

SECTION 064115

TRESPA ATHLON® SOLID COMPOSITE CASEWORK

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Solid composite casework.

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. 105100 - Lockers.
- D. 106700 - Shelving.
- E. 154000 - Plumbing; for sinks field inserted in countertops.

1.03 REFERENCES

- A. SEFA 3-1996 Recommended Practices.
- B. Woodwork Institute, Section 15.
- C. American Woodwork Association, Section 400.

1.04 SUBMITTALS

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

1.05 QUALIFICATIONS

- A. Installer to have experience fabricating phenolic casework.
 - 1. Installer to provide a list of previous projects where they have supplied cabinets and casework made of phenolic panels.

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. Delivered completed solid composite casework shall be stored in a ventilated place, protected from weather. Protect finished casework from soiling and damage during handling and storage.

1.08 WARRANTY

- A. Solid composite materials to be warranted against delamination for 10 years. The factory authorized cabinet fabricator, product installer and material manufacturer must sign the Warranty documents and submit a copy to the Contractor.
- B. Other materials and workmanship covered in this section shall carry a one year warranty from the date of installation acceptance.

PART 2 – PRODUCTS

2.01 MANUFACTURERS

- A. These specifications are based on panels manufactured by Trespa North America, Ltd., 800-487-3772.
 - 1. Represented locally by W.H. Steele Co. 909-930-0831. A list of approved fabricators may be acquired from the above.
- B. All products specified in this section to be provided by a single manufacturer approved by Trespa North America.

1. MATERIALS

- A. Entire cabinet shall be constructed of “Trespa”: Tops, drawer faces & doors to be “Virtuon, Meteon or Athlon”. Backs, shelves and end panels to be

- “Athlon” solid composite panels.
- a. Panel finish with Virtuon or Meteor panels to be “Satin”.
 - b. Panel finish with Athlon panels to be “Quartz”.
- B. Cabinet hardware shall be furnished and installed as required to provide a complete casework installation conforming to Woodwork Institute’s requirements for institutional grade 1, where ever appropriate. Finish to be brushed stainless steel.
- C. Hinges: Rockford Process Control (RPC) Hinge - 270° opening, #8314 – 1/2 overlay hinge, 1/2” door / 1/2” ends, black epoxy coated cold rolled steel.
- D. Door and Drawer Locks: National Lock #8102 or Olympus Lock. Provide metal strike plates to protect against particleboard rip out. Provide two keys for each lock.
- E. Keying: Verify keying requirements with Project Manager prior to start of work.
- F. Handles: Wire pulls @ interior doors only: Sugatsune oval CHMC #DBL96BCR.
- G. Drawer Guides – Accuride full extension.

2.03 CONSTRUCTION

- A. Construction and design to develop maximum strength and rigidity in each sectional unit. Each sectional unit to be completely fabricated ready for placement in the casework and equipment assembly. Each cabinet to be a complete integral rigid unit within itself to permit relocation at any subsequent time.
- B. The cabinet shall incorporate full overlay design in which posts and rails are concealed behind the doors and drawer heads. The door and drawer heads shall create a .125" horizontal reveal. There shall be a .0625" vertical reveal at the edge of each cabinet creating a .125" vertical reveal at the end of each cabinet when two cabinets are set in place next to each other.
- C. Base cabinets to be constructed to achieve an industry standard height of 30" or 36" including the counter top.
- D. Each cabinet to be assembled with stainless-steel machine-threaded screws. Vertical and horizontal members shall be mechanically fastened. Exposed edges on cabinet components, doors and drawer heads to be routed to a satin smooth finish. Tops shall have a “eased” exposed edge. Underside of toe space shall be enclosed. Notch adjustable shelves to receive shelf rest and

form a positive lock feature.

E. Component Thickness Schedule

1. Cabinet sides and bottoms: 0.5" (13mm)
2. Door and drawer heads: 0.5" (13mm)
3. Horizontal rail supports: 0.5" (13mm)
4. Cabinet backs: 0.25" (6mm)
5. Wall cabinet backs: 0.25" (6mm)
6. Cabinet shelves: 0.5" (13mm)
(Refer to Section 2.04.E. Uniform Load Chart)
7. Work surfaces: As specified on drawings or by Architect.

F. Drawer and cupboard units:

1. Each base cabinet shall consist of drawers or cupboard doors or a combination thereof as shown in drawings.
2. All base cabinets, unless specified in drawings otherwise, shall have removable back panels from the inside of the cabinet, for access to the pipe spaces to the rear of the cabinet. If cabinet is located in the corner of an assembly and access to the pipe space is required to the side of the cabinet, removable panels shall be provided in the side of the cabinet also. All removable panels shall be easily removed without the use of tools or the removal of screws.
3. Cupboard units to be provided with an adjustable shelf. Shelf clips to engage shelf in such a way as to avoid slippage and movement of shelf.
4. Sectional units shall have 4" (101.6mm) high by 3" (76.2mm) deep toe space members, unless otherwise noted on drawings.
5. Drawers shall have full box construction and be fabricated of ½" thick solid composite phenolic resin material. Drawer bottoms shall be matching ¼" material. Drawer fronts shall be attached to drawer box using dual directional adjustment hardware.

G. Wall and floor storage cabinets and cases shall match in design and construction the sectional units as specified previously.

H. Sectional units, cabinets and cases to be located on the floor shall be equipped with leveling devices that are easily adjustable, to compensate for unevenness in the floor.

2.03 COLOR

- A. Color to be selected by Architect from Manufacturer's standard color pallet.

2.04 SOURCE QUALITY CONTROL

- A. Panels shall be of material specifically designed for laboratory 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"
1/4" panels:	120	150	170	200	230				
5/16" panels:	160	190	210	240	280	350			
3/8" panels:	190	220	260	290	340	420	510		
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"
1/4" panels:	37	11	4	22
5/16" panels:	87	26	11	51
3/8" panels:	170	50	21	100
1/2" panels:	370	110	47	220
5/8" panels:	690	210	87	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.
 1. Weight: 93 lbs. per cubic foot maximum.
 2. Tensile strength: 13,000-PSI, minimum.
 6. Flexural strength: 16,000-PSI minimum.
 7. Surface Impact Resistance: 9 lb.
 8. Scratch Resistance: 0.8 lb.

PART 3 – EXECUTION

3.01 INSTALLATION

- A. Install cabinets as manufactured by this specification as per approved shop drawings.

3.02 PROTECTION

- A. After installation, the General Contractor shall protect the casework from damage. They shall be kept free from paint, plaster, cement scratches, or any other destructive forces.

END OF SECTION