operating condition.
- .2 Lubricate hardware and other moving parts.

### **3.6 CLEANING**

- .1 Perform cleaning after installation to remove construction and accumulated environmental dirt.
- .2 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

### **3.7 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.
  - .1 Clean surfaces after installation using manufacturer's recommended cleaning procedures.
  - .2 Clean aluminum with damp rag and approved non-abrasive cleaner.
  - .3 Clean and polish hardware and stainless components.

### **3.8 PROTECTION**

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

**END OF SECTION**