

## SECTION 10 21 13

### TOILET COMPARTMENTS

#### PART 1 - GENERAL

##### 1.01 DESCRIPTION

- A. This Section includes:
  - 1. Steel toilet compartments configured as toilet enclosures, entrance screens and urinal screens.
- B. Related Sections:
  - 1. Stone toilet compartments are specified in Section 10 21 13.40.
  - 2. Toilet accessories are specified in Section 10 28 13.

##### 1.02 SUBMITTALS

- A. Product Data: Manufacturer's technical data for materials, fabrication, and installation, include catalog cuts of anchors, hardware, fastenings, and accessories. Include manufacturer's recommended maintenance data.
- B. Shop Drawings: Include plans, elevations, sections, details and attachments to other work.
  - 1. Show locations of cutouts for compartment-mounted toilet accessories.
  - 2. Show locations of reinforcements for compartment-mounted grab bars.
- C. Samples: Full range of color samples for each type of unit required. Furnish 6-inch square samples of each color and finish on same substrate to be used in the work, for color verification after selections have been made.
- D. LEED Submittals:
  - 1. MR Credit 4: Product data and certification letter indicating percentages by weight of post-consumer and pre-consumer recycled content for products having recycled content. Include statement indicating costs for each product having recycled content.
    - a. Furnish the LEED Online Credit Template declaring that the credit requirements have been met and list the recycled content products used.
    - b. List total cost of all materials for the Project.
    - c. Required Audit Documentation:
      - 1) Manufacturer product data sheets, literature or letters highlighting the overall post-consumer and/or post-industrial recycled content percentages (by weight) of each product listed on the template.
      - 2) Materials invoices showing costs for each product listed on the template.
  - 2. IEQ Credit 4.4: Product data for products containing composite wood or agrifiber products or wood glues indicating that they do not contain urea-formaldehyde resin or binder.
    - a. Furnish the LEED Online Credit Template listing all the composite wood and agrifiber products used in the building, stating that they contain no added urea-formaldehyde resins.

b. Required Audit Documentation:

- 1) Product data that wood and agrifiber products used on the interior of the building contain no added urea-formaldehyde resins.
- 2) Product data that laminating adhesives used to fabricate on-site and shop-applied composite wood and agrifiber assemblies do not contain added urea-formaldehyde resins.

1.03 QUALITY ASSURANCE

- A. Surface-Burning Characteristics: As determined by testing identical products according to ASTM E84, 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 or less.
  2. Smoke-Developed Index: 450 or less.
- B. Regulatory Requirements: Comply with Americans with Disabilities Act (ADA) and California Building Code (CBC) requirements.

1.04 ENVIRONMENTAL QUALITY ASSURANCE

- A. MR Credit 4: Provide building materials with recycled content such that post-consumer recycled content plus one-half of pre-consumer recycled content constitutes a minimum of **10-percent** of cost of materials used for the Project.
1. The cost of post-consumer content of an item shall be determined by dividing the weight of post-consumer recycled content in the item by the total weight of the item and multiplying by the cost of the item.
  2. The cost of post consumer recycled content plus one-half of pre-consumer recycled content of an item shall be determined by dividing the weight of post-consumer recycled content plus one-half of pre-consumer recycled content in the item by the total weight of the item and multiplying by the cost of the item.
- B. IEQ Credit 4.4:
1. Composite wood and agrifiber products used on the interior of the building shall contain no added urea-formaldehyde resin.
  2. Laminating adhesives used to fabricate on-site and shop-applied composite wood and agrifiber assemblies shall not contain added urea-formaldehyde resins.
  3. Composite wood and agrifiber products are defined as particleboard, medium density fiberboard (MDF), plywood, wheatboard, strawboard, panel substrates and door cores. Materials considered fixtures, furniture and equipment are not considered base building elements and are not included.
- C. Applicable LEED Credits:
1. Credit MR 4 – Recycled Content.
  2. Credit IEQ 4.1 – Low-Emitting Materials - Adhesives and Sealants.
  3. Credit IEQ 4.4 – Low-Emitting Materials - Composite Wood and Agrifiber Products.

## 1.05 PROJECT CONDITIONS

- A. Field Measurements: Take field measurements prior to preparation of Shop Drawings and fabrication where possible. Allow for adjustments within specified tolerances wherever taking field measurements before fabrication might delay the work.
- B. Coordination: Furnish inserts and anchorages to be built into other work; coordinate delivery to avoid delay.

## PART 2 - PRODUCTS

### 2.01 MATERIALS

- A. General: Provide materials which have been selected for surface flatness and smoothness. Exposed surfaces which exhibit pitting, seam marks, roller marks, stains, discolorations, telegraphing of core material, and other imperfections are not acceptable.
- B. Aluminum Castings: ASTM B26.
- C. Aluminum Extrusions: ASTM B221.
- D. Steel Sheet: Commercial steel sheet for exposed applications; mill phosphatized and selected for smoothness.
  - 1. Electrolytically Zinc Coated: ASTM A879.
- E. Stainless Steel Castings: ASTM A743.
- F. Zamac: ASTM B86, commercial zinc-alloy die castings.

### 2.02 STEEL UNITS

- A. Approved Manufacturers: Accurate Partitions Corporation, All American Metal Corp., Aampco, Inc., Global Steel Products Corp., Knickerbocker Partition Corporation, Sanymetal or approved equal.
- B. Toilet-Enclosure Style: Overhead braced.
- C. Urinal-Screen Style: Wall hung, flat panel
- D. Door, Panel and Pilaster Construction: Seamless, metal facing sheets pressure laminated to core material; with continuous interlocking molding strip or lapped-and-formed edge closures; 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: Sound-deadening honeycomb of resin-impregnated kraft paper in thickness required to provide finished thickness of 1-inch for doors and panels and 1-1/4-inches for pilasters.
  - 2. Grab-Bar Reinforcement: Concealed internal reinforcement.
  - 3. Tapping Reinforcement: Concealed reinforcement for tapping (threading) at locations where machine screws are used for attaching items to units.
- E. Urinal Screen Construction: Flat panel matching panel construction.
- F. Facing Sheets and Closures: Electrolytically coated steel sheet with nominal base-metal (uncoated) thicknesses as follows:
  - 1. Pilasters, Braced at Both Ends: Not less than 20-gauge.

2. Pilasters, Braced at One End: Not less than 18-gauge.
  3. Panels: Not less than 22-gauge.
  4. Doors: Not less than 22-gauge.
  5. Urinal Screens: Match panels.
- G. Pilaster Shoes: Stainless-steel sheet, not less than 22-gauge thickness, 3-inches high, finished to match hardware.
- H. Brackets (Fittings): Provide one of the following at Developer Design/Builder's option.
1. Stirrup Type: Ear or U-brackets; stainless steel.
  2. Full Height (Continuous) Type: Manufacturer's standard stainless steel.
- I. Steel Sheet Finish: Immediately after cleaning and pretreating, apply baked-on finish, including thermosetting, electrostatically applied, and powder coatings. Color as selected by the County's Representative from manufacturer's full range of colors, including custom colors.

## 2.03 ACCESSORIES

- A. Hardware and Accessories: Manufacturer's standard design, heavy duty operating hardware and accessories.
1. Material: Stainless steel.
  2. Hinges: Paired, self-closing type that can be adjusted to hold doors open at any angle up to 90-degrees.
  3. Latch and Keeper: 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. Coat Hook: Combination hook and rubber-tipped bumper, sized to prevent in-swinging door from hitting compartment-mounted accessories.
  5. Door Bumper: 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: Continuous, extruded-aluminum head rail with anti-grip profile, satin anodized finish.
- C. Anchorages and Fasteners: Stainless steel exposed fasteners 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.

## 2.04 FABRICATION

- A. Overhead-Braced Units: Provide corrosion-resistant supports, leveling mechanism, and anchors at pilasters to suit floor conditions. Provide shoes at pilasters to conceal supports and leveling mechanism.

- B. Door Size and Swings: Provide 24-inch wide, inswinging doors for standard toilet compartments and 36-inch wide, out-swinging doors with a minimum 32-inch wide clear opening for compartments designated as accessible.

## PART 3 - EXECUTION

### 3.01 INSTALLATION

A. General:

1. Comply with manufacturer's recommended procedures and installation sequence.
2. Install units rigid, straight, plumb, and level.
3. Secure units in position with manufacturer's recommended anchoring devices.
4. Provide clearances of not more than 1/2-inch between pilasters and panels, and not more than 1-inch between panels and walls.
5. Secure panels to walls with not less than two stirrup brackets attached near top and bottom of panel.
  - a. Locate wall brackets so that holes for wall anchors occur in masonry or tile joints.
  - b. Align brackets at pilasters with brackets at walls.

B. Overhead-Braced Units:

1. Secure pilasters to floor and level, plumb, and tighten installation.
2. Set pilasters with anchors penetrating not less than 1-3/4-inches into structural floor.
3. Secure continuous head rail to each pilaster with not less than two fasteners.
4. Hang doors to align tops of doors with tops of panels, and adjust so that tops of doors are parallel with overhead-brace when doors are in closed position.

- C. Urinal Screens: Attach with anchoring devices to suit supporting structure. Set units level and plumb, rigid, and secured to resist lateral impact.

### 3.02 ADJUST AND CLEAN

A. Hardware Adjustment:

1. Adjust and lubricate hardware for proper operation.
2. Set hinges on in-swinging doors to hold doors open approximately 30-degrees from closed position when unlatched.
3. Set hinges on out-swinging doors and entrance swing doors to return to fully closed position.

- B. Clean exposed surfaces of partitions using materials and methods recommended by manufacturer. Protect as required to prevent damage until final acceptance.

END OF SECTION