

## SECTION 123553

### TRESPA ATHLON® SOLID COMPOSITE COUNTERTOP WORK SURFACES

#### PART 1 – GENERAL

##### 1.01 SECTION INCLUDES

- A. Solid composite work surfaces.

##### 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. 062000 - Finish Carpentry.
- C. 102113 – Toilet Partitions.
- D. 105100 – Lockers.
- E. 106700 - Shelving.
- F. 123800 - Specialty Casework and Fixtures.
- G. 154000 - Sinks Field Inserted in Countertops.

##### 1.03 REFERENCES

- A. SEFA 3-1996 Recommended Practices.

##### 1.04 SUBMITTALS

- A. Submit in accordance with Section 01300.
- B. Submit samples of each color and thickness of material used.

##### 1.05 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.

#### 1.06 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.

#### 1.07 COORDINATION

- A. Secure field measurements before preparation of shop drawings and fabrication where possible, for proper and adequate fabrication and installation of the work.
- B. Furnish anchorage and top connection devices or material as specified.

#### 1.08 WARRANTY

- A. Worktops to be guaranteed against warpage or delaminating for 10 years. The factory authorized fabricator, product installer and material manufacturer must sign the Warranty documents and submit a copy to the Contractor. The project name must be written on the warranty.

### PART 2 – PRODUCTS

#### 2.01 MANUFACTURERS

- A. These specifications are based on solid phenolic panels manufactured by Trespa North America, 800-487-3772.
  - 1. Represented locally by W.H. Steele Co. 909-930-0831, Fax: 626-357-4268, E-Mail: info@whsteele.com. A list of approved fabricators may be acquired from the above.
- B. All products specified in this section shall be provided by a single manufacturer.

#### 2.02 MATERIALS

- A. Basis of countertop design: Trespa Athlon DSC (Double Sided Crystal), or DSQ (Double Sided Quartz) as specified by Architect.

1. Core: Phenolic impregnated kraft papers. To ensure panel quality and consistency, panel must be at least 93-lbs.z/cubic foot to ensure full saturation of kraft core.
  2. Face sheet: Separate sheet of clear melamine over decorative papers impregnated with melamine resin and integrally compression molded with the core.
- B. Thickness: As specified on drawings or by Architect.
- C. Color: to be selected by Architect from Manufacturer's standard color pallet.

### 2.03 FABRICATION

- A. All exposed edges shall be sanded to a smooth finish and, except as indicated below, shall be rounded to a 1/4" radius at front top edge and at vertical corners.
- B. Fix work surface panels with blind fastenings into the back or underside of the panel. Use #10, type A sheet metal screws sized to stop at least 1/8" short of the finished face. Pre-drill panel with an 11/64" diameter high speed drills bit aligned with 7/32" clearance holes in the supporting structure.
- C. Form tight-fitting butt joints in the work surface using mechanical fasteners positioned to be concealed after installation
- D. Curbs shall be bonded to the top of the work surface to form a square joint. Joints between sections of curb shall be stepped or mitered as necessary to minimize the amount of black core exposed.
- E. Cutouts for drop-in sinks shall be routed to form openings with 3/8" minimum depth supporting flanges and such that the rim of the sink when installed is at the same level as the work surface top. Epoxy sinks shall be set in beds of epoxy adhesive. Stainless steel and polypropylene sinks shall be set in beds of silicone sealant.
- F. Cutouts for under-mounted sinks shall be routed and sanded to form smooth edged openings with the top edge radiused to approximately 1/8". The bottom edge of the sink opening shall be finished smooth with the edge broken to prevent sharpness. Corners of sink cutouts shall be radiused not less than 3/4". Under-mounted sinks shall be supported by brackets blind-fixed to the underside of the work surface.

### 2.04 SOURCE QUALITY CONTROL

- A. Panels shall be of material specifically designed for countertop work surfaces. Fabricated work surfaces shall comply with all current codes and

regulations. Tops and shelves shall have uniform thickness (+0.03”) and flatness (maximum difference of 0.03”) for 10-foot span.

- B. Panels to be U.L. registered and labeled for quality consistency.
- C. Chemical Resistance: Evaluation of chemical resistance is based on SEFA’s (Scientific Equipment and Fixture Association) standard list of 49 chemicals / concentrations, their required methods of testing and their minimum acceptable results as a means of establishing a minimum acceptable level of performance for all exposed and semi-exposed surfaces.
- D. Panels to have screw pullout strength minimums per following chart (lbs.):
 

| 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   |
| 5/8” panels: | 310 | 370 | 430 | 490 | 560  | 710   | 850   | 990   | 1,100 |
| 3/4” panels: |     |     | 510 | 590 | 680  | 850   | 1,000 | 1,200 | 1,400 |
- E. Uniform load to cause no more than 1/4” deflection at center of the span:
 

| Thickness    | 12” x 24” | 12” x 36” | 12” x 48” | 24” x 36” |
|--------------|-----------|-----------|-----------|-----------|
| 1/2” panels: | 370       | 110       | 45        | 220       |
| 5/8” panels: | 690       | 210       | 85        | 410       |
| 3/4” panels: | 1,400     | 400       | 170       | 800       |
| 1” panels:   | 2,600     | 780       | 330       | 1,500     |
- F. Performance requirements:
  1. Modulus of elasticity: 1,500,000 psi minimum.
  2. Shear strength: 2000 psi minimum.
  3. Compressive strength: 24,000 psi minimum.
  4. Weight: 93 lbs. per cubic foot maximum.
  5. Flame spread (ASTM E-84): Class 1A (25).
  6. Non-porous surface and edges.
    1. Will not support micro-organic growth.
    2. Water absorption: 3% maximum.

## PART 3 – EXECUTION

### 3.01 INSTALLATION

- A. Install work tops as per shop drawings on frames or base cabinets provided per specification.

### 3.02 PROTECTION

- A. After installation, the General Contractor shall protect the worktops from damage. The tops shall be kept free from paint, plaster, cement scratches, or

any other destructive forces.

END OF SECTION