

**SECTION 10 28 00  
TOILET ACCESSORIES**

**PART 1 - GENERAL**

**1.1 DESCRIPTION**

- A. This section specifies manufactured items usually used in toilets and at sinks in related spaces.
- B. Items Specified:
  - 1. Waste receptacles.
  - 2. Toilet tissue dispenser.
  - 3. Grab Bars.
  - 4. Metal framed mirror.
  - 5. Wall-mounted Soap Dispenser.
  - 6. Warm-Air Dryer.
  - 7. Diaper Changing Station.
  - 8. Mop / Broom Holder.
  - 9. Napkin disposal.
  - 10. Double-sided Napkin disposal.
  - 11. Toilet Seat Cover Dispenser.
  - 12. Mop / Broom Holder and Utility Shelf.
  - 13. Undersink Pipe Protection.
  - 14. Deodorizer Drip for toilets and urinals.

**1.2 RELATED WORK**

- A. 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. Shop Drawings:
  - 1. Each product specified.
  - 2. Show material and finish, size of members, and details of construction, installation and 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. 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(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-09.....Seamless and Welded Austenitic Stainless Steel  
Pipes
- A653/A653M-10.....Steel 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
- C1036-06.....Flat Glass
- C1048-04.....Heat-Treated Flat Glass-Kind HS, Kind FT Coated  
and Uncoated Glass
- D635-10.....Rate 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. 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. Glass:
  - 1. ASTM C1036, Type 1, Class 1, Quality q2, for mirrors.

## **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 WASTE RECEPTACLES**

- A. Recessed type, without doors. Fed. Spec WW-P-541, Type II.
- B. Fabricate of stainless steel.
- C. Form face frame from one piece.
- D. Provide removable waste receptacle of approximately (12 gallon) capacity, fabricated of stainless steel.
- E. Waste receptacle key locked in place.

## **2.6 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.

## **2.7 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 at floor, swing up and on metal 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.
    - b. Nylon coated bars, minimum 1.5 mm (0.0598 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. 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.

## **2.8 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 SOAP DISPENSER**

- A. Surface Wall Mounted:
  1. Capacity: 40 oz. liquid soap.
  2. Fabricate from type 304, 20 gauge stainless steel with exposed surfaces in architectural satin finish approximately 8-3/16"W x 4-7/8"H x 2-7/8"D overall size.

3. Fabricate from type 304, 20 gauge stainless steel with exposed surfaces in architectural satin finish approximately 8-3/16"W x 4-7/8"H x 2-7/8"D overall size.

#### **2.10 WARM-AIR DRYER**

- A. Mounting: Stainless Steel Recessed kit.
- B. Operation: Infrared Optical Sensor with timed power cut-off switch.
- C. Velocity: 19,000 lfm at the air outlet.
- C. Operation Time: 30 to 40 seconds.
- D. Cover Material and Finish: Stainless steel, No. 4 finish (satin).
- E. Electrical Requirements: 110/120 V, 12.5 A, 60 Hz, 1500 Watts.

#### **2.11 DIAPER CHANGING STATION:**

- A. Surface Mounted, fold-up type:
  1. Fabricate from bacterial-resistant, high impact polyethylene with full horizontal length steel-on-steel rods.
  2. Provide concealed gas shock mechanism that lifts door from open position, then brakes its closing motion to prevent trapping fingers.
  3. Provide straps with snap-on fasteners to secure child.

#### **2.12 MOP/BROOM HOLDER AND UTILITY SHELF:**

- A. Surface Mounted:
  1. Fabricate from type 304, 18 gauge stainless steel with exposed surfaces in architectural satin finish approximately 34"W x 14"H x 8"D overall size.
  2. Four (4) hook and three (3) mop holder capacity.
  3. Holders consist of spring activated rubber cams on plated steel retainers.

#### **2.13 SANITARY NAPKIN DISPOSAL UNIT**

1. Wall-Mounted, Semi-Recessed Type: With adjustable flanges for wall mounting; self-closing door; and reusable receptacle that is removable.
2. Partition-Mounted, Dual-Access Type: With adjustable flanges for partition mounting to serve two toilet compartments; self-closing door; and reusable receptacle that is removable from one side.

#### **2.14 TOILET SEAT COVER DISPENSER**

1. Wall-Mounted, Surface Mounted Type: Fabricate from type 304, 22 gauge stainless steel with exposed surfaces in architectural satin finish, door with piano hinge and tumbler lock.
2. Partition-Mounted, Dual-Access Type: Fabricate from type 304, 22 gauge stainless steel with exposed surfaces in architectural satin finish, door with piano hinge and tumbler lock.
3. Capacity: 500 standard single-fold or half-fold toilet seat covers.

## **2.15 UNDERLAVATORY GUARDS**

- A. Description: Insulating pipe covering for supply and drain piping assemblies that prevent direct contact with and burns from piping; allow service access without removing coverings.
- B. Material and Finish: Antimicrobial, rigid, high-impact, stain-resistant molded plastic, white.

## **2.16 DEODORIZER DRIP**

- A. Description: Automatically dispenses odor counteractant into urinals and toilet bowls without the need for batteries. Utilizes gravity feed wick method.
- B. Mounting: Each dispenser comes complete with mounting hardware, tubing and complete installation and operation instructions.
- C. Capacity: 34 oz.
- D. Material and Finish: Antimicrobial, rigid, high-impact, stain-resistant ABS plastic, white.

## **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 SCHEDULE OF ACCESSORIES

- A. To establish an acceptable level of quality for the toilet and bath accessories, the following manufacturers are listed as approved manufacturers for the purpose of identifying manufacturers that provide work and materials generally complying with these specifications. Their selection for this work does not relieve them from performing the work as specified.
1. Bobrick Washroom Equipment.
  2. Bradley Corporation.
  3. Excel Dryer Inc..
  4. Truebro, IPS Corporation.
  5. Or Approved Equal.
- B. Available Products / Manufacturer: Subject to compliance with requirements, products / manufacturer that may be incorporated into the Work include, but are not limited to, the products / manufacturer specified (**Basis-of-Design Products**):
1. Recessed Waste Receptacle: Fabricate of 22 gauge stainless steel for nominal 4 inch wall depth, and minimum 12-gal. (46-L) capacity, removable, heavy-duty stitched vinyl-coated nylon liner complying with the following:
    - a. Manufacturer: Bradley
    - b. Description: Recessed 12 gallon waste container removable, heavy-duty stitched vinyl-coated nylon liner.
    - c. Model No.: 344
    - d. Finish Color: Stainless Steel.
  2. Toilet Tissue Dispenser: Double-Roll Dispenser, size to accommodate core type tissue to 5-inch diameter roll complying with the following:
    - a. Manufacturer: Bradley
    - b. Description: Surface-mounted toilet paper holder for two rolls, type-304.
    - c. Model No.: 5234.
    - d. Finish Color: Polished stainless Steel.
  3. Grab Bar: Stainless Steel Type, provide grab bars with wall thickness not less than 0.05 inch (18 gage) complying with the following:
    - a. Manufacturer: Bradley
    - b. Description: Stainless steel grab bars, 1 1/4" diameter.

- c. Model No.: 832-4
- d. Finish Color: Satin stainless Steel.
- 4. Mirror Unit: Stainless Steel Framed Mirror Units, fabricate frame with one-piece, roll-formed shapes not less than 20 gage, with square corners mitered, welded, and ground smooth. Provide in No. 4 satin polished finish complying with the following:
  - a. Manufacturer: Bradley
  - b. Description: 24 gauge stainless steel channel framed mirror.
  - c. Model No.: Model 781.
  - d. Size: 24 inch wide by 36 inch high.
  - e. Finish Color: Polished stainless Steel.
- 5. Wall-Mounted Soap Dispenser: Liquid Soap Dispenser, surface-mounted type, minimum 40-oz. capacity tank with stainless steel valve plunger and spout designed to dispense soap in measured quantity by pump action complying with the following:
  - a. Manufacturer: Bradley
  - b. Description: Surface-mounted liquid soap dispenser, 40 fl. oz..
  - c. Model No.: 6542
  - d. Finish Color: Satin stainless Steel.
- 6. Warm-Air Dryer: Cover of high impact cast stainless steel. Motor shall be a induction type operating at 20,000 RPM at rated load. Dryer shall deliver 19,000 LFM and activated by means of an infrared emitting/receiving electronic control device when hands are present and complying with the following:
  - a. Manufacturer: Excel Dryer Inc.
  - b. Model: Xlerator.
  - c. Mounting: Recessed kit with 22 gauge stainless steel wall box and 16 gauge dryer mounting plate.
  - d. Operation: Electronic-sensor activated with timed power cut-off switch. Operation Time: 30 to 40 seconds.
  - e. Cover Material and Finish: Stainless steel with a brushed finish.
  - f. Electrical Requirements: 110/120 V, 12.5 A, 60 Hz, 1500 Watts.
- 7. Baby Diaper Changing Station: Surface-Mounted Baby Diaper Changing Station, fabricated of high impact polyethylene with concealed gas shock mechanism that lifts door from open position complying with the following:
  - a. Manufacturer: Bradley
  - b. Description: Surface-Mounted Baby Diaper Changing Station.
  - c. Model No.: 961.
  - d. Finish Color: Grey and white speckled.

8. Mop/Broom Holder with Utility Shelf: Stainless Steel Utility Shelf, fabricate of type 304, 180 gauge stainless steel in satin finish. Hooks shall be of 164 gauge stainless steel and mop holders shall be spring activated rubber cams complying with the following:
  - a. Manufacturer: Bradley
  - b. Description: 18 gauge stainless steel utility shelf.
  - c. Model No.: 9933 - 4 hooks/3 holders.
  - d. Finish Color: Satin stainless Steel.
9. Wall-Mounted Sanitary Napkin Disposal Unit, Semi-Recessed Type: Stainless-steel with adjustable flanges for wall mounting; self-closing door; and reusable receptacle that is removable:
  - a. Manufacturer: Bradley
  - b. Description: Stainless steel Semi-Recessed Sanitary Napkin Disposal Unit.
  - c. Model No.: 4722-1015.
  - d. Finish Color: Satin stainless Steel.
10. Partition-Mounted, Dual-Access Type Sanitary Napkin Disposal Unit: Stainless-steel With adjustable flanges for partition mounting to serve two toilet compartments; self-closing door; and reusable receptacle that is removable from one side:
  - a. Manufacturer: Bradley
  - b. Description: Stainless steel Partition-Mounted, Dual-Access Type Sanitary Napkin Disposal Unit.
  - c. Model No.: 4721-15.
  - d. Finish Color: Satin stainless Steel
11. Wall-Mounted Toilet Seat Cover Dispenser: Fabricate from type 304, 22 gauge stainless steel with exposed surfaces in architectural satin finish, door with piano hinge and tumbler lock:
  - a. Manufacturer: Bradley
  - b. Description: Stainless steel Surface-Mounted Type Seat Cover Dispenser Unit.
  - c. Model No.: 583.
  - d. Capacity: 500 standard single-fold or half-fold toilet seat covers.
  - e. Finish Color: Satin stainless Steel
12. Partition-Mounted, Dual-Access Type Toilet Seat Cover Dispenser: Fabricate from type 304, 22 gauge stainless steel with exposed surfaces in architectural satin finish, door with piano hinge and tumbler lock:
  - a. Manufacturer: Bradley

- b. Description: Stainless steel Partition-Mounted, Dual-Access Type Seat Cover Dispenser Unit.
  - c. Model No.: 582.
  - d. Capacity: 500 standard single-fold or half-fold toilet seat covers
  - e. Finish Color: Satin stainless Steel
13. Underlavatory Guards (Family Toilet 127 ONLY): Insulating pipe covering for supply and drain piping assemblies that prevent direct contact with and burns from piping; allow service access without removing coverings:
- a. Manufacturer: Truebro, IPS Corporation.
  - b. Description: Antimicrobial, rigid, high-impact, stain-resistant molded plastic Unit.
  - c. Model No.: Lav-Shield, Model number to coordinate with lavatory manufacturer and model.
  - d. Finish Color: White.
14. Deodorizer Drip: Wall mounted deodorizer drip that automatically dispenses odor counteractant into urinals and toilet bowls utilizing gravity feed wick method:
- a. Manufacturer: SurcoTech, a division of Surco Products, Inc.
  - b. Model No.: Drip-O-Matic Drip Appliance Dispenser with Drip-O-Matic Drip Fluid.
  - c. Capacity: 34 oz.
  - d. Finish Color: White.

### 3.4 CLEANING

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

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