### SECTION 10 21 16 - SHOWER AND DRESSING COMPARTMENTS

### PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

### A. Section Includes:

- 1. Shower compartments fabricated from [CMU block with cultured marble, granite, or other solid surface panel (preferred)] [stainless steel] [solid phenolic]
- 2. Dressing compartments fabricated from [stainless steel] [solid phenolic]

### **B.** Related Sections:

- 1. Section 05 50 00 "Metal Fabrications" for supports that attach floor-and-ceiling-anchored compartments to overhead structural system.
- 2. [Section 06 10 00 "Rough Carpentry"] [Section 06 10 53 "Miscellaneous Rough Carpentry"] for [blocking] [and] [overhead support of floor-and-ceiling-anchored compartments].
- 3. Section 10 28 00 "Toilet, Bath, and Laundry Accessories" for grab bars, purse shelves, and similar accessories.

## 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. LEED Submittals (Projects authorized for LEED certification only)
  - 1. Product Data for Credit IEQ 4.4: For particleboard, documentation indicating that product contains no urea formaldehyde.
  - 2. Laboratory Test Reports for Credit IEQ 4: For [adhesives] [and] [composite wood products], documentation indicating that products comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
- C. Shop Drawings: For shower and dressing compartments. Include plans, elevations, sections, details, and attachments to other work.

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- 1. Show locations of cutouts for compartment-mounted accessories.
- 2. Show locations of reinforcements for compartment-mounted grab bars.
- 3. Show locations of centerlines of drains.
- 4. Show[ ceiling grid and] overhead support or bracing locations.
- D. Samples for Initial Selection: For each type of compartment indicated. Include Samples of hardware and accessories for material and color selection.
- E. Samples for Verification: For the following products, in manufacturer's standard sizes unless otherwise indicated:
  - 1. Each type of material, color, and finish required for compartments, prepared on 6-inch-(152-mm-) square Samples of same thickness and material indicated for the Work.
  - 2. Each type of hardware and accessory.
  - 3. Curtain Fabric: 12-inch- (305-mm-) square swatch or larger as required to show complete pattern repeat, from dye lot used for the Work, with specified treatments applied. Mark top and face of material.

## 1.4 INFORMATIONAL SUBMITTALS

A. Product Certificates: For each type of shower and dressing compartment, from manufacturer.

## 1.5 CLOSEOUT SUBMITTALS

A. Maintenance Data: For shower and dressing compartments to include in maintenance manuals.

# 1.6 QUALITY ASSURANCE

- A. Surface-Burning Characteristics: As determined by testing identical products according to ASTM E 84, or another standard acceptable to authorities having jurisdiction, by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
  - 1. Flame-Spread Index: [25] [75] [200] or less.
  - 2. Smoke-Developed Index: 450 or less.
- B. Regulatory Requirements: Comply with applicable provisions in [the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines] [and] [ICC/ANSI A117.1] for shower and dressing compartments designated as accessible.

#### 1.7 PROJECT CONDITIONS

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A. Field Measurements: Verify actual locations of walls, columns, ceilings, and other construction contiguous with shower and dressing compartments by field measurements before fabrication.

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#### PART 2 - PRODUCTS

# 2.1 MATERIALS

- A. Aluminum Castings: ASTM B 26/B 26M.
- B. Aluminum Extrusions: ASTM B 221 (ASTM B 221M).
- C. Brass Castings: ASTM B 584.
- D. Brass Extrusions: ASTM B 455.
- E. Stainless-Steel Sheet: ASTM A 666, Type 304, stretcher-leveled standard of flatness.
- F. Stainless-Steel Castings: ASTM A 743/A 743M.
- G. Adhesives: Manufacturer's standard product that complies with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
- 2.2 CMU BLOCK WITH CULTURED MARBLE, GRANITE, OR OTHER SOLID SURFACE PANEL COMPARTMENTS <Insert drawing designation> [In Development: suggested components for shower compartments; use with fiber cement board ceiling. Pre-molded shower units may be used within restrooms only]
- 2.3 STAINLESS-STEEL COMPARTMENTS < Insert drawing designation>
  - A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - B. <u>Basis-of-Design Product</u>: Subject to compliance with requirements, provide <u>partitions</u> by General Partitions Mfg. Corp.; www.generalpartitions.com or comparable product by one of the following:
    - 1. <u>Global Steel Products Corp</u>; www.globalpartitions.com.
    - 2. Substitutions: See Section 01 25 00 Substitution Procedures.
  - C. Configuration: As shown on Drawings.
  - D. Enclosure Style: Overhead braced
  - E. Panel and Pilaster Construction: Seamless metal facing sheets, pressure laminated to core material; with continuous, interlocking molding strip or lapped-and-formed edge closures and with corners secured by welding or clips and exposed welds ground smooth. Exposed surfaces shall be free of pitting, seam marks, roller marks, stains, discolorations, telegraphing of core material, or other imperfections.

- 1. Core Material: Manufacturer's standard, sound-deadening honeycomb of resinimpregnated kraft paper in thickness required to provide finished thickness of 1 inch (25 mm) for panels and 1-1/4 inches (32 mm) for pilasters.
- 2. Grab-Bar Reinforcement: Provide concealed internal reinforcement for grab bars mounted on compartments.
- 3. Tapping Reinforcement: Provide concealed reinforcement for tapping (threading) at locations where machine screws are used for attaching items to compartments.
- F. Door Construction: Match panels; 1-inch (25-mm) finished thickness.
- G. Facing Sheets and Closures: Stainless-steel sheet of nominal thicknesses as follows:
  - 1. Panels: Manufacturer's standard thickness, but not less than 0.031 inch (0.79 mm) [0.038 inch (0.95 mm)].
  - 2. Doors: Manufacturer's standard thickness, but not less than 0.031 inch (0.79 mm).
- H. Pilaster Shoes: Formed from stainless-steel sheet, not less than 0.031-inch (0.79-mm) nominal thickness and 3 inches (76 mm) high, finished to match hardware.
- I. Brackets (Fittings):
  - Dressing-Compartment Brackets: Match toilet-compartment brackets specified in Section 10 21 13 "Toilet Compartments."
- J. Stainless-Steel Finish: Match stainless-steel toilet-compartment finish, specified in Section 10 21 13 "Toilet Compartments," on exposed faces. Protect exposed surfaces from damage by applying strippable, temporary protective covering before shipment.
- 2.4 PHENOLIC-CORE COMPARTMENTS < Insert drawing designation >
  - A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - B. <u>Basis-of-Design Product</u>: Subject to compliance with requirements, provide <u>partitions</u> by General Partitions Mfg. Corp.; www.generalpartitions.com or comparable product by one of the following:
    - 1. Global Steel Products Corp; www.globalpartitions.com.
    - 2. Substitutions: See Section 01 25 00 Substitution Procedures.
  - C. Configuration: As shown on Drawings.
  - D. Enclosure Style: Overhead braced.
  - E. Panel and Pilaster Construction: Solid phenolic material consisting of solid phenolic-core panel with melamine facing on both sides fused to substrate during panel manufacture (not separately laminated) and with eased and polished edges. Provide minimum 3/4-inch- (19-mm-) thick pilasters and minimum 1/2-inch- (13-mm-) thick panels.
  - F. Door Construction: Match panels; 3/4-inch (19-mm) minimum thickness.

- G. Pilaster Shoes: Formed from stainless-steel sheet, not less than 0.031-inch (0.79-mm) nominal thickness and 3 inches (76 mm) high, finished to match hardware.
- H. Brackets (Fittings):
  - 1. Dressing-Compartment Brackets: Match toilet-compartment brackets specified in Section 10 21 13 "Toilet Compartments."
- I. Phenolic-Core-Panel Finish:
  - 1. Facing Sheet Finish: [One color and pattern] [Two colors and patterns] in each room.
  - 2. Color and Pattern: Match phenolic-core toilet compartments specified in Section 10 21 13 "Toilet Compartments" with manufacturer's standard dark-color core .

## 2.5 ACCESSORIES

- A. Door Hardware and Accessories: Manufacturer's standard design, heavy-duty, operating hardware and accessories.
  - 1. Material: Stainless steel.
  - 2. Hinges: Manufacturer's standard, continuous, cam type that swings to a closed or partially open position .
  - 3. Latch and Keeper: Manufacturer's standard, recessed latch unit designed for emergency access and with combination rubber-faced door strike and keeper. Provide units that comply with regulatory requirements for accessibility at compartments designated as accessible.
  - 4. Clothing Hooks: Manufacturer's standard clothing hooks in each dressing compartment; include one combination hook and rubber-tipped bumper at in-swinging doors, sized to prevent door from hitting wall panel or compartment-mounted accessories.
  - 5. Door Bumper: Manufacturer's standard, rubber-tipped bumper at out-swinging doors.
  - 6. Door Pull: Manufacturer's standard unit at out-swinging doors that complies with regulatory requirements for accessibility. Provide units on both sides of doors at compartments designated as accessible.
- B. Overhead Bracing: Manufacturer's standard, continuous, extruded-aluminum head rail or cap with antigrip profile; in manufacturer's standard finish.
- C. Head Rail with Hooks: Manufacturer's standard, continuous, extruded-aluminum head rail or cap with curtain hooks running in concealed track; with antigrip profile; in manufacturer's standard finish.
- D. Curtain: Flame-resistant, [polyester-reinforced vinyl fabric] [manufacturer's standard fabric] < Insert fabric> that is stain resistant, self-sanitizing, antistatic, and antimicrobial; launderable to a temperature of not less than [90 deg F (32 deg C)] < Insert temperature>.
  - 1. Flame Resistance: Passes NFPA 701 tests when tested by a testing and inspecting agency acceptable to authorities having jurisdiction.

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- 2. Labeling: Identify fabrics with appropriate markings of applicable testing and inspecting agency.
- 3. Curtain Grommets: Two-piece, rolled-edge, rustproof, nickel-plated brass; spaced not more than 6 inches (152 mm) o.c.; machined into top hem.
- 4. Length: Where curtain extends to a floor surface, size so that bottom hem clears finished floor by not more than 1 inch (25 mm) and not less than 1/2 inch (13 mm) above floor surface. Where curtains extend to a shower-receptor curb, size so that bottom hem hangs above curb line and clears curb line by not more than 1/2 inch (13 mm).
- 5. Color and Pattern: Match Architect's sample.
- E. Soap Holder: [Surface-mounted] [Recessed], seamless [stainless-steel] <Insert material> soap dish.
- F. Seats: Manufacturer's standard, [panel-mounted] [wall-mounted] [or] [floor-mounted] benches.
  - 1. Material: [Wood] [Solid phenolic] [Molded plastic] [Stainless steel] <Insert material>.
  - 2. Operation: [Fixed] [Folding].
  - 3. Finish: [As indicated by manufacturer's designations] [Match Architect's sample] [As selected by Architect from manufacturer's full range] [Match enclosure panels] <Insert finish>.
- G. Anchorages and Fasteners: Manufacturer's standard, exposed fasteners of stainless steel, chrome-plated steel, or solid brass, finished to match the items they are securing; with theft-resistant-type heads. Provide sex-type bolts for through-bolt applications. For concealed anchors, use stainless steel, hot-dip galvanized steel, or other rust-resistant, protective-coated steel.

# 2.6 FABRICATION

- A. Overhead-Braced Compartments: Provide manufacturer's standard, corrosion-resistant supports, leveling method, and anchors at pilasters and walls to suit floor and wall conditions. Provide shoes at pilasters to conceal supports and leveling method.
- B. Door Sizes and Swings: Unless otherwise indicated, provide 24-inch- (610-mm-) wide, inswinging doors for standard shower and dressing compartments, and 36-inch- (914-mm-) wide, out-swinging doors with a minimum 32-inch- (813-mm-) wide, clear opening for compartments designated as accessible.

#### PART 3 - EXECUTION

## 3.1 INSTALLATION

- A. General: Comply with manufacturer's written installation instructions. Install compartments rigid, straight, level, and plumb. Secure compartments in position with manufacturer's recommended anchoring devices.
  - 1. Maximum Clearances for Dressing Compartment:
    - a. Pilasters and Panels: 1/2 inch (13 mm).
    - b. Panels and Walls: 1 inch (25 mm).
  - Stirrup Brackets: Secure panels to walls and to pilasters with no fewer than [two brackets attached] [three brackets attached at midpoint and] near top and bottom of panel.
    - a. Locate wall brackets so holes for wall anchors occur in masonry or tile joints.
    - b. Align brackets at pilasters with brackets at walls.
- B. Overhead-Braced Compartments: Secure pilasters to floor, and level, plumb, and tighten. Set pilasters with anchors penetrating not less than 1-3/4 inches (44 mm) into structural floor unless otherwise indicated in manufacturer's written instructions. Secure continuous head rail to each pilaster with no fewer than two fasteners. [Hang doors to align tops of doors with tops of panels, and adjust so tops of doors are parallel with overhead brace when doors are in closed position.]
- C. Floor-and-Ceiling-Anchored Compartments: Secure pilasters to supporting construction, and level, plumb, and tighten. [Hang doors and adjust so doors are level and aligned with panels when doors are in closed position.]
- D. Curtains: Install curtains to specified length and verify that they hang vertically without stress points or diagonal folds.
- E. Shower Receptors: Install prefabricated shower receptors with drain gasket compression fit to outside diameter of waste pipe.

# 3.2 ADJUSTING

- A. Curtain Adjustment: After hanging curtains, test and adjust each track or rod to produce unencumbered, smooth operation. Steam and dress down curtains as required to produce crease- and wrinkle-free installation. Remove and replace curtains that are stained or soiled or that have stress points or diagonal folds.
- B. Hardware Adjustment: Adjust and lubricate hardware according to hardware manufacturer's written instructions for proper operation. Set hinges on in-swinging doors to hold doors open

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approximately 30 degrees from closed position when unlatched. Set hinges on out-swinging doors to return doors to fully closed position.

END OF SECTION 10 21 16