



SECTION 10 21 00 - Compartments and Cubicles
TOILET COMPARTMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Solid polymer partitions.

1.2 RELATED SECTIONS

- A. Section 05 50 00 - Metal Fabrications.
- B. Section 06 11 16 - Mechanically Graded Lumber.
- C. Section 10 28 00 - Toilet, Bath, and Laundry Accessories.

1.3 REFERENCES

- A. ASTM International:
 - 1. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 2. ASTM D 1735 - Standard Practice for Testing Water Resistance of Coatings Using Water Fog Apparatus
 - 3. ASTM D 2247 - Standard Practice for Testing Water Resistance of Coatings in 100 percent Relative Humidity
- B. United States Green Building Council (USGBC): LEED Green Building Rating System.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. [Product Data]: Manufacturer's data sheets on each product to be used, including:
 - 1. Literature indicating typical panel, pilaster, door, hardware and fastening.
 - 2. Preparation instructions and recommendations.
 - 3. Storage and handling requirements and recommendations.
 - 4. Installation methods.
- C. Shop Drawings:
 - 1. Dimensioned plans indicating layout of toilet compartments.
 - 2. Dimensioned elevations indicating heights of doors, pilasters, separation partitions, and other components; indicate locations and sizes of openings in compartment separation partitions for toilet and bath accessories to be installed in partitions; indicate floor and ceiling clearances.
 - 3. Details indicating anchoring components (bolt layouts) and methods for project conditions; indicate components required for installation, but not supplied by toilet compartment manufacturer.
- D. Selection Samples: For each finish product specified, one complete set of color selection guides representing manufacturer's full range of available colors, textures and patterns.

- E. Verification Samples: For each finish product specified, two samples representing actual product, color, texture and pattern.
- F. LEED Green Building Rating System: Submit manufacturer's documentation of recycled content, in accordance with LEED credit calculations.
- G. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store and handle materials and products in strict compliance with manufacturer's instructions and recommendations and industry standards.
- B. Store products indoors in manufacturer's or fabricator's original containers and packaging, with labels clearly identifying product name and manufacturer. Protect from damage.
- C. Lay cartons flat, with adequate support to ensure flatness and to prevent damage to pre-finished surfaces.
- D. Do not store where ambient temperature exceeds 120 degrees F (49 degrees C).

1.6 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
- B. Do not deliver materials or begin installation until building is enclosed, with complete protection from outside weather, and building temperature maintained at a minimum of 60 degrees F (15.6 degrees C).

1.7 WARRANTY

- A. Manufacturers Standard Warranty: Provide warranty for Solid polymer HDPE Material: Against breakage, corrosion, and delamination for 25 years.

1.8 COORDINATION

- A. Coordinate Work with placement of support framing and anchors in walls and ceilings.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: ASI Global Partitions, which is located at: 900 Clary Connector; Eastanollee, GA 30538; Tel: 706-827-2700; Fax: 706-827-2710; Email:[request info \(sales@asi-globalpartitions.com\)](mailto:request_info@asi-globalpartitions.com); Web:<http://asi-globalpartitions.com>
 - 1. Other Acceptable Manufacturer: ASI Accurate Partitions; Burr Ridge IL; Tel: 708-442-6800; Web: <http://www.asi-accuratepartitions.com>.
 - 2. No other manufacturer will be accepted without ASTM performance compliance.
- B. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

2.2 COMPARTMENTS AND SCREENS

- A. Toilet Compartments: Ceiling hung, solid polymer.
 - 1. Compartment Depth and Width: As scheduled and indicated on Drawings.

2. Door Width: 24 inches (610 mm), minimum; at ADA accessible compartments 36 inches (915 mm) minimum.
3. Height Above Floor: 14 inches (356 mm).
4. Door/Panel Height: 55 inches (1397 mm).

B. Privacy and Urinal Screens: Ceiling hung.

1. Screen Panel Size: As scheduled and indicated on Drawings.
2. Screen Panel Height: 55 inches (1397 mm).
3. Height Above Floor: As scheduled and indicated on Drawings.

2.3 SOLID POLYMER TOILET COMPARTMENTS

A. Doors, Panels, Screens, and Pilasters: Single sheet solid, homogenous HDPE plastic material formed from waterproof, non-absorbent, high-density polyethylene resins; mark-resistant self-lubricating surface; edges finished smooth.

1. Material: Solid, homogenous HDPE; 1 inch (25 mm) thick.
2. Rating: Class "B" Fire Rated per ASTM E 84.
3. Material shall be compliant with IBC 2012 or later and must be solid HDPE; foamed material is not allowed. Material shall be NFPA 286 compliant.
4. Edges: 1/4 inch (6 mm) radius machined edges.
5. Heat Sink: Aluminum heat sink, to dissipate heat from incendiary devices used by vandals, attached to bottom of doors and panels.

B. Finish: Pebble-textured homogenous color throughout material. Color as selected from manufacturer's standard colors.

C. Door Hardware: 8 inch (203 mm) aluminum wrap-around hinge.

1. Hinges: Hinges shall be 8 inches (203 mm) and fabricated from heavy-duty extruded aluminum (6463-T5 alloy) with a brushed anodized finish with wrap-around flanges, surface mounted and through bolted to doors and pilasters. Hinges operate and are field set with adjustable nylon cams. Cams can be set in 30 degree increments.
2. Latch: Anodized extruded aluminum, with housing, slide bolt and button.
3. Strike and Keeper: 6 inch (152 mm) wrap-around flanges fabricated from heavy-duty extruded aluminum (6463-T5 alloy) with a brushed anodized finish.
4. Coat Hook and Bumper: Non-ferrous, chrome-plated, with black rubber tip for doorstop.
5. Fastening Hardware: Manufacturer's standard, Type 304 stainless steel, No. 4 satin finish, theft-resistant barrel nuts and machine screws.
6. Door Pulls: Non-ferrous, chrome-plated. Standard on ADA compartments. Two per ADA door.

D. Mounting Brackets: Provide optional aluminum continuous brackets with theft resistant barrel nuts and shoulder screws.

E. Pilaster Shoes: Ceiling Hung and Floor-to-Ceiling. Type 304 Stainless Steel, No. 4 satin finish. Minimum 5 inches (127 mm) high.

F. Pilaster Anchors: Ceiling Hung.

1. Pilasters shall include a mounting system comprised of 1/4 by 1 inch (6 by 25 mm) stainless steel mounting bar attached to the pilaster in a GLOBAL PLUG LOC arrangement having 3/8 inch (9.5 mm) zinc plated steel bolts secured to 1/8 inch (3.2 mm) thick semi cylindrical PLUG LOC imbedded within a contoured aperture transversely piercing the core.
2. Each mounting bar shall be secured to the building structure with 3/8 inch (9.5 mm) zinc plated steel studs.
3. Cross bracing shall be 4 inches (102 mm) wide by 1 inch (25 mm) thick by appropriate length polymer (HDPE).

4. A shoe shall conceal each ceiling mounting, having an internal cross section conforming to the pilaster.
5. Ceiling hung hdpe compartments require use of 74" continuous aluminum U bracket at all panel to pilaster connections. The bracket shall extend from the bottom of the pilaster above the pilaster. This is for rigidity as hdpe is a flexible material.

PART 3 EXECUTION

3.1 EXAMINATION AND PREPARATION

- A. Inspect and prepare substrates using the methods recommended by the manufacturer for achieving best result for the substrates under project conditions. Clean surfaces thoroughly prior to installation.
- B. Do not proceed with installation until substrates have been prepared using the methods recommended by the manufacturer and deviations from manufacturer's recommended tolerances are corrected. Commencement of installation constitutes acceptance of conditions.
- C. If preparation is the responsibility of another installer, notify Architect in writing of deviations from manufacturer's recommended installation tolerances and conditions.
 1. Verify dimensions of areas to receive compartments.
 2. Verify locations of built-in framing, anchorage, bracing, and plumbing fixtures.

3.2 INSTALLATION

- A. Install in accordance with approved shop drawings and manufacturer's instructions.
- B. Fasten components to adjacent materials and to other components using purpose-designed fastening devices.
- C. Adjust pilaster anchors for substrate variations; conceal anchors with pilaster shoes.
- D. Equip each compartment door with hinges and door latch.
- E. Install door strike keeper on pilasters in alignment with door latch.
- F. Equip each compartment door with one coat hook and bumper.
- G. Installation Tolerances:
 1. Maximum variations from plumb or level: 1/8 inch (3 mm).
 2. Clearance between wall surface and panels or pilasters: 1-1/2 inch (38 mm) maximum.

3.3 ADJUSTING

- A. Adjust and align hardware to uniform clearance at vertical edge of doors.
- B. Adjust adjacent components for consistency of line or plane.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.
- C. Remove factory protective coverings and clean finish surfaces in accordance with manufacturer's instructions before substantial completion.