

SECTION 10 21 13

TOILET COMPARTMENTS
06/07

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ALUMINUM ASSOCIATION (AA)

AA DAF-45 (2003) Designation System for Aluminum Finishes

ASTM INTERNATIONAL (ASTM)

ASTM A 123/A 123M (2002) Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products

ASTM A 167 (2004) Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip

ASTM A 385 (2003) Providing High-Quality Zinc Coatings (Hot-Dip)

ASTM B 221 (2005) Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes

U.S. GENERAL SERVICES ADMINISTRATION (GSA)

CID A-A-60003 (Basic) Partitions, Toilet, Complete

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

36 CFR 1191 Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. Submit the following in accordance with Section 01 33 00
SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Installation Drawings
Fabrication Drawings

Drawings showing plans, elevations, details of construction, hardware, reinforcing, fittings, mountings, and anchorings for metal partitions and urinal screens. Installation drawings as specified.

SD-03 Product Data

Toilet Partition System; G
Cleaning and Maintenance Instructions
Colors And Finishes
Partition Panels and Doors
Anchoring Devices and Fasteners
Hardware and Fittings
Brackets
Door Hardware
Floor-Anchored Partitions
Overhead-Braced Partitions

Manufacturer's technical data and catalog cuts including installation and cleaning instructions.

SD-04 Samples

Colors and Finishes

Manufacturer's standard color charts and color samples.

SD-07 Certificates

Certification

Documentation of product quality, as specified.

1.3 SYSTEM DESCRIPTION

Provide a complete and usable [toilet partition system](#), including toilet enclosures, room entrance screens, urinal screens, system of panels, hardware, and support components. Comply with EPA requirements for recycled, recovered materials and Affirmative Procurement guidelines. Furnish the partition system from a single manufacturer, with a standard product as shown in the most recent catalog data. Submit [Fabrication Drawings](#) for metal toilet partitions and urinal screens consisting of fabrication and assembly details to be performed in the factory. Submit manufacturer's [Cleaning and Maintenance Instructions](#) with Fabrication Drawings for review.

1.4 DELIVERY, STORAGE, AND HANDLING

Deliver materials in the manufacturer's original unopened packages with the brand, item identification, and project reference clearly marked. Store

Components in a dry location that is adequately ventilated; free from dust, water, other contaminants, and damage during delivery, storage, and construction.

1.5 FIELD MEASUREMENTS

Take field measurements prior to the preparation of drawing and fabrication to ensure proper fits.

PART 2 PRODUCTS

2.1 MATERIALS

2.1.1 Anchoring Devices and Fasteners

Provide steel anchoring devices and fasteners hot-dipped galvanized after fabrication, in conformance with [ASTM A 385](#) and [ASTM A 123/A 123M](#). Conceal all galvanized anchoring devices.

2.1.2 Brackets

Wall brackets must be two-ear panel brackets, T-style, 1-inch stock. Provide stirrup style panel-to-pilaster brackets.

2.1.3 Hardware and Fittings

2.1.3.1 General Requirements

Hardware for the toilet partition system must conform to [CID A-A-60003](#) for the specified type and style of partitions. Provide hardware finish highly resistant to alkalis, urine, and other common toilet room acids. Comply latching devices and hinges for handicap compartments with [36 CFR 1191](#); devices and hinges must be stainless steel door latches that operate without either tight grasping or twisting of the wrist of the operator.

- a. Aluminum must conform to [ASTM B 221](#).
- b. Corrosion-resistant steel must conform to [ASTM A 167](#), Type 304.

2.1.3.2 Finishes

- a. Aluminum must have a clear anodic coating conforming to [AA DAF-45](#).
- b. Corrosion-resistant steel must have a No. 4 finish.
- c. Exposed fasteners must match the hardware and fittings.

2.1.4 Door Hardware

2.1.4.1 Hinges

Hinges must be self-lubricating with the indicated swing. Hinges must be the surface-mounted type and have the following type of return movement:

Gravity return movement

Hinge must be adjustable to hold in-swinging doors open at any angle up to 90 degrees and outswinging doors to 10 degrees.

2.1.4.2 Latch and Pull

Latch and pull must be a combination rubber-faced door strike and keeper equipped with emergency access.

2.1.4.3 Coat Hooks

Coat hooks must be combination units with hooks and rubber tipped pins.

2.2 PARTITION PANELS AND DOORS

Partition Panels and doors must be not less than 1 inch thick. Provide type and style as indicated on drawings.

2.2.1 Toilet Enclosures

Conform toilet enclosures to CID A-A-60003, Type I, Style A, floor supported. Furnish width, length, and height of toilet enclosures as shown. Finish surface of panels must be solid plastic. Provide grab bars to withstand a bending stress, shear stress, shear force, and a tensile force induced by 250 lbf. Grab bars must not rotate within their fittings.

2.2.2 Urinal Screens

Conform urinal screens to CID A-A-60003, Type III, Style A, floor supported or as indicated on drawings. Provide finish for surface of screens as solid plastic. Furnish width and height of urinal screens as shown. Secure wall hung urinal screens with 42 inch long, continuous flanges. Screens must be fabricated from the same types of panels and pilasters as the toilet partitions. Fittings and fasteners must be corrosion-resistant steel.

2.3 FLOOR-ANCHORED PARTITIONS

Pilasters must be not less than 1-1/4 inch thick with face sheets not less than 0.0635 inch thick. Provide anchoring device at the bottom of the pilaster consisting of a steel bar not less than 1/2 by 7/8 inch welded to the reinforced face sheets and having not less than two 3/8 inch round anchorage devices for securing to the floor slab. Provide anchorage devices complete with threaded rods, expansion shields, lock washers, and leveling-adjustment nuts. Trim piece at the floor must be 3 inch high and fabricated from not less than 0.030 inch thick corrosion-resistant steel.

2.4 COLORS AND FINISHES

2.4.1 Colors

Provide manufacturer's standard color charts for color of finishes for toilet partition system components.

2.4.2 Finishes

Provide solid plastic fabricated of polymer resins (polyethylene) formed under high pressure rendering a single component section not less than **one inch** thick. Colors must extend throughout the panel thickness. Provide exposed finish surfaces: smooth, waterproof, non-absorbant, and resistant to staining and marking with pens, pencils, or other writing devices. Solid plastic partitions must not show any sign of deterioration when immersed in the following chemicals and maintained at a temperature of **80 degrees F** for a minimum of 30 days:

Acetic Acid (80 percent)	Hydrochloric Acid (40 percent)
Acetone	Hydrogen Peroxide (30 percent)
Ammonia (liquid)	Isopropyl Alcohol
Ammonia Phosphate	Lactic Acid (25 percent)
Bleach (12 percent)	Lime Sulfur
Borax	Nicotine
Brine	Potassium Bromide
Caustic Soda	Soaps
Chlorine Water	Sodium Bicarbonate
Citric Acid	Trisodium Phosphate
Copper Chloride	Urea; Urine
Core Oils	Vinegar

Provide color as indicated on drawings.

PART 3 EXECUTION

3.1 INSTALLATION

Install partitions rigid, straight, plumb, and level, with the panels centered between the fixtures. Provide a panel clearance of not more than **1/2 inch** and secure the panels to walls and pilasters with not less than two wall brackets attached near the top and bottom of the panel. Locate wall brackets so that holes for wall bolts occur in masonry or tile joints. Secure Panels to pilasters with brackets matching the wall brackets.

- a. Secure panels to hollow plastered walls with toggle bolts using not less than **1/4-20** screws of the length required for the wall thickness. Toggle bolts must have a load-carrying strength of not less than **600 pounds** per anchor.
- b. Secure panels to ceramic tile on hollow plastered walls or hollow concrete-masonry walls with toggle bolts using not less than **1/4-20** screws of the length required for the wall thickness. Toggle bolts must have a load-carrying strength of not less than **600 pounds** per anchor.
- c. Secure panels to solid masonry or concrete with lead or brass expansion shields designed for use with not less than **1/4-20** screws, with a shield length of not less than **1-1/2 inch**. Expansion shields must have a load-carrying strength of not less than **600 pounds** per anchor.

3.2 FLOOR-ANCHORED PARTITIONS

Secure pilasters to the floor with the anchorage device specified. Make all leveling devices readily accessible for leveling, plumbing, and tightening the installation. Tops of doors must be level with tops of pilasters when doors are in a closed position. Expansion shields must have a minimum 2-inch penetration into the concrete slab.

3.3 FINAL ADJUSTMENT

After completion of the installation, make final adjustments to the pilaster-leveling devices, door hardware, and other working parts of the partition assembly.

3.4 CLEANING

Clean all surfaces of the work, and adjacent surfaces soiled as a result of the work, in an approved manner compliant with the manufacturer's recommended cleaning procedures. Remove all equipment, tools, surplus materials, and work debris from the site.

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