# SECTION 06 4116 PLASTIC-LAMINATE-CLAD ARCHITECTURAL CASEWORK

# [ALTERNATE SPECIFICATION LOCATION] SECTION 12 3216 PLASTIC-LAMINATE-CLAD ARCHITECTURAL CASEWORK

Specifier Note: Specification is based on Steelcase Health: Convey product line. Copy and edit into this section as needed for casework that cannot be described on the drawings.

Specifier Notes: This Product Guide Specification is written according to the Construction Specifications Institute (CSI) format, Including MasterFormat, Section Format, and Page Format, as described in the project resource guide - the Project Delivery Practice Guide. Section numbers are from CSI's MasterFormat.

This section must be carefully reviewed and edited by the architect to meet the requirements of the project and local building codes. Coordinate this section with other specification sections and drawings. Delete all "Specifier Notes" when editing this section.

#### **PART 1 GENERAL**

# 1.01 SECTION INCLUDES

Specifier Note: Steelcase Convey modular HPDL casework includes floor base units, wall-suspended base units, uppers, tall storage, specialty items, countertops, and miscellaneous items.

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

#### 1.02 RELATED REQUIREMENTS

- A. Section 06 1000 Rough Carpentry: Wood blocking for anchoring casework.
- B. Section 07 9200 Joint Sealants: Sealing joints between casework and countertops and adjacent walls, floors, and ceilings.
- C. Section 09 2116 Gypsum Board Assemblies: Reinforcement in metal framed partitions for anchoring casework.
- D. Section 09 6500 Resilient Flooring: Resilient base applied to casework.
- E. Section 10 2219 Demountable Partitions.
- F. Section 12 3216 Manufactured Plastic-Laminate-Clad Casework.
- G. Section 12 3600 Countertops: Countertops not specified in this section.
- H. Division 22 Plumbing: Service fittings and outlets.
- Division 26 Electrical

#### 1.03 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.

#### 1.04 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

#### 1.05 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.

# 1.06 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.

# 1.07 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.

#### 1.08 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.

# 1.09 WARRANTY

A. Casework: Provide Limited Lifetime Warranty for defective material and workmanship for the life of the product.

B. Solid Surfacing: Provide a 12 year warranty to the original owner against defective material and workmanship.

#### **PART 2 PRODUCTS**

#### 2.01 MANUFACTURERS

- A. Steelcase Health, 901 44th Street, Grand Rapids, MI 49508; Product: Convey: www.steelcase.com.
- B. Substitutions: Not permitted.

#### 2.02 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.
  - 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.

#### 2.03 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.

#### 2.04 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.

#### 2.05 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, 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.

#### 2.06 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.

# 2.07 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**

#### 3.01 EXAMINATION

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

# 3.02 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.

#### 3.03 ADJUSTING

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

### 3.04 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.
- Restore damaged components and finishes as necessary so no evidence remains of corrected work.

#### **END OF SECTION**