### **SECTION 102113**

## TRESPA® ATHLON SOLID COMPOSITE PHENOLIC TOILET PARTITIONS

### PART 1 - GENERAL

## 1.01 SECTION INCLUDES

A. Solid composite phenolic toilet compartments and urinal screens.

## 1.02 RELATED SECTIONS

- A. Documents affecting work in this section includes but is not limited to the General Conditions, Supplementary Conditions and Sections in Division 1 General Requirements of these Specifications.
- B. 051000 Structural Metal Framing; for backing in metal framed walls.
- C. 061000 Finish Carpentry; for backing in wood framed walls.
- D. 101850 Shower Enclosures.
- E. 105100 Lockers.
- F. 108000 Toilet Accessories.

# 1.03 DESCRIPTION

- A. Toilet and Shower Compartments (Commercial, Institutional, or No-Sightline):
  - 1. Ceiling hung type units consisting of Trespa pilasters, panels, and doors, plated steel leveling devices with stainless steel covers; and stainless steel fittings, hardware, and fastenings necessary for complete installation.
  - 2. Floor supported type units consisting of Trespa pilasters, panels and doors; plated steel leveling devices with stainless steel covers; and stainless steel fittings, hardware and fastenings necessary for complete installation.
  - 3. Overhead braced type units consisting of Trespa pilasters, panels and doors; plated steel leveling devices with stainless steel covers; aluminum overhead bracing, and stainless steel fittings, hardware and fastenings necessary for complete installation.

### B. Urinal Screens:

- 1. Wall hung type consisting of Trespa screen panels and stainless steel fittings and fastening necessary for complete installation.
- 2. Floor supported type units consisting of Trespa pilasters and screen panels; plated steel leveling devices with stainless steel covers, and stainless steel

fittings and fastenings necessary for complete installation.

#### 1 04 REFERENCES

- A. ASTM A167-92b Stainless and Heat Resisting Chromium Nickel Steel Plated Sheet and Strip.
- B. ASTM E-84-91a Surface Burning Characteristics of Building Materials.

## 1.05 SUBMITTALS

- A. Submittals, procedures and quantities are specified in Section 01300.
- B. Shop drawings: Submit shop drawings indicating elevations of partitions, thickness of Trespa, fastenings, proposed method of anchoring, size and spacing of anchors, details of construction, hardware, fittings, mountings and other related items and installation details.
- C. Product Data: Submit manufacturer's technical data for materials, fabrication, finishing, fastenings, hardware, and installation details.
- D. Samples: Submit samples of color and pattern selected for verification.

# 1.06 REGULATORY REQUIREMENTS

- A. Accessibility Requirements: Comply with the requirements for the accessibility of the physically disabled of the appropriate jurisdiction and ADA Accessibility guidelines for Buildings and Facilities of June 26, 1991.
- B. Surface Burning Requirements: The panels to have the following surface burning characteristics and smoke generation values per U.L. Classification and labeling in accordance with ASTM E-84 tests and shall be self-extinguishing.
  - 1. Flame spread: 25 for 3/4" thick panels; 30 for 1/2" thick panels.
  - 2. Smoke developed: 70 for 3/4" thick panels; 85 for 1/2" thick panels.

# 1.07 DELIVERY, STORAGE AND HANDLING

A. Deliver and store materials in the manufacturer's original protective packaging. Store materials in an enclosed shelter providing protection from damage and exposure to the elements.

### 1.08 COORDINATION

A. Field Measurements: Secure field measurements before preparation of shop drawings and fabrication where possible, for proper and adequate fabrication and installation of the work.

B. Furnish inserts and anchorage built into other construction for installation of toilet compartments and urinal screens.

### 1.09 WARRANTY

A. Trespa panels to be warranted for 10 years against delamination. The factory authorized fabricator, product installer and phenolic manufacturer must sign the warranty and submit a copy to the General Contractor. The project name must be written on the warranty.

# PART 2 - PRODUCTS

#### 2 01 ACCEPTABLE MANUFACTURER

- A. Drawings and specifications are based on lockers fabricated using Trespa solid phenolic panels: Trespa North America, 800-487-3772.
  - 1. Represented locally by W.H. Steele Co., 909-930-0831, E-Mail: info@whsteele.com.
- B. Approved Fabricators:
  - 1. Accutec Manufacturing, Santa Ana, CA 714-549-2015.
  - 2. Alan Lewis Inc., Santa Ana, CA 714-434-9407.
  - 3. Laminating Technologies, Anaheim, CA 714-632-8696.

### 2.02 MATERIALS

- A. Partition panels, pilasters, doors and privacy screens:
  - 1. Core: Phenolic impregnated Kraft papers. To ensure panel quality and consistency, panel must be at least 93 lbs./cubic foot to ensure full saturation of Kraft core.
  - 2. Face sheet: Decorative papers impregnated with melamine resin and integrally compression molded with the core.
    - A. Colors: As indicated on drawings.
    - B. Finish: Quartz.
- B. Stainless Steel: ASTM A167, Type 304.
- C. Concealed Fasteners and Leveling Devices: Zinc or cadmium coated steel.

### 2.03 FABRICATION

A. Panels and Urinal Screens: Flush, formed of 1/2" thick Trespa solid phenolic panels. Height and width as indicated in drawings.

- B. Pilasters and Doors: Flush, formed of 3/4" thick Trespa solid phenolic panels.
  - 1. Door Dimensions: Unless otherwise indicated, furnish 24" wide in-swinging doors for standard toilet compartments, 36" wide clear opening outswinging doors when located at the end, and 36" wide clear opening outswinging doors when located at the side for stalls equipped for use by the physically disabled. [No-Sightline doors and pilasters provided with 1/2" by 3/8" rabbit as indicated on drawings to create a No-Sightline design.]
  - 2. Anchorage Devices: Provide galvanized steel anchorage devices, complete and threaded rods, washers, and leveling adjustment nuts at pilasters, to permit connection to [structural support above finished ceiling] [Floor slab]. Furnish devices, which are designed to support pilasters from structure without transmitting load to [floor fill] [ceiling finish].
  - 3. Overhead Bracing: Provide anti-grip, decorative, heavy duty, extruded aluminum head rail with clear anodized finish.

## 2.04 COMMERCIAL DUTY HARDWARE & FITTINGS

- A. Materials: Type 304 stainless steel, unless otherwise specified. Aluminum or die cast zinc alloy castings will not be acceptable.
- B. Stirrup Brackets: Provide 3 U-brackets for attaching each panel to pilaster and 3 double-eared brackets for attaching panels and urinal screen to the wall. Fasten brackets with stainless steel, one-way shouldered through-bolts and barrel nuts.
- C. Hinges: Heavy duty, surface mounted, self-closing type, adjustable to hold door open at any angle up to 90 degrees.
- D. Latch and Keeper: Surface mounted latch unit designed for physically disabled accessibility, with combination rubber-faced door strike and keeper.
- E. Coat Hook: Combination hook and rubber-tipped bumper, sized to prevent door from hitting mounted accessories.
- F. Door Pull: Manufacturer's standard for out-swinging doors.

# 2.05 INSTITUTIONAL DUTY HARDWARE AND FITTINGS

- A. Materials: Type 304 stainless steel with a No. 4 brushed satin finish, unless otherwise specified. Die cast zinc alloy castings will not be acceptable.
- B. Brackets: Provide a continuous U-shaped bracket for attaching each panel to pilaster and two continuous angles for attaching panels and urinal screens to the wall. Angles and brackets shall not be lighter than 18 gauge stainless steel.
- C. Hinges: Model No. 780-057 "Roton" geared, continuous, surface mounted type of extruded aluminum with a clear anodized finish equipped for easy removal to

- provide emergency access for the physically disabled.
- D. Latch and Keeper: Surface mounted latch unit designed for physically disabled accessibility, with combination rubber-faced door strike and keeper.
- E. Coat Hook: Combination hook and rubber-tipped bumper, sized to prevent door from hitting mounted accessories.
- F. Door Pull: Manufacturer's standard for out-swinging doors.

# 2.06 SOURCE QUALITY CONTROL

- A. Fire resistance: Fabricate compartments from panels, which have a fire classification and label from Underwriters Laboratories, Inc. as follows:
  - 1. 3/4" (19mm) flame spread: 25, smoke developed: 70;
  - 2. 1/2" (13mm) flame spread: 30, smoke developed: 85.
- B. Consistency:
  - 1. Panels to have uniform thickness (+0.03").
  - 2. Panels to have uniform flatness (maximum difference of 0.03") for 10' span.
  - 3. Panels to be U.L. registered and labeled for quality consistency.
- C. Modulus of Elasticity: 1.5 Million PSI minimum.
- D. Shear strength: 2,000 PSI minimum.
- E. Compressive strength: 24,000 PSI minimum.
- F. Water absorption: 3% maximum.
- G. Screw pull-out strength minimums chart (lbs.):

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Screw depth: #6 #8 #10 #12 1/4" 5/16" 3/8" 7/16" 1/2" 1/2" panels: 250 300 340 390 450 560 680 790 900 3/4" panels: 510 590 680 850 1,000 1,200 1,400
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H. Chemical resistance: Panels to meet or exceed Scientific Equipment Furniture Association's (S.E.F.A.) list of 49 standard chemicals.

### PART 3 - EXECUTION

# 3.01 EXAMINATION

A. Before covering wall and ceiling framing with finish materials, examine framing to ensure that backing plates and structural framing have been installed in such position as to receive all attachment screws.

- B. Verify spacing of plumbing fixtures to ensure compatibility with installation of compartments.
- C. Do not start the work of this section until all deficiencies have been corrected.

### 3 02 INSTALLATION

- A. General: Install toilet compartments and urinal screens as shown on the shop drawings and in accordance with Manufacturer's specifications and printed installation instructions. Install toilet compartments and doors in a rigid and substantial manner, straight and plumb, with horizontal lines level.
- B. Pilasters: Secure pilasters to supporting members and level, plumb and tighten the installation with leveling nuts and washers.
- C. Panels and Urinal Screens: Secure panels and doors to pilasters so the exterior faces are flush. Provide clearances of not more than 1/2 inch between pilasters and panels, and 1 inch between panels and walls. Secure panels and urinal screens to walls with 2 stirrup brackets located near the top and bottom of each panel, or one continuous bracket from top to bottom. At light gauged steel framed walls, fasten brackets with toggle or molly bolts into metal studs or backing plates fastened directly to the studs. At wood framed walls, fasten brackets with wood screws into wood studs or blocking fastened directly to the studs. At concrete or masonry walls, fasten brackets with screws and expansion anchors.

## 3.03 ADJUSTING AND CLEANING

- A. Hardware Adjustment: After installation, carefully adjust hardware for proper operation. Set hinges on in-swinging doors to hold open approximately 30 degrees from the closed position when unlatched. Set hinges on out-swinging doors to return to the fully closed position. Adjust doors so that doors are level with the pilasters when the doors are in the closed position.
- B. Cleaning: Clean compartments at completion and leave free of imperfections.

END OF SECTION