

SECTION 10 21 16
SOLID PLASTIC TOILET COMPARTMENTS

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Solid plastic toilet compartments and urinal screens.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.02 REFERENCES

- A. ASTM International (ASTM):
 - 1. A167 - Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.
 - 2. B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
 - 3. E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- B. National Fire Protection Association (NFPA) 286 - Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth.

1.03 SYSTEM DESCRIPTION

- A. Compartment Configurations:
 - 1. Toilet partitions: Floor mounted, overhead braced.
 - 2. Urinal screens: Wall mounted.

1.04 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Include dimensioned layout, elevations, trim, closures, and accessories.
 - 2. Product Data: Manufacturer's descriptive data for panels, hardware, and accessories.
 - 3. Samples: Per owner's request, provide 2 x 3 inch samples in each color.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum 5 years experience in manufacture of solid plastic toilet compartments with products in satisfactory use under similar service conditions.
- B. Installer Qualifications: Minimum 5 years experience in work of this Section.

1.06 WARRANTIES

- A. Provide manufacturer's 25 year warranty against breakage, corrosion, and delamination under normal conditions.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Contract Documents are based on Hiny Hiders by Scranton Products.
(www.scrantonproducts.com)
- B. Or approved equal.

2.02 MATERIALS

- A. Doors, Panels and Pilasters:
 - 1. High density polyethylene (HDPE), fabricated from polymer resins compounded under high pressure, forming single thickness panel.
 - 2. Waterproof and nonabsorbent, with self-lubricating surface, resistant to marks by pens, pencils, markers, and other writing instruments.
 - 3. 1 inch thick with edges rounded to 1/4 inch radius.
 - 4. Fire hazard classification: Not required.
 - 5. Color: As selected by Owner's Representative from manufacturer's standard colors.

- B. Aluminum Extrusions: ASTM B221, 6463-T5 alloy and temper.
- C. Stainless Steel: ASTM A167, Type 304.

2.03 HARDWARE

- A. Hinges: Continuous 54" long, heavy duty aluminum
- B. Door Strike and Keeper:
 - 1. 6 inches long, fabricate from heavy-duty extruded aluminum with bright dip anodized finish, with wrap-around flanges secured to pilasters with stainless steel tamper resistant Torx head sex bolts.
 - 2. Bumper: Extruded black vinyl.
- C. Latch and Housing:
 - 1. Heavy-duty extruded aluminum.
 - 2. Latch housing: Bright dip anodized finish.
 - 3. Slide bolt and button: Black anodized finish.
- D. Coat Hook/Bumper:
 - 1. Combination type, chrome plated Zamak.
 - 2. Equip outswing handicapped doors with second door pull and door stop.
- E. Door Pulls: Chrome plated Zamak.

2.04 COMPONENTS

- A. Doors and Dividing Panels: 55 inches high, mounted 14 inches above finished floor, with aluminum heat-sinc fastened to bottom edges.
- B. Pilasters: 82 inches high, fastened to pilaster sleeves with stainless steel tamper resistant Torx head sex bolt.
- C. Pilaster Sleeves: 3 inches high, 20 gage stainless steel, secured to pilaster with stainless steel tamper resistant Torx head sex bolt.
- D. Wall Brackets: Continuous 54 inches long, heavy-duty aluminum, bright dip anodized finish, fastened to pilasters and panels with stainless steel tamper resistant Torx head sex bolts.
- E. Headrail: Heavy-duty extruded aluminum, anti-grip design, clear anodized finish, fastened to headrail bracket with stainless steel tamper resistant Torx head sex bolt and at top of pilaster with stainless steel tamper resistant Torx head screws.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install compartments in accordance with manufacturer's instructions and approved Shop Drawings.
- B. Install rigid, straight, plumb, and level.
- C. Locate bottom edge of doors and panels 14 inches above finished floor.
- D. Provide uniform, maximum 3/8 inch vertical clearance at doors.
- E. Not Acceptable: Evidence of cutting, drilling, or patching.

3.02 ADJUSTING

- A. Adjust doors and latches to operate correctly.

END OF SECTION

SECTION 10 28 13
TOILET AND BATH ACCESSORIES

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 06 1000 - Rough Carpentry
- B. Section 10 2116 - Plastic Toilet Compartments

1.02 SUBMITTALS

- A. Shop Drawings: Details for grab bars.
- B. Product Data: Specifications or data sheets and installation instructions for each product required. Coordinate fixture model numbers with Owner's Representative to ensure Owner's refills fit products selected.
- C. Contract Closeout Submittals: Furnish the following, as applicable, for each product required:
 - 1. Operation and maintenance data.
 - 2. Parts list.
 - 3. Keys and tools.

1.03 QUALITY ASSURANCE

- A. Provide products from more than one manufacturer if necessary to meet the requirements of this Section.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store products in manufacturer's original protective packaging.
 - 1. Furnish items with protective wrappings or covers as required to protect finishes. Do not remove protective coverings until completion of other Work liable to damage accessory finish.
- B. Pack products with required trim, mounting devices, fasteners, service tools or keys, and complete installation instructions.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Stainless Steel: AISI Type 302/304 with No. 4 satin finish, unless otherwise indicated.
- B. Mounting Devices and Fasteners: Stainless steel, unless otherwise indicated.

2.02 FABRICATION

- A. Fabricate dispenser and disposal units of one-piece welded construction with seamless corners, unless otherwise specified.
- B. Equip units with keyed vandal-resistant lock where key access is specified.
- C. Mounting Devices: If not indicated, furnish type and size compatible with accessory unit specified which will securely mount accessory to wall or partition construction indicated.
 - 1. Grab Bars: Furnish anchoring devices which will withstand minimum downward pull of 500 pounds.
- D. Exposed Mounting Devices and Fasteners:
 - 1. Type: Theft-resistant.
 - 2. Finish: Match accessory finish, unless otherwise indicated.
 - 3. Concrete Construction: Furnish stainless steel machine screws in nonferrous expansion anchors except furnish stainless steel toggle bolts where anchorage occurs in concrete.

2.03 KEYS AND TOOLS

- A. Keys: Furnish minimum of 2 keys and an additional 2 keys for every 6 key operated accessories.
 - 1. Key similar key access units alike unless otherwise specified.

- B. Tools: Furnish socket wrenches compatible with set screws of concealed theft-resistant fastenings. Furnish minimum of 2 wrenches and an additional 2 wrenches for every 6 accessories having such fastenings.

2.04 ADA BENCHES

- A. Bench, 5' long – Equal to Global Industrial™ Item WB493702 Locker Room Bench, Hardwood With Steel Tube Pedestal Legs, 60 x 9-1/2 x 17
- B. Bench, 6' long – Equal to Global Industrial™ Item WB183670 Locker Room Bench, Hardwood With Steel Tube Pedestal Legs, 72 x 9-1/2 x 17
- C. ADA Bench - Equal to Global Industrial™ Item WB269860 Locker Room Bench, Hardwood With Steel Tube Pedestal Legs, 48"W x 20"D x 17-1/4"H
- D. Size: As indicated above.
- E. Color to be chosen by Director's Representative from manufacturer's standard colors.

2.05 MIRRORS

- A. Types:
 - 1. Unless otherwise indicated: Mirror by Bobrick, Model# B-165 2436 & B-165 2460.
 - a. Description: Type 430 stainless steel with bright-polished finish. Mitered corners. Frame screw permits replacement of glass. No. 1 quality, 1/4" (6mm) glass mirror; warranted against silver spoilage for 15 years. Galvanized steel back. Secured to concealed wall hanger with theft-resistant mounting.
 - b. Size: Width: 24 inches, Height: 36 inches, Depth: 1/2 inch
 - c. Size: Width: 24 inches, Height: 60 inches, Depth: 1/2 inch

2.06 SHELVES

- A. Wood Shelf: Solid Wood one-piece top with wood angular gusset brackets and two 3/16 inch diameter mounting holes per bracket; all solid wood construction. Locate brackets 3 inches from each end of shelf. Furnish shelves 6 inches wide by 30 inches long unless otherwise indicated.
- B. Wood Species: Match all other wood trim in Bathroom.

2.07 DOUBLE-ROLL TOILET TISSUE DISPENSERS (DRTTD)

- A. ASI model 0264-12 double tissue holder, surface mounted, controlled delivery, theft-resistant spindle
 - 1. Description: Double-roll dispenser.
 - 2. Mounting: Surface mounted.
 - 3. Operation: Noncontrol delivery with theft-resistant spindle.
 - 4. Capacity: Designed for two (2) standard core tissue rolls.
 - 5. Material and Finish: Stainless steel, No. 4 finish (satin).

2.08 TRASH CANS

- A. Trash cans to be supplied by Fresh Air Fund.

2.09 PAPER TOWEL DISPENSER

- A. Paper towel dispensers furnished by Fresh Air Fund, installed by General Contractor.

2.10 SOAP DISPENSER

- A. Soap dispensers furnished by Fresh Air Fund, installed by General Contractor.

2.11 GRAB BARS (GB)

- A. ASI 3700 series 1-1/4" diameter with snap flange covers

2.12 SANITARY NAPKIN DISPOSAL UNIT:

- A. Basis of Design: ASI model 0473-A.

2.13 MULTI-PIECE SHOWER MODULE

- A. Basis of Design: ADA Transfer Shower Module
 - 1. Shower Kit Model [Best Bath Systems Model: 4LSS4038A58], consisting of two side panels, one back panel, shower pan, and two removeable corner molding strips.
 - 2. Alcove Panel Dimensions: as shown on drawings.
- B. Basis of Design: Non-ADA Shower Module
 - 1. Shower Kit Model [Aquatic Model: 1363TRIO], consisting of two side panels, one shower pan, and two removeable corner molding strips.
 - 2. Alcove Panel Dimensions: as shown on drawings.
- C. Color to be chosen by Director's Representative from manufacturer's standard colors.
- D. Concealed Fasteners: Manufacturer's standard stainless steel.
 - 1. Provide at top flanges
- E. Exposed Fasteners: Manufacturer's standard chrome-plated steel or brass flat/ panhead screws, finished to match item being secured
 - 1. Provide at side flanges to facilitate and ease subsequent removal of upper sections for access to and servicing of concealed piping and valves.
- F. Sealant: One-part mildew-resistant silicone sealant, complying with ASTM C920, clear.

2.14 FOLDING SHOWER SEAT

- A. Non-ADA Shower fold-down dressing seat
 - 1. ASI model 8203 (18" wide)
- B. ADA Shower fold-down dressing seat
 - 1. ASI model 8203-20 (20" wide)
- C. ADA Folding Shower Seat, ADA Shower Stall
 - 1. ASI model 8206-SC-R slow-close folding shower seat, white phenolic, L-shaped, right hand, ADA

2.15 SHOWER CURTAINS (SC)

- A. Curtains of 8 oz white duck, 10 percent oversized, mildew resistant treated and water repellent finished, with hemmed edges all 4 sides. Curtains shall have rust proof metal grommets for hooks on 6 inch centers along top hem. Length as required by curtain hook height.

2.16 COMBINATION UTILITY SHELF/MOP AND BROOM HOLDER

- A. 0.05 inch (1.3 mm) thick stainless steel, Type 304, with 1/2 inch (12 mm) returned edges, 0.06 inch (1.6 mm) steel wall brackets.
 - 1. Length: 36 inches (___ mm).
 - 2. Product: [model 8215 (in utility room)] manufactured by [ASI or approved equal].
- B. Surface Mounted Shelf: 18 Gauge type 304 stainless steel alloy 18-8.
 - 1. Length: 36 inches
 - 2. Product: Roval Surface Mounted Shelf - Model 20692 by ASI Inc.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Unless otherwise indicated, install Work of this Section in strict accordance with the manufacturer's instructions.
 - 1. Install all attachments, anchorage devices, and fasteners as required to securely mount accessory units to types of wall or partition construction indicated.
- B. Toilet Tissue Dispensers - Surface Mounted: Install units back-to-back where possible for 2 or more compartments with dividing stall partitions. Fasten dispensers through backs with stainless steel through bolts and bonnet nuts.

- C. Shower Curtain Rods: Install units back-to-back where possible for 2 or more compartments with dividing stall partitions. Fasten dispensers through backs with stainless steel through bolts and bonnet nuts.

3.02 CLEANING AND POLISHING

- A. Remove protective wrappings from installed accessories after completion of other Work liable to damage accessory finish. Remove residue, if any, and polish exposed surfaces.

3.03 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

SECTION 10 73 16.23
FABRIC CANOPIES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Fabric canopies.

1.02 REFERENCE STANDARDS

- A. ASTM A53/A53M - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless; 2012.
- B. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2017.
- C. ASTM A572/A572M - Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel; 2021, with Editorial Revision.
- D. NFPA 701 - Standard Methods of Fire Tests for Flame Propagation of Textiles and Films; 2019.

1.03 SUBMITTALS

- A. Product Data: Provide data on fabric covering, color fastness, stitching and seaming methods, attachment devices to framing system.
- B. Shop Drawings: Indicate canopy layout, all support frame member sizes, locations, configurations, connection attachments, anchorage, size and type of fasteners, graphic images, patterns, and accessories; shop drawings to be sealed and signed by delegated design engineer.
- C. Samples, Covering: Submit 12 by 12 inch (300 by 300 mm) sample of covering with representative hem stitch detail, seam with reinforcement, and attachment devices to framing system.
- D. Executed warranty.
- E. Specimen warranty.

1.04 WARRANTY

- A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.
- B. Provide manufacturer's warranty from Date of Substantial Completion, covering the following:
 - 1. Fabric: 10 years.
 - 2. Aluminum and Steel Coatings: 10 years.

PART 2 PRODUCTS

2.01 CANOPIES - GENERAL

- A. Delegated Design: Engage a qualified professional engineer, legally qualified to practice jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated to design canopy support frame.
- B. Structural Performance: Canopy support frame systems to withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated according to applicable codes and standards.
 - 1. Design Loading Criteria: As indicated on Drawings. Include 5 psf life load.
 - 2. Deflection and drift limits:
 - a. No greater than the following:
 - 1) Purlins, Rafters, Trusses, or Girts: Vertical deflection of 1/180 of the span for snow load and 1/120 of the span for snow and dead load.
 - 2) Lateral Drift: Maximum of 1/60 of the building height.
 - 3) Anchorage to Foundation: Design anchorage to existing concrete foundation, see drawings for existing conditions.
- C. Configuration: As indicated on drawings.

- D. Sizes: As indicated on drawings.
- E. Provide a complete system ready for erection at project site.
- F. Shop fabricate to the greatest extent possible; disassemble if necessary for shipping.

2.02 FABRIC CANOPIES

- A. Description: Shaped lightweight metal framework with fabric covering that provides weather protection, identity, or decoration. Canopy shall be structurally independent.
- B. Shape: As indicated on drawings.
- C. Framework: Steel with hot-dipped and water-quenched G60 galvanized finish suitable to accept a field-painted finish.
- D. Anchorage: As per delegated design.
- E. Covering Materials: As indicated under Fabric Coverings article.

2.03 COMPONENTS

- A. Steel Framing System:
 - 1. Steel Pipe: ASTM A53/A53M, Grade B Schedule 40, hot-dipped galvanized finish.
 - 2. Steel Outriggers, Fascia, Diagonal Supports, and Mounting Brackets: ASTM A572/A572M, Grade 50 (345) high-strength, columbium-vanadium steel; shop fabricated with prepunched or predrilled holes.
 - 3. Framing: Steel pipe trusses; welded joints.
 - 4. Fittings: Elbows, T-shapes, wall brackets; cast steel.
 - 5. Mounting: Brackets and flanges, with anchors to be anchored to existing concrete foundation.
 - 6. Exposed Fasteners: Flush countersunk galvanized steel screws or bolts; consistent with design of system.
 - 7. Splice Connectors: Steel concealed spigots.
 - 8. Finish Exposed Components: Galvanized in accordance with requirements of ASTM A123/A123M.

2.04 FABRIC COVERINGS

- A. Covering Materials: Comply with applicable code for flame spread/smoke developed ratings for roof covering.
 - 1. Performance Requirements:
 - a. Flammability: Pass NFPA 701 large and small tests.
 - b. Flammability: Meets the fire propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 or has a flame spread index not greater than 25 when tested in accordance with ASTM E84 or UL 723.
 - 2. Covering Attachment:
 - a. Staples: Galvanized steel, 1/2 inch (13 mm) length minimum, space at 1-1/2 inches (38 mm) maximum.
 - b. Screws: Zinc-coated No.10, 3/4 inch (19 mm) self-tapping screws, space evenly at 6 inches (152 mm) apart, maximum.
 - c. Lacing: Woven nylon, through grommets.
 - 3. Fabric Color:
 - a. As selected by Director's Representative from manufacturer's standard range.

2.05 FABRICATION - FRAMING

- A. Fit and shop assemble components in largest practical sizes for delivery to site.
- B. Fabricate components with joints tightly fitted and secured.

2.06 FABRICATION - COVERING

- A. Manufacture covering in one piece wherever possible, sized and configured to suit framing.

2.07 FINISHES

- A. Finish Color: G60 galvanized finish per article 2.02 above.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine foundations and anchor bolts for location and elevation; notify Architect of inaccuracies, and do not begin installation until unacceptable conditions have been corrected.
- B. Examine rough-in of required electrical services prior to placement of canopy.

3.02 PREPARATION

- A. Clean and strip primed steel items to bare metal where site welding is required.

3.03 INSTALLATION - FRAMING

- A. Install in accordance with manufacturer's instructions.
- B. Install components plumb and level, accurately fitted, free from distortion or defects.
- C. Provide anchors required for connecting framing to structure. Anchor framing to structure.
- D. Field weld anchors as indicated on drawings. Grind welds smooth. Touch-up welds with primer.
- E. Conceal bolts and screws whenever possible. Where not concealed, use flush countersunk fastenings.

3.04 INSTALLATION - FABRIC COVERING

- A. Install covering over framing members, stretched taut without creases or folds.
- B. Attach covering and fasten securely.

END OF SECTION