

Part 1 General

1.1 REFERENCES

- .1 ASTM International
 - .1 ASTM A167-99 (2009), Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.
 - .2 ASTM B456-11e1, Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium.
 - .3 ASTM A653/A653M-08, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - .4 ASTM F2285-04 (2010), Standard Consumer Safety Performance Specification for Diaper Changing Tables for Commercial Use.
 - .5 ASTM G21-09, Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi.
- .2 Canadian Standards Association (CSA)
 - .1 CSA B651-12, Accessible Design for the Built Environment.
 - .2 CAN/CSA G164-M92 (R2003), Hot Dip Galvanizing of Irregularly Shaped Articles.

1.2 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.

1.3 CLOSEOUT 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 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.

1.5 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 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.

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 304 with No. 4 satin 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 All components to have stainless steel exposed surfaces, satin No. 4 finish. Provide matching components from a single manufacturer's line.
- .2 Toilet tissue dispenser: Surface mounted dual roll dispenser; all welded construction.
 - .1 Front: Drawn, one-piece seamless construction.
 - .2 Tumbler lock.
 - .3 Capacity for 133 mm diameter rolls.
 - .4 Extra roll to drop in to place automatically when bottom roll is depleted.
 - .5 Spindles: Heavy duty ABS, theft resistant.
- .3 Combination towel dispenser/waste receptacle: All welded construction.
 - .1 Mounting: Surface or semi-recessed, as shown on drawings.
 - .2 Door: Minimum 1.2 mm thick, with 90° return.
 - .3 Hinge: Concealed, full-length.
 - .4 Two tumbler locks.
 - .5 Capacity for C-fold, multifold, or single fold paper towels.
 - .6 Waste receptacle: Removable, leak-proof plastic, 14.4 L capacity.

- .4 Soap dispenser: Surface mounted.
 - .1 Valve: Corrosion resistant, operable with one hand with less than 22.2 N of force.
 - .2 Refill indicator window.
 - .3 Top: Locked, hinged for top filling.
 - .4 Capacity: 1.2 L.
 - .5 Mounting: Concealed, vandal resistant.
- .5 Sanitary napkin disposal bin: All welded construction, swinging door access.
 - .1 Door: Full length steel hinge.
 - .2 Front panel: Secured to cabinet with full-length concealed stainless steel hinge; tumbler lock.
 - .3 Receptacle: Removable, leak proof plastic: 4.6 L capacity.
- .6 Baby change station: To ASTM F2285 and ASTM G21, surface mounted.
 - .1 Exterior: Minimum 1.27 mm thickness stainless steel, satin finish.
 - .2 Interior: Moulded high-density polyethylene with embedded antimicrobial treatment, smooth concave changing area.
 - .3 Hinge: Full-length of table, steel, concealed from exposure on interior and exterior surfaces.
 - .4 Mounting brackets: Minimum 3.0 mm thickness steel.
 - .5 Features: Pneumatic cylinder mechanism, child safety straps, liner cavity, liner dispenser, and label with universal instruction graphics and safety messages.
- .7 Grab bars: 30/32 mm stainless steel tubing, 38 mm diameter wall flanges, concealed screw attachment, flanges welded to tubular bar, provided with steel back plates and all accessories. Peen bar at area of hand grips. Grab bar material and anchorage to withstand downward pull of 2.2 kN.
- .8 Mirror: Wall mounted unit, fixed frameless mirror, 6 mm thick tempered glass, concealed clip mounting.

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 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 Chrome and nickel plating: to ASTM B456, satin finish.

Part 3 Execution

3.1 EXAMINATION

- .1 Verify that conditions of substrates and surfaces to receive toilet and bathroom accessories 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.
- .3 Proceed with installation only after unacceptable conditions have been remedied.

3.2 INSTALLATION

- .1 Install and secure accessories rigidly in place.
- .2 Stud walls: Install steel back-plate to stud prior to plaster or drywall finish. Provide plate with threaded studs or plugs.
- .3 Install grab bars on built-in anchors provided by bar manufacturer.
- .4 Use tamper proof screws/bolts for fasteners.
- .5 Install accessories level and plumb.

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.
- .2 Leave Work area clean at end of each day.
- .3 Final Cleaning: Upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.
- .4 Waste Management: Remove waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

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 SUMMARY

- .1 Section includes:
 - .1 Portable fire extinguishers.
 - .2 Fire extinguisher cabinets.
 - .3 Fire extinguisher mounting brackets.
 - .4 Fire protection during construction.

1.2 REFERENCES

- .1 National Fire Protection Association (NFPA):
 - .1 NFPA 10 Portable Fire Extinguishers, 2010 Edition
- .2 Underwriters Laboratories of Canada (ULC):
 - .1 CAN/ULC-S508-02 Standard for the Rating and Fire Testing of Fire Extinguishers, Including Amendments 1 And 2

1.3 SUBMITTALS

- .1 Product Data: Manufacturer's data showing compliance with contract documents.
- .2 Samples: Finishes of cabinets, on actual or similar material.
- .3 Operating and Maintenance Data: Instruction manual complying with requirements of NFPA 10.
- .4 Certification: Installer shall submit written certification that the fire extinguishers installed comply with the contract documents and are fully and correctly charged.
- .5 Bldg. Drawing showing placement and type of extinguishers for each area.
 - .1 Drawing will show: Location, Type/Class, Size
 - .2 Drawing will need to be to scale (so determination can be made for maximum distance between extinguishers is not scaled).
- .6 Contractor to provide fire protection plan for all phases of construction. This will include quantity, type, placement and reporting.

1.4 QUALITY ASSURANCE

- .1 Provide only fire extinguishers which comply with NFPA 10.
- .2 Labels: Provide only fire extinguishers which are listed and labeled by Underwriters Laboratories Inc.

1.5 PROJECT CONDITIONS

- .1 Do not deliver or install contract extinguishers until just before substantial completion.

1.6 MAINTENANCE

- .1 Provide a maintenance contract to Departmental Representative for a period of 1 year after substantial completion.
 - .1 Include monthly and annual inspections in accordance with NFPA 10 and OSHA regulations.
 - .2 Submit reports of inspections to Departmental Representative.

Part 2 Products

2.1 FIRE EXTINGUISHERS

- .1 Manufacturers: Provide products complying with requirements of contract documents and made by one of the following:
 - .1 Fire extinguishers:
 - .1 Amerex Corporation.
 - .2 Ansul Fire Protection/A Grinnell Company
 - .3 Fire-End & Croker Corporation.
 - .4 General Fire Extinguisher Corporation.
 - .5 Potter-Roemer Division/Smith Industries, Inc.
 - .1 Walter Kidde, The Fire Extinguisher Co.
 - .2 Fire extinguisher cabinet manufacturer.
 - .2 Fire Extinguishers:
 - .1 Quantity: As shown on drawings.
 - .2 Type: Multipurpose dry chemical (ammonium phosphate).
 - .1 Stored pressure type.
 - .2 20 lb. capacity minimum.
 - .3 Wall mounted and cabinet mounted, as per architectural requirements.
 - .4 Identification of Wall-Mounted Fire Extinguishers: Provide manufacturer's standard vinyl decal on wall above extinguisher.
 - .5 Brackets: Provide wall bracket for each wall-mounted extinguisher.

2.2 CABINETS AND CABINET ACCESSORIES

- .1 Manufacturers: Provide products complying with requirements of contract documents and made by one of the following:
 - .1 Cabinets and accessories:
 - .1 J.L. Industries.
 - .2 Larsen's Manufacturing Company.
 - .3 Modem Metal Products, Division of Technico.
 - .4 Potter-Roemer Division/Smith Industries, Inc.
 - .5 Samson Metal Products, Inc.
 - .6 Thomas Enterprises.
 - .2 Cabinets:
 - .1 Quantity: As shown on drawings.

- .2 To house one extinguisher.
- .3 Style: Fully recessed mounted.
 - .1 Flat trim.
- .4 Single flat door.
 - .1 Break glass panel in solid door, with manufacturer's standard label.
 - .2 Door material: Steel, factory painted.
 - .1 Color: White.
 - .3 Surface mounted door handle, finished to match door.
 - .4 Friction or roller catch.
- .5 Trim (box flange or frame): Same material and finish as door.
- .6 Manufacturer's standard vertical lettering identifying contents of cabinet.
 - .1 Letters engraved into door.
- .7 Box: Manufacturer's standard material and construction.
- .8 Provide wall bracket for extinguisher, inside cabinet.
- .3 Hinges: Provide hinges for each door; concealed or continuous type; allow full 180 degree opening of door.
 - .1 Exposed hinges: Finish to match door.

Part 3 Execution

3.1 INSTALLATION

- .1 Perform installation in accordance with the manufacturer's instructions except where more stringent requirements are shown or specified, and except where project conditions require extra precautions or provisions to ensure satisfactory performance of the work.
- .2 Locate extinguishers as directed by Architect and Consultant.
- .3 Install brackets for wall mounted extinguishers at height necessary to place the top of the extinguisher at 48 inches above finish floor.
- .4 Locate cabinets as directed by Construction Manager.
- .5 Install so that top of cabinet is 48 inches above finish floor.
- .6 Install extinguishers.

3.2 OWNER PERSONNEL INSTRUCTION

- .1 Instruct designated personnel of owner in:
 - .1 Operation of extinguishers.
 - .2 Frequency of inspection and maintenance.
 - .3 Procedures for inspection and maintenance.
 - .4 Designation of inspection and maintenance entity.

END OF SECTION