

**SECTION 06 1000**  
**ROUGH CARPENTRY**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Roofing nailers.
- B. Preservative treated wood materials.
- C. Fire retardant treated wood materials.
- D. Communications and electrical room mounting boards.
- E. Concealed wood blocking, nailers, and supports.

**1.02 REFERENCE STANDARDS**

- A. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
- B. ASTM D2898 - Standard Test Methods for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing.
- C. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- D. AWPA U1 - Use Category System: User Specification for Treated Wood.
- E. PS 2 - Performance Standard for Wood-Based Structural-Use Panels.
- F. PS 20 - American Softwood Lumber Standard.

**1.03 SUBMITTALS**

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide technical data on insulated sheathing, wood preservative materials, and application instructions.
- C. Manufacturer's Certificate: Certify that wood products supplied for rough carpentry meet or exceed specified requirements.

**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.

**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](http://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. Stud Framing (2 by 2 through 2 by 6 ):
  - 1. Species: Any allowed under referenced grading rules.
  - 2. Grade: No. 2.
- D. 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 thick; flame spread index of 25 or less, smoke developed index of 450 or less, when tested in accordance with ASTM E84.
- B. Other Applications:
  - 1. Plywood Exposed to View But Not Exposed to Weather: PS 1, A-D, or better.

### 2.04 ACCESSORIES

- A. Fasteners and Anchors:
  - 1. Metal and Finish: Hot-dipped galvanized steel complying with ASTM A153/A153M 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.

### 2.05 FACTORY WOOD TREATMENT

- A. Treated Lumber and Plywood: Comply with requirements of AWPA 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.
  - 2. Preservative-Treated Wood: Provide lumber and plywood marked or stamped by an ALSC-accredited testing agency, certifying level and type of treatment in accordance with AWPA standards.
- B. Fire Retardant Treatment:
  - 1. Manufacturers:
    - a. Arch Wood Protection, Inc; \_\_\_\_: [www.wolmanizedwood.com](http://www.wolmanizedwood.com).
    - b. Hoover Treated Wood Products, Inc; \_\_\_\_: [www.frtw.com](http://www.frtw.com).
    - c. Substitutions: See Section 01 6000 - Product Requirements.
  - 2. Exterior Type: AWPA U1, Category UCFB, Commodity Specification H, chemically treated and pressure impregnated; capable of providing a maximum flame spread index of 25 when tested in accordance with ASTM E84, with no evidence of significant combustion when test is extended for an additional 20 minutes both before and after accelerated weathering test performed in accordance with ASTM D2898.
    - a. Kiln dry wood after treatment to a maximum moisture content of 19 percent for lumber and 15 percent for plywood.
    - b. Do not use treated wood in direct contact with the ground.
  - 3. Interior Type A: AWPA U1, Use Category UCFA, Commodity Specification H, low temperature (low hygroscopic) type, chemically treated and pressure impregnated; capable of providing a maximum flame spread index of 25 when tested in accordance with ASTM E84, with no evidence of significant combustion when test is extended for an additional 20 minutes.
    - a. Kiln dry wood after treatment to a maximum moisture content of 19 percent for lumber and 15 percent for plywood.
    - b. Treat rough carpentry items as indicated .

- c. Do not use treated wood in applications exposed to weather or where the wood may become wet.
- C. Preservative Treatment:
  1. Preservative Pressure Treatment of Lumber Above Grade: AWWPA U1, Use Category UC3B, Commodity Specification A using waterborne preservative.
    - a. Kiln dry lumber after treatment to maximum moisture content of 19 percent.
    - b. Treat lumber exposed to weather.
    - c. Treat lumber in contact with masonry or concrete.

## **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 framed assemblies that have concealed spaces, provide solid wood fireblocking as required by applicable local code, to close concealed draft openings between floors and between top story and roof/attic space; other material acceptable to code authorities may be used in lieu of solid wood blocking.
- C. In metal stud walls, provide continuous blocking around door and window openings for anchorage of frames, securely attached to stud framing.
- D. 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.
- E. Where ceiling-mounting is indicated, provide blocking and supplementary supports above ceiling, unless other method of support is explicitly indicated.
- F. Provide the following specific non-structural framing and blocking:
  1. Cabinets and shelf supports.
  2. Wall brackets.
  3. Handrails.
  4. Grab bars.
  5. Towel and bath accessories.
  6. Wall-mounted door stops.
  7. Chalkboards and marker boards.
  8. Wall paneling and trim.
  9. Joints of rigid wall coverings that occur between studs.
  10. Television support brackets.

### **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 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.
4. Size: 48 by 96 inches, installed horizontally at ceiling height.

### **3.05 TOLERANCES**

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

### **3.06 CLEANING**

- A. Waste Disposal: Comply with the requirements of Section 01 7419 - Construction Waste Management and Disposal.
  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**

**SECTION 06 2614**  
**MINERAL PROFILE PANELING**

**GENERAL**

**1.01 SUMMARY**

- A. Section Includes: Light weight composite mineral profile paneling and seam finishing materials to create a monolithic sculptured wall surface.
- B. Related Requirements:
  - 1. 09 29 00-Gypsum Board: Substrate and seam finishing.
- C. Abbreviations and Acronyms:
  - 1. ASTM American Society for Testing and Materials.
  - 2. GA Gypsum Association.
- D. Reference Standards:

**1.02 ASTM D 256 STANDARD TEST METHODS FOR DETERMINING THE IZOD PENDULUM IMPACT RESISTANCE OF PLASTICS.**

**1.03 ASTM D 696 STANDARD TEST METHOD FOR COEFFICIENT OF LINEAR THERMAL EXPANSION OF PLASTICS BETWEEN -30°C AND 30°C WITH A VITREOUS SILICA DILATOMETER.**

**1.04 ASTM E 84 STANDARD TEST METHOD FOR SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS.**

**1.05 GA-214 RECOMMENDED LEVELS OF GYPSUM BOARD FINISH.**

**1.06 ADMINISTRATIVE REQUIREMENTS**

- A. Pre-installation Meetings:
  - 1. Convene meeting at project site within one week of scheduled start of installation with representatives of the following in attendance: Owner, Architect, General Contractor, Installer, Finisher, and Painter.
  - 2. Review substrate conditions, requirements of related work, installation instructions, seam finishing, and painting instructions, storage and handling procedures, and protection measures.

**1.07 ACTION SUBMITTALS**

- A. Product Data: Each product specified.
- B. Project List: Minimum 5 previous completed ModularArts, Inc. installations or 5 installations of similar materials and complexity. Include contact name and e-mail address or telephone number for each project.
- C. Shop Drawings: Show standard and project specific details including termination at adjacent surfaces.
- D. Samples: Minimum 15 by 15 inch panel of specified design(s).

**1.08 INFORMATIONAL SUBMITTALS**

- A. Manufacturer's installation instructions.
- B. Qualification Statements: Proof of manufacturer, installer, and finisher qualifications.

**1.09 QUALITY ASSURANCE**

- A. Qualifications:
  - 1. Manufacturer: Minimum five years experience in producing mineral profile paneling.
  - 2. Installer: Minimum three years experience in finish carpentry/architectural woodwork installation.
  - 3. Finisher: Minimum three years experience in executing Level 5 finish in accordance with GA-214.

- B. Field Samples:
  1. Provide in a location selected by Architect showing representative sample of installed product including finished seam.
  2. Minimum Size: 8 feet by 8 feet.
  3. Approved field samples may remain as part of completed Work.

**1.10 DELIVERY, STORAGE, AND HANDLING**

- A. Storage and Handling Requirements:
  1. Store panels in fully enclosed space, protected against damage from moisture, direct sunlight, and surface contamination.
  2. Store panels vertically, in shipping crates, until ready to be installed. Loosen crate lids to allow for venting. Do not stack or lean against walls.
  3. Store panels in area of installation minimum 24 hours prior to installation.
- B. Packaging Waste Management: 100 percent of materials used to package components of this section shall be recyclable.

**1.11 FIELD CONDITIONS**

- A. Ambient Conditions:
  1. HVAC: Operate HVAC system to maintain occupancy level temperature and relative humidity conditions (35 to 67 percent) in the area of installation from 24 hours prior to delivery of panels to the installation area through remainder of construction period.
  2. Lighting: Permanent project lighting, including any special lighting used to highlight the profiled panels, must be operational prior to seam finishing.

**1.12 WARRANTY**

- A. Manufacturer Warranty: Provide manufacturer’s standard limited warranty.

**1.13 PRODUCTS**

**1.14 MANUFACTURER**

- A. Modular Arts, Inc. [www.modulararts.com](http://www.modulararts.com)
- B. Substitution Limitations: None permitted.

**1.15 COMPONENTS**

- A. Profile Panel: Smooth surface mineral composite panel with light weight plant-based foam back.
  1. Size: 32 by 32 by 1.5 inch maximum profile relief.
  2. Physical Properties:
 

a. Izod Impact Strength: ASTM D 256	9.4
ft-lb/in <sup>2</sup>	
b. Thermal Expansion: ASTM D 696	
3.8x10 <sup>-7</sup> in/in °F.	
c. Compressive Strength: ASTM D 696	2.3
ksi.	
d. Flame Spread Index: ASTM E 84	0
e. Smoke Development Index: ASTM E 84	50
f. Weight (for all designs excluding MUDD formerly YUMA)	1.5 psf
g. Weight (for MUDD design only)	3
psf	
  3. Design: **BIZBEE deluxe** ©; vertical orientation.
  4. Note: Modular Arts designs are protected by registered copyrights and may not be duplicated. Attempts to copy or closely mimic Modular Arts original designs will be considered a violation of intellectual property rights and will be duly pursued.

- B. Installation Kit: Item quantities in parenthesis denote quantities for (Small Kit-up to 50 panels/Large Kit-up to 100 panels). (Not applicable to EZ-Seam™ Designs.)
  - 1. Dry Mix Joint Compound: One 18 lb bag SHEETROCK® brand EASY SAND™ 45, or BEADDEX® brand SILVER SET™ 40.
  - 2. Acrylic Fortifier: (One/Two) quart THORO® ACRYL 60®.
  - 3. Construction Adhesive: (12/24) 10.2 oz tubes PL® Polyurethane Premium Construction Adhesive.
  - 4. Primer Sealer: (3/6) gal GLIDDEN® GRIPPER® WHITE PRIMER/SEALER GL-3210-1200.
  - 5. Countersink Drill Bit with Depth Stop-Collar: (One/Two) No. 7.
  - 6. Flexible Spreader: (One/Two) MUDTOOLS SMT-Y2
  - 7. Sandpaper: (15/30) sheets No-Load 220G, (10/20) sheets No-Load 150G.
  - 8. Plastic Container: One 100 oz.
  - 9. Measuring Cup: One 8 oz.

#### **1.16 ACCESSORIES**

- A. Anchors: 30 lb. self-drilling, drywall anchor.
- B. Screws: Coarse thread, drywall type, length as required by panel design and in accordance with Manufacturer's Installation Instructions.

#### **1.17 SOURCE QUALITY CONTROL**

- A. Fabrication Tolerances:
  - 1. Dimensions, length and width: ± 1/16 inch.
  - 2. Thickness: ± 1/16 inch.
  - 3. Weight: ± 1/2 lb.

#### **1.18 EXECUTION**

#### **1.19 EXAMINATION**

- A. Examine substrates upon which profile paneling will be installed.
  - 1. Verify that substrate is a material listed as an acceptable substrate by the profile paneling manufacturer.
- B. Verify that permanent project lighting is in place and operational prior to start of seam finishing.
- C. Coordinate with responsible entity to correct unsatisfactory conditions.
- D. Commencement of work by installer is acceptance of substrate conditions.

#### **1.20 INSTALLATION**

- A. Install profile paneling in accordance with Manufacturer's Installation Instructions except that seam finishing shall be performed under Section 09 29 00-Gypsum Board, and sealing and painting shall be performed under Section 09 91 23-Interior Painting.

#### **1.21 CLEANING**

- A. Waste Management: Refer to Section 01 74 00 ? Cleaning and Waste Management.

#### **1.22 PROTECTION**

- A. Protect finished work from damage during remainder of construction period.

**END OF SECTION**

**SECTION 06 4100**  
**ARCHITECTURAL WOOD CASEWORK**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Specially fabricated cabinet units.
- B. Countertops.
- C. Cabinet hardware.

**1.02 REFERENCE STANDARDS**

- A. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards.
- B. AWMAC/WI (NAAWS) - North American Architectural Woodwork Standards, U.S. Version 3.0.
- C. BHMA A156.9 - American National Standard for Cabinet Hardware.

**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. Provide the information required by AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS).
  - 2. Include certification program label.
- C. Product Data: Provide data for hardware accessories.
- D. 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 Standard: Custom Grade, in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), unless noted otherwise.
- 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: Melamine.
  - 4. Door and Drawer Front Edge Profiles: Square edge with thin applied band.
  - 5. Cabinet Design Series: As indicated on drawings.
  - 6. Adjustable Shelf Loading: 50 lbs. per sq. ft.
    - a. Deflection: L/144.



7. Cabinet Style: Flush overlay.
8. Cabinet Doors and Drawer Fronts: Flush style.
9. Drawer Side Construction: Multiple-dovetailed.

## **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](http://www.formica.com).
  2. Panolam Industries International, Inc; Nevamar; \_\_\_\_\_: [www.nevamar.com](http://www.nevamar.com).
  3. Wilsonart; \_\_\_\_\_: [www.wilsonart.com](http://www.wilsonart.com).
  4. Substitutions: See Section 01 6000 - Product Requirements.

## **2.04 COUNTERTOPS**

- A. Plastic Laminate Countertops: Medium density fiberboard substrate covered with HPDL, conventionally fabricated and self-edge banded.
- B. Quartz Countertops: Specified in Section 12 3600

## **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 back-mounted system using surface mounted metal shelf standards and coordinated cantilevered shelf brackets, satin chrome finish, for nominal 1 inch spacing adjustments.
- C. Drawer and Door Pulls: \_\_\_\_\_.
  1. Product: 5-1/16" CTC Bar Pulls manufactured by Amerock.
- D. Cabinet Locks: Keyed cylinder, two keys per lock, master keyed, steel with chrome finish.
- E. Drawer Slides:
  1. Type: Extension types as indicated.
  2. Static Load Capacity: Commercial grade.
  3. Mounting: Side mounted.
  4. Stops: Integral type.
  5. Features: Provide self closing/stay closed type.
- F. Hinges: European style concealed self-closing type, steel with polished finish.
  1. Manufacturers:
    - a. Blum, Inc; \_\_\_\_\_: [www.blum.com](http://www.blum.com).
    - b. Substitutions: See Section 01 6000 - Product Requirements.

## **2.07 FABRICATION**

- A. Assembly: Shop assemble cabinets for delivery to site in units easily handled and to permit passage through building openings.

- B. Fitting: When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide matching trim for scribing and site cutting.
- C. 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 from sink cut-outs.
- D. 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 1/32 inch. 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.
- G. Site glaze glass materials using the Interior Dry method specified in Section 08 8000.

#### **3.03 ADJUSTING**

- A. Adjust installed work.
- B. Adjust moving or operating parts to function smoothly and correctly.

#### **3.04 CLEANING**

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

**END OF SECTION**