

SECTION 12 35 30

RESIDENTIAL CASEWORK

(AAPG Residential Casework — Birch Plywood Boxes with Solid Wood Doors and Drawers)

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Factory-fabricated residential casework for kitchens, baths, and related residential interiors, including base cabinets, wall cabinets, tall and pantry cabinets, vanities, drawers, cabinet hardware, fillers, scribes, toe base, and installation accessories.
 - 1. [Base cabinets.] [Wall cabinets.] [Tall and pantry cabinets.] [Vanity cabinets.]
 - 2. [Laminate-faced birch plywood cabinet boxes.] [Wood-faced birch plywood cabinet boxes.]
 - 3. [Five-piece solid wood doors and drawer fronts.] [Slab solid wood doors and drawer fronts.]
 - 4. [Solid birch dovetailed drawer boxes.]
 - 5. Adjustable leveling legs and snap-on toe kicks.
 - 6. [Cabinet-mounted organizers and accessories.]
- B. Products Not Furnished or Installed Under This Section:
 - 1. Wood blocking, backing, and in-wall reinforcement for cabinet attachment.
 - 2. [Countertops specified in Section 12 36 00 or as scheduled.]
 - 3. [Plumbing fixtures, sinks, and fittings specified in Division 22.]
 - 4. [Appliances and appliance connections.]
 - 5. [Electrical devices, under-cabinet lighting, and data, specified in Divisions 26 and 27.]
 - 6. Field finishing of adjacent construction.

1.2 RELATED SECTIONS

- A. Section 06 10 00 - Rough Carpentry: Blocking and backing for cabinet support.
- B. Section 06 41 00 - Architectural Wood Casework.
- C. Section 09 21 16 - Gypsum Board Assemblies: Wall substrates receiving casework.
- D. Section 12 36 00 - Countertops.
- E. Division 22 - Plumbing: Sinks, fittings, and rough-in at casework.
- F. Divisions 26 and 27 - Electrical and Communications: Devices, lighting, 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, where referenced for solid wood and finishing.
- C. American National Standards Institute (ANSI):
 - 1. ANSI/HPVA HP-1 - Standard for Hardwood and Decorative Plywood (birch plywood).
 - 2. ANSI A208.1 - Particleboard, and ANSI A208.2 - MDF, where used.
- D. National Electrical Manufacturers Association (NEMA):
 - 1. NEMA LD 3 - High-Pressure Decorative Laminates (laminate box facing).
- E. Builders Hardware Manufacturers Association (BHMA):
 - 1. ANSI/BHMA A156.9 - Cabinet Hardware.
- F. 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.
- G. Forest Stewardship Council (FSC) chain-of-custody certification, where required by the Project.
- H. ASTM E84 - Surface Burning Characteristics of Building Materials, where required.

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 cabinet type, describing box construction and facing, door and drawer-front construction, drawer boxes, finishes, edge treatments, hardware, and accessories.
- B. Shop Drawings: Submit plans, elevations, and sections showing cabinet layout, dimensions, cabinet types, box material, door style, finishes, hardware, filler and scribe conditions, countertop interface, cutouts, blocking, and anchorage.
- C. Samples:
 - 1. Door Samples: One five-piece door and one slab door, showing species, profile, and finish.
 - 2. Box Material Samples: Laminate-faced birch plywood and wood-faced birch plywood.
 - 3. Drawer Box Sample: Solid birch, dovetailed, showing joinery and finish.
 - 4. Finish Samples: Showing the specified transparent or opaque finish, stain, and sheen.
 - 5. Hardware Samples: Blum hinge and Blum drawer slide, and each pull or knob specified.
- D. Certificates and Test Reports:
 - 1. ANSI/KCMA A161.1 certification seal, where required by the Project.
 - 2. Composite-panel formaldehyde compliance documentation (TSCA Title VI / CARB).
 - 3. FSC chain-of-custody documentation, where required by the Project.
 - 4. Surface burning characteristics (ASTM E84), where required.
- E. Closeout Submittals: Submit cleaning and maintenance instructions, warranty documentation, and a record of approved species, finishes, hardware, and product codes.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Manufacturer regularly engaged in the production of residential 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 manufactured to and complying with ANSI/KCMA A161.1, [and bearing the KCMA certification seal].
- D. Grade: Provide solid wood doors and drawer fronts complying with the AWI Architectural Woodwork Standards, [Premium] [Custom] Grade, where referenced.
- E. Composite Panels: Comply with TSCA Title VI / CARB for formaldehyde. Hardwood plywood: ANSI/HPVA HP-1.
- F. Single-Source Responsibility: Provide casework, hardware, and accessories under single-source responsibility.
- G. Mockup: [Provide one full-size base cabinet and one wall cabinet, including door, drawer, 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 [five (5) years] [the limited lifetime of the original purchaser] from the date of Substantial Completion. Natural variation in wood color and grain is not a defect.

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 Residential 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 (full-access).] [Face-frame.]
- C. Exposed and Semi-Exposed Surfaces: [Natural birch] [laminated], as selected. Concealed surfaces: manufacturer's standard.
- D. Composite Panels: Comply with TSCA Title VI / CARB for formaldehyde. Hardwood plywood: ANSI/HPVA HP-1.
- E. Certified Wood: FSC-certified, where required by the Project.

2.4 CABINET BOXES

- A. Material: Birch plywood (veneer-core), complying with ANSI/HPVA HP-1.
- B. Box Facing (select one per the Schedule):
 - 1. Laminate-Faced Birch Plywood: Birch plywood with a thermally fused laminate or melamine interior face, for durable, cleanable, low-maintenance interiors.
 - 2. Wood-Faced Birch Plywood: Birch plywood with a birch veneer face, for a transparent-finished natural wood interior.
- C. Ends, Tops, and Bottoms: [3/4 inch (19 mm)] birch plywood, edgebanded at exposed edges.
- D. Backs: [1/2 inch (13 mm)] [3/4 inch (19 mm)] birch plywood, with continuous hanging rails at wall cabinets.
- E. Adjustable Shelves: [3/4 inch (19 mm)] birch plywood, edgebanded, on [5 mm pin] supports.
- F. Edgebanding: [Matching wood edgeband] [PVC], applied to exposed plywood edges.

2.5 DOORS AND DRAWER FRONTS

- A. Type (select per the Schedule): [Five-piece solid wood — stile-and-rail construction with cope-and-stick joinery and a floating center panel.] [Slab solid wood.]
- B. Material: Solid wood; species [Birch] [Hard Maple] [Red Oak] [White Oak] [Cherry] [Walnut] [Paint-grade].
- C. Panel Profile (Five-Piece): [Raised panel.] [Flat / Shaker (square-edge recessed panel).]
- D. Overlay: [Full overlay.] [Inset.] [Reveal / partial overlay.]
- E. Finish: [Transparent stain and clear finish.] [Opaque painted finish.] As specified in Article 2.8.

2.6 DRAWER BOXES

- A. Construction: Solid birch drawer boxes, dovetailed at front and back, with [1/2 inch (13 mm)] solid birch sides, a captured [1/4 inch (6 mm)] plywood bottom, and sanded, clear-sealed surfaces.
- B. Slides: Blum concealed undermount, as specified in Article 2.7.

2.7 CABINET HARDWARE

- A. Basis-of-Design Hardware Manufacturer: Blum Inc. Provide Blum hardware as specified; comparable products of other manufacturers are not permitted where Blum is named.
- B. Hinges: Blum concealed, self-closing / soft-close (BLUMOTION), heavy-duty, adjustable, [clip-on] [110-degree] [wide-angle where required], complying with ANSI/BHMA A156.9.
- C. Drawer and Rollout Slides: Blum concealed undermount, self-closing / soft-close (BLUMOTION), heavy-duty, full-extension, [minimum 100-lb (45 kg) class] — [TANDEM] [MOVENTO].
- D. Pulls and Knobs: [As scheduled]; finish [_____].
- E. Shelf Supports, Levelers, and Organizers: Manufacturer's standard; [Blum ORGA-LINE or equivalent inserts where scheduled].

2.8 FINISHING

- A. Transparent Finish: Factory-applied AWS-compliant [catalyzed conversion varnish] [catalyzed lacquer] system; sheen [satin] [semi-gloss]; stain [to approved sample].
- B. Opaque Finish: Factory-applied [catalyzed pigmented] opaque finish to approved sample and sheen.
- C. Interiors: [Natural birch, clear-sealed.] [Laminate / melamine face.]

2.9 BASE AND SUPPORT

- A. Leveling Legs: All cabinets are mounted on adjustable leveling legs, 4-1/4 inches (108 mm) nominal height, providing independent level adjustment and load support at each cabinet.
- B. Toe Kicks: Provide snap-on toe kick panels that clip to the leveling legs, in [matching] [contrasting] finish, removable for access to concealed services and leg adjustment.

2.10 FABRICATION

- A. Fabricate casework to ANSI/KCMA A161.1, square, true, and rigid, with flush, aligned faces and consistent reveals.
- B. Factory-assemble cabinets complete with hardware to the greatest extent practicable.
- C. Sequence and balance solid wood doors and fronts for a uniform appearance. Machine cutouts, ease exposed edges, and seal field-cut plywood edges where exposed to moisture.
- D. Provide fillers, scribes, 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 plywood 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 35 30