

**SECTION 10-20-00  
BATHROOM ACCESSORIES**

**PART 1 GENERAL**

1.01 SCOPE OF WORK

- A. Include all supplied materials, to complete the work of the above referenced section.
  - 1. SCS to supply bathroom accessories, Finish Carpentry to install.

1.01 DESCRIPTION

- A. SUMMARY:
  - 1. Section Includes: Toilet and bath accessories at dressing rooms, toilets, baths, locker rooms and other areas indicated on drawings.

1.2 RELATED REQUIREMENTS

- A. Color of finishes: See schedule for finishes. (SCS to supply)
- B. 06-11-00 Rough Framing
- C. 06-20-00 Finish Carpentry

1.3 APPLICABLE PUBLICATIONS

- A. Comply with references to extent specified in this section.
- B. American Society of Mechanical Engineers (ASME):
  - 1. B18.6.4-98(R2005) - Thread Forming and Thread Cutting Tapping Screws and Metallic Drive Screws inch.
- C. American Welding Society (AWS):
  - 1. D10.4-86(2000) - Welding Austenitic Chromium-Nickle Stainless Steel Piping and Tubing.
- D. ASTM International (ASTM):
  - 1. A269/A269M-15 - Seamless and Welded Austenitic Stainless Steel Tubing for General Service.
  - 2. A312/A312M-15b - Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes.
  - 3. A653/A653M-15 - Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
  - 4. A666-15 - Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
  - 5. A1011/A1011M-14 - Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength.
  - 6. B30-14a - Copper Alloys in Ingot Form.

7. B75/B75M-11 - Seamless Copper Tube.
  8. B221-14 - Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
  9. B221M-13 - Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric).
  10. B456-11e1 - Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium.
  11. B824-14 - General Requirements for Copper Alloy Castings.
  12. C1036-11e1 - Flat Glass.
  13. C1048-12e1 - Heat-Strengthened and Fully Tempered Flat Glass.
  14. D635-14 - Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position.
  15. F446-85(2009) - Grab Bars and Accessories Installed in the Bathing Area.
- E. Federal Specifications (Fed. Spec.):
1. A-A-3002 - Mirror, Glass.
  2. FF-S-107C(2) - Screws, Tapping and Drive.
  3. WW-P-541/8B(1) - Plumbing Fixtures (Accessories, Land Use).
- F. National Architectural Metal Manufacturers(NAAMM):
1. AMP 500-06 - Metal Finishes Manual.
- 1.4 SUBMITTALS
- A. Submittal Procedures: Section 01-30-00, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Submittal Drawings:
1. Show size, configuration, and fabrication, anchorage and installation details.
  2. Show mounting locations and heights.
- C. Manufacturer's Literature and Data:
1. Description of each product.
  2. Installation instructions.
- D. Samples:
1. Full sized, complete assembly of each product specified.
  2. Approved samples may be incorporated into project.
- E. Certificates: Certify each product complies with specifications.
1. Soap dispensers: Certify soap dispensers are fabricated of material that will not be affected by liquid soap, aseptic detergents, and hexachlorophene solutions.
- F. Qualifications: Substantiate qualifications comply with specifications.
1. Manufacturer // with project experience list //.
- G. Operation and Maintenance Data:
1. Care instructions for each exposed finish product.

## 1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications:
  - 1. Regularly manufactures specified products.

## 1.6 DELIVERY

- A. Deliver products in manufacturer's original sealed packaging.
- B. Mark packaging, legibly. Indicate manufacturer's name or brand, type, // color, // production run number, and manufacture date.
- C. Before installation, return or dispose of products within distorted, damaged, or opened packaging.

## 1.7 STORAGE AND HANDLING

- A. Store products indoors in dry, weathertight facility.
- B. Protect products from damage during handling and construction operations.

## 1.8 WARRANTY

- A. Construction Warranty: FAR clause 52.246-21, "Warranty of Construction."

# PART 2 - PRODUCTS

## 2.1 MATERIALS

- A. Aluminum: ASTM B221M (ASTM B221), Alloy 6063-T5 and Alloy 6463-T5.
- B. Stainless Steel:
  - 1. Plate Or Sheet: ASTM A666, Type 304, 0.8 mm (0.031 inch) thick unless otherwise specified.
  - 2. Tubing: ASTM A269/A269M, Grade TP 304, seamless or welded.
  - 3. Pipe: ASTM A312/A312M; Grade TP 304.
- C. Steel Sheet: ASTM A653/A653M, zinc-coated (galvanized) coating designation G90.
- D. Chrome Plating (Service Condition Number SC 2): ASTM B456.
- E. Brass Castings: ASTM B30.
- F. Copper:
  - 1. Tubing: ASTM B75/B75M.
  - 2. Castings: ASTM B824.
- G. Glass:
  - 1. ASTM C1036, Type 1, Class 1, Quality q2, for mirrors, and for mirror doors in medicine cabinets.
  - 2. ASTM C1036, Type 1 Class 1 Quality q3, for shelves in medicine cabinets.
  - 3. ASTM C1048, Kind FT, Condition A, Type 1, Class 1 for glass and mirrors in Mental Health and Behavior Patient Care Units, and Security Examination Rooms.

## 2.2 GRAB BARS

- A. Fed. Spec. WW-P-541/8B, Type IV, bars, surface mounted, Class 2, grab bars and complying with ASTM F446.
- B. Fabricate from stainless steel or nylon coated steel, use one type throughout project:
  - 1. Stainless steel: Grab bars, flanges, mounting plates, supports, screws, bolts, and exposed nuts and washers.
- C. Nylon Coated Steel: Grab bars and flanges complete with mounting plates and fasteners. // Color as specified, See schedule for finishes. (SCS to supply)
- D. Mounting:
  - 1. Floor Mounted Grab Bars: Exposed type.
  - 2. Swing Up Grab Bars: Exposed type.
  - 3. Metal // Toilet // Dressing // Shower // Partitions Mounted Grab Bars: Exposed type.
  - 4. Other Types and Locations: Concealed type.
- E. Bars:
  - 1. Fabricate to 38 mm (1-1/2 inch) outside diameter.
    - a. Stainless steel, minimum 1.2 mm (0.05 inch) thick.
    - b. Nylon coated bars, minimum 1.5 mm (0.06 inch) thick.
  - 2. Fabricate in one continuous piece with ends turned toward walls.
    - a. Swing up grab bars and grab bars continuous around three sides of showers may be fabricated in two sections, with concealed slip joint between.
  - 3. Continuously weld intermediate support to grab bar.
  - 4. Swing Up Bars: Manually operated; designed to prevent bar from falling when in raised position.
- F. Flange for Concealed Mounting:
  - 1. Minimum 2.65 mm (0.1 inch) thick, maximum 79 mm (3-1/8 inch) diameter by 13 mm (1/2 inch) deep, with minimum three set screws for securing flange to back plate.
  - 2. Insert grab bar through center of flange and continuously weld perimeter of grab bar flush to back side of flange.
  - 3. In lieu of providing flange for concealed mounting, and back plate as specified, grab bar may be welded to back plate covered with flange.
- G. Flange for Exposed Mounting:
  - 1. Minimum 5 mm (3/16 inch) thick, maximum 79 mm (3-1/8 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 // dressing // shower // 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, maximum 5 mm (3/8 inch) from edge of flange.

H. Back Plates:

1. Minimum 2.65 mm (0.1046 inch) thick metal.
2. Fabricate in one piece, maximum 6 mm (1/4 inch) deep, with diameter sized to fit flange. Provide slotted holes to accommodate anchor bolts.
3. Provide spreaders, through bolt fasteners, and cap nuts, where grab bars are mounted on partitions.

## 2.3 SHOWER CURTAIN RODS

- A. Stainless steel tubing, minimum 1.27 mm (0.050 inch) wall thickness, 32 mm (1-1/4 inch) outside diameter.
- B. Flanges, stainless steel rings, 66 mm (2.6 inch) minimum outside diameter, with 2 holes opposite each other for 6 mm (1/4 inch) stainless steel fastening bolts. Provide set screw within curvature of each flange for securing rod.

## 2.4 CLOTHES HOOKS, ROBE OR COAT

- A. Fabricate hook units from chromium plated brass with satin finish, or stainless steel, using 6 mm (1/4 inch) minimum thick stock, with edges and corners rounded smooth to thickness of metal, or 3 mm (1/8 inch) minimum radius.
- B. Fabricate each unit as a double hook on a single shaft, integral with or permanently fastened to wall flange, provided with concealed fastenings.

## 2.5 TOWEL BARS

- A. Fed. Spec. WW-P-541/8B, Type IV, Bar, Surface mounted; Class 1, towel.
- B. Stainless steel, or chromium plated copper alloy.
- C. Bar Length: 450 and 600 mm (18 and 24 inches) as shown.
- D. Finish brackets and supports to match bar.

## 2.6 METAL FRAMED MIRRORS

- A. Fed. Spec. A-A-3002 metal frame; // chromium finished steel, // anodized aluminum, // or // stainless steel //.
- 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 minimum 9 mm (3/8 inch) wide. Fabricate with square corners.
  2. Metal Thickness 0.9 mm (0.035 inch).
  3. Filler:

- a. Where mirrors are mounted on walls having ceramic tile wainscots not flush with wall above, provide fillers contoured to conceal void between back of mirror and wall surface.
  - b. Fabricate fillers from same material and finish as mirror frame.
4. Attached Shelf for Mirrors:
- a. Fabricate shelf of same material and finish as mirror frame.
  - b. Make shelf maximum 150 mm (6 inches) in depth, and extend full width of mirror.
  - c. Close ends and front edge of shelf to same thickness as mirror frame width.
  - d. Form shelf for aluminum framed mirror as integral part of bottom frame member.
  - e. Form stainless steel shelf with concealed brackets to attach to mirror frame.
- D. Back Plate:
- 1. Fabricate backplate for concealed wall hanging from zinc-coated, or cadmium plated 0.9 mm (0.036 inch) thick sheet steel, die cut to fit face of mirror frame.
  - 2. Provide 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.
- 2.7 MEDICINE CABINETS
- A. Fed. Spec. WW-P-541/8B, Type III Medicine cabinets, Style R, Recessed.
- 1. Mirror Glass: Minimum 5 mm (3/16 inch) thick. Set mirror in protective vinyl glazing tape.
  - 2. Glass Shelves: Minimum 6 mm (1/4 inch) thick, with bulb-edges at front. Support shelves on adjustable aluminum brackets. Provide three shelves for each cabinet.
  - 3. Cabinet Body: Fabricate from 0.9 mm (0.036 inch) thick sheet steel, with baked enamel finish, or 0.9 mm (0.036 inch) thick stainless steel. Form body in one piece, without seams, and with rounded inside corners.
- B. Hinged Door:
- 1. Swing door.
  - 2. Fabricate mirror door approximately 400 by 560 mm (16 by 22 inches).
  - 3. Cabinet concealed when doors are closed.
  - 4. Mirror Door Frame: Channel shape, 15 mm (0.060 inch) thick chromium plated brass, or 0.9 mm (0.036 inch) thick stainless steel.
  - 5. Provide door with full length stainless steel piano hinge, magnetic or friction catches, rubber bumpers, and 90 degree restraining arm with spring type stop.
- C. Sliding Door:
- 1. Slide door.
  - 2. Fabricate sliding doors for approximately 660 by 560 mm (26 by 22 inch) opening.
  - 3. Provide nylon glides in stainless steel tracks, door pulls and rubber bumpers.

4. Entire contents of cabinet concealed when doors closed.

## 2.8 SOAP DISHES

- A. Fed. Spec. WW-P-541/8B, Type VI, Holder.
- B. Class 1, Soap, Surface Mounted:
  1. One piece with provisions for exposed fasteners.
  2. Fabricate from chromium plated brass approximately 115 by 95 mm (4 1/2 by 3-3/4 inches) overall size with drainage openings at bottom.
- C. Soap, Recessed:
  1. One piece seamless shell and flange with provisions for concealed fasteners.
  2. Fabricate from 0.8 mm (0.031 inch) thick stainless steel or chromium plated brass.
  3. Form surface of soap tray with raised ridges or patterned dimples to provide gripping surface for soap bar, or provide flush soap tray with a retaining lip. Plastic soap trays or tray inserts are not acceptable.

## 2.9 MOP RACKS

- A. Minimum 1016 mm (40 inches) long with five holders.
- B. Clamps:
  1. Minimum of 1.3 mm (0.05 inch) thick stainless steel bracket retaining channel with 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. Support:
  1. Minimum 1 mm (0.04 inch) thick stainless steel hat shape channel to hold clamps away from wall as indicated.
  2. Drill wall flange for 3 mm (1/8 inch) fasteners above and below clamp locations.
- D. Secure clamps to support with oval head machine screws or rivets into continuous reinforcing back of clamps.

## 2.10 FINISH

- A. Steel Paint Finish:
  1. Powder-Coat Finish: Manufacturer's standard two-coat finish system consisting of the following:
    - a. One coat primer.
    - b. One coat thermosetting topcoat.
    - c. Dry-film Thickness: 0.05 mm (2 mils) minimum.
    - d. Color: See SCHEDULE FOR FINISHES.

- B. Nylon Coated Steel: Nylon coating powder formulated for fluidized bonding process to steel to provide hard smooth, medium gloss finish, minimum 0.3 mm (0.012 inch) thick, rated as self-extinguishing when tested according to ASTM D635.
- C. Stainless Steel: NAAMM AMP 500; No. 4 polished finish.
- D. Aluminum Anodized Finish: NAAMM AMP 500.
  - 1. Clear Anodized Finish: AA-C22A41; Class I Architectural, 0.018 mm (0.7 mil) thick.
  - 2. Color Anodized Finish: AA-C22A42 or AA-C22A44; Class I Architectural, 0.018 mm (0.7 mil) thick.
- E. Chromium Plating: ASTM B456, satin or bright as specified, Service Condition No. SC2.

## 2.11 ACCESSORIES

- A. Fasteners:
  - 1. Exposed Fasteners: Stainless steel or chromium plated brass, finish to match adjacent surface.
  - 2. Concealed Fasteners:
    - a. Shower, Bath Tubs, and High Moisture Areas: Stainless steel.
    - b. Other Locations: Steel, hot-dipped galvanized.
  - 3. Toggle Bolts: For use in hollow masonry or frame construction.
  - 4. Sex bolts: For through bolting on thin panels.
  - 5. Expansion Shields: Lead or plastic for solid masonry and concrete substrate as recommended by accessory manufacturer to suit application.
  - 6. Screws:
    - a. ASME B18.6.4.
    - b. Fed. Spec. FF-S-107, Stainless steel Type A.
- B. Adhesive: As recommended by manufacturer to suit application.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Examine and verify substrate suitability for product installation.
  - 1. Verify blocking to support accessories is installed and located correctly.
- B. Verify location of accessories with SCS Representative.

### 3.2 INSTALLATION

- A. Install products according to manufacturer's instructions // and approved submittal drawings //.
  - 1. When manufacturer's instructions deviate from specifications, submit proposed resolution for SCS Representative consideration.
- B. Install grab bars according to ASTM F446.

- C. Set work accurately, in alignment and where indicated, parallel or perpendicular as required to line and plane of surface. Install accessories plumb, level, free of rack and twist.
- D. Toggle bolt to steel anchorage plates in frame partitions and hollow masonry. // Expansion bolt to concrete or solid masonry. //
- E. Install accessories to function as designed. Perform maintenance service without interference with 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.
- 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

- A. After installation, clean toilet accessories according to manufacturer's instructions.

### 3.4 PROTECTION

- A. Protect accessories from damage until project completion.

**END OF SECTION**