

**CONSTRUCTION STANDARD SPECIFICATION**

**SECTION 10160**

**METAL TOILET COMPARTMENTS**

	<u>Page</u>
<b><u>PART 1 - GENERAL</u></b>	
1.01 Summary .....	2
1.02 References .....	2
1.03 Submittals .....	3
1.04 Delivery, Storage, And Handling .....	3
1.05 Project Conditions.....	3
 <b><u>PART 2 - PRODUCTS</u></b>	
2.01 Manufacturers .....	4
2.02 Materials .....	4
2.03 Fabrication .....	5
2.04 Factory Baked Enamel Finishes .....	6
 <b><u>PART 3 - EXECUTION</u></b>	
3.01 Installation .....	7
3.02 Adjusting And Cleaning .....	7

**CONSTRUCTION STANDARD SPECIFICATION**

**SECTION 10160**

**METAL TOILET COMPARTMENTS**

**PART 1 - GENERAL**

**1.01 SUMMARY**

- A. Section includes toilet compartments and screens as indicated on Contract documents, and as follows:
  - 1. Type: Steel, color-coated finish.
  - 2. Compartment Style
    - a. Overhead-Braced and Floor-Anchored: Use for existing construction.
    - b. Ceiling-Hung: Use for new construction, or for existing construction that can structurally support compartment.
  - 3. Screen Style
    - a. Floor-Anchored: Use for existing construction.
    - b. Wall-Hung: Use for new construction, or for existing construction that can structurally support screen.
- B. Related Section: Refer to the following sections for related work:
  - 1. Section 05500, "Metal Fabrications" for supports that attach units to overhead structural system.
  - 2. Section 06100 "Rough Carpentry" for overhead support of ceiling anchored units.
  - 3. Section 10800, "Toilet Accessories" for toilet paper holders, grab bars, and similar accessories.

**1.02 REFERENCES**

- A. American Society for Testing and Materials (ASTM)
  - A591 Specification for Steel Sheet, Electrolytic Zinc-Coated, for Light Coating Mass Applications

A653 Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy - Coated (Galvannealed) by the Hot-Dip Process

A666 Specification for Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar

B. National Association of Architectural Metal Manufacturers (NAAMM)

Metal Finishes Manual for Architectural and Metal Products.

### 1.03 SUBMITTALS

A. Product Data: For each type and style of toilet compartment and screen specified. Include details of construction relative to materials, fabrication, and installation. Include details of anchors, hardware, and fastenings.

B. Shop Drawings: For fabrication and installation of toilet compartment and screen assemblies. Include plans, elevations, sections, details, and attachments to other work. Show locations of cutouts for compartment-mounted toilet accessories and compartment-mounted grab bars.

C. Samples: Manufacturer's standard color chart showing full range of colors available for each type of compartment or screen indicated.

D. Submit manufacturer's documentation of recycled content for steel sheet product.

### 1.04 DELIVERY, STORAGE, AND HANDLING

A. Delivery: Deliver materials in manufacturer's original unopened and undamaged packages. Clearly identify manufacturer, brand name, contents, color, stock number, and order number on each package.

B. Storage: Store in original packaging under protective cover and protect from damage. Stack containers in accordance with manufacturer's recommendations.

C. Handling: Handle materials in accordance with manufacturer's instructions to prevent damage to products and finishes.

### 1.05 PROJECT CONDITIONS

A. Field Measurements: Verify dimensions in areas of installation by field measurements before fabrication and indicate measurements on shop drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating units without field measurements. Coordinate supports, adjacent construction, and fixture locations to ensure actual dimensions correspond to established dimensions.

- B. Coordination: Furnish inserts and anchorages which must be built into other work for installation of toilet compartments and related work; coordinate delivery with other work to avoid delay.

#### 1.06 QUALITY ASSURANCE

- A. Comply with requirements in CID-A-A-60003, "Partitions, Toilets, Complete".

### PART 2 - PRODUCTS

#### 2.01 MANUFACTURERS

Available Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- Accurate Partitions Corporation
- American Metal Corp
- Fiat Products, A Crane Plumbing Co.
- General Partitions
- Hadrian Inc.
- Metpar Corp.
- Sanymetal, A Crane Plumbing Co.

#### 2.02 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, or other imperfections on finished units are not acceptable.
- B. Steel Sheets for Color-Coated Finish: Provide mill-phosphatized steel sheet that is leveled to stretcher-leveled flatness complying with the requirements of standards indicated below.
  - 1. Electrolytically Zinc-Coated Steel Sheet: ASTM A591, Class C, of the following minimum thicknesses:
    - a. Pilasters (Overhead Braced): 0.0359 inch (0.9 mm) 20 gage.
    - b. Pilasters (Unbraced): 0.0478 inch (1.2 mm) 18 gage.
    - c. Panels and Screens: 0.0299 inch (0.75 mm) 22 gage.
    - d. Doors: 0.0299 inch (0.75 mm) 22 gage.
  - 2. Hot-Dip Galvanized or Galvannealed Steel Sheet: ASTM A653, in manufacturer's standard coating designation and of the following minimum thicknesses:
    - a. Pilasters (Overhead Braced): 0.040 inch (1.0 mm) 20 gage.
    - b. Pilasters (Unbraced): 0.052 inch (1.3 mm) 18 gage.

- c. Panels and Screens: 0.034 inch (0.85 mm) 22 gage.
- d. Doors: 0.034 inch (0.85 mm) 22 gage.
- 3. Steel Sheet Recycled-Content
  - a. Minimum 16 percent post-consumer recycled content.
  - b. Minimum 25 percent total recycled content.
- C. Core Material for Metal Compartments: Manufacturer's standard sound-deadening honeycomb of resin-impregnated Kraft paper in thickness required to provide finished thickness of 1 inch (25 mm) minimum for doors, panels and screens, and 1-1/4 inches (32 mm) minimum for pilasters.
- D. Pilaster Shoes and Sleeves (Caps): ASTM A666, Type 302 or 304 stainless steel, not less than 0.0312 inch (0.8 mm) thick and 3 inches (75 mm) high, finished to match hardware.
- E. Stirrup Brackets: Manufacturer's standard design for attaching panels and screens to walls and pilasters. Provide chrome-plated, nonferrous, cast zinc alloy (Zamac) or clear anodized aluminum.
- F. Hardware and Accessories: Manufacturer's standard design, heavy-duty operating hardware and accessories of chrome-plated, nonferrous cast zinc alloy (Zamac).
- G. Overhead Bracing: Manufacturer's standard continuous, extruded-aluminum head rail with antigrip profile in manufacturer's standard finish.
- H. Anchorages and Fasteners: Manufacturer's standard exposed fasteners of stainless steel or chrome-plated steel or brass, finished to match hardware, with theft-resistant-type heads and nuts.
  - 1. Provide sex-type bolts for through-bolt applications.
  - 2. For concealed anchors, use hot-dip galvanized, or other rust-resistant protective-coated steel.

## 2.03 FABRICATION

- A. General: Provide standard doors, panels, screens, and pilasters fabricated for compartment system, unless otherwise indicated. Provide units with cutouts, drilled holes, and internal reinforcement to receive compartment-mounted hardware, accessories, and grab bars, as indicated.
- B. Metal Faced Toilet Compartments and Screens: Pressure laminate seamless face sheets to core material, and seal edges with continuous interlocking strip or with lapped and formed edges. Weld corners with exposed welds ground smooth.
- C. Overhead-Braced and-Floor-Anchored Compartments: Provide manufacturer's standard corrosion-resistant supports, leveling mechanism, fasteners, and anchors at pilasters to suit floor conditions. Make provisions for setting and securing

continuous head rail at top of each pilaster. Provide shoes at pilasters to conceal supports and leveling mechanism.

- D. Ceiling-Hung Compartments: Provide manufacturer's standard corrosion-resistant anchoring assemblies complete with threaded rods, lock washers, and leveling adjustment nuts at pilasters for connection to structural support above finished ceiling. Provide assemblies that support pilasters from structure without transmitting load to finished ceiling. Provide sleeves (caps) at tops of pilasters to conceal anchorage.
- E. Floor-Anchored Screens: Provide pilasters and panels of same construction and finish as toilet compartments. Provide manufacturer's standard corrosion resistant anchoring assemblies complete with threaded rods, lock washers, and leveling adjustment nuts at pilasters for structural connection to floor. Provide shoes at pilasters to conceal anchorage.
- F. Wall-Hung Screens: Provide units in size indicated of same construction and finish as compartment panels, unless otherwise indicated. Provide metal-faced screens with not less than two (2) stirrup brackets for attachment to wall.
- G. Doors: Unless otherwise indicated, provide minimum 24-inch- (610-mm-) wide in-swinging doors for standard toilet compartments, and minimum 36-inch- (914-mm-) wide out-swinging doors with a minimum 32-inch- (813-mm-) wide clear opening for compartments indicated to be handicapped accessible. (People with disabilities)
  - 1. Hinges: Manufacturer's standard self-closing type that can be adjusted to hold door open at any angle up to 90 degrees.
  - 2. Latch and Keeper: Manufacturer's standard latching mechanism for emergency access and with combination rubber-faced door strike and keeper. Provide units that comply with accessibility requirements at compartments indicated to be handicapped accessible.
  - 3. Coat Hook: Manufacturer's standard combination hook and rubber-tipped bumper, sized to prevent door from hitting compartment-mounted accessories. Install one per stall.
  - 4. Door Pull: Manufacturer's standard unit that complies with ADA and ABA Accessibility Guidelines for Buildings and Facilities, Part II: ABA Application and Scoping accessibility requirements at out-swinging doors. Provide units on both sides of doors at compartments indicated to be handicapped accessible.
  - 5. Door Bumper: Manufacturer's standard rubber-tipped bumpers at out-swinging doors.

#### 2.04 FACTORY BAKED ENAMEL FINISHES

- A. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations relative to applying finishes.
- B. Color Coated Finish: Provide manufacturer's standard baked finish complying with coating manufacturer's written instructions for pretreatment, application, baking, and minimum dry film thickness.

- C. Color: Manufacturer's standard colors in each room as selected by SDR from manufacturer's full range of colors.

### PART 3 - EXECUTION

#### 3.01 INSTALLATION

- A. General: Comply with manufacturer's written installation instructions. Install units rigid, straight, plumb, and level. Provide clearances of not more than 1/2 inch (12.7 mm) between pilasters and panels, and not more than 1 inch (25 mm) between panels and walls. Align brackets at pilasters with brackets at wall. Secure units in position with manufacturer's recommended anchoring devices.
  - 1. Secure panels to walls and panels with not less than two (2) stirrup brackets attached near top and bottom of panel. Locate wall brackets so holes for wall anchors occur in masonry or tile joints.
  - 2. Repair wall surfaces damaged during installation.
- B. Overhead-Braced and-Floor-Anchored Compartments: Secure pilasters to floor and level, plumb, and tighten. Secure continuous head rail to each pilaster with not less than two (2) fasteners. Hang doors and adjust so that tops of doors are parallel with overhead brace when doors are in closed position.
- C. Ceiling-Hung Compartments: Secure pilasters to supporting structure and level, plumb, and tighten. Hang doors and adjust so bottoms of doors are level with bottoms of pilasters when doors are in closed position.
- D. Screens: Attach with anchoring devices according to manufacturer's written instructions and to suit supporting structure. Set units level and plumb and to resist lateral impact.

#### 3.02 ADJUSTING AND CLEANING

- A. Hardware Adjustment: Adjust and lubricate hardware according to manufacturer's written instructions for proper operation. Set hinges on in-swinging doors to hold open approximately 30 degrees from closed position when unlatched. Set hinges on out-swinging doors and swing doors in entrance screens to return to fully closed position.
- B. Provide final protection and maintain conditions that ensure toilet compartments and screens are without damage or deterioration at the time of completion of construction.
- C. Clean exposed surfaces of compartment systems using materials and methods recommended by manufacturer, and provide protection as necessary to prevent damage during remainder of construction period.

END OF SECTION