

SECTION 123216 PLASTIC-LAMINATE-CLAD ARCHITECTURAL CASEWORK

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

1.2 SECTION INCLUDES

- A. Plastic-Laminate-Faced Wood Casework.
- B. Countertops.
- C. Mounting Boards.
- D. Casework hardware.

1.3 RELATED REQUIREMENTS

- A. Section 06 1000 - Rough Carpentry: Wood blocking for anchoring casework.
- B. Section 06 4116 - Plastic-Laminate-Clad Architectural Casework.
- C. Section 07 9200 - Joint Sealants: Sealing joints between casework and countertops and adjacent walls, floors, and ceilings.
- D. Section 09 2116 - Gypsum Board Assemblies: Reinforcement in metal framed partitions for anchoring casework.
- E. Section 09 6500 - Resilient Flooring: Resilient base applied to casework.
- F. Section 10 2219 - Demountable Partitions.
- G. Section 12 3600 - Countertops: Countertops not specified in this section.
- H. Division 22 - Plumbing: Service fittings and outlets.
- I. Division 26 - Electrical

1.4 REFERENCE STANDARDS

- A. ANSI A135.4 - American National Standard for Basic Hardboard.
- B. ANSI A208.1 - American National Standard for Particleboard.
- C. ANSI A208.2 - American National Standard for Medium Density Fiberboard.
- D. ANSI/BIFMA e3 - Furniture Sustainability Standard; 2012.
- E. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

- F. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards
- G. BHMA A156.9 - American National Standard for Cabinet Hardware.
- H. ISFA 2-01 - Classification and Standards for Solid Surfacing Material.
- I. NEMA LD 3 - High-Pressure Decorative Laminates.
- J. SEFA 8PL - Scientific Equipment and Furniture Association: Plastic laminate Grade Casework; 2010.

1.5 DEFINITIONS

- A. HPDL – High Pressure Decorative Laminate
- B. FSC - Forrest Stewardship Council: Chain-of-custody.
- C. MR - Moisture Resistant.
- D. PP - Polypropylene
- E. PVC - Poly-vinyl chloride
- F. MDF - Medium Density Fiberboard

1.6 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide component dimensions, configurations, construction details, joint details, and attachments, utility and service requirements and locations.
- C. Shop Drawings: Indicate casework locations, large scale plans, elevations, cross sections, rough-in and anchor placement dimensions and tolerances, clearances required.
- D. Samples: Submit two samples, minimum size 12 x 12 inch (305 x 305 mm) of each color of base plastic laminate, or other finish.
- E. Selection Samples: For each countertop specified, color chips representing manufacturer's full range of available colors and patterns.

1.7 QUALIFICATIONS

- A. Manufacturer: Company regularly engaged in design and manufacture of products specified in this section and scope of work similar to requirements of this project.
- B. Installer: Company that has successfully completed projects of the type and scope similar to the requirements of this project.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Accept casework on site. Inspect on arrival for damage.

- B. Coordinate size of access and route to place of installation.
- C. Protect finished surfaces during handling and installation with protective covering of polyethylene film or other suitable material.

1.9 SITE CONDITIONS

- A. Do not deliver or install the casework until concrete, masonry, and drywall/plaster work is dry; ambient relative humidity is maintained between 25 - 55 percent prior to delivery and throughout the life of installation; and the temperature is controlled above 55°F.
- B. Casework shall not be stored or installed in non-climate controlled conditions.
- C. If ambient conditions are not met at the time of requested delivery, the general contractor or owner must provide a letter releasing manufacturer from any liability and responsibility from any warranty or damage resulting from not complying with required ambient conditions.

1.10 WARRANTY

- A. Casework: Provide Limited Lifetime Warranty for defective material and workmanship for the life of the product.
- B. Solid Surfacing: Provide a 3 year warranty to the original owner against defective material and workmanship.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Steelcase Health, 901 44th Street, Grand Rapids, MI 49508; Product: Convey: www.steelcase.com or approved equal.
- B. Substitutions: Not permitted without written approval of the County.

2.2 CASEWORK, GENERAL

- A. Design Criteria: Modular plastic-laminate clad casework and components, with each individual cabinet an interchangeable, integral part of assembly making up required casework units.
 - 1. Each module to be rigid and dependent on no other component part of complete assembly for its rigidity.
- B. Quality Standards: Comply with quality standards indicated, unless otherwise indicated.
 - 1. ANSI/BIFMA x5.6 Panel Systems.
 - 2. ANSI/BIFMA x5.9 Storage Systems.
 - 3. Architectural Woodwork Standards.
- C. Certified Wood:
 - 1. FSC Mixed Credit, FSC STD-01-001.
 - 2. FSC STD-40-004, Chain-of Custody Certification.

- D. Indoor Air Quality:
 - 1. Compliant with ANSI/BIFMA e3, Level 1 Indoor.
 - 2. Certified to SCS-EC10.2, Indoor Advantage Gold.
- E. Product Designations: Drawings indicate sizes, configurations, and finish materials of manufactured plastic-laminate-clad cabinets by referencing designated manufacturer's catalog numbers.

2.3 CASEWORK

- A. Design: Reveal overlay, frameless.
- B. Grain Direction for High Pressure Decorative Laminate (HPDL): Manufacturer's standard.
- C. Exposed Exterior Components.
 - 1. Core: Particleboard
 - a. Meet or exceed all requirements of ANSI A208.1-2016.
 - 2. Laminate: HPDL, colors and patterns as indicated by manufacturer's designations.
 - 3. Edge Banding: Unless otherwise indicated, provide specified edge banding on all exposed edges.
 - a. Edge Banding on Doors and Drawers: 3 mm.
 - b. Edge Banding on Panels: 1 mm.
- D. Exposed Interior Components.
 - 1. Core: Particleboard
 - a. Meet or exceed all requirements of ANSI A208.1-2016.
 - 2. Laminate: HPDL, colors and patterns as indicated by manufacturer's designations.
 - 3. Edge Banding: Unless otherwise indicated, provide specified edge banding on all exposed edges.
 - a. Edge Banding on Panels: 1 mm.
- E. Semi-Exposed Components.
 - 1. Core: Particleboard
 - a. Meet or exceed all requirements of ANSI A208.1-2016.
 - 2. Laminate: HPDL, colors and patterns as indicated by manufacturer's designations.
 - 3. Edge Banding: Unless otherwise indicated, provide specified edge banding on all exposed edges.
 - a. Edge Banding on Panels: 1 mm.
- F. Concealed Components.
 - 1. Core: Particleboard
 - a. Meet or exceed all requirements of ANSI A208.1-2016.
 - 2. Laminate: HPDL, colors and patterns as indicated by manufacturer's designations.

3. Edge Banding: Unless otherwise indicated, provide specified edge banding on all exposed edges.

- a. Edge Banding on Panels: 1 mm.

- G. Sealant For Use in Casework Construction: Manufacturer's recommended type.

2.4 COLORS AND FINISHES

- A. HPDL Colors, Patterns, and finishes: [As indicated by manufacturer's designation.] [As selected by Architect from casework manufacturer's full range.]
- B. Edgebanding Color: Casework manufacturer's standard color.
- C. Cabinet Interior, Enclosed Storage: White.

2.5 HARDWARE

- A. Hardware: Manufacturer's standard, commercial-quality, heavy-duty, complying with requirements indicated for each type.
- B. Hinges:
 1. Adjustable, Soft-Closing Euro-Style:
 - a. Grade 2 per BHMA A156.9.
 - b. Door Swing: 110 degrees.
 - c. Basis of Design: BLUM; 71B3580.
- C. Drawer Slides:
 1. Full Extension, Self-closing, side mount, ball bearing.
 - a. Grade 1 HD-150 per ANSI A156.9 BHMA.
 - b. Load Rating: 150 lb.
 - c. Basis of Design: Knapp & Vogt; 8600 Series
- D. Door and Drawer Pulls:
 1. Pull Locations: Shown on Drawings.
 2. Basis of Design: Hafele; Contemporary [Nickel, 117.34.605] [Black, 117.34.305] [Polished, 117.34.205] [Silver, 117.34.405].
 3. Basis of Design: Mansco; Jazz [Nickel, 200-24766] [Black, 2-24774] [Polished, 200-24765] [Silver, 117-34.405].
 4. Basis of Design: Hafele; D-Ring [Nickel, 116.09.680] [Black, 116.09.380] [Polished, 116.09.288] [Silver, 116.09.480].
 5. Hidden Pulls: [Nickel] [Platinum]
- E. Locks (where shown or noted only):
 1. Lock Locations: Selected cabinets shown on Drawings.
 2. Lock Type:

- a. Keyed Lock: All locks keyed alike. Lock core removable permitting change of locks.
 - b. Electronic Lock: Controlled with remote device.
 - 1) Provide with safety breakaways
 - c. Inactive door of base and wall cabinets secured by using an elbow catch.
 - F. Cabinet Mounting Brackets:
 - 1. Mounting Brackets and Covers for Base Cabinets:
 - a. Basis of Design: Camar S.p.A.; 807.
 - b. Mounted in cabinet side panel.
 - 2. Mounting Brackets and Covers for Cantilevers and End Panels:
 - a. Basis of Design: Camar S.p.A.; 821.
 - b. Mounted in cabinet side panel.
 - G. Cabinet Mounting Rail: For supporting wall-hung cabinets and tethering floor- supported cabinets.
 - 1. Attached to drywall or Steelcase V.I.A.
 - 2. Standard Length: 96 inches.
 - 3. Material: Clear anodized aluminum 6063-T6.
- 2.6 FABRICATION - GENERAL
- A. Cabinet Box Style: Reveal Overlay, Frameless.
 - B. Cabinet Box Core: Particleboard
 - a. Meet or exceed all requirements of ANSI A208.1-2016.
 - C. Cabinet Construction: Wet glue and doweled case clamp construction.
 - 1. Bottoms and ends of cabinets, and tops of wall cabinets and tall cabinets: 3/4 inch (9 mm) thick particleboard.
 - 2. Shelves: 3/4 inch (19 mm) particleboard up to 36 inches (914 mm), 1 inch (25 mm) particleboard over 36 inches (914 mm).
 - 3. Backs: 1/4 inch (6 mm) MDF.
 - 4. Drawer Fronts: 3/4 inch (19 mm) particleboard.
 - 5. Drawer Bodies:
 - a. Sides, Fronts, and Backs: 3/4 inch (19 mm) particleboard.
 - b. Bottoms: 1/4 inch (6 mm) particleboard.
 - 6. Doors: 3/4 inch (19 mm) particleboard.
 - 7. Cover Panels: 1/2 inch (12 mm) MDF.
 - 8. Light Valance: 3/4 inch (19 mm) particleboard.
 - 9. Base Trim: 3/4 inch (19 mm) MR10 particleboard.
 - 10. End Panels, Cantilevers, and Garage Units: 1-1/8 inch (29 mm) MR10 particleboard.
 - D. Cabinet finished interior options: Finished at All

- E. Slope Fascia:
 - 1. Slope tops 20 degrees and construct of same material as cabinets.
 - F. Vertical Fascia: Same material as cabinets.
 - G. Base Trim:
 - 1. Unless casework is built-in, provide fully enclosed toe space, 4 inches (102 mm) high. Provide adjustable levelers with 2 inch (51 mm) range for uneven floor conditions.
 - H. Filler Strips:
 - 1. Provide as needed to close spaces between cabinets and walls, ceilings, and indicated equipment. Fabricate from same material and with same finish as cabinets.
 - I. Cover Panels: Provide cover panels where required at exposed ends of cabinet configurations.
 - J. Mounting Boards: 3/4 inch (9 mm) thick particleboard core with same finish as cabinets. Provide where required for mounting wall-hung accessories.
 - K. Sink Cabinets: Where required, provide sloped front sink cabinets for ADA compliance.
 - L. Doors: Where required, provide doors with openings for [gloves]. Configure inside of cabinet to accept dispensers.
 - M. Drawer Boxes: Full-height sides and back on all drawer boxes.
 - N. Work Surface Supports: Provide where required.
- 2.7 SOLID SURFACING COUNTERTOPS: SOLID SURFACING SHEET OR PLASTIC RESIN CASTING OVER CONTINUOUS SUBSTRATE.
- A. Thickness: 1-1/2 inch (38mm)
 - B. Solid Surfacing Sheet and Plastic Resin Castings: Complying with ISFA 2-01 and NEMA LD 3; acrylic or polyester resin, mineral filler, and pigments; homogenous, non-porous and capable of being worked and repaired using standard woodworking tools; no surface coating; color and pattern consistent throughout thickness.
 - 1. Manufacturers:
 - a. Dupont; : www.corian.com.
 - b. Substitutions: Not permitted.
 - 2. Surface Burning Characteristics: Flame spread index of 25, maximum; smoke developed index of 450, maximum; when tested in accordance with ASTM E84.
 - 3. Finish on Exposed Surfaces: Matte, gloss rating of 5 to 20.
 - 4. Color and Pattern: As selected by Architect from manufacturer's full line.
 - C. Back and End Splashes: Same sheet material, square top; minimum 4 inches (102 mm) high.
 - D. Fabricate in accordance with manufacturer's standard requirements.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify adequacy of support framing and anchors.
- B. Verify that service connections are correctly located and of proper characteristics.

3.2 INSTALLATION

- A. Install casework, components and accessories in accordance with manufacturer's instructions.
- B. Wall-Mount Rails: Cut cabinet support rail to length and fasten to partition framing, wood blocking, or reinforcements in partitions.
- C. Attach cabinet mounting brackets to cabinet support rail and secure cabinet to the wall. Cover mounting brackets with decorative covers provided.
- D. Set casework items plumb and square, securely anchored to building structure.
- E. Scribe to abutting surfaces and align adjoining components. Apply matching filler pieces where casework abuts dissimilar construction.
- F. Install hardware uniformly and precisely.

3.3 ADJUSTING

- A. Adjust doors, drawers, hardware, fixtures, and other moving or operating parts to function smoothly.

3.4 CLEANING AND PROTECTION

- A. Clean exposed surfaces using methods recommended by manufacturer which will not damage finish.
- B. Protect casework and countertops against damage until accepted.
- C. Restore damaged components and finishes as necessary so no evidence remains of corrected work.

END OF SECTION 123216