

**SECTION 06 1000
ROUGH CARPENTRY**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Fire retardant treated wood materials.
- B. Communications and electrical room mounting boards.
- C. Concealed wood blocking, nailers, and supports.
- D. Miscellaneous wood nailers, furring, and grounds.

1.02 REFERENCE STANDARDS

- A. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware ; 2009.
- B. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials ; 2014.
- C. AWPA U1 - Use Category System: User Specification for Treated Wood; American Wood Protection Association ; 2012.
- D. PS 20 - American Softwood Lumber Standard; National Institute of Standards and Technology, Department of Commerce ; 2010.

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Manufacturer's Certificate: Certify that wood products supplied for rough carpentry meet or exceed specified requirements.
- C. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.
- B. Fire Retardant Treated Wood: Prevent exposure to precipitation during shipping, storage, or installation.

1.05 WARRANTY

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a five year period after Date of Substantial Completion.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

- A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.
 - 1. If no species is specified, provide any species graded by the agency specified; if no grading agency is specified, provide lumber graded by any grading agency meeting the specified requirements.
 - 2. Grading Agency: Any grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee (www.alsc.org) and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.
- B. Lumber fabricated from old growth timber is not permitted.

2.02 DIMENSION LUMBER FOR CONCEALED APPLICATIONS

- A. Sizes: Nominal sizes as indicated on drawings, S4S.
- B. Moisture Content: S-dry or MC19.

- C. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:
 - 1. Lumber: S4S, No. 2 or Standard Grade.
 - 2. Boards: Standard or No. 3.

2.03 CONSTRUCTION PANELS

- A. Communications and Electrical Room Mounting Boards: PS 1 A-D plywood, or medium density fiberboard; 3/4 inch (19 mm) thick; flame spread index of 25 or less, smoke developed index of 450 or less, when tested in accordance with ASTM E84.

2.04 ACCESSORIES

- A. Fasteners and Anchors:
 - 1. Metal and Finish: Hot-dipped galvanized steel per ASTM A 153/A 153M for high humidity and preservative-treated wood locations, unfinished steel elsewhere.
 - 2. Drywall Screws: Bugle head, hardened steel, power driven type, length three times thickness of sheathing.
 - 3. Anchors: Toggle bolt type for anchorage to hollow masonry.

2.05 FACTORY WOOD TREATMENT

- A. Treated Lumber and Plywood: Comply with requirements of AWWA U1 - Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications.
 - 1. Fire-Retardant Treated Wood: Mark each piece of wood with producer's stamp indicating compliance with specified requirements.
- B. Fire Retardant Treatment:
 - 1. Manufacturers:
 - a. Arch Wood Protection, Inc : www.wolmanizedwood.com.
 - b. Hoover Treated Wood Products, Inc : www.frtw.com.
 - c. Substitutions: See Section 01 6000 - Product Requirements.

PART 3 EXECUTION

3.01 PREPARATION

- A. Coordinate installation of rough carpentry members specified in other sections.

3.02 INSTALLATION - GENERAL

- A. Select material sizes to minimize waste.
- B. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including: shims, bracing, and blocking.
- C. Where treated wood is used on interior, provide temporary ventilation during and immediately after installation sufficient to remove indoor air contaminants.

3.03 BLOCKING, NAILERS, AND SUPPORTS

- A. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.
- B. In metal stud walls, provide continuous blocking around door and window openings for anchorage of frames, securely attached to stud framing.
- C. In walls, provide blocking attached to studs as backing and support for wall-mounted items, unless item can be securely fastened to two or more studs or other method of support is explicitly indicated.
- D. Where ceiling-mounting is indicated, provide blocking and supplementary supports above ceiling, unless other method of support is explicitly indicated.

3.04 INSTALLATION OF CONSTRUCTION PANELS

- A. Communications and Electrical Room Mounting Boards: Secure with screws to studs with edges over firm bearing; space fasteners at maximum 24 inches (610 mm) on center on all edges and into studs in field of board.

1. At fire-rated walls, install board over wall board indicated as part of the fire-rated assembly.
2. Where boards are indicated as full floor-to-ceiling height, install with long edge of board parallel to studs.
3. Install adjacent boards without gaps.

3.05 TOLERANCES

- A. Framing Members: 1/4 inch (6 mm) from true position, maximum.
- B. Variation from Plane (Other than Floors): 1/4 inch in 10 feet (2 mm/m) maximum, and 1/4 inch in 30 feet (7 mm in 10 m) maximum.

3.06 CLEANING

- A. Waste Disposal: Comply with the requirements of Section 01 7419.
 1. Comply with applicable regulations.
 2. Do not burn scrap on project site.
 3. Do not burn scraps that have been pressure treated.
 4. Do not send materials treated with pentachlorophenol, CCA, or ACA to co-generation facilities or "waste-to-energy" facilities.
- B. Do not leave any wood, shavings, sawdust, etc. on the ground or buried in fill.
- C. Prevent sawdust and wood shavings from entering the storm drainage system.

END OF SECTION 06 1000

SECTION 06 4100
ARCHITECTURAL WOOD CASEWORK

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Specially fabricated cabinet units.
- B. Countertops.
- C. Cabinet hardware.
- D. Factory finishing.
- E. Preparation for installing utilities.

1.02 REFERENCE STANDARDS

- A. BHMA A156.9 - American National Standard for Cabinet Hardware; 2010.
- B. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards ; 2014.
- C. BHMA A156.9 - American National Standard for Cabinet Hardware; Builders Hardware Manufacturers Association ; 2010 (ANSI/BHMA A156.9).

1.03 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meeting: Convene a preinstallation meeting not less than one week before starting work of this section; require attendance by all affected installers.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details, and accessories.
 - 1. Minimum Scale of Detail Drawings: 1-1/2 inch to 1 foot (1:8).
 - 2. Provide the information required by AWI/AWMAC/WI (AWS).
- C. Product Data: Provide data for hardware accessories.
- D. Samples: Submit actual samples of architectural cabinet construction, minimum 12 inches (300 mm) square, illustrating proposed cabinet, countertop, and shelf unit substrate and finish.
- E. Samples: Submit actual sample items of proposed pulls, hinges, shelf standards, and locksets, demonstrating hardware design, quality, and finish.

1.05 QUALITY ASSURANCE

- A. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum five years of documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Protect units from moisture damage.

1.07 FIELD CONDITIONS

- A. During and after installation of custom cabinets, maintain temperature and humidity conditions in building spaces at same levels planned for occupancy.

PART 2 PRODUCTS

2.01 CABINETS

- A. Quality Grade: Unless otherwise indicated provide products of quality specified by AWI/AWMAC/WI (AWS) for Premium Grade.
- B. Plastic Laminate Faced Cabinets: Custom grade.
- C. Cabinets :
 - 1. Finish - Exposed Exterior Surfaces: Decorative laminate.
 - 2. Finish - Exposed Interior Surfaces: Decorative laminate.
 - 3. Finish - Concealed Surfaces: Manufacturer's option.

4. Door and Drawer Front Edge Profiles: Square edge with laminate edge.
5. Door and Drawer Front Retention Profiles: Fixed panel.
6. Casework Construction Type: Type B - Face-frame.
7. Interface Style for Cabinet and Door: Style 1 - Overlay; .
8. Cabinet Design Series: As indicated on drawings.
9. Adjustable Shelf Loading: 50 lbs. per sq. ft..
10. Cabinet Style: Flush overlay.
11. Cabinet Doors and Drawer Fronts: Flush style.
12. Drawer Side Construction: Multiple-dovetailed.
13. Drawer Construction Technique: Dovetail joints.

2.02 WOOD-BASED COMPONENTS

- A. Wood fabricated from old growth timber is not permitted.

2.03 LAMINATE MATERIALS

- A. Manufacturers:
 1. Formica Corporation : www.formica.com.
 2. Panolam Industries International, Inc\Nevamar : www.nevamar.com.
 3. Wilsonart, LLC : www.wilsonart.com.
 4. Substitutions: See Section 01 6000 - Product Requirements.
- B. Provide specific types as scheduled.

2.04 COUNTERTOPS

- A. Plastic Laminate Countertops: Medium density fiberboard substrate covered with HPDL, conventionally fabricated and self-edge banded.
- B. Solid Surface Fabrication:
 1. Manufacturers: Corian surfaces from the DuPont Company.
 - a.
 2. Materials:
 - a. Solid polymer components
 - 1) 1. Cast, nonporous, filled polymer, not coated, laminated or of composite construction with through body colors meeting ANSI Z124.3 or ANSI Z124.6, having minimum physical and performance properties specified.
 - 2) 2. Superficial damage to a depth of 0.010 inch (.25 mm) shall be repairable by sanding and/or polishing.
 - b. Thickness:
 - 1) 2. 1/2 inch
 - c. Edge treatment: PVC edge.
 - d. Color: As indicated in the Drawings.
 - e. Backsplash: Integral.

2.05 ACCESSORIES

- A. Adhesive: Type recommended by fabricator to suit application.
- B. Fasteners: Size and type to suit application.
- C. Bolts, Nuts, Washers, Lags, Pins, and Screws: Of size and type to suit application; galvanized or chrome-plated finish in concealed locations and stainless steel or chrome-plated finish in exposed locations.
- D. Concealed Joint Fasteners: Threaded steel.
- E. Grommets: Standard plastic, painted metal, or rubber grommets for cut-outs, in color to match adjacent surface.

2.06 HARDWARE

- A. Hardware: BHMA A156.9, types as recommended by fabricator for quality grade specified.

- B. Adjustable Shelf Supports: Standard side-mounted system using recessed metal shelf standards and coordinated self rests, satin chrome finish, for nominal 1 inch (25 mm) spacing adjustments.
- C. Drawer and Door Pulls: As indicated on Drawings.
 - 1. Product: P13101C-SN-C (Ethan Pull) manufactured by Liberty Hardware.
- D. Cabinet Locks: Keyed cylinder, two keys per lock, steel with satin finish.
 - 1. Provide stamped serial number on keys and corresponding locks. Provide master key to open all locks.
- E. Catches: Magnetic.
- F. Drawer Slides:
 - 1. Type: 3/4 extension.
 - 2. Static Load Capacity: Commercial grade.
 - 3. Mounting: Side mounted.
 - 4. Stops: Integral type.
 - 5. Features: Provide self closing/stay closed type.
 - 6. Products:
 - a. Julius Blum, Inc: www.blum.com.
- G. Hinges: Concealed 120 degree straight arm type, steel with satin finish.
 - 1. Products:
 - a. Julius Blum, Inc : www.blum.com.
 - b. Substitutions: Or approved equal.

2.07 FABRICATION

- A. Assembly: Shop assemble cabinets for delivery to site in units easily handled and to permit passage through building openings.
- B. Edging: Fit shelves, doors, and exposed edges with specified edging. Do not use more than one piece for any single length.
- C. Fitting: When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide matching trim for scribing and site cutting.
- D. Plastic Laminate: Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit corners and joints hairline; secure with concealed fasteners. Slightly bevel arises. Locate counter butt joints minimum 2 feet (600 mm) from sink cut-outs.
 - 1. Cap exposed plastic laminate finish edges with material of same finish and pattern.
- E. Mechanically fasten back splash to countertops as recommended by laminate manufacturer at 16 inches (400 mm) on center.
- F. Provide cutouts for plumbing fixtures. Verify locations of cutouts from on-site dimensions. Prime paint cut edges.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify adequacy of backing and support framing.
- B. Verify location and sizes of utility rough-in associated with work of this section.

3.02 INSTALLATION

- A. Set and secure custom cabinets in place, assuring that they are rigid, plumb, and level.
- B. Use fixture attachments in concealed locations for wall mounted components.
- C. Use concealed joint fasteners to align and secure adjoining cabinet units.
- D. Carefully scribe casework abutting other components, with maximum gaps of 1/64 inch (____ mm). Do not use additional overlay trim for this purpose.
- E. Secure cabinets to floor using appropriate angles and anchorages.

- F. Countersink anchorage devices at exposed locations. Conceal with solid wood plugs of species to match surrounding wood; finish flush with surrounding surfaces.

3.03 CLEANING

- A. Clean casework, counters, shelves, hardware, fittings, and fixtures.

END OF SECTION 06 4100