

**SECTION 10 28 00**  
**TOILET, BATH, AND LAUNDRY ACCESSORIES**

**PART 1 - GENERAL**

**1.1 DESCRIPTION**

- A. This section specifies manufactured items usually used in dressing rooms, toilets, showers and at sinks in related spaces.
  - 1. Purchase and installation of specified items.
  - 2. Installation of Owner supplied item.
- B. Items Specified:
  - 1. Grab Bars.
  - 2. Clothes hooks, robe or coat.
  - 3. Metal framed mirror, mirror with shelf and secure mirror.
  - 4. Utility shelf and mop rack.
  - 5. Diaper changing station.
  - 6. Personal Protective Equipment Dispenser.
  - 7. Recessed Paper Towel Dispenser.
  - 8. Paper Towel Dispenser.
  - 9. Soap Dispenser.
  - 10. Recessed Soap Dispenser.
  - 11. Toilet Tissue Dispenser.
  - 12. Recessed Toilet Tissue Dispenser.
- B. This section also specifies custom fabricated items used in toilets and related spaces.

**1.2 RELATED WORK**

- A. Countertops: Section 06 20 00 FINISH CARPENTRY.
- B. Color of finishes: Section 09 06 00, SCHEDULE FOR FINISHES

**1.3 SUBMITTALS**

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Samples:
  - 1. One of each type of accessory specified.
  - 2. After approval, samples may be used in the work.
- C. Manufacturer's Literature and Data:
  - 1. All accessories specified.
  - 2. Show type of material, gages or metal thickness in inches, finishes, and when required, capacity of accessories.
  - 3. Show working operations of spindle for toilet tissue dispensers.

D. Manufacturer's Certificates:

- 1. Attesting that soap dispensers are fabricated of material that will not be affected by liquid soap or aseptic detergents, PhisoHex and solutions containing hexachlorophene.
- 2. Anodized finish as specified.

**1.4 QUALITY ASSURANCE**

- A. Each product shall meet, as a minimum, the requirements specified, and shall be a standard commercial product of a manufacturer regularly presently manufacturing items of type specified.
- B. Each accessory type shall be the same and be made by the same manufacturer.
- C. Each accessory shall be assembled to the greatest extent possible before delivery to the site.
- D. Include additional features, which are not specifically prohibited by this specification, but which are a part of the manufacturer's standard commercial product.

**1.5 PACKAGING AND DELIVERY**

- A. Pack accessories individually to protect finish.
- B. Deliver accessories to the project only when installation work in rooms is ready to receive them.
- C. Deliver inserts and rough-in frames to site at appropriate time for building-in.
- D. Deliver products to site in sealed packages of containers; labeled for identification with manufacturer's name, brand, and contents.

**1.6 STORAGE**

- A. Store products in weathertight and dry storage facility.
- B. Protect from damage from handling, weather and construction operations before, during and after installation in accordance with manufacturer's instructions.

**1.7 APPLICABLE PUBLICATIONS**

- A. Publications listed below form a part of this specification to the extent referenced. Publications are referenced in the text by the basic designation only.
- B. American Society for Testing and Materials (ASTM):
  - A167-99(R2004).....Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet and Strip.
  - A176-99(R2004).....Stainless and Heat-Resisting Chromium Steel Plate, Sheet, and Strip
  - A269-07.....Seamless and Welded Austenitic Stainless Steel Tubing for General Service

- A312/A312M-06.....Seamless and Welded Austenitic Stainless Steel  
Pipes
- A653/A653M-07.....Steel Sheet, Zinc-Coated (Galvanized) or Zinc-  
Iron Alloy-Coated (Galvannealed) by the Hot-Dip  
Process
- B221-06.....Aluminum and Aluminum-Alloy Extruded Bars, Rods,  
Wire, Shapes, and Tubes
- B456-03.....Electrodeposited Coatings of Copper Plus Nickel  
Plus Chromium and Nickel Plus Chromium
- C1036-06.....Flat Glass
- C1048-04.....Heat-Treated Flat Glass-Kind HS, Kind FT Coated  
and Uncoated Glass
- D635-06.....Rate of Burning and/or Extent and Time of Burning  
of Self Supporting Plastics in a Horizontal  
Position
- F446-85 (R2004).....Consumer Safety Specification for Grab Bars and  
Accessories Installed in the Bathing Area.
- A269-07.....Seamless and Welded Austenitic Stainless Steel  
Tubing for General Service
- D3453-01.....Flexible Cellular Materials - Urethane for  
Furniture and Automotive Cushioning, Bedding, and  
Similar Applications
- D3690-02.....Vinyl-Coated and Urethane-Coated Upholstery  
Fabrics
- C. The National Association of Architectural Metal Manufacturers (NAAMM):  
AMP 500 Series.....Metal Finishes Manual  
AMP 500-505-88.....Metal Finishes Manual and Finishes for Stainless  
Steel
- D. American Welding Society (AWS):  
D10.4-86 (R2000).....Welding Austenitic Chromium-Nickel Stainless  
Steel Piping and Tubing
- E. Federal Specifications (Fed. Specs.):  
A-A-3002.....Mirrors, Glass  
FF-S-107C (2).....Screw, Tapping and Drive  
FF-S-107C.....Screw, Tapping and Drive.  
WW-P-541E(1).....Plumbing Fixtures (Accessories, Land Use) Detail  
Specification

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS**

- A. Aluminum: ASTM B221, alloy 6063-T5 and alloy 6463-T5.
- B. Stainless Steel:

1. Plate or sheet: ASTM A167, Type 302, 304, or 304L, except ASTM A176 where Type 430 is specified, 0.0299-inch thick unless otherwise specified.
2. Tube: ASTM A269, Alloy Type 302, 304, or 304L.
- C. Stainless Steel Tubing: ASTM A269, Grade 304 or 304L, seamless or welded.
- D. Stainless Steel Pipe: ASTM A312; Grade TP 304 or TP 304L.
- E. Steel Sheet: ASTM A653, zinc-coated (galvanized) coating designation G90.
- F. Glass:
  1. ASTM C1036, Type 1, Class 1, Quality q2, for mirrors.
- G. Foam Rubber: ASTM D3453, Grade BD, Type 2.

## 2.2 FASTENERS

- A. Exposed Fasteners: Stainless steel or chromium plated brass, finish to match adjacent surface.
- B. Concealed Fasteners: Steel, hot-dip galvanized (except in high moisture areas such as showers or bath tubs use stainless steel).
- C. Toggle Bolts: For use in hollow masonry or frame construction.
- D. Hex bolts: For through bolting on thin panels.
- E. Expansion Shields: Lead or plastic as recommended by accessory manufacturer for component and substrate for use in solid masonry or concrete.
- F. Screws:
  1. ASME B18.6.4.
  2. Fed Spec. FF-S-107, Stainless steel Type A.
- G. Adhesive: As recommended by manufacturer for products to be joined.

## 2.3 FINISH

- A. In accordance with NAAMM AMP 500 series.
- B. Anodized Aluminum:
  1. AA-C22A41 Chemically etched medium matte, with clear anodic coating, Class I Architectural, 0.7-mil thick.
- C. AA-M32 Mechanical finish, medium satin.
  1. Chromium Plating: ASTM B456, satin or bright as specified, Service Condition No. SC2.
  2. Stainless Steel: NAAMM AMP 503, finish number 4.
  3. Ferrous Metal:
    - a. Shop Prime: Clean, pretreat and apply one coat of primer and bake.
    - b. Finish: Over primer apply two coats of alkyd or phenolic resin enamel, and bake.
  4. Nylon Coated Steel: Nylon coating powder formulated for a fluidized bonding process to steel to provide a hard smooth, medium gloss finish, not less than 0.3 mm (0.012-inch) thick, rated as self-extinguishing when tested in accordance with ASTM D635.

**2.4 FABRICATION - GENERAL**

- A. Welding, AWS D10.4.
- B. Grind dress, and finish welded joints to match finish of adjacent surface.
- C. Form exposed surfaces from one sheet of stock, free of joints.
- D. Provide steel anchors and components required for secure installation.
- E. Form flat surfaces without distortion. Keep exposed surfaces free from scratches and dents. Reinforce doors to prevent warp or twist.
- F. Isolate aluminum from dissimilar metals and from contact with building materials as required to prevent electrolysis and corrosion.
- G. Hot-dip galvanized steel, except stainless steel, anchors and fastening devices.
- H. Shop assemble accessories and package with all components, anchors, fittings, fasteners and keys.
- I. Key items alike.
- J. Provide templates and rough-in measurements as required.
- K. Round and deburr edges of sheets to remove sharp edges.

**2.5 FOR BASIS OF DESIGN MODEL AND MANUFACTURERS, SEE SECTION 09 06 00 SCHEDULE FOR FINISHES****2.6 RECESSED PAPER TOWEL DISPENSER (ROOM #132A ONLY)**

- A. Recessed type.
- B. Fabricate of stainless steel with satin finish
- C. Door: Double-pan-back construction is warp-resistant.
- D. Dispenses 350 C-fold or 475 multifold paper towels.
- E. Cabinet: heavy gauge stainless steel. All-welded construction. Exposed surfaces to be satin finish.

**2.7 PAPER TOWEL DISPENSER**

- A. Hands free Dispenser.
- B. 297 mm (11 11/16 inch) wide x 424 mm (16 11/16 inch) high x 240 mm (9 7/16 inch) deep.

**2.8 GRAB BARS**

- A. Fed. Spec WW-P-541/8B, Type IV, bars, surface mounted, Class 2, grab bars and ASTM F446.
- B. Fabricate of either stainless steel
  - 1. Stainless steel: Grab bars, flanges, mounting plates, supports, screws, bolts, and exposed nuts and washers.
- C. Concealed mount.
- D. Bars:
  - 1. Fabricate from 38 mm (1-1/2 inch) outside diameter tubing.
    - a. Stainless steel, minimum 1.2 mm (0.0478 inch) thick.
  - 2. Fabricate in one continuous piece with ends turned toward walls.

3. Continuous weld intermediate support to the grab bar.
- E. Flange for Concealed Mounting:
1. Minimum of 2.65 mm (0.1046 inch) thick, approximately 75 mm (3 inch) diameter by 13 mm (1/2 inch) deep, with provisions for not less than three set screws for securing flange to back plate.
  2. Insert grab bar through center of the flange and continuously weld perimeter of grab bar flush to back side of flange.
- F. In lieu of providing flange for concealed mounting, and back plate as specified, grab rail may be secured by being welded to a back plate and be covered with flange.
- G. Back Plates:
1. Minimum 2.65 mm (0.1046 inch) thick metal.
  2. Fabricate in one piece, approximately 6 mm (1/4 inch) deep, with diameter sized to fit flange. Provide slotted holes to accommodate anchor bolts.
  3. Furnish spreaders, through bolt fasteners, and cap nuts, where grab bars are mounted on metal partitions.

#### **2.9 GRAB BAR (Room #132A ONLY)**

- A One piece with no space between wall and bar and "open" design so contraband cannot be hidden.
- B. Design to meet ADAAG and NAPHS (The National Association of Psychiatric Health Systems) guidelines.
- C. One piece extruded 6063-T5 aluminum alloy.
- d. Round and finish all exposed edges.
- e. Factory installed standard end cap.

#### **2.10 CLOTHES HOOKS-ROBE OR COAT**

- A. Fabricate flange and support arm of stainless steel, with edges and corners rounded smooth to the thickness of the metal, or 3 mm (1/8 inch) minimum radius. Support arm 37 mm (1 ½ inches) long.
- B. Fabricate each unit as a sink hook on a single shaft, integral with or permanently fastened to the wall flange, provided with 1.6mm stainless steel concealed mounting bracket 50mm (2 inches)x 50mm (2inches).
- C. Cap: 13mm (1/2 inch) deep by 3.6mm stainless steel welded to support arm.
- D. Secure Clothes Hooks:
  1. 14 guage, polished finish.
  2. Surface mounted hook with tamper proof screws.
  3. 101.6 mm (4 inch) high x 101.6 mm (4 inch) wide x 31.75 (1.25 inch) hook projection.
  4. Excessive weight causes hook to drop tied fastenings will slip off.

#### **2.11 METAL FRAMED MIRRORS**

- A. Fed. Spec. A-A-3002 metal frame; stainless steel, type 430.

- B. Size: 457 mm (18 inches) wide by 762 mm (30 inches) high.
- C. Mirror Glass: Unless otherwise noted.
  - 1. Minimum 6 mm (1/4 inch) thick No. 1 quality.
  - 2. Set mirror in a protective vinyl glazing tape.
- D. Frames:
  - 1. Channel or angle shaped section with face of frame not less than 9 mm (3/8 inch) wide. Fabricate with square corners.
  - 2. Use 0.9 mm (0.0359 inch) thick stainless steel.
  - 3. Filler:
    - a. Where mirrors are mounted on walls having ceramic tile wainscots not flush with wall above, provide fillers at void between back of mirror and wall surface.
    - b. Fabricate fillers from same material and finish as the mirror frame, contoured to conceal the void behind the mirror at sides and top.
  - 4. Attached Shelf for Mirrors:
    - a. Fabricate shelf from 18-8s, type 304, .8mm stainless steel.
    - b. Make shelf approximately 125 mm (five inches) in depth, and extend full width of the mirror.
    - c. Close the ends and the front edge of the shelf to the same thickness as the mirror frame width.
    - d. Bottom frame member. Form shelf as integral part of mirror frame reinforced with 1.6 mm, concealed stainless steel brackets.
  - 5. Secure Mirror:
    - a. Welded frame ground smooth.
    - b. Shock-absorbing edge cushion.
    - c. Tamperproof mounting and locking screws 10/32 by 32 mm (1¼ inch).
    - d. 3 mm (0.118 inch) thick polycarbonate glazing
    - e. 18 gauge steel "H" bracket support.
- E. Back Plate:
  - 1. Fabricate backplate for concealed wall hanging of either zinc-coated, or cadmium plated 0.9 mm (0.036 inch) thick sheet steel, die cut to fit face of mirror frame, and furnish with theft resistant concealed wall fastenings.
  - 2. Use set screw type theft resistant concealed fastening system for mounting mirrors.
- F. Mounting Bracket:
  - 1. Designed to support mirror tight to wall.
  - 2. Designed to retain mirror with concealed set screw fastenings.

## 2.12 MOP RACKS & SHELF

- A. Minimum 1.0M (36 inches) long with five holders.

## B. Clamps:

1. Minimum of 1.3 mm (0.050-inch) thick stainless steel bracket retaining channel with a hard rubber serrated cam; pivot mounted to channel.
2. Clamps to hold handles from 13 mm (1/2-inch) minimum to 32 mm (1-1/4 inch) maximum diameter.

C. Shelf: 915mm (36 inches) long by 205 (8 inches) deep with a 38mm (1 1/2 inch return edge.

## D. Support:

1. Minimum of 1 mm (0.0375 inch) thick stainless steel hat shape channel to hold clamps away from wall as shown.
2. Drill wall flange for 3 mm (1/8 inch) fasteners above and below clamp locations.

E. Secure clamps to support with oval head machine screws or rivets into continuous reinforcing back of clamps.

F. Finish on stainless Steel: AMP 503-No. 4.

**2.13 DIAPER CHANGING STATION**

A. Description: Horizontal unit that opens by folding down from stored position and with child-protection strap.

1. Engineered to support a minimum of 13 kg (250-lb) static load
2. Size: 892 mm (35 inches) by 508 mm (20").

B. Mounting: Surface mounted, with unit projecting not more than 100 mm (4 inches) from wall when closed.

C. Operation: By pneumatic shock-absorbing mechanism.

## D. Material and Finish:

1. Exterior: 18 gauge stainless steel with satin finish.
2. Interior: High-density polyethylene in manufacturer's standard colors.
3. Liner Dispenser: Built in.
4. Hinge: Concealed, full length metal hinge.

**2.15 PERSONAL PROTECTION EQUIPMENT DISPENSER**

A. Material: Dispenser front to be stainless steel, 304 #4 finish. Wall mounted, hinged at bottom.

B. Size: 577.8 mm (22 3/4 inch) wide x 457.2 mm (18 inch) high x 101.6 mm (4 inch) deep

**2.16 SOAP DISPENSERS**

A. Wall Mounted.

B. Size: 139.7 mm (5 1/2 inch) wide x 307.4 mm (12 inch) high

**2.17 RECESSED SOAP DISPENSER (Room #132A ONLY)**

A. Recessed Type.

B. Size: 185 mm (7 1/4 inch) wide x 160 mm (6 3/8 inch) high x 3 mm (1/8 inch) from wall.

**2.18 TOILET TISSUE DISPENSER**

- A. 2-roll side-by-side dispenser.
- B. Size: 11 1/16" wide x 8 13/16" high x 7 3/16" deep.
- C. Material: Plastic.

**2.19 RECESSED TOILET TISSUE DISPENSER (Room #132A ONLY)**

- A. Anti-ligature recessed, double roll dispenser.
- B. Solid polymer housing with flexible neoprene spindle.

**PART 3 - EXECUTION**

**3.1 PREPARATION**

- A. Before starting work notify Resident Engineer in writing of any conflicts detrimental to installation or operation of units.
- B. Verify with the Resident Engineer the exact location of accessories.

**3.2 INSTALLATION**

- A. Set work accurately, in alignment and where shown. Items shall be plumb, level, free of rack and twist, and set parallel or perpendicular as required to line and plane of surface.
- B. Toggle bolt to steel anchorage plates in frame partitions or hollow masonry.
- C. Install accessories in accordance with the manufacturer's printed instructions and ASTM F446.
- D. Install accessories plumb and level and securely anchor to substrate.
- E. Install accessories in a manner that will permit the accessory to function as designed and allow for servicing as required without hampering or hindering the performance of other devices.
- F. Position and install dispensers, and other devices in countertops, clear of drawers, permitting ample clearance below countertop between devices, and ready access for maintenance as needed.
- G. Align mirrors, dispensers and other accessories even and level, when installed in battery.
- H. Install accessories to prevent striking by other moving, items or interference with accessibility.
- I. Install secure grab bar with tamperproof fasteners.

**3.3 SCHEDULE OF ACCESSORIES**

- A. As indicated on drawings.

**3.4 CLEANING**

- A. After installation, clean as recommended by the manufacturer and protect from damage until completion of the project.

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