

SECTION 10 21 14 - PHENOLIC CORE TOILET COMPARTMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Provide the work of this Section in accordance with requirements of the Contract Documents.
- B. Section Includes but is not limited to:
 - 1. Phenolic-core toilet compartments **TC-01**.
 - 2. Phenolic-core urinal screens **TC-03**.
- C. Related Work:
 - 1. Division 10, Section 10 28 00 "Toilet and Bath Accessories" for toilet accessories.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Sustainable Design Submittals:
 - 1. Building Product Disclosure and Optimization - Sourcing of Raw Materials:
 - a. Recycled Content: For products having recycled content, indicate percentages by weight of post-consumer and pre-consumer recycled content.
 - 1) Include statement indicating costs for each product having recycled content.
 - 2. Indoor Environmental Quality, Low Emitting Materials: Building Products must be tested and compliant with the California Department of Public-Health (CDPH) Standard Method v1.2 2017, using the applicable exposure scenario.
 - a. Adhesives and Sealants: For wet applied on-site products, submit printed statement showing compliance with the applicable chemical content requirements of SCAQMD Rule 1168, effective July 1, 2005, and rule amendment date of January 7, 2005.
 - b. For paints, and coatings, wet applied, include printed statement of VOC content, showing compliance with the applicable VOC limits of the California Air Resources Board (CARB) 2007, Suggested Control Measure for Architectural Coatings or the South Coast Air Quality Management District (SCAQMD) Rule 1113-2011.
 - c. Composite Wood: Submit documentation showing that wood used in the project has low formaldehyde emissions that meet the California Air Resources Board ATCM for formaldehyde requirements for ultra-low emitting formaldehyde (ULEF) resins or no added formaldehyde resins.
- C. Shop Drawings:
 - 1. Include plans, elevations, sections, details, and attachments to other work.
 - 2. Show locations of cutouts for compartment-mounted toilet accessories.
 - 3. Show locations of centerlines of toilet fixtures.

- D. Samples for Initial Selection: For each type of unit indicated. Include Samples of hardware and accessories involving material and color selection.
- E. Samples for Verification: For the following products, in manufacturer's standard sizes unless otherwise indicated:
 - 1. Each type of material, color, and finish required for units, prepared on 6-inch- (152-mm-) square Samples of same thickness and material indicated for Work.
 - 2. Each type of hardware and accessory.
- F. Fabrication Engineering and Design Data Submittal: Submit for wall mounted urinal screens to verify compliance with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.3 INFORMATIONAL SUBMITTALS

- A. Sustainable Design Submittals:
 - 1. Building Product Disclosure and Optimization - Environmental Product Declarations
 - a. Submit product specific type III EPDs or Industry wide (generic) EPDs, USGBC approved program declaration or products with a publicly available, critically reviewed life-cycle assessment conforming to ISO 14044 that have at least a cradle to gate scope.

1.4 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For toilet compartments to include in maintenance manuals.

1.5 QUALITY ASSURANCE

- A. Surface-Burning Characteristics: As determined by testing identical products according to ASTM E84, or another standard acceptable to authorities having jurisdiction, by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Flame-Spread Index: 75 or less.
 - 2. Smoke-Developed Index: 450 or less.
- B. Regulatory Requirements: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA) and Architectural Barriers Act (ABA) Accessibility Guidelines for Buildings and Facilities" and ICC/ANSI A117.1, and Texas Accessibility Standards for toilet compartments designated as accessible for toilet compartments designated as accessible.
- C. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.
 - 1. Build room corner mockups of the public toilet room to be constructed in the field include the following:
 - a. Wall tile.
 - b. Floor tile / wall base,
 - c. Corner guards.
 - d. Acoustical panel ceiling system.
 - e. Lighting in accordance with Division 26.
 - f. Linear floor drain in accordance with Division 23.

- g. Toilet partitions.
 - h. Water closets in accordance with Division 22.
 - i. Washroom accessories.
 - j. Typical countertop with plumbing fixtures in accordance with Division 22.
 - k. Restroom traffic management system.
- 2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
- 3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.6 PROJECT CONDITIONS

- A. Field Measurements: Verify actual locations of toilet fixtures, walls, columns, ceilings, and other construction contiguous with toilet compartments by field measurements before fabrication.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Fabrication Engineering and Design Data: Engage a qualified professional engineer, as defined in Section 01 33 16, "Fabrication Engineering Design Data," to design wall mounted urinal screens complying with requirements.

2.2 MATERIALS

- A. Aluminum: ASTM B209, Type 6063T3.
- B. Stainless-Steel Castings: ASTM A743/A743M.
- C. Low-Emitting Materials:
 - 1. Architectural paints and coatings wet-applied inside the weather-proofing system must meet the VOC general emissions testing criteria of CDPH Standard Method v1.2.
 - 2. All paints and coatings wet-applied inside the weather-proofing system must have VOC content in compliance with the applicable VOC limits (g/L) found in tables in Division 01, Section 01 81 13 "Sustainable Design Requirements - LEED v4 BD+C."
 - 3. Adhesives and Sealants wet-applied inside the weather-proofing system must meet the VOC general emissions testing criteria of CDPH Standard Method v1.2.
 - 4. All adhesives and sealants wet-applied inside the weather-proofing system must have VOC content in compliance with the applicable VOC limits (g/L) found in tables in Division 01, Section 01 81 13.14 "Sustainable Design Requirements - LEED v4 BD+C."
 - 5. Provide non-structural composite wood products that contain either No Added Formaldehyde (NAF) resins or Ultra Low Emitting Formaldehyde (ULEF) resins per CARB ATCM criteria noted in Division 01, Section 01 81 13.14 "Sustainable Design Requirements - LEED v4 BD+C."
 - 6. Provide structural composite wood products tested per EN 717-1:2014 as compliant with emissions class E1. Structural composite wood, with no added urea-formaldehyde resins or surface treatments, and certified per the following: PS 1-09 or PS 2-10 for plywood, PS 2-10 for OSB, ASTM D 5446-13 for structural composite lumber.

2.3 PHENOLIC CORE TOILET COMPARTMENTS

- A. Basis-of-Design Product: Oasis by Thrislington Cubicles.
- B. Toilet-Enclosure Style: Floor anchored.
- C. Urinal-Screen Style: Wall hung.
- D. Pivoted Door, Panel Construction: Solid phenolic-core panel material with melamine facing on both sides fused to substrate during panel manufacture (not separately laminated), and with eased and polished edges and no-sightline system with extruded aluminum framing system.
 - 1. Doors:
 - a. Thickness: 1/2 inch (12 mm).
 - b. Height: 85 inches in height and approximately 4 inches AFF. Top of partition height shall be 86 inches AFF.
 - 2. Partition Panels **TC-01**
 - a. Thickness: 1/2 inch (12 mm).
 - b. Height: 81 inches in height and approximately 4 inches AFF. Top of partition height shall be 86 inches AFF.
 - 3. Urinal Screens **TC-03**:
 - a. Thickness: 1/2 inch (12 mm).
 - b. Heights: 60 inches in height and approximately 4 inches AFF. Top of partition height shall be 64 inches AFF.
 - 4. Door and frame edges shall be routed and overlapped to block sight lines into the compartments.
- E. Framing: Headrails and vertical posts fabricated from extruded aluminum profiles AA 6063-T6, in manufacturer's standard profiles and thickness. Manufacturer's standard clear anodized finish.
- F. Feet: Stainless steel. Type 304, circular foot, height adjustable.
- G. Stirrup Brackets (Fittings): Manufacturer's standard design; Type 304 stainless steel.
- H. Phenolic-Panel Finish:
 - 1. Facing Sheet Finish: One color and pattern.
 - 2. Color and Pattern: Chene Alba from Polyrey with manufacturer's standard black color core.

2.4 ACCESSORIES

- A. Hardware and Accessories: Manufacturer's standard design, heavy-duty operating hardware and accessories.
 - 1. Material: Stainless steel. Type 303. No. 4 satin finish
 - 2. Closer: Self-closing hydraulic closer concealed within aluminum frame.
 - 3. Concealed Latch: Fixed through the door to face plate. Lock finger housed within the door, extends from door edge and engaged into the receiver integral to aluminum frame, with provision for emergency access. Provide units that comply with regulatory requirements for accessibility at compartments designated as accessible.

4. Coat Hook: Type 303 stainless steel.
5. Fastening Hardware: Manufacturer's standard, Type 303 stainless steel, No. 4 satin finish. Door hardware will be attached to holes predrilled at the manufacturing facility.
6. Provide sex-type bolts for through-bolt applications. For concealed anchors, use stainless steel, hot-dip galvanized steel, or other rust-resistant, protective-coated steel.

2.5 FABRICATION

- A. Floor-Anchored Units: Provide manufacturer's standard corrosion-resistant anchoring assemblies with adjustable support feet for structural connection to floor.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. General: Comply with manufacturer's written installation instructions. Install units rigid, straight, level, and plumb. Secure units in position with manufacturer's recommended anchoring devices.
 1. Maximum Clearances:
 - a. Framing and Panels: 1/8 inch (3mm).
 - b. Panels and Walls: 1/4 inch (6 mm).
 2. Stirrup Brackets: Secure panels to walls and to framing system with no fewer than three brackets attached at midpoint and near top and bottom of panel.
 - a. Locate wall brackets so holes for wall anchors occur in masonry or tile joints.
- B. Floor-Anchored Units: Set panels with adjustable feet, level on anchors penetrating not less than 2 inches (51 mm) structural floor in manufacturer's written instructions. Level and plumb. Hang doors and adjust so tops of doors are level with framing system when doors are in closed position.
- C. Urinal Screens: Attach with anchoring devices to suit supporting structure. Set units level and plumb, rigid, and secured to resist lateral impact.

3.2 ADJUSTING

- A. Hardware Adjustment: Adjust and lubricate hardware according to hardware manufacturer's written instructions for proper operation. Set hinges on in-swinging doors to hold doors open approximately 30 degrees from closed position when unlatched. Set hinges on out-swinging doors to return doors to fully closed position.

END OF SECTION