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## SECTION 10 2116 - PLASTIC TOILET COMPARTMENTS

### PART 1 - GENERAL

#### 1.01 SECTION INCLUDES

- A. Solid plastic partitions.
- B. Plastic laminate partitions.
- C. Phenolic partitions

#### 1.02 RELATED REQUIREMENTS

- A. Section 05 5000 - Metal Fabrications: Concealed steel support members.
- B. Section 06 1000 - Wood Framing: Concealed wood framing and blocking for compartment support.
- C. Section 10 2000 - Toilet and Bath Accessories.

#### 1.03 REFERENCES

- A. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- B. ASTM D4976 - Standard Specification for Polyethylene Plastics Molding and Extrusion Materials.
- C. LEED Green Building Rating System
  - 1. MR 4.1 and MR 4.2: Recycled Content.
  - 2. MR 6.0: Rapidly Renewable Materials.
  - 3. MR 7.0: Certified Wood.
  - 4. EQ 4.1, EQ 4.2, EQ 4.4: Low Emitting Materials.

#### 1.04 SUBMITTALS

- A. Submit under provisions of Section 01 3000.
- 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, minimum size 4-inches square, representing actual product, color, texture and pattern.

#### 1.05 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Lay cartons flat, with adequate support to ensure flatness and to prevent damage to pre-finished surfaces.
- C. Do not store where ambient temperature exceeds 120 degrees F.

#### 1.06 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.

## 1.07 WARRANTY

- A. Provide warranty for solid plastic HDPE material against breakage, corrosion, and delamination for 15 years.
- B. Provide warranty for plastic laminate material against discoloration or delamination for 2 years, assuming proper maintenance according to manufacturer's recommendations.
- C. Provide warranty for phenolic material against delamination, breakage, or corrosion for 10 years, assuming proper maintenance according to manufacturer's recommendations.

## 1.08 COORDINATION

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

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

- A. Accurate Partitions Corp, P. O. Box 287 ; Lyons, IL 60534-0287; Tel: 708-442-6800; Fax: 708-442-7439; [www.accuratepartitions.com](http://www.accuratepartitions.com)

### 2.02 COMPARTMENTS AND SCREENS

- A. Toilet Compartments: Floor anchored/overhead braced (plastic laminate/phenolic).
  - 1. Compartment Depth and Width: As indicated on drawings.
  - 2. Door Width:
    - a. Width: 24 inches, minimum; at accessible compartments 36 inches minimum.
    - b. As indicated on drawings.
  - 3. Height Above Floor: 12 inches.
  - 4. Door/Panel Height: 58 inches.
  - 5. Pilaster Height: 82 inches.
- B. Toilet Compartments: Floor anchored/overhead braced (solid plastic panels).
  - 1. Compartment Depth and Width: As indicated on drawings.
  - 2. Door Width:
    - a. Width: 24 inches, minimum; at accessible compartments 36 inches minimum.
    - b. As indicated on drawings.
  - 3. Height Above Floor: 14 inches.
  - 4. Door/Panel Height: 55 inches.
  - 5. Pilaster Height: 82 inches.
- C. Toilet Compartments: Ceiling hung (plastic laminate/phenolic).
  - 1. Compartment Depth and Width: As indicated on drawings.
  - 2. Door Width:
    - a. Width: 24 inches, minimum; at accessible compartments 36 inches minimum.
    - b. As indicated on drawings.
  - 3. Height Above Floor: 12 inches.
  - 4. Door /Panel Height: 58 inches.
  - 5. Pilaster Height: As indicated on drawings.
- D. Toilet Compartments: Ceiling hung (solid plastic panels).
  - 1. Compartment Depth and Width: As indicated on drawings.
  - 2. Door Width:
    - a. Width: 24 inches, minimum; at accessible compartments 36 inches minimum.
    - b. As indicated on drawings.
  - 3. Height Above Floor: 14 inches.
  - 4. Door/Panel Height: 55 inches.
  - 5. Pilaster Height: As indicated on drawings.
- E. Toilet Compartments: Floor anchored (plastic laminate/phenolic).
  - 1. Compartment Depth and Width: As indicated on drawings.
  - 2. Door Width:
    - a. Width: 24 inches, minimum; at accessible compartments 36 inches minimum.
    - b. As indicated on drawings.

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3. Height Above Floor: 12 inches.
4. Door/Panel Height: 58 inches.
5. Pilaster Height: 70 inches.
- F. Toilet Compartments: Floor and ceiling anchored (plastic laminate/phenolic).
  1. Compartment Depth and Width: As indicated on drawings.
  2. Door Width:
    - a. Width: 24 inches, minimum; at accessible compartments 36 inches minimum.
    - b. As indicated on drawings.
  3. Height Above Floor: 12 inches.
  4. Door/Panel Height: 58 inches.
  5. Pilaster Height: As indicated on drawings.
- G. Toilet Compartments: Floor and ceiling anchored (solid plastic panels).
  1. Compartment Depth and Width: As indicated on drawings.
  2. Door Width:
    - a. Width: 24 inches, minimum; at accessible compartments 36 inches minimum.
    - b. As indicated on drawings.
  3. Height Above Floor: 14 inches.
  4. Door/Panel Height: 55 inches.
  5. Pilaster Height: As indicated on drawings.
- H. Privacy and Urinal Screens: Post-to-ceiling.
  1. Screen Panel Width: As indicated on drawings.
  2. Screen Panel Height:
    - a. 58 inches.
    - b. 55 inches for Solid Plastic.
  3. Post: 1-3/4 inches square by 10 feet long maximum.
  4. Pilaster: Minimum 6-inches wide by maximum 10 feet long.
- I. Privacy and Urinal Screens: Floor anchored
  1. Screen Panel Width: As indicated on drawings.
  2. Screen Panel Height:
    - a. 58 inches.
    - b. 55 inches for solid plastic.
  3. Height Above Floor: Height: 12 inches.
  4. Pilaster: As indicated on drawings.
- J. Privacy and Urinal Screens: Wall hung.
  1. Screen Panel Size: As indicated on drawings.
  2. Height Above Floor: 18 inches.
- K. Privacy and Urinal Screens: Ceiling Hung
  1. Screen Panel Size: As indicated on drawings.
  2. Screen Panel Height: 58 inches.
  3. Height Above Floor: As indicated on drawings.
  4. Pilaster: As indicated on drawings.

2.03 SOLID PLASTIC COMPONENTS

- 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 thick.
  2. Flame spread index of 50, maximum smoke developed index of 450, maximum, when tested in accordance with ASTM E 84.
  3. Edges: 1/4 inch radius machined edges.
  4. 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.
  1. Color: As selected from manufacturer's standard colors.
- C. Door Hardware: Wrap around hinge.
  1. Hinges: 8-inch wrap around type.
  2. Latch: Non-ferrous, satin chrome-plated, slide latch.
  3. Strike and Keeper: Permitting emergency access by lifting the door until latch is clear of keeper; satin chrome-plated 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.
- D. Door Hardware: Integral hinge.
1. Hinges: 1/2 inch nylon gravity cam hinge with 3/16 inch stainless steel center pin and 1/2 inch nylon rod; integral to door and pilaster.
  2. Latch: Non-ferrous, satin chrome-plated, slide latch.
  3. Strike and Keeper: Permitting emergency access by lifting the door until latch is clear of keeper; satin chrome-plated 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.
- E. Door Hardware: Vault hinge.
1. Top Hinge: Heavy-duty "bank vault" type, die-cast zamac alloy with brushed chrome-plated finish; wrap-around pilaster and door mounting, through-bolted.
  2. Bottom Hinge: Same as top hinge, with gravity-acting cams.
  3. Latch: Non-ferrous, satin chrome-plated, slide latch.
  4. Strike and Keeper: Permitting emergency access by lifting the door until latch is clear of keeper; satin chrome-plated finish.
  5. Fastening Hardware: Manufacturer's standard, Type 304 stainless steel, No. 4 satin finish, theft-resistant barrel nuts and machine screws.
- F. Door Hardware: Piano hinge.
1. Hinge: Continuous spring loaded, stainless steel piano hinge.
  2. Coat Hook and Bumper: Non-ferrous, chrome-plated, with black rubber tip for doorstop.
  3. Fastening Hardware: Manufacturer's standard, Type 304 stainless steel, No. 4 satin finish, theft-resistant barrel nuts and machine screws.
- G. Mounting Brackets:
1. PVC panel brackets, 54 inches long, with theft resistant barrel nuts and machine screws.
  2. Aluminum stirrup brackets with theft resistant barrel nuts and machine screws.
  3. Aluminum continuous brackets with theft resistant barrel nuts and machine screws
  4. Stainless steel continuous bracket with theft resistant barrel nuts and machine screws.
- H. Pilaster Shoes:
1. Type 304 Stainless Steel No. 4 satin finish.
  2. Molded plastic:
  3. Color: As selected from manufacturer's standard colors.
- I. Headrail: Manufacturer's standard anodized aluminum rail with anti-grip profile.
- J. Pilaster Anchors:
1. Floor Anchored/Overhead Braced: 1/4 inch by 1 inch steel mounting bar secured to pilaster with 3/8 inch steel fasteners; and pilaster secured to floor with 3/8 inch studs and nuts. Leveling adjustment concealed by pilaster shoe after installation.
  2. Ceiling Hung: 1/4 inch by 1 inch steel mounting bar secured to pilaster with 3/8 inch steel fasteners. Pilaster to be secured to ceiling with 3/8 inch studs and nuts. Leveling adjustment to be concealed by pilaster shoe after installation.
  3. Floor and Ceiling Anchored: 1/4 inch by 1 inch steel mounting bar secured to pilaster with 3/8 inch steel fasteners. 3/8 inch by 1 inch steel mounting bar at ceiling secured to overhead structural member with 3/8 inch studs and nuts. Both top and base concealed by pilaster shoe after installation.

## 2.04 PLASTIC LAMINATE COMPONENTS

- A. Doors, Panels, Screens, and Pilasters: Decorative plastic laminate bonded under pressure with non-toxic adhesive to wood core; edge banded prior to facing.
1. Doors, Screens, and Panels: 7/8 inch thick particleboard; finished thickness of 1 inch.
  2. Pilasters: 1-1/8 inches thick particleboard; finished thickness of 1-1/4 inch.
    - a. Steel Core: Reinforce pilaster with minimum 0.1196 inch thick steel sheet.
- B. Finish: Plastic laminate.
1. Color: As selected from manufacturer's standard colors.
- C. Door Hardware:
1. Finish:
    - a. Chrome plated Zamac attached with theft resistant barrel nuts and shoulder screws.

- b. Type 304 Stainless Steel, No. 4 satin finish attached with theft resistant barrel nuts and shoulder screws.
- 2. Hinges:
  - a. Top and Bottom Hinges: Recessed into door with saddle on adjacent pilaster, providing bi-directional operation about axis within the plane of the door; adjustable cams supporting door, returning to resting position by gravity.
  - b. Continuous spring loaded, stainless steel piano hinge.
- 3. Strike and Keeper: Emergency access by lifting door.
- 4. Latch: Manufacturer's standard surface mounted slide latch.
- 5. Coat Hook and Bumper: Manufacturers standard surface mounted.
- 6. Door Pull: Standard on accessible compartments.
- 7. Fastening Hardware: Manufacturers standard theft resistant heads.
- D. Mounting Brackets:
  - 1. Chrome plated Zamac stirrup brackets with theft resistant screws.
  - 2. Aluminum continuous brackets with theft resistant screws.
  - 3. Type 304 Stainless Steel, No. 4 satin finish, stirrup brackets with theft resistant screws.
  - 4. Type 304 Stainless Steel, No. 4 satin finish, continuous brackets with theft resistant screws.
- E. Pilaster Shoes: Type 304 Stainless Steel, No. 4 satin finish. Minimum 5 inches high secured to floor w/internal clips.
- F. Headrail: Manufacturer's standard, Anodized Aluminum with anti-grip profile.
- G. Pilaster Anchors:
  - 1. Floor Anchored/Overhead Braced: 1/4 inch by 1 inch steel mounting bar secured to pilaster with 3/8 inch steel fasteners. Pilaster to be secured to floor with 3/8 inch studs and nuts. Leveling adjustment to be concealed by pilaster shoe after installation.
  - 2. Floor Anchored: 1/4 inch by 1 inch steel mounting bar secured to pilaster with 3/8 inch steel fasteners. Pilasters to be secured to floor with 3/8 inch studs and nuts. Leveling adjustment to be concealed by pilaster shoe after installation.
  - 3. Ceiling Hung: 1/4 inch by 1 inch steel bar secured to pilaster with 3/8 inch cadmium plated studs; leveling adjustment concealed by pilaster shoe after installation.
  - 4. Floor and Ceiling Anchored: 1/4 inch by 1 inch steel mounting bar secured to pilaster at bottom with 3/8 inch steel fasteners. 3/8 inch by 1 inch steel mounting bar secured to pilaster at top to attach to overhead structural member, anchored with 3/8 inch threaded steel rods. Both top and base concealed by pilaster shoe after installation.

## 2.05 PHENOLIC COMPONENTS

- A. Doors, Panels, Screens, and Pilasters: Decorative surface sheet with solid phenolic core of melamine resin impregnated kraft paper fused under high temperature and pressure; edges machine sanded with a 45 degree radius edge. Manufacturer's standard.
  - 1. Doors and Pilasters: 3/4 inch thick.
  - 2. Panels and Screens: 1/2 inch thick.
  - 3. Edges:
    - a. Machine Sanded Black
    - b. Color-Thru, matching color sheet.
  - 4. Fire Rated Material:
    - a. Class B.
    - b. Class A. (Machine Sanded Black only)
- B. Finish: Solid phenolic/Color-Thru.
  - 1. Color: As selected from manufacturer's standard colors.
- C. Door Hardware: Vault hinge.
  - 1. Top Hinge: Heavy-duty "vault" type, die-cast with brushed chrome-plated finish; wrap-around pilaster and door mounting, through-bolted.
  - 2. Bottom Hinge: Same as top hinge, with gravity-acting cams.
  - 3. Latch: Non-ferrous, satin chrome-plated, slide latch.
  - 4. Strike and Keeper: Permitting emergency access by lifting the door until latch is clear of keeper; satin chrome-plated finish.
  - 5. Coat Hook and Bumper: Non-ferrous, satin finish, with black rubber tip for doorstep.
  - 6. Fastening Hardware: Manufacturer's standard, Type 304 stainless steel, No. 4 satin finish, with theft-resistant barrel nuts and machine screws.
- D. Door Hardware: Piano hinge.

1. Hinges: Continuous stainless steel piano hinge.
  2. Coat Hook and Bumper: Non-ferrous, satin finish, with black rubber tip for doorstep.
  3. Fastening Hardware: Manufacturer's standard Type 304 stainless steel, No. 4 satin finish, with theft-resistant barrel nuts and machine screws.
- E. Mounting Brackets:
1. Die-cast Type 304 stainless steel stirrup bracket, No. 4 satin finish, with stainless steel theft-resistant barrel nuts and machine screws of same material and finish.
  2. Stainless steel continuous bracket Type 304 stainless steel, No. 4 satin finish, with stainless steel theft-resistant barrel nuts and machine screws of same material and finish.
  3. Aluminum continuous brackets with theft resistant screws.
- F. Pilaster Shoes: Type 304 stainless steel, No. 4 satin finish. Minimum 5 inches high secured to floor w/internal clips.
- G. Headrail: Manufacturer's standard anodized aluminum rail with anti-grip profile.
- H. Pilaster Anchors:
1. Floor Anchored/Overhead Braced: 1/4 inch by 3/4 inch steel mounting bar secured to pilaster with 3/8 inch steel fasteners. Pilaster to be secured to floor with 3/8 inch studs and nuts. Leveling adjustment to be concealed by pilaster shoe after installation.
  2. Floor Anchored: 1/4 inch by 3/4 inch steel mounting bar secured to pilaster with 3/8 inch steel fasteners. Pilasters to be secured to floor with 3/8 inch studs and nuts. Leveling adjustment to be concealed by pilaster shoe after installation.
  3. Ceiling Hung: 1/4 inch by 3/4 inch steel bar secured to pilaster with 3/8 inch cadmium plated studs; leveling adjustment concealed by pilaster shoe after installation.
  4. Floor and Ceiling Anchored: 1/4 inch by 3/4 inch steel mounting bar secured to pilaster at bottom with 3/8 inch steel fasteners. 3/8 inch by 1 inch steel mounting bar secured to pilaster at top to attach to overhead structural member, anchored with 3/8 inch threaded steel rods. Both top and base concealed by pilaster shoe after installation.

## PART 3 - EXECUTION

### 3 .01 EXAMINATION

- A. Do not begin installation until installation conditions and substrates have been properly prepared.
- B. Verify dimensions of areas to receive compartments.
- C. Verify locations of built-in framing, anchorage, bracing, and plumbing fixtures.
- D. Verify substrates have been properly installed.
- E. If installation conditions and substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

### 3 .02 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

### 3 .03 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 top and bottom 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.
  2. Clearance between wall surface and panels or pilasters: 1-1/2 inch maximum.

### 3 .04 ADJUSTING

- A. Adjust and align hardware to uniform clearance at vertical edge of doors.

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- B. Adjust door openings to comply with accessibility requirements.
- C. Adjust adjacent components for consistency of line or plane.

3 .05 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.

END OF SECTION