

SECTION 10160

METAL TOILET COMPARTMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Powder-coat enamelled steel toilet compartments, consisting of:
- B. Stainless steel toilet compartments, consisting of:
 - 1. Floor-mounted overhead-braced toilet compartments.
 - 2. Floor-mounted toilet compartments.
 - 3. Ceiling-hung toilet compartments.
 - 4. Wall-mounted urinal screens.
 - 5. Floor-mounted overhead-braced shower compartments.
 - 6. Floor-mounted overhead-braced dressing compartments.
 - 7. Floor-mounted dressing compartments.
- C. Compartment installation hardware.
- D. Compartment door hardware.

1.2 RELATED SECTIONS

- A. Section 10800 - Toilet, Bath, and Laundry Accessories.
- B. Section _____ - Structural support for ceiling hung compartments.

1.3 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's printed literature indicating typical panel, pilaster, door, hardware and fastening.
- C. Shop Drawings: Submit six sets of the following:
 - 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 and methods for project conditions; indicate components required

for installation, but not supplied by toilet compartment manufacturer.

- D. Samples: Two manufacturer's color cards representing manufacturer's full color palette.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Store compartment components until installation in unopened cartons in vertical position, with adequate support to ensure flatness and to prevent damage to prefinished surfaces.

1.5 ENVIRONMENTAL REQUIREMENTS

- A. Do not deliver materials or begin construction activities of this section until building is enclosed, with complete protection from outside weather, and building temperature maintained at a minimum of 60 degrees Fahrenheit.

1.6 SEQUENCING

- A. Obtain accessory manufacturer's installation instructions and installation templates for toilet and bath accessories to be installed in compartment separation partitions; supply instructions and templates to installer before beginning construction activities of this section.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Global Steel Products, Inc.; 95 Marcus Blvd., Deer Park NY 11729-4595; telephone 516-586-3330, FAX 516-586-3455.
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 POWDER-COAT ENAMELLED STEEL TOILET COMPARTMENTS

- A. Acceptable Product: Embassy Steel Toilet Compartments.
- B. Acceptable Product: Regal Steel Toilet Compartments.

C. Acceptable Product: Imperial Steel Toilet Compartments.

D. Panels:

1. Nominal thickness: 1 inch.
2. Core: Kraft honeycomb, impregnated with water-resistant resins.
3. Face sheets: 0.032 +/- 0.002 inch galvanized steel sheet, stretcher-leveled; bonded under pressure to core with non-toxic adhesive.
4. Welded edge moldings on all edges forming rigid frame around component.

E. Pilasters:

1. Nominal thickness: 1-1/4 inches.
2. Core: Kraft honeycomb, impregnated with water-resistant resins.
3. Face sheets: 0.032 +/- 0.002 inch galvanized steel sheet, stretcher-leveled; bonded under pressure to core with non-toxic adhesive; sides sealed with edge molding.
4. Face sheets: 0.046 +/- 0.002 inch galvanized steel sheet, stretcher-leveled; bonded under pressure to core with non-toxic adhesive; sides and top sealed with edge molding.
5. Face sheets: 0.046 +/- 0.002 inch galvanized steel sheet, stretcher-leveled; bonded under pressure to core with non-toxic adhesive; sides and bottom sealed with edge molding.
6. Reinforcement for installation: Inverted stirrup bracket, with adjusting jack bolt, welded within pilaster base.
7. Reinforcement for installation: Inverted stirrup bracket, 0.116 +/- 0.002 inch steel, slotted for field adjustment, welded within pilaster base.
8. Reinforcement for installation: Stirrup bracket, 0.116 +/- 0.002 inch steel, slotted for field adjustment, welded within pilaster top.

F. Doors:

1. Nominal thickness: 1 inch.
2. Core: Kraft honeycomb, impregnated with water-resistant resins.
3. Face sheets: 0.032 +/- 0.002 inch galvanized steel sheet, stretcher-leveled; bonded under pressure to core with non-toxic adhesive.
4. Welded edge moldings on all edges forming rigid frame around component.

- G. Edge Moldings: 0.032 +/- 0.002 inch interlocking molding, with molding corners welded to each other and to face sheets and ground smooth.
- H. Finish: Polyester powder-coat finish, 1.7 mil minimum thickness, on chemically cleaned, degreased, phosphatized surface; color selected from manufacturer's standard color palette.

2.3 STAINLESS STEEL TOILET COMPARTMENTS

- A. Acceptable Product: Embassy Stainless Steel Toilet Compartments.
- B. Acceptable Product: Regal Stainless Steel Toilet Compartments.
- C. Acceptable Product: Imperial Stainless Steel Toilet Compartments.
- D. Panels:
 - 1. Nominal thickness: 1 inch.
 - 2. Core: Kraft honeycomb, impregnated with water-resistant resins.
 - 3. Face sheets: 0.032 +/- 0.002 inch stainless steel sheet, No. 4 satin finish, stretcher-leveled; bonded under pressure to core with non-toxic adhesive.
 - 4. Welded edge moldings on all edges forming rigid frame around component.
 - a. Edges: 0.032 +/- 0.002 inch stainless steel interlocking molding, with molding corners welded to each other and to face sheets; welds ground smooth and polished to match faces.
- E. Pilasters:
 - 1. Nominal thickness: 1-1/4 inches.
 - 2. Core: Kraft honeycomb, impregnated with water-resistant resins.
 - 3. Face sheets: 0.032 +/- 0.002 inch stainless steel sheet, No. 4 satin finish, stretcher-leveled; bonded under pressure to core with non-toxic adhesive; sides sealed with edge molding.
 - 4. Face sheets: 0.046 +/- 0.002 inch stainless steel sheet, No. 4 satin finish, stretcher-leveled; bonded under pressure to core with non-toxic adhesive; sides and top sealed with edge molding.

5. Face sheets: 0.046 +/- 0.002 inch stainless steel sheet, No. 4 satin finish, stretcher-leveled; bonded under pressure to core with non-toxic adhesive; sides and bottom sealed with edge molding.
6. Reinforcement for installation: Inverted stirrup bracket, with adjusting jack bolt, welded within pilaster base.
7. Reinforcement for installation: Inverted stirrup bracket, 0.116 +/- 0.002 inch steel, slotted for field adjustment, welded within pilaster base.
8. Reinforcement for installation: Stirrup bracket, 0.116 +/- 0.002 inch steel, slotted for field adjustment, welded within pilaster top.

F. Doors:

1. Nominal thickness: 1 inch.
2. Core: Kraft honeycomb, impregnated with water-resistant resins.
3. Face sheets: 0.032 +/- 0.002 inch stainless steel sheet, No. 4 satin finish, stretcher-leveled; bonded under pressure to core with non-toxic adhesive.
4. Welded edge moldings on all edges forming rigid frame around component.

- G. Edge Moldings: 0.32 +/- 0.002 inch stainless steel interlocking molding, with molding corners welded to each other and to face sheets; welds ground smooth and polished to match faces.

2.4 ACCESSORIES

- A. Pilaster Shoes: One-piece Type 304 stainless steel assembly, No. 4 satin finish, having an internal cross section conforming to the pilaster; held in place with concealed fastening clips.
- B. Pilaster Anchors: Inverted stirrup with jack bolt for leveling during installation and permanent height adjustment, integrally welded to base of pilaster, with "L" brackets coupled to stirrup bracket and floor for full range adjustment; concealed by pilaster shoe after installation.
- C. Pilaster Anchors: 0.116 +/- 0.002 inch slotted stirrup bracket integrally welded in base of pilaster, with two 3/8-inch diameter cadmium-plated studs anchoring bracket to floor; concealed by pilaster shoe after installation.

- D. Pilaster Anchors: 0.116 +/- 0.002 inch slotted stirrup bracket integrally welded to top of pilaster, with two 3/8-inch diameter cadmium-plated studs anchoring bracket to structure overhead; concealed by pilaster shoe after installation.
- E. Urinal Screen Brackets: Full height 38-inch-long two ear anodized aluminum with satin finish.
- F. Head Rail: Manufacturer's standard anodized aluminum rail with anti-grip device.
- G. Brackets: Heavy duty, die-cast non-ferrous chrome-plated, with chrome-plated throughbolts and fasteners with tamper-resistant heads.
- H. Door Hardware: Heavy duty, die-cast non-ferrous chrome-plated.
- I. Brackets: Die-cast No.304 stainless steel, No.4 satin finish, with throughbolts and fasteners of same material and finish with tamper-resistant heads.
- J. Door Hardware: Die-cast No.304 stainless steel, with No.4 satin finish.
 - 1. Top Hinge: Recessed and interlocked in door, with nylon pin in the plane of the door, through-bolted.
 - 2. Bottom Hinge: Recessed in door, with mating box and pintle nylon cams providing the bearing surface; adjustable to allow door to rest at any position within a 270-degree range; through-bolted.
 - 3. Latch: Concealed, with emergency access.
 - 4. Stop and Keeper: Through bolted.
 - 5. Coat Hook and Bumper: Surface-mounted.
 - 6. Fastening Hardware: Tamper-resistant heads.
- K. Toilet, Bath, and Laundry Accessories for Installation in Compartment Separation Partitions: Specified in Section 10800.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions:
 - 1. Measure areas to receive compartments; verify area dimensions are in accordance with shop drawings.
 - 2. Verify built-in framing, anchorage, bracing, and plumbing fixtures are in correct location.

- B. Installer's Examination:
 - 1. Have installer of this section examine conditions under which construction activities of this section are to be performed, then submit written notification if such conditions are unacceptable.
 - 2. Transmit two copies of installer's report to Architect within 24 hr of receipt.
 - 3. Beginning construction activities of this section before unacceptable conditions have been corrected is prohibited.
 - 4. Beginning construction activities of this section indicates installer's acceptance of conditions.

3.2 PREPARATION

- A. Surface Preparation:
 - 1. Prepare openings in compartment separation partitions for toilet and bath accessories to be installed in partitions; marring of partition finish is prohibited.
 - 2. Locate openings in accordance with shop drawings and accessory manufacturer's installation instructions and templates.

3.3 INSTALLATION

- A. Install compartments to specified tolerances in accordance with shop drawings and manufacturer's printed installation instructions.
- B. Attach components to adjacent materials and to other components using purpose-designed fastening devices.
- C. Adjust pilaster anchors for floor variations; conceal anchors with pilaster shoes.
- D. Support pilasters from above ceiling framing using two adjustable hanging studs for vertical adjustment to level; conceal ceiling fastenings with pilaster shoes.
- E. Equip each compartment door with top and bottom hinges, and door latch.
- F. Install door strike keeper on pilasters in alignment with door latch.
- G. Equip each compartment door with one coat hook and bumper.

- H. Installation Tolerances:
1. Maximum variation from plumb or level: 1/8 inch.
 2. Maximum displacement from indicated position: 1/8 inch.
 3. Clearance between wall surface and panels or pilasters: 1-1/2 inch, maximum.

3.4 ADJUSTING

- A. Adjust door hardware for uniform clearance between doors and pilasters.
- B. Adjust door hinges to attain free movement, to locate in-swinging doors in partial open position when unlatched; and to return out-swinging doors to closed position.
- C. Adjust door hardware to align door strike keeper on each pilaster with door latch.

3.5 PROTECTION OF INSTALLED PRODUCTS

- A. Prevent damage to product finishes by subsequent construction activities.
- B. Repair damaged finishes; replace components having damaged finish if repair is not possible.
- C. Remove factory protective coverings and clean finish surfaces in accordance with manufacturer's instructions before final inspection.

3.6 SCHEDULE

- A. Men's Toilet Room No. ____: Enamelled steel ceiling-hung toilet compartments and wall-mounted urinal screens; _____ color.
- B. Women's Shower Room No. ____: Stainless steel floor-mounted shower compartments.

END OF SECTION