

Part 1 General

1.1 RELATED REQUIREMENTS

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

1.2 REFERENCES

- .1 American Society for Testing and Materials International (ASTM)
 - .1 ASTM A167-2004, Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.
- .2 Canadian Standards Association (CSA International)
 - .1 CSA-B651-04, Accessible Design for the Built Environment.

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's printed product literature for toilet partitions or components, specifications and datasheet and include product characteristics, performance criteria, physical size, finish and limitations.
- .3 Shop Drawings:
 - .1 Indicate fabrication details, plans, elevations, hardware, and installation details.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements.
- .2 Protect finished laminated plastic surfaces during shipment and installation.
- .3 Do not remove until immediately prior to final inspection.

Part 2 Products

2.1 MATERIALS

- .1 Solid Phenolic Toilet Partitions: Floor-anchored overhead-braced toilet partitions; colour to be selected by Architect.
 - .1 Doors to be constructed of 19 mm solid phenolic panel.
 - .2 Panels to be constructed of 13 mm solid phenolic panel.
 - .3 Pilasters, urinal screens to be constructed of 19 mm solid phenolic panel.

2.2 COMPONENTS

- .1 All components: 316 stainless steel.
- .2 Hinges: Heavy duty.
 - .1 Field-adjustable cam to permit door to be fully closed or partially open when compartment is unoccupied.
 - .2 Theft-resistant, one-way stainless steel machine screws secured into factory-installed stainless steel threaded inserts.
 - .3 Emergency access feature.
- .3 Latch Set: Barrier-free compliant to CSA B651, slide bolt type with combination door stop and keeper.
- .4 Mounting Brackets: Full length double angle.
- .5 Pilaster Shoe: Stainless steel, polished finish, wraparound design to conceal levelling device.
- .6 Headrail (Overhead-Braced): anti-grip profile.
- .7 Door pull: Barrier-free type suited for out-swinging doors.
 - .1 Install both sides to Barrier-free compartments.
- .8 Coat Hook: Resilient bumper type, manufacturer's standard.
- .9 Wall mounted door stop for barrier free door.
- .10 Anchors: Theft-resistant, one-way stainless steel screws.

Part 3 Execution

3.1 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and datasheets.

3.2 INSTALLATION

- .1 Ensure supplementary anchorage, if required, is in place.
- .2 Do work in accordance with CAN/CSA-B651-95.
- .3 Install partitions and screens secure, plumb and square.
- .4 Leave maximum 12 mm space between wall and panel or end pilaster.
- .5 Anchor mounting brackets to steel framing back-up using screws.
- .6 Use male to female through bolts.
- .7 Floor anchored partition erection.
 - .1 Attach pilasters to floor with pilaster supports and level, plumb, and tighten installation with levelling device.
 - .2 Secure pilaster shoes in position.

- .8 Attach panel and pilaster to brackets with through type sleeve bolt and nut.
- .9 Provide for adjustment of floor variations with screw jack through steel saddles made integral with pilaster.
 - .1 Conceal floor fixings with stainless steel shoes.
- .10 Adjust and align hardware for proper function.
- .11 Equip out-swinging doors with door pulls on inside and outside of door in accordance with CAN/CSA-B651.
- .12 Install Coat hook for barrier free on pilaster.
- .13 Install wall bumper to stop doors coat hook or pull from hitting adjacent walls.
- .14 Install hardware and accessories to locations shown on drawings and in accordance with Section 10 28 10.

3.3 CLEANING

- .1 Proceed in accordance with Section 01 74 11 - Cleaning.

END OF SECTION

Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 10 21 10 - Toilet Compartments.

1.2 REFERENCES

- .1 ASTM International
 - .1 ASTM A167-99(2009), Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.
- .2 CSA International
 - .1 CAN/CSA-B651-12, Accessible Design for the Built Environment.

1.3 ACTION AND INFORMATIONAL 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.

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.

1.6 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements 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 toilet and bathroom accessories from nicks, scratches, and blemishes.
 - .3 Replace defective or 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 316.
- .3 Stainless steel tubing: Type 316, commercial grade, seamless welded,.
- .4 Fasteners:
 - .1 Screws and bolts Type 316 stainless steel.
 - .2 Expansion shields fibre, lead or rubber as recommended by accessory manufacturer for component and its intended use.

2.2 COMPONENTS

- .1 All metal parts, material, components, and accessories, to be Type 316 stainless steel.
 - .1 Exposed Surfaces: Satin finish
- .2 Exposed Fasteners: Tamperproof Type 316 stainless steel screws.
- .3 Manufacturer's or brand names on face of units not acceptable.
- .4 Toilet Tissue Dispenser: double roll tissue, cabinet, hinged front panel, refill indicator slot, lock and key, cabinet capacity of 1000 tissues.
 - .1 Quantity: One per toilet fixture
- .5 Toilet Tissue Dispenser for HC toilets: Holds two (2) large round rolls of tissue, stainless steel fixture.
 - .1 Quantity: One per HC toilet fixture
 - .2 Acceptable product:
 - .1 Bobrick B-2892
 - .2 Approved alternate
- .6 Soap Dispenser: liquid push-in valve 64 mm spout, self- contained 340 mL translucent polyethylene, stainless steel piston and valve assembly, tamper proof filler lock, surface mounted, exposed metal components chrome plated.
 - .1 Quantity: One per lavatory fixture

- .7 Feminine Napkin Disposal Bin: unit, continuous hinged door, self-closing, embossed with universally accepted symbol, removable stainless steel receptacles fitted with spring clip for deodorizer block.
 - .1 Quantity: One per female toilet fixture
- .8 Shower Curtain: anti-bacterial, anti-fungal, mildew-proof, fire resistive self-extinguishing vinyl laminated fabric shower curtain.
 - .1 Provide collapsible curtain rings. Quantity as required for length.
 - .2 Curtain length to 50 mm above floor.
 - .3 Quantity: One curtain and set of rings per shower
- .9 Shower Rods: 32 mm dia, 1.6 mm wall thickness steel tubing of required length with satin finished flanges, Shower rod material and anchorage to withstand downward pull of 0.9 kN.
 - .1 Quantity: One per shower
- .10 Shower Seat: wall mounted folding, self-locking mechanism, minimum one piece 8 mm solid phenolic. 460 mm wide and projects 400 mm from wall.
 - .1 Quantity:
 - .1 One per shower
 - .2 One per shower drying area
- .11 Grab Bars: 38mm dia, 1.6 mm wall tubing of 76 mm diameter wall flanges, exposed screw attachment, flanges welded to tubular bar, provided with steel back plates and all accessories.
 - .1 Peen bar at area of hand grips.
 - .2 Grab bar material and anchorage to withstand downward pull of 2.2 kN.
 - .3 Quantity: See drawings.
- .12 Soap / Shampoo Shelf: Surface mounted, 5 mm thick perforated shelf, 300 mm long x 150 mm deep, flush screws.
 - .1 Quantity: One per shower
- .13 Robe Hook: Vandal-Resistant Hook Strip
 - .1 Back plate 2 mm thick.
 - .2 Four stainless steel hooks snap down for safety if excessively loaded.
 - .3 Unit approx.: 455 x 140 x 20 mm.
 - .4 Hooks project 30mm from back plate.
 - .5 Quantity: One per shower drying area
- .14 Mirror: fixed: 610 mm x 915 mm, 6 mm tempered glazing, channel frame, complete with concealed mounting hardware.
 - .1 Quantity: One per lavatory
- .15 Lavatory Shelf: surface mounted stainless steel, 125 deep, 450 mm wide.
 - .1 Located between sinks.
 - .2 Quantity: Two per washroom.

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 All concealed ferrous metal anchors and fastening devices to be Type 316 Stainless Steel.
- .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.
- .9 Provide templates, details and instructions for building in anchors and inserts.
- .10 Provide steel anchor plates and components for installation on studding and building framing.

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 the Departmental Representative.

3.2 INSTALLATION

- .1 Locate accessories where indicated.
 - .1 Locate HC items to CAN/CSA B651-12.
 - .2 Exact locations determined by Departmental Representative.
- .2 Install and secure accessories rigidly in place as follows:
 - .1 Stud walls: install steel back-plate to stud prior to drywall finish.
 - .1 Provide plate with threaded studs or plugs.
 - .2 Hollow masonry units: 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.

- .3 Install grab bars on built-in anchors provided by bar manufacturer.
- .4 Use tamper proof screws/bolts for fasteners.
- .5 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.

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

Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 04 04 99 Masonry for Minor Works
- .2 Section 09 21 16 – Gypsum Board Assemblies.
- .3 Section 09 66 24 – Epoxy Matrix Flooring

1.2 REFERENCES

- .1 ASTM E 64 – Standard Test Method for Surface Burning Characteristics of Building Materials.
- .2 ASTM D 792: Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement.
- .3 ASTM D 2583: Standard Test Method for Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor.
- .4 ASTM E 84: Standard Test Method for Surface Burning Characteristics of Building Materials.
- .5 ASTM G 21: Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi.
- .6 ASTM G 22: Standard Practice for Determining Resistance of Plastics to Bacteria.
- .7 ASTM G 155: Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials.
- .8 NEMA LD-3: High Pressure Decorative Laminates.
- .9 SCAQMD Rule 1168: Adhesive and Sealant Applications.

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
 - .1 Shop Drawings: Indicate, by large scale details, materials, finishes, dimensions, anchorage and assembly.
- .2 Product Data: Submit manufacturer's printed product literature, specifications and data sheet.
- .3 Samples.
 - .1 Submit physical colour samples of full range of standard colours for each product material for selection by Departmental Representative.
 - .2 Submit duplicate 100 mm long samples of profiles for each item specified and for each colour selected.
- .4 Manufacturer's Instructions.
 - .1 Submit manufacturer's installation instructions.

1.4 QUALITY ASSURANCE

- .1 Test Reports:
 - .1 Submit certified test reports showing compliance with specified performance characteristics and physical properties.
- .2 Certificates:
 - .1 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 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 from nicks, scratches, and blemishes.
 - .3 Replace defective or damaged materials with new.

Part 2 Products

2.1 MATERIALS

- .1 Solid Surface Material:
 - .1 Physical Characteristics
 - .1 Hardness (Barcol Impressor): 62; ASTM D 2583.
 - .2 Impact Resistance: 1980 mm. drop with no fracture; NEMA LD-3, Method 3.8.
 - .3 Light Resistance - Xenon: NEMA LD-3, Method 3.3.
 - .4 Stain Resistance: ANSI Z 124.3, modified.
 - .5 Wear and Cleanability: ANSI Z 124.3.
 - .6 Fungi Resistance: ASTM G 21.
 - .7 Bacterial Resistance: ASTM G 22.
 - .8 Boiling Water Resistance: NEMA LD-3, Method 3.5.
 - .9 High Temperature Resistance: NEMA LD-3, Method 3.6.
 - .10 Weatherability: Delta E less than 5; ASTM G 155.

- .11 Specific Gravity: 1.78 gram/cm³; ASTM D 792.
 - .12 15. Approximate Weight: 1kg/0.1m²
 - .13 16. Surface Burning Characteristics: Class II and Class B; ASTM E 84.
- .2 Seamless Acrylic Wall Panel System:
 - .1 Solid polymer components:
 - .1 Acrylic resins, fire retardant mineral fillers and colouring agents. Through-the- body colour for full thickness of sheet material.
 - .2 Thickness: 6 mm
 - .3 Colour: as selected by Departmental Representative from manufacturer's standard range.
- .3 Seamless Acrylic Countertops:
 - .1 Solid polymer components:
 - .1 Acrylic resins, fire retardant mineral fillers and colouring agents. Through-the- body colour for full thickness of sheet material.
 - .2 Thickness: 19 mm
 - .3 Backsplash; aprons and components: 19 mm
 - .4 Colour: as selected by Departmental Representative from manufacturer's standard range.
 - .2 Accessories:
 - .1 316 stainless steel counter brackets installed with stainless steel anchors.

2.2 ACCESSORIES

- .1 Seam Adhesive:
 - .1 Manufacturer's standard adhesive for chemically bonding solid surfacing seams.
 - .2 Colour complementary to solid surfacing panels.
- .2 Panel adhesive:
 - .1 Manufacturer's standard complying with ANSI A136.1-1967, UL listed.
- .3 Sealant:
 - .1 Panel matching, mildew-resistant, to Section 07 92 00.

2.3 WATERPROOFING SYSTEM

- .1 Waterproofing Membrane System: Minimum 8 mm thick fleece-backed polyethylene
 - .1 Provide adhesive, all required components, products and accessories including preformed corners for complete waterproofing protection.

2.4 FABRICATION

- .1 Fabricate components in shop, to greatest extent practicable, in sizes and shapes indicated according to approved shop drawings and manufacturer's published fabrication requirements.
- .2 Rout all wall cladding panels to size; saw cuts are not permissible.
- .3 Form joint seams between solid surfacing components with specified seam adhesive.
 - .1 Completed joints inconspicuous in appearance and without voids.
- .4 Provide holes and cutouts indicated on approved shop drawings.
 - .1 Rout cutouts with eased edges and complete by sanding all edges smooth.
- .5 Use woodworking and specialized fabrication tools acceptable to manufacturer.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable panel 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 INSTALLATION WALL PANELS

- .1 Comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.
- .2 Coordinate with installation of flooring and base.
- .3 Install waterproofing membrane using methods as recommended by manufacturer for location of installation.

- .4 Install wall cladding panels plumb, level, and true according to approved shop drawings and manufacturer's published installation instructions.
- .5 Shim as required during installation process.
- .6 Provide eased panel edges.
- .7 Form radius inside corners by thermosetting.
- .8 Attach wall cladding panels to substrate with specified construction adhesive to manufacturer's instructions.
 - .1 Provide temporary bracing until adhesive has to set to proper strength.
 - .2 Promptly remove excess adhesive.
- .9 Form wall cladding joint seams for multiple panels with specified seam adhesive.
 - .1 Seams in locations shown on approved shop drawings and acceptable to manufacturer.
 - .2 Promptly remove excess adhesive.
- .10 Caulk perimeter with mildew resistant sealant to Section 07 92 00.
- .11 Wall-mounted accessories must be completed supported by substrate wall framing, not wall cladding panels.

3.1 INSTALLATION COUNTERTOPS

- .1 Comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.
- .2 Coordinate with installation of plumbing and electrical.
- .3 Install support brackets into solid framing.
- .4 Form joint seams with specified seam adhesive.
 - .1 Seams in locations shown on approved shop drawings and acceptable to manufacturer.
 - .2 Promptly remove excess adhesive.
- .5 Caulk perimeter with mildew resistant sealant to Section 07 92 00.

3.1 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
- .2 Clean solid surfacing components according to manufacturer's published maintenance instructions. Completely remove excess adhesives and sealants from finished surfaces.

3.2 PROTECTION

- .1 Protect installed products and components from damage during construction.

END OF SECTION