PART 1 - GENERAL

1.00 RELATED DOCUMENTS:

A. Drawings and general provisions of Contract, including General and Special Conditions and Division 1 - Specification sections, apply to work of this section.

1.01 WORK INCLUDED:

A. The work includes fabrication and installation of fixed modular and laminate clad casework and components, fixed and modular countertops and related products furnished by the same supplier for single source responsibility, as shown on drawings, schedules and specified herein.

1.03 QUALITY ASSURANCE:

A. Manufacturers’ products shall be publicly catalogued. Manufacturer will show evidence of a minimum of five (5) years experience in providing manufactured casework systems for similar types of projects, produce evidence of financial stability and adequate facilities and personnel required to perform on this project.

B. Manufacturer: Provide products certified as meeting or exceeding ANSI-A 161.1-2000 testing standards.

C. Quality Standard: Unless otherwise indicated, comply with AWI’s Architectural Woodwork Quality Standards for Premium grade, unless noted otherwise, of interior architectural woodwork, construction, finishes and other requirements.

1.04 SUBMITTALS:

A. Comply with Section 01 33 00.

B. Product Data: Manufacturer’s catalog with specifications and construction details

C. Shop Drawings: Indicate dimensions, description of materials and finishes, general construction, specific modifications, component connections, anchorage methods, hardware and installation procedures, plus the following specific requirements:

1. Include section drawings of typical and special casework, work surfaces and accessories.

2. Indicate locations of plumbing and electrical service field connection by others.

D. Casework Samples:

1. Base cabinet: Cabinet conforming to specifications, with drawer and door.

2. Wall cabinet: Cabinet conforming to specifications, with door.
3. Cabinet samples shall be complete with specified hardware for doors, drawers and shelves.

4. Component samples: Two sets of samples for each of the following:
   
a. Decorative laminate color charts/ABS edgings.

1.05 PRODUCT HANDLING:

A. Deliver completed laminate clad casework, countertops and related products only after wet operations in building are completed, store in a ventilated place, protected from the weather, with relative humidity range of 20% to 50%.

B. Protect finished surfaces from soiling and damage during handling and installation with a protective covering.

1.06 JOB CONDITIONS

A. Environmental Requirements: Do not install casework until permanent HVAC systems are operating and temperature and humidity have been stabilized for at least one (1) week.

1. Manufacturer/Supplier shall advise Contractor of temperature and humidity requirements for architectural casework installation areas.

2. After installation, control temperature and humidity to maintain relative humidity between 25 percent and 55 percent.

1.07 WARRANTY:

A. All materials and workmanship covered by this section will carry a five (5) year warranty from date of acceptance.

PART 2 – PRODUCTS

2.01 MATERIALS

A. Core Materials:

1. Particleboard up to 7/8 inch thick: Industrial Grade average 47-pound density particleboard, ANSI A 208.1-2011, M-2.


B. Hardboard: 1/2 inch thick prefinished hardboard, CS-251.

C. Decorative Laminates: Greenguard Indoor Air Quality Certified.
1. High-pressure decorative laminate VGS (.028), NEMA Test LD 3-2005.
2. High-pressure decorative laminate HGS (.048), NEMA Test LD 3-2005.
3. High-pressure decorative laminate HGP (.039), NEMA Test LD 3-2005.
5. High-pressure backer BKH (.048), (.039), (.028), NEMA Test LD3-2005.

D. Chemical-Resistant decorative laminate, NEMA Test LD 3-2005.

E. Laminate Color Selection: Maximum 1 color per unit face and no project limit.

F. Edging Materials:
   1. 2mm ABS banding for plastic laminate countertop (Custom color to match laminate.)
   2. 1mm banding for doors and drawers. (Custom color to match laminate.)

G. Glass:
   1. Wall unit full sliding glass doors: 1/4 inch laminated safety glass.
   2. Glass insert doors, hinged or sliding wall cabinets: 1/4 inch laminated safety glass.
   3. Glass insert doors, hinged or sliding tall or base cabinets: 1/4 inch laminate safety glass.
   5. Trim glass inserts: Extruded rigid PVC.

H. Solid Surface Material:
   1. Corian or acrylic solid surface approved equal.
   2. Integral solid surface sinks and countertops. Refer to Fixture Schedule.
   3. Core drilling of solid surface tops.

2.02 SPECIALTY ITEMS

A. Support Members: Furniture grade, epoxy powder coated steel.
   1. Countertop support brackets.
   2. Undercounter support frames.
   3. Legs.

B. Articulating Computer Keyboard Tray:
   1. Furnished by Owner. Contractor to install where indicated.
C. Narcotics Locker

1. Furnished by Owner, installed by Millwork Contractor.

2.04 CABINET HARDWARE

A. Hinges:

1. Blum self-closing concealed full overlay hinge, 120° swing, 6 way adjustment.
   a. Doors 48 inch and over in height have 3 hinges per door.

B. Pulls:

1. Door and drawer front pulls, are 4” stainless steel wire pull, Epco MC-402-4-55 96mm spacing on screws. Pull design shall comply with the Americans with Disability Act (ADA). Mount horizontally.

C. Drawer Slides:


D. Adjustable Shelf Supports:

1. Injection molded transparent polycarbonate friction fit into cabinet end panels and vertical dividers, adjustable on 32 mm centers. Each shelf support has 2 integral support pins, 5mm diameter, to interface pre-drilled holes, and to prevent accidental rotation of support. The support automatically adapts to 3/4 inch or 1 inch thick shelving and provides non-tip feature for shelving. Supports may be field fixed if desired. Structural load to 1200 pounds (300 pounds per support) without failure.

E. Locks: (Allow for locks at doors, drawers, files, etc. where shown on interior elevation drawings)

1. Removable core, disc tumbler, 5 pin, cam style lock with strike.
F. File Suspension System: 14-gauge steel file suspension rails, epoxy powder coated. File followers, or other split bottom hardware, are not acceptable.

2.05 FABRICATION:

A. Fabricate casework per AWI premium grade countertops and related products to dimensions, profiles, and details shown. All casework panel components must go through a supplemental sizing process after cutting, producing a panel precisely finished in size and squareness to within 0.010 inches, ensuring strict dimensional quality and structural integrity in the final fabricated product.

B. Cabinet Body Construction:

1. Tops and bottoms are glued and doweled to cabinet sides and internal cabinet components such as fixed horizontals, rails and verticals. Minimum 6 dowels each joint for 24 inch deep cabinets and a minimum of 4 dowels each joint for 12 inch deep cabinets.
   a. Tops, bottoms and sides of all cabinets except sink base units are 3/4 inch thick particleboard core.
   b. Tops, bottoms and sides of sink base units are 3/4 inch thick moisture resistant particleboard core.

2. Cabinet backs: 1/2 inch thick pre-finished hardboard on all four (4) sides. Wall and tall cabinets are provided with a 1 inch x 1-3/4 inch ABS mounting strip used to secure the cabinet to the wall.
   a. Exposed back on fixed or movable cabinets, except sink base units: 3/4 inch particleboard with the exterior surface finished in VGS laminate as selected.
   b. Exposed back on fixed or movable sink base cabinets: 3/4 inch moisture resistant particleboard with the exterior surface finished in VGS laminate as selected.
   c. Flexible rail mounted cabinet backs: 3/4 inch thick particleboard structurally doweled into cabinet sides and top panels.

3. Fixed base and tall units have an individual factory-applied base, constructed of 3/4 inch exterior grade plywood. Base is 96mm (nominal 4 inch) high unless otherwise indicated on the drawings.

4. Base units, except sink base units: Full sub-top. Sink base units are provided with open top, a welded steel/epoxy painted sink rail full width at top front edge concealed behind face rail/doors, a split back removable access panel.
5. Side panels and vertical dividers shall receive adjustable shelf hardware at 32mm line boring centers. Mount door hinges, drawer slides and pull-out shelves in the line boring for consistent alignment.

6. Exposed and semi exposed edges.
   a. Edging: 2mm ABS for plastic laminate countertop (custom color to match laminate). 1mm ABS for doors and drawers (custom color to match laminate).

7. Adjustable shelf core: 3/4 inch thick particleboard up to 30 inches wide, 1 inch thick particleboard over 30 inches wide.
   a. All four edges: 2mm ABS.

8. Interior finish, units with open Interiors:
   a. Top, bottom, back, sides, horizontal and vertical members, and adjustable shelving faces with VGS high-pressure decorative laminate. Laminate to match exterior laminate.

9. Interior finish, units with closed Interiors:
   a. Top, bottom, sides, horizontal and vertical members, and adjustable shelving faces with thermally fused melamine laminate with matching pre-finished back. Melamine to match the plastic laminate color.

10. Exposed ends:
   a. Faced with HGS high-pressure decorative laminate.

11. Wall unit bottom:
   a. Faced with VGS high-pressure decorative laminate.

12. Wall and tall unit tops:
   a. Top surface is faced with HG-S high-pressure decorative laminate.

C. Drawers:

1. Sides, back and sub front: Minimum 1/2 inch thick particleboard, laminated with thermally fused melamine doweled and glued into sides. Top edge banded with 1mm PVC.
2. Drawer bottom: Minimum 1/2 inch thick particleboard laminated with thermally fused melamine, screwed directly to the bottom edges of drawer box.
3. Paper storage drawers: Minimum 3/4 inch thick particleboard sides, back, and sub front laminated with thermally fused melamine. Minimum 1/2 inch thick particleboard drawer bottoms screwed directly to the bottom edges of the drawer box. Provide ABS angle retaining bar at the rear of the drawer.

D. Door/Drawer Fronts:
1. Core: 3/4 inch thick particleboard, except at sink units which is 3/4 inch moisture resistant particleboard.
2. Provide double doors in opening in excess of 24 inches wide.
3. Faces:
   a. Exterior: VGS High-pressure decorative laminate.
   b. Interior: High-pressure cabinet liner CLS, to match exterior.
4. Door/drawer edges: 1mm ABS, external edges and outside corners.
5. Miscellaneous Shelving:
   a. Core material: 3/4 inch or 1 inch particleboard.
   b. Exterior: VGS High-pressure decorative laminate.
   c. Edges: 1mm ABS.

2.06 DECORATIVE LAMINATE COUNTERTOPS:

A. Core:
1. All countertops except at sink elevations: 1 inch ANSI A 208.1-1993 M-2 particleboard.
2. Countertops at sink elevations: 1 inch exterior grade plywood.

B. Surface: HGS high-pressure decorative laminate with balanced backer sheeting.
C. Edges, including applied backsplash: self-edge.

2.07 SOLID SURFACE COUNTERTOP:

A. Provide solid surface countertops where indicated on the drawings by Corian or acrylic solid surface approved equal. Coordinate with Plumbing drawings.
B. Color to be selected from standard color samples.
C. Installation per certified fabricators/installer by Solid Surface manufacturer.

2.08 THERMALLY FUSED MELAMINE:

A. Melamine to exactly match the plastic laminate. Distributor is to be DSI, Carnegie, PA 15106 (412-279-7824).
PART 3 - EXECUTION

3.01 INSPECTION:
   A. The casework contractor must examine the job site and the conditions under which the work under this section is to be performed, and notify the building owner in writing of unsatisfactory conditions. Do not proceed with work under this Section until satisfactory conditions have been corrected in a manner acceptable to the installer.

3.02 PREPARATION:
   A. Condition casework to average prevailing humidity conditions in installation areas prior to installing.

3.03 INSTALLATION:
   A. Erect casework, plumb, level, true and straight with no distortions. Shim as required. Where laminate clad casework abuts other finished work, scribe and cut to accurate fit.
   B. Adjust casework and hardware so that doors and drawers operate smoothly without warp or bind.
   C. Repair minor damage per plastic laminate manufacturer’s recommendations. Replace other damaged cabinets or materials.
   D. Countertop cut out for sinks by casework contractor; coordinate size and location of opening with Plumbing Contractor.
   E. Slight openings between casework and walls shall be sealed flush by applying a silicone sealant, color as selected by Architect, Dow Corning 781 Building Sealant, G.E. Silicone Construction Sealant, or approved equal. Openings shall be masked as required for neatness, struck smooth and smears / solvent cleaned.

3.04 CLEANING:
   A. Leave cabinets clean inside and out. Wipe off fingerprints, pencil marks, and surface soil etc., in preparation for final cleaning by the building owner.
   B. Remove and dispose of all packing materials and related construction debris.

3.05 COLOR SELECTION:
   A. Laminate Color Selection:
      1. Select from the full range of Wilsonart® and Formica® stock color charts for cabinet faces, exposed ends, open interiors, and countertops. Thermally fused melamine laminates matched to white laminate color.
B. **ABS Edge Banding Color Selection:**

1. Edge banding to match laminate color, custom color if required.