

**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, baths, locker rooms and at sinks in related spaces.
- B. Items Specified:
  - 1. Hands Free Paper towel dispenser.
  - 2. Toilet tissue dispenser.
  - 3. Grab Bars.
  - 4. Wood framed mirror.
  - 5. Automatic hands free soap dispenser, VA furnished, Contractor installed.
  - 6. Underlavatory guards or wrap.
  - 7. Automatic hands free electric hand dryer.
- C. This section also specifies custom fabricated items used in toilets and related spaces.

**1.2 SUBMITTALS**

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Shop Drawings:
  - 1. Each product specified.
  - 2. Paper towel dispenser and combination dispenser and disposal units.
  - 3. Grab bars, showing design and each different type of anchorage.
- C. Samples:
  - 1. One of each type of accessory specified.
  - 2. After approval, samples may be used in the work.
- D. 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.
- E. Manufacturer's Certificates:
  - 1. Anodized finish as specified.

**1.3 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.

#### **1.4 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.

#### **1.5 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.

#### **1.6 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
  - C1036-06 .....Flat 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.
- 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
  - WW-P-541E(1) .....Plumbing Fixtures (Accessories, Land Use)  
Detail Specification

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS**

- A. 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.
- B. Stainless Steel Tubing: ASTM A269, Grade 304 or 304L, seamless or  
welded.
- C. Stainless Steel Pipe: ASTM A312; Grade TP 304 or TP 304L.
- D. Steel Sheet: ASTM A653, zinc-coated (galvanized) coating designation  
G90.
- E. Glass:
  - 1. ASTM C1036, Type 1, Class 1, Quality q2, for mirrors.
- F. Foam Rubber: ASTM D3453, Grade BD, Type 2.
- G. Vinyl Covering: ASTM D3690, Vinyl coated fabric, Class A.
- H. Plywood: PS1, Grade CD.

## **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. AA-M32 Mechanical finish, medium satin.
  - 1. Stainless Steel: NAAMM AMP 503, finish number 4.

## **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 PAPER TOWEL DISPENSERS - TOUCHLESS/HANDS FREE**

- A. Cabinet, 24 gage, 304 stainless steel with satin finish, vertical grain; accommodates rolls 8 to 8-1/4 inches wide; hands free roll paper towel mechanism dispenses adjustable preset lengths of towels.
- B. Overall 13.3 inches wide x 8.0 inches deep x 16.4 inches high; provide collar to effect finished appearance.
- C. Battery-powered (provide batteries) and capable of being hard wired for AC power; lockable cabinet with key.
- D. LEDs for low paper towel and motion sensor activation.
- E. Adjustable settings for sheet delay, paper length, and sensor range.

**2.6 TOILET TISSUE DISPENSERS - JUMBO ROLL**

- A. Surface Mounted Jumbo Roll Toilet Paper Dispenser; 20 gage 304 stainless steel cabinet and door, satin finish;
- B. Drawn one-piece seamless construction; tumbler lock keyed like other toilet accessories;
- C. Viewing slot to reveal paper supply inside cabinet; accommodates two 9 inch diameter toilet paper rolls.
- D. Units that control delivery or do not permit continuous paper flow will not be permitted

**2.7 GRAB BARS**

- A. Fed. Spec WW-P-541/8B, Type IV, bars, surface mounted, Class 2, grab bars and ASTM F446.
- B. Fabricate of stainless steel.
  - 1. Stainless steel: Grab bars, flanges, mounting plates, supports, screws, bolts, and exposed nuts and washers.
- C. Concealed mount, except grab bars mounted on toilet partitions.
- 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, except swing up and where grab bars are shown continuous around three sides of showers, bars may be fabricated in two sections, with concealed slip joint between.
  - 3. Continuous weld intermediate support to the grab bar.
  - 4. Swing up bars manually operated. Designed to prevent bar from falling when in raised position.
- 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. Flange for Exposed Mounting:

1. Minimum 5 mm (3/16 inch) thick, approximately 75 mm (3 inch) diameter.
2. Insert grab bar through flange and continuously weld perimeter of grab bar flush to backside of flange.
3. Where mounted on toilet partitions, provide three equally spaced, countersunk holes, sized to accommodate 5 mm (3/16 inch) diameter bolts.
4. Where mounted on floor, provide four equally spaced holes, sized to accommodate 5 mm (3/8 inch) diameter bolts, not more than 5 mm (3/8 inch) from edge of flange.

G. 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.

H. 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 partitions.

## 2.8 MIRRORS

A. Metal Framed: Fed. Spec. A-A-3002 metal frame; stainless steel, type 302 or 304.

B. Mirror Glass:

1. Minimum 6 mm (1/4 inch) thick.
2. Set mirror in a protective vinyl glazing tape.
3. Use tempered glass for mirrors in Mental Health and Behavioral Nursing units.

C. Wood Frames: Mahogany wood, 2-1/2" wide, with decorative egg and dart design, stained to match laminate on vanity top; mitered corners. Shop finish work in accordance with AWI pre-catalyzed lacquer or conversion varnish system.

D. 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.

E. Mounting Bracket:

1. Designed to support mirror tight to wall.
2. Designed to retain mirror with concealed set screw fastenings.

**2.9 INSULATIVE GUARD/PIPE WRAP**

Insulative Guard/Pipe Wrap: Product designed, built, and installed to insulate exposed undersink piping; antimicrobially treated, closed cell vinyl; 1/8" constant wall thickness with internal ribs; UV resistant; concealed molded fasteners for virtually seamless finished installation; white color; self-extinguishing per ASTM D635.

**2.10 AUTOMATIC HANDS FREE ELECTRIC HAND DRYER**

- A. Hand Dryers, General: One-piece die-cast aluminum cover with silver finish; automatic "hands free" infrared activation; UL listed.

1. Graphic operating instructions on cover; 81,000 rpm motor minimum equipped with automatic thermal overload switch;
2. No heating element;
3. 12 second hand dry operation; with 30 second operation lock out;
4. 700 mph air speed; 68 cfm air flow; 84 dBA.
5. Filtration: HEPA filter with anti-microbial coating; 99.97% particulate efficiency <99.9% bacteria removal.
6. Color as selected by Designer from manufacturer's premium range.
7. Internally grounded; 208 volt, 12 amp, 1400 watts, 50/60 Hz, Single Phase.

**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. Expansion bolt to concrete or solid 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.

### **3.3 CLEANING**

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

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