
USACE / NAVFAC / AFCEA / NASA UFGS-10 21 13 (April 2006)

Preparing Activity: USACE Replacing without change
UFGS-10153 (November 2003)

UNIFIED FACILITIES GUIDE SPECIFICATIONS

References are in agreement with UML dated 1 April 2006

Latest change indicated by CHG tags

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SECTION 10 21 13

TOILET PARTITIONS 04/06

NOTE: This guide specification covers the requirements for toilet enclosures, room entrance screens, and urinal screens.

Comments and suggestions on this guide specification are welcome and should be directed to the technical proponent of the specification. A listing of technical proponents, including their organization designation and telephone number, is on the Internet.

Recommended changes to a UFGS should be submitted as a Criteria Change Request (CCR).

Use of electronic communication is encouraged.

Brackets are used in the text to indicate designer choices or locations where text must be supplied by the designer.

PART 1 GENERAL

NOTE: Army buildings not excluded by TI 800-01 Design Criteria will be accessible in accordance with 36 CFR 1191, Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities.

Drawings will indicate location, dimensions, schedules, elevations, details, and such other information as required to indicate the extent of the work.

1.1 REFERENCES

NOTE: This paragraph is used to list the publications cited in the text of the guide specification. The publications are referred to in the text by basic designation only and listed in this paragraph by organization, designation, date, and title.

Use the Reference Wizard's Check Reference feature when you add a RID outside of the Section's Reference Article to automatically place the reference in the Reference Article. Also use the Reference Wizard's Check Reference feature to update the issue dates.

References not used in the text will automatically be deleted from this section of the project specification when you choose to reconcile references in the publish print process.

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.

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

NOTE: Review submittal description (SD) definitions in Section 01 33 00 SUBMITTAL PROCEDURES and edit the following list to reflect only the submittals required for the project. Submittals should be kept to the minimum required for adequate quality control.

A "G" following a submittal item indicates that the submittal requires Government approval. Some submittals are already marked with a "G". Only delete an existing "G" if the submittal item is not complex and can be reviewed through the Contractor's Quality Control system. Only add a "G" if the submittal is sufficiently important or complex in context of the project.

For submittals requiring Government approval on Army projects, a code of up to three characters within the submittal tags may be used following the "G" designation to indicate the approving authority. Codes for Army projects using the Resident Management System (RMS) are: "AE" for Architect-Engineer; "DO" for District Office

(Engineering Division or other organization in the District Office); "AO" for Area Office; "RO" for Resident Office; and "PO" for Project Office. Codes following the "G" typically are not used for Navy, Air Force, and NASA projects.

Choose the first bracketed item for Navy, Air Force and NASA projects, or choose the second bracketed item for Army projects.

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for [Contractor Quality Control approval.][information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government.] The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Installation[; G][; G, [____]]

Drawings showing plans, elevations, details of construction, hardware, reinforcing, fittings, mountings, and anchorings.

SD-03 Product Data

Toilet Partition System[; G][; G, [____]]

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

SD-04 Samples

Colors and Finishes[; G][; G, [____]]

Manufacturer's standard color charts and color samples.

1.3 SYSTEM DESCRIPTION

Toilet partition system, including toilet enclosures, room entrance screens, and urinal screens, shall be a complete and usable system of panels, hardware, and support components. The Contractor shall comply with EPA requirements in accordance with Section 00 62 35 RECYCLED / RECOVERED MATERIALS. The partition system shall be provided by a single manufacturer, and shall be a standard product as shown in the most recent catalog data. The partition system shall be as shown.

1.4 DELIVERY, STORAGE, AND HANDLING

Components shall be delivered to the jobsite in the manufacturer's original packaging with the brand, item identification, and project reference clearly marked. Components shall be stored in a dry location that is adequately ventilated; free from dust, water, or other contaminants; and shall have easy access for inspection and handling.

1.5 WARRANTY

Manufacturer's standard performance guarantees or warranties that extend

beyond a 1 year period shall be provided.

PART 2 PRODUCTS

NOTE: Painted metal (Finish 1) toilet enclosures, urinal screens, and room entrance screens are suitable for use in installations where the partitions are subjected to normal usage and exposure conditions. Laminated plastic (Finish 3) toilet partitions will not be used where severe water conditions will be encountered, such as where cleaning is to be performed by spraying water.

Where toilet partitions are indicated for hard usage or severe exposure areas, finishes other than painted metal (Finish 1) or laminated plastic (Finish 3) should be specified when their high initial cost can be justified through life cycle cost. The least expensive painted metal finish is generally the least durable of the finishes listed in CID A-A-60003. Laminated plastic (Finish 3) costs more than the painted metal and less than stainless steel (Finish 2), solid phenolic (Finish 4), or solid polyethylene (Finish 5). Laminated plastic (Finish 3) finishes are hard and smooth; resistant to wear, scratches, periodic moisture, impact, acids and alkalies, and cigarette burns.

Next to stainless steel (Finish 2), the solid plastics (phenolic and polyethylene) are the most durable finishes available. When finishes other than painted metal (Finish 1) are being considered, laminated plastic (Finish 3) should be the next logical choice, followed by solid plastics and stainless steel (Finish 2), and solid phenolic (Finish 4). Polyethylene (Finish 5), stainless steel (Finish 2), and solid phenolic (Finish 4) are highly resistant to humidity, steam, detergents, cleaning chemicals and corrosion. Interior fire and smoke finish classification must be addressed when materials other than metal partitions are being considered. Edit the following paragraphs for styles and finishes.

Generally, floor-supported enclosures, Style A, will be used; and overhead braced enclosures, Style C, and overhead braced-alcove, Style F, will be used when pilasters cannot be anchored into minimum 76 mm (3 inches) thick structural concrete. Ceiling hung enclosures, Style B, will be used only when the additional cost is justified for reasons of sanitation or appearance. Ceiling hung enclosures, Style B, are not recommended by manufacturers when ceiling height is greater than 2590 mm (8 feet 6 inches). Urinal screens, when deemed necessary, may be any of the 6 styles available, but the floor to ceiling hung screen, Style D, is the most justifiable for reasons of cost and sanitation.

Type II, Style D, room entrance screens are generally the most durable style due to the floor to ceiling post support design. Edit as needed to meet project requirements.

If ceiling hung enclosures are to be used, details showing the structural steel channel support system should be shown on the drawings. This section should be coordinated with Section 10 28 13 TOILET ACCESSORIES and the drawings regarding toilet enclosures which will have partition-mounted accessories attached to the panels.

2.1 TOILET ENCLOSURES

Toilet enclosures shall conform to **CID A-A-60003**, Type I, Style [A, floor supported] [B, ceiling hung] [C, overhead braced] [F, overhead braced-alcove]. Width, length, and height of toilet enclosures shall be as shown. Finish surface of panels shall be [painted metal, Finish 1] [laminated plastic, Finish 3] [_____]. Panels indicated to receive toilet paper holders or grab bars as specified in Section **10 28 13 TOILET ACCESSORIES**, shall be reinforced for mounting of the items required. Grab bars shall withstand a bending stress, shear stress, shear force, and a tensile force induced by **1112 N 250 lbf**. Grab bars shall not rotate within their fittings.

2.2 ROOM ENTRANCE SCREENS

NOTE: Length and height of room entrance screens will be shown on the drawings, using standard size panels and pilasters to the maximum extent practicable.

Room entrance screens shall conform to **CID A-A-60003**, Type II, Style [A, floor supported] [E, wall hung] [_____]. Finish surface of screens shall be [painted metal, Finish 1] [laminated plastic, Finish 3] [_____]. Length and height of screens shall be as shown.

2.3 URINAL SCREENS

NOTE: Use of urinal screens between individual urinals will be dependant on the function of the facility. Use of urinal screens will normally be limited to those applications where sanitary protection is required, such as between a urinal and an immediately adjacent lavatory. Style A screens should normally be between 600 to 900 mm (24 to 36 in) wide. Style E screens should normally be between 400 to 600 mm (18 to 24 in) wide. Wall hung, Style E, urinal screens will be used only where the supporting construction is masonry or concrete. Where high use is expected, choose the last bracketed sentence.

Urinal screens shall conform to CID A-A-60003, Type III, Style [A, floor supported] [B, ceiling hung] [C, overhead braced] [D, floor to ceiling hung] [E, floor to ceiling post supported]. Finish surface of screens shall be [painted metal, Finish 1] [laminated plastic, Finish 3] [_____]. Width and height of urinal screens shall be as shown. Secure wall hung urinal screens with [a minimum of three wall stirrup brackets.] [1050 mm 42 inch long, continuous flanges.]

2.4 HARDWARE

Hardware for the toilet partition system shall conform to CID A-A-60003 for the specified type and style of partitions. Hardware finish shall be highly resistant to alkalies, urine, and other common toilet room acids. Latching devices and hinges for handicap compartments shall comply with 36 CFR 1191 and shall be [chrome-plated steel] [or] [stainless steel] door latches that operate without either tight grasping or twisting of the wrist of the operator.

2.5 COLORS AND FINISHES

2.5.1 Colors

NOTE: In areas where a high degree of damage, corrosion, and frequent replacement has been experienced or where, for reasons of sanitation or appearance, additional cost is justified, partition finishes should be selected on the basis of Life Cycle Cost Analysis (LCC). The LCC analysis should be performed for a period of not less than ten years. For any project requiring non-combustible partitions, panels, screens, or door finishes, exclude finish No. 5.

Color of finishes for toilet partition system components shall be manufacturer's standard [as specified in Section 09 06 90 COLOR SCHEDULE] [_____].

2.5.2 Finishes No. 1 through No. 3

Partitions, panels, screen, and door finishes shall conform to CID A-A-60003 and shall be [Finish No. 1, baked enamel] [Finish No. 2, stainless steel] [Finish No. 3, laminated plastic].

2.5.3 Finishes No.4 and No. 5

Solid plastic fabricated of [solid phenolic core with melamine facing sheets] [or] [polymer resins (polyethylene)] formed under high pressure rendering a single component section not less than 25 mm one inch thick. Colors shall extend throughout the panel thickness. Exposed finish surfaces shall be smooth, waterproof, non-absorbant, and resistant to staining and marking with pens, pencils, or other writing devices. Solid plastic partitions shall not show any sign of deterioration when immersed in the following chemicals and maintained at a temperature of 27 degrees C 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

PART 3 EXECUTION

3.1 INSTALLATION

NOTE: Toilet partitions in barracks, and other hard usage areas, as well as those partitions on which grab bars are to be mounted, will be bolted to walls. Through-bolting will be specified for these applications; except, toggle bolts may be specified when through-bolting would be exposed in a finished room or would otherwise be unsuitable.

Toilet partitions shall be installed straight and plumb with uniform clearance of 13 mm 1/2 inch between pilasters and panels; 25 mm 1 inch between pilasters and walls; and not more than 5 mm 3/16 inch between pilasters and doors, in accordance with approved manufacturer's instructions with horizontal lines level and rigidly anchored to the supporting construction. Where indicated, anchorage to walls shall be by [through-bolting] [toggle-bolting]. Drilling and cutting for installation of anchors shall be at locations that will be concealed in the finished work. In the finished work, conceal evidence of drilling in floors and walls. Screws and bolts shall be stainless steel.

3.2 ADJUSTING AND CLEANING

Doors shall have a uniform vertical edge clearance of approximately 5 mm 3/16 inch and shall rest open at approximately 30 degrees when unlatched. Baked enamel finish shall be touched up with the same color of paint that was used for the finish. Toilet partitions shall be cleaned in accordance with approved manufacturer's instructions and shall be protected from damage until accepted.

-- End of Section --