

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. Soap dispensers (GFCI)
 - 2. Paper towel dispensers (GFCI)
 - 3. Utility shelves
 - 4. Metal framed mirrors: (10800-7.DWG)
 - 5. Grab bars: (10800-1.DWG)
 - 6. Sanitary napkin disposals
 - 7. Toilet tissue dispensers (GFCI)
 - 8. Toilet seat cover dispensers (GFCI)
 - 9. Solid phenolic folding benches
 - 10. 'L'-shaped grab bars
 - 11. Soft trap covers
- B. This section also specifies custom fabricated items used in toilets and related spaces.

1.2 RELATED WORK

- A. Color of finishes: Section 09 06 00, SCHEDULE FOR FINISHES
- B. Wall reinforcement for wall mounted toilet accessories: Section 05 50 00, METAL FABRICATIONS

1.3 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Shop Drawings:
 - 1. Each product specified.

2. Metal framed mirrors, showing shelf where required, fillers, and design and installation of units when installed on ceramic tile wainscots and offset surfaces.
3. Grab bars, showing design and each different type of anchorage.
4. Show material and finish, size of members, and details of construction, installation and anchorage of mop racks.

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.
4. Utility shelf.

E. Manufacturer's Certificates:

1. Attesting that soap dispensers are fabricated of material that will not be adversely affected by liquid soap or aseptic detergents.
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(R2009)Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet and Strip.
 - A176-99(R2009)Stainless and Heat-Resisting Chromium Steel Plate, Sheet, and Strip
 - A269-10.....Seamless and Welded Austenitic Stainless Steel Tubing for General Service
 - A312/A312M-09Seamless and Welded Austenitic Stainless Steel Pipes
 - A653/A653M-10Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
 - B221-08.....Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes
 - B456-03(R2009)Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium
 - C1036-06Flat Glass
 - C1048-04Heat-Treated Flat Glass-Kind HS, Kind FT Coated and Uncoated Glass
 - D635-10Rate of Burning and/or Extent and Time of Burning of Self Supporting Plastics in a Horizontal Position
 - F446-85(R2009).....Consumer Safety Specification for Grab Bars and Accessories Installed in the Bathing Area.

D3453-07 Flexible Cellular Materials - Urethane for Furniture and
Automotive Cushioning, Bedding, and Similar Applications

D3690-02(R2009) Vinyl-Coated and Urethane-Coated Upholstery Fabrics

C. The National Association of Architectural Metal Manufacturers (NAAMM):

AMP 500 Series Metal Finishes Manual

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

H. Vinyl Covering: ASTM D3690, Vinyl coated fabric, Class A

I. 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. Anodized Aluminum:
 - 1. AA-C22A44 Chemically etched medium matte with electrolytically deposited metallic compound, integrally colored coating Class I Architectural, 0.7-mil thick finish. Dyes will not be accepted.
- 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 SOAP DISPENSERS

- A. As indicated in Equipment and Accessories Schedule in Drawings.

2.6 PAPER TOWEL DISPENSERS

- A. Surface mounted type with sloping top.
- B. Dispensing capacity for 300 sheets of any type of paper toweling.
- C. Fabricate of stainless steel.
- D. Provide door with continuous hinge at bottom, and either spring tension cam lock or tumbler lock, keyed alike, at top and a refill sight slot in front.

2.7 UTILITY SHELVES

- A. As indicated in Equipment and Accessories Schedule in Drawings.

2.8 METAL FRAMED MIRRORS

- A. 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.
- C. 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 either 0.9 mm (0.0359 inch) thick stainless steel, chrome finished steel, or extruded aluminum, with clear anodized finish 0.4 mils thick.
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.

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 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 at floor and swing up.
- 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
 - b. Lengths as indicated in drawings, center-to-center at return to wall
 - c. Straight bars, return to wall both ends:
 - 1) 1067 mm (42 inches) horizontal at all toilet side walls

- 2) 915 mm (36 inches) horizontal at all toilet rear walls
- d. 'L' shaped grab bars, center of return to wall to face of flange:
 - 1) 458 x 839 mm (18 x 33 inches) wall to floor grab bar at drinking fountains, with snap flanges and peened grips.
 2. Fabricate in one continuous piece with ends turned toward walls.
- 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. 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 phenolic toilet partitions.

2.10 SANITARY NAPKIN DISPOSAL

- A. Side wall mounted:
 1. Fabricate to size and shape shown of 1.2 mm (0.0478 inch) thick sheet.
 2. Turn up edges and weld corners closed.
 3. Fabricate brackets and weld to shelf. Drill brackets for 6 mm (1/4 inch) anchor bolts.

2.11 TOILET TISSUE DISPENSERS

- A. Double roll surface mounted type
- B. Mount on continuous backplate.
- C. Removable spindle ABS plastic or chrome plated plastic
- D. Wood rollers are not acceptable.

2.12 WALL MOUNTED TOILET SEAT COVER DISPENSERS

- A. As indicated in Equipment and Accessories Schedule in Drawings.

2.13 SOLID PHENOLIC FOLDING BENCHES

- A. As indicated in Equipment and Accessories Schedule in Drawings.

2.14 L-SHAPED GRAB BARS

- A. As indicated in Equipment and Accessories Schedule in Drawings.

2.15 SOFT TRAP COVERS

- A. As indicated in Equipment and Accessories Schedule in Drawings.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Before starting work notify Project Engineer in writing of any conflicts detrimental to installation or operation of units.
- B. Verify with the Project 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. Expansion bolt to concrete.
- 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 SCHEDULE OF ACCESSORIES

- A. Schedule of accessories is as indicated on the 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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