

SECTION 12 32 00

MANUFACTURED WOOD CASEWORK

(AAPG Commercial Casework — Factory-Produced Modular Wood Casework)

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Factory-produced, modular manufactured wood casework for commercial interiors, including base cabinets, wall cabinets, tall and full-height cabinets, filler and closure panels, cabinet hardware, and related accessories.
 - 1. [Frameless (European) modular casework units.]
 - 2. [Face-frame modular casework units.]
 - 3. [Open shelving, wardrobe, and storage units.]
 - 4. [Casework countertops as scheduled.]
- B. Products Not Furnished or Installed Under This Section:
 - 1. Wood blocking, backing, and in-wall reinforcement for casework attachment.
 - 2. Gypsum board substrates and finished wall surfaces.
 - 3. [Plumbing fixtures, fittings, and sinks set into casework, specified in Division 22.]
 - 4. [Electrical devices, data outlets, and under-cabinet lighting, specified in Divisions 26 and 27.]
 - 5. [Countertops specified in Section 12 36 00.]
 - 6. Field finishing of adjacent construction.

1.2 RELATED SECTIONS

- A. Section 06 10 00 - Rough Carpentry: Blocking and backing for casework support.
- B. Section 06 41 00 - Architectural Wood Casework.
- C. Section 06 41 16 - Plastic-Laminate-Clad Architectural Cabinets.
- D. Section 09 21 16 - Gypsum Board Assemblies: Wall substrates receiving casework.
- E. Section 12 36 00 - Countertops.
- F. Division 22 - Plumbing: Sinks, fittings, and rough-in at casework.
- G. Divisions 26 and 27 - Electrical and Communications: Devices, power, and data at casework.

1.3 REFERENCES

- A. Kitchen Cabinet Manufacturers Association (KCMA):
 - 1. ANSI/KCMA A161.1 - Performance and Construction Standard for Kitchen and Vanity Cabinets.
- B. Architectural Woodwork Institute (AWI):
 - 1. AWI Architectural Woodwork Standards (AWS), latest edition — casework requirements, where referenced.
- C. ASTM International (ASTM):
 - 1. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- D. American National Standards Institute (ANSI):
 - 1. ANSI A208.1 - Particleboard.
 - 2. ANSI A208.2 - Medium Density Fiberboard (MDF) for Interior Applications.
 - 3. ANSI/HPVA HP-1 - Standard for Hardwood and Decorative Plywood.
- E. Builders Hardware Manufacturers Association (BHMA):
 - 1. ANSI/BHMA A156.9 - Cabinet Hardware.
- F. National Electrical Manufacturers Association (NEMA):
 - 1. NEMA LD 3 - High-Pressure Decorative Laminates.
- G. U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB):
 - 1. 40 CFR Part 770 (TSCA Title VI) and CARB ATCM 93120 - Formaldehyde emissions from composite wood products.

- H. Forest Stewardship Council (FSC) chain-of-custody certification.
- I. International Building Code (IBC), Chapter 8 - Interior Finishes.

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Conference: Conduct a conference at the Project site before installation. Review substrates, blocking and backing, environmental conditions, layout, installation sequence, utility rough-ins, countertop coordination, hardware, keying, and protection.
- B. Coordination: Coordinate casework dimensions, blocking, cutouts, and service locations with plumbing, electrical, communications, and countertop work before fabrication.

1.5 SUBMITTALS

- A. Product Data: Submit manufacturer's literature for each casework type, describing modular construction, core materials, facing, finishes, edge treatments, hardware, and accessories.
- B. Shop Drawings: Submit plans, elevations, and sections showing casework layout, module sizes, cabinet types, materials, finishes, hardware, filler and closure conditions, countertop interface, cutouts, blocking, anchorage, and accessible clearances.
- C. Samples:
 - 1. Facing Samples: Minimum 8 inches by 10 inches (203 mm by 254 mm), showing color, texture, and finish for each facing specified.
 - 2. Hardware Samples: One of each hinge, pull, drawer slide, and lock specified.
 - 3. Corner Sample: Cabinet corner showing core, facing, edgeband, and joinery.
- D. Certificates and Test Reports:
 - 1. KCMA certification seal (ANSI/KCMA A161.1), where required by the Project.
 - 2. Surface burning characteristics (ASTM E84) for the specified casework, where required.
 - 3. Composite-panel formaldehyde compliance documentation (TSCA Title VI / CARB).
 - 4. FSC chain-of-custody documentation, where required by the Project.
- E. Closeout Submittals: Submit cleaning and maintenance instructions, warranty documentation, and a record of the approved finishes, hardware, and product codes.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Manufacturer regularly engaged in the factory production of modular wood casework of similar type, scope, and quality.
- B. Installer Qualifications: Installer experienced in casework of comparable scope and approved by the manufacturer.
- C. Performance Standard: Provide casework tested to and complying with ANSI/KCMA A161.1, [and bearing the KCMA certification seal].
- D. Surface Burning Characteristics: Provide casework complying with the interior finish requirements of IBC Chapter 8 for the occupancy and location indicated, when tested in accordance with ASTM E84.
 - 1. Required Rating: [Class A.] [Class B.] [Class C.] [As required by the authority having jurisdiction.]
- E. Single-Source Responsibility: Provide casework, hardware, and accessories under single-source responsibility.
- F. Mockup: [Provide one full-size base and wall cabinet unit, including facing, finish, and hardware, for review. The approved mockup establishes the minimum standard.]

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver casework in protective packaging identified with product, finish, and Project information, and only after wet work is complete and dry.
- B. Store casework upright and supported in a dry, conditioned, ventilated space, protected from moisture, sunlight, soiling, and damage. Do not store directly on concrete.
- C. Handle casework to prevent chipping, scratching, racking, and damage to faces, edges, and hardware.
- D. Immediately report damaged or missing materials to the shipper and to AAPG. Do not install missing or damaged components.

1.8 PROJECT CONDITIONS

- A. Environmental Conditions: Do not deliver or install until the building is enclosed, wet work is complete and dry, and permanent HVAC maintains service conditions.
- B. Acclimatization: Condition casework in the installation area for not less than 48 hours before installation, or longer if required by the manufacturer.
- C. Field Measurements: Verify dimensions at the Project site before fabrication where the Work depends on field conditions.

1.9 WARRANTY

- A. Manufacturer's Warranty: Provide the manufacturer's standard written warranty covering defects in materials and manufacture for [one (1)] year from the date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Basis-of-Design Manufacturer: American Architectural Products Group (AAPG), 248 James Street, Venice, FL 34285. Telephone: +1-844-307-9571. Email: info@aapgco.com. Website: www.aapgco.com.
- B. Specified Product: AAPG Manufactured Wood Casework.

2.2 SUBSTITUTIONS

- A. Substitutions: Not permitted. Requests for substitutions, comparable products, alternates, or proposed equals will not be considered.
- B. Division 01 substitution procedures do not apply to this Section. Product naming is proprietary and establishes the only acceptable manufacturer and product.

2.3 CASEWORK — COMMON REQUIREMENTS

- A. Performance Standard: Manufactured to ANSI/KCMA A161.1.
- B. Construction Type: [Frameless (European).] [Face-frame.]
- C. Module Sizes: Manufacturer's standard nominal modular widths in [3-inch (76 mm)] increments, with standard base, wall, and tall heights and depths as scheduled.
- D. Cabinet Bodies: [5/8-inch (16 mm)] or [3/4-inch (19 mm)] composite-core panels, faced and edgebanded on exposed and semi-exposed surfaces.
- E. Facing: [Thermally fused laminate (TFL) / melamine] [high-pressure decorative laminate] [wood veneer], color and texture as specified.
- F. Edgebanding: [PVC] [3 mm profiled] [ABS] edgeband on doors, drawer fronts, and exposed panel edges; matching or contrasting as specified.
- G. Backs: [1/2-inch (13 mm)] minimum; provide continuous hanging rails for wall cabinets.
- H. Drawers: [Doweled multi-ply] [steel-sided] [dovetailed] boxes, with [full-extension] [soft-close] slides.
- I. Adjustable Shelves: Faced and edgebanded, adjustable on [5 mm pin] [twin] supports.
- J. Composite Panels: Comply with TSCA Title VI / CARB for formaldehyde. Particleboard: ANSI A208.1. MDF: ANSI A208.2. Hardwood plywood: ANSI/HPVA HP-1.

2.4 DOORS AND DRAWER FRONTS

- A. Type: [Slab / flat-panel] [five-piece] [_____], faced to match cabinet bodies.
- B. Overlay: [Full overlay.] [Reveal overlay.] [Inset.]
- C. Finish: [Factory finish integral to the facing.] [Applied finish to approved sample.]

2.5 CASEWORK HARDWARE

- A. General: Comply with ANSI/BHMA A156.9; commercial grade for the frequency of use indicated.
- B. Hinges: [Concealed European-style, adjustable, soft-close, minimum 110-degree opening.]
- C. Pulls: [Wire pulls] [bar pulls] [as scheduled]; finish [_____].
- D. Drawer Slides: [Full-extension, soft-close, minimum 100-lb (45 kg) class.] [Heavy-duty 150-lb (68 kg) class where indicated.]
- E. Locks: [Cam locks / keyed as scheduled], keyed [alike] [differently] [to Project keying].

- F. Shelf Supports, Levelers, and Grommets: Manufacturer's standard commercial-grade.

2.6 FABRICATION

- A. Fabricate casework to ANSI/KCMA A161.1, square, true, and rigid, with flush, aligned faces and consistent reveals.
- B. Factory-assemble modular units complete with hardware to the greatest extent practicable.
- C. Machine cutouts, ease exposed edges, and reinforce as required. Seal field-cut composite edges where exposed to moisture.
- D. Provide fillers, closures, and finished ends as required for a complete installation.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, blocking, dimensions, tolerances, moisture conditions, utility rough-ins, and adjacent construction before installation.
- B. Verify that blocking and backing are present, correctly located, and capable of supporting the casework and imposed loads without deflection.
- C. Do not begin installation until unsatisfactory conditions have been corrected. Beginning installation constitutes acceptance of substrates.

3.2 PREPARATION

- A. Verify and establish layout, benchmarks, and control lines. Coordinate with adjacent finishes.
- B. Coordinate concealed services, cutouts, and blocking before setting casework.

3.3 INSTALLATION

- A. Install casework in accordance with the approved shop drawings and the manufacturer's written instructions, level, plumb, and true, and within the installation tolerances of the referenced standard.
- B. Anchor casework securely to blocking and structure with concealed fasteners. Do not rely on gypsum board alone for attachment.
- C. Set base cabinets on levelers or shims; align faces and tops; join adjacent units with concealed connectors for flush, tight joints.
- D. Hang wall and tall cabinets from continuous hanging rails and blocking. Support countertops on properly leveled cabinets.
- E. Scribe fillers, finished ends, and closures neatly to adjacent construction. Provide accessible knee and toe clearances complying with the accessibility standard where indicated.
- F. Install hardware, adjust for smooth operation, and provide the specified keying.
- G. Cut openings accurately for sinks, fittings, devices, grommets, and penetrations; seal cut composite edges as required.

3.4 ADJUSTING

- A. Adjust doors, drawers, and hardware for smooth, quiet, aligned operation with consistent reveals and clearances.

3.5 FIELD QUALITY CONTROL

- A. Inspect the completed installation for alignment, level, plumb, secure anchorage, surface damage, joint uniformity, hardware operation, and conformance with the approved shop drawings and mockup.
- B. Replace casework that is warped, delaminated, chipped, scratched, stained, misaligned, or otherwise unacceptable.

3.6 CLEANING

- A. Clean exposed surfaces with manufacturer-approved nonabrasive products. Remove adhesive, markings, and construction residue without damaging finishes.
- B. Do not use abrasive pads, strong solvents, or cleaners not approved by the manufacturer.

3.7 PROTECTION

- A. Protect completed casework from impact, moisture, dust, staining, and damage by subsequent construction activities.
- B. Repair or replace damaged work before Substantial Completion.

END OF SECTION 12 32 00