

**SECTION 06100**  
**ROUGH CARPENTRY**

**PART 1 - GENERAL**

1.01 RELATED DOCUMENTS

- A. Drawings and General Provisions of contract, including General Conditions and Division One, Specification Sections, apply to the work of this Section.

1.02 REFERENCE STANDARDS

- A. FS TT-W-571 - Wood Preservation: Treating Practices.
- B. APA - American Plywood Association.
- C. ASTM A 153 – Standard Specification for Zinc Coating (Hot Dip) on Iron and Steel Hardware.
- D. International Code Council (ICC); International Building Code.

1.03 RELATED WORK

- A. Temporary, rough framed exterior weather enclosure for doors, windows and other openings are covered under Section 01520, Construction Aids.
- B. Bolts and other fasteners: see Section 05500, Metal Fabrication.
- C. Architectural Woodwork: Section 06400.

1.04 GRADING RULES

- A. Grading of lumber of various species in accordance with American Softwood Lumber Standard PS 20-15, U.S. Department of Commerce (National Grading Rule).
- B. Each piece of yard, structural lumber shall bear official grade mark of appropriate inspection bureau or association.

**PART 2 - PRODUCTS**

2.01 WOOD

- A. Exterior blocking: No. 2 dimension Southern Yellow Pine, preservative treated.

- B. Interior grounds, nailers, furring and blocking: No. 2 dimension Southern Yellow Pine, fire-retardant treated.
- C. Interior Plywood: 3/4" thick APA INT BC fire retardant treated for Main Communications Room, Telephone, CATV and Electric Closets, and other utility spaces shown on the Drawings. Panels shall be 8'-0" tall.
- D. Exterior Plywood plywood sheathing: 1/2" thick exposure CD fire treated unless noted otherwise.

## 2.02 LUMBER SIZE AND MOISTURE CONTENT

- A. Lumber: Surfaced 4 sides (S4S).
- B. Board, dimension lumber: Either air or kiln dried with moisture content in accordance with National Grading Rule, but not exceeding 19 percent for dimension lumber and board lumber 8 inch or less in width.

## 2.03 PRESERVATIVE TREATMENT

- A. Lumber in contact with masonry, concrete, earth or roof cants: Preservative treated.
- B. Preservative treat by pressure method; Alkaline Copper Quaternary (ACQ). Preservative treatments containing arsenic or chromium shall not be acceptable. "Naturewood" by Osmose, Inc. or other products meeting the requirements of the ICC shall be acceptable.
  - 1. Certain metal products may corrode when in direct contact with ACQ. Use only hot dipped galvanized or other fasteners recommended by the hardware manufacturers for direct contact with ACQ. Hot dipped galvanized fasteners shall comply with ASTM A153.
- C. Season treat lumber after preservative treatment to moisture content specified for nontreated lumber.
- D. Label treated lumber except furring and grounds with name of treater and type of preservative used.
- E. Complete fabrication of treated items prior to treatment, where possible. If cut after treatment, coat cut surfaces with heavy brush coat of same chemical used for treatment. Inspect each piece of lumber after drying and discard damaged or defective pieces.

## 2.04 FIRE-RETARDANT TREATMENT

- A. Fire-retardant treated lumber or plywood: AWPA standards for pressure impregnation with fire-retardant chemicals to achieve flame spread rating of not more than 25; UL Test 723, ASTM E84 or NFPA Test 355.
- B. Provide UL label on each piece of fire-retardant treated item.
- C. Season treat items after fire retardant treatment to moisture content specified for non-treated items.

## 2.05 MISCELLANEOUS MATERIALS

- A. Provide fasteners and anchorages of size and type as indicated and recommended by applicable standards, complying with federal specifications for nails, screws, staples, bolts, nuts, washers and anchoring devices.

## PART 3 - EXECUTION

### 3.01 INSTALLATION GENERAL

- A. Frame, fit closely, set framing accurately to required lines levels. Secure rigidly in place. Size blocking to provide a true surface for finishing. Provide special blocking for construction not indicated or specified but required to complete work.
- B. Provide wood grounds nailers, blocking, as indicated for screeding or attachment of other work. Form to shapes indicated and cut as required to maintain tolerances specified for work to be attached. Coordinate location with adjoining work. Secure to substrate as required to support applied loading. Counter-sink bolts and nuts flush with surface.

### 3.02 PLYWOOD

- A. Install fire retardant treated plywood panels on walls for special system terminal cabinets and telephone and electric equipment as required by utility companies in Main Communications Room and other utility closets identified on the Drawings. Provide 8'-0" tall panels in widths as indicated below.
- B. Main Communications Room (Surface all walls with plywood)
  - 1. Elementary Schools:
    - a. Fire Alarm and Telecommunications: 6'-0" wide
    - b. Security, Sound, CATV and Emergency Panels: 3'-0" wide.
  - 2. Middle Schools and High Schools:
    - a. Fire Alarm and Telecommunications: 10'-0" wide.

- b. Security: 5'-0" wide.
  - c. Sound: 8'-0" wide.
  - d. CATV: 4'-0" wide.
  - e. Emergency Panels: 3'-0" wide.
- C. Telephone and CATV Service Demarcation Closets: 6'-0" wide

END OF SECTION

## SECTION 06400

### ARCHITECTURAL WOODWORK

#### PART 1 - GENERAL

##### 1.01 RELATED DOCUMENTS

- A. Drawings and General Provisions of Contract, including General Conditions and Division-1 Specification Sections, apply to the Work of this Section.

##### 1.02 WORK INCLUDED

- A. Subject to scope of work indicated on the drawings, the following items are part of this section:
  - 1. Wood shelving
  - 2. Mounting blocks
  - 3. Other miscellaneous millwork indicated on drawings

##### 1.03 RELATED WORK

- A. Samples: Section 01340
- B. Rough Carpentry: Section 06100
- C. Wood Doors: Section 08211
- D. Woodwork Finish: See Section 09900, Painting
- E. Wood Casework: Section 12302
- F. Plastic Laminate Faced Casework and Fixtures: Section 12304
- G. Library Casework: Section 12360

##### 1.04 QUALITY ASSURANCE

- A. The "Quality Standards" of the Architectural Woodwork Institute, apply to work specified in this Section. Reference to Premium, Custom or Economy in this Section shall be as defined in AWI "Quality Standards."
  - 1. Any item not given a specific quality grade shall be Custom Grade.

**1.05 SUBMITTALS**

- A. Submit detailed shop drawings covering all items of architectural woodwork.
- B. Submit manufacturer's descriptive literature of specialty items not manufactured by the architectural woodworker.
- C. Samples:
  - 1. Submit samples of wood veneers, and species as appropriate.
  - 2. Submit finished samples of each shop applied finish.

**1.06 PRODUCT HANDLING**

- A. Do not deliver woodwork to site until building and storage areas are sufficiently dry to prevent damage to woodwork caused by excessive changes in moisture content. Store materials in a secure area, safe from damage by work of other trades or unauthorized access.

**PART 2 - PRODUCTS****2.01 CLOSET AND STORAGE SHELVING**

- A. AWI quality grade: Custom grade for transparent finish.

**2.02 MOUNTING BLOCKS**

- A. General
  - 1. Type: Plain sawn red oak, AWI Custom grade for transparent finish. All edges shall be chamfered and sanded prior to finishing.
  - 2. Provide and install mounting blocks in locations and in quantities shown on the drawings.
  - 3. As part of the work of this Section, contractor shall be responsible for the following:
    - a. The attachment of Owner-provided pencil sharpeners to each of the sharpener blocks shown on the Drawings.
- B. Pencil sharpener blocks: 8" x 8" x 1".
- C. Fire extinguishers blocks: For fire extinguishers not in cabinets; size for mounting bracket supplied with extinguisher.

**2.03 OAK TRIM**

- A. Provide 1x oak trim at locations indicated on the drawings.
- B. Type: Plain sawn red oak, AWI Custom grade for transparent finish. All edges shall be chamfered and sanded prior to finishing.

**2.04 SPECIALTY ITEMS**

- A. Refer to Drawings for other special fabrications not listed in this Section.

**PART 3 - EXECUTION****3.01 JOB CONDITIONS**

- A. Examine the drawings carefully to assure that large shop fabricated items can physically pass through openings. Where necessary, manufacture the units in parts for final field assembly.
- B. Prior to fabrication, examine the work areas and verify that field conditions will allow the work to be performed in accordance with the Contract Documents. Notify the Architect and Owner's Representative of any observed deficiencies or discrepancies that would interfere with the proper installation of the work. Do not proceed until these conditions have been corrected.
- C. Coordinate installation of the work of this section with the work of other trades, and verify that adjoining work is complete to the point where this installation may properly commence.

**3.02 INSTALLATION**

- A. General:
  - 1. Architectural woodwork shall produce joints true, tight and well nailed with members assembled in accordance with quality grade specified or as indicated.
  - 2. Discard units of material with defects that might impair the quality of work and units too small to fabricate the work with minimum joints or the optimum joint arrangement.
- B. Jointing:
  - 1. Make joints to conceal shrinkage; miter exterior corner; cope interior corners, miter or scarf end-to-end joints.

2. Install trim in pieces as long as possible, jointing only where solid support is obtained.

C. Fastening:

1. Install items straight, true, level, plumb, and firmly anchored in place where blocking or backing is required. Coordinate as necessary with other trades to ensure placement of all required backing and blocking in timely manner.
2. Nail trim with finish nails or proper dimension to hold the member firmly in place without splitting the wood.
3. On exposed finish work, set nails for putty.
4. Screw, do not drive, wood screws except that screws may be started by driving and then screwed home.

3.03 FIELD TOUCH-UP

- A. Fill and touch-up exposed nail or screw holes, refinish raw surfaces resulting from job fitting, repair scratches, mars and clean finish surfaces.

3.04 CLEANING UP

- A. Keep the premises in a neat, safe and orderly condition at all times during execution of this portion of the work, free from accumulation of sawdust, cut-ends and debris. Perform final clean up once the work of this Section is completed.

END OF SECTION



## **INSTRUCTIONS FOR COORDINATION**

### **SECTION 06651**

#### **SOLID SURFACE FABRICATIONS**

1. Paragraph 1.02 Provide solid surface countertops at sinks locations. Provide solid surface window sills at drywall framing walls.

## SECTION 06651

### SOLID SURFACE FABRICATIONS

#### PART 1 — GENERAL

##### 1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the contract, including general conditions and other Division 1 Specification Sections, apply to the work of this Section.

##### 1.02 SUMMARY

- A. This Section includes the following horizontal and trim solid surface product types:
  - 1. Countertops and splashes.
  - 2. Windowsills: Provide 1/2" thick solid surface on wood shim blocking with 1 1/2" Apron edge.
- B. Related Work:
  - 1. Section 06100 Rough Carpentry
  - 2. Section 06400 Architectural Woodwork.

##### 1.03 DEFINITION

- A. Solid surface is defined as nonporous, homogeneous material maintaining the same composition throughout the part with a composition of acrylic polymer, aluminum trihydrate filler and pigment.

##### 1.04 SUBMITTALS

- A. Product data: Indicate product description, fabrication information and compliance with specified performance requirements.
- B. Shop drawings:
  - 1. Show location of each item, dimensioned plans and elevations, large-scale details, attachment devices and other components, including edge details and required blocking.
- C. Samples: Provide quantity of 2 samples
  - 1. Submit minimum 6-inch by 6-inch sample in specified gloss.
  - 2. Cut sample and seam together for representation of inconspicuous seam.

- D. Maintenance data:
  - 1. Submit manufacturer's care and maintenance data, including repair and cleaning instructions.
  - 2. Include in project closeout documents.
- E. Provide data that the products including adhesives and sealants shall meet or exceed the VOC content requirements of South Coast Air Quality Management District (SCAQMD) Rule 1113.

#### 1.05 QUALITY ASSURANCE

- A. Qualifications:
  - 1. Shop that employs skilled workers who custom fabricate products similar to those required for this project and whose products have a record of successful in-service performance for Five (5) years.
- B. Fabricator/installer qualifications:
  - 1. Work of this section shall be by a certified fabricator/installer, certified in writing by the manufacturer.
- C. Applicable standards:
  - 1. Standards of the following, as referenced herein:
    - a. American National Standards Institute (ANSI)
    - b. American Society for Testing and Materials (ASTM)
    - c. National Electrical Manufacturers Association (NEMA)
    - d. NSF International
  - 2. Fire test response characteristics:
    - a. Provide with the following Class A (Class I) surface burning characteristics as determined by testing identical products per UL 723 (ASTM E84) or another testing and inspecting agency acceptable to authorities having jurisdiction:
      - 1) Flame Spread Index: 25 or less.
      - 2) Smoke Developed Index: 450 or less.

**1.06 DELIVERY, STORAGE AND HANDLING**

- A. Deliver no components to project site until areas are ready for installation.
- B. Store components indoors prior to installation.
- C. Handle materials to prevent damage to finished surfaces. Provide protective coverings to prevent physical damage or staining following installation for duration of project.

**1.07 WARRANTY**

- A. Provide manufacturer's Ten (10) year warranty against defects in materials.
  - 1. Warranty shall provide material and labor to repair or replace defective materials.

**PART 2 — PRODUCTS****2.01 MANUFACTURERS**

- A. Subject to compliance with requirements, provide products by one of the following:
  - 1. Corian® surfaces from the DuPont company (basis of design).
  - 2. LG Surfaces
  - 3. Formica solid surfacing by Formica Group
  - 4. Other manufacturers complying with this specification and approved in accordance with Section 01630, shall be acceptable.

**2.02 MATERIALS**

- A. Solid polymer components
  - 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. Superficial damage to a depth of 0.010 inch (.25 mm) shall be repairable by sanding and/or polishing.
- B. Thickness: 1/2 inch sheets to the thickness shown on plans
- C. Edge treatment: 1/8" radius

- D. Provide drip edge at all sinks
- E. Back and Side splash: Applied. ½" thick x 4" high
- F. Colors: Level 1 and 2 color choices, as selected by Architect

### 2.03 ACCESSORIES

- A. Joint adhesive:
  - 1. Manufacturer's standard one- or two-part adhesive kit to create inconspicuous, nonporous joints.
- B. Sealant:
  - 1. Manufacturer's standard mildew-resistant, FDA-compliant, NSF 51-compliant (food zone — any type), UL-listed silicone sealant in colors matching components.

### 2.04 FACTORY FABRICATION

- A. Shop assembly: Fabricate components to greatest extent practical to sizes and shapes indicated, in accordance with approved shop drawings and manufacturer's printed instructions and technical bulletins.
  - 1. Form joints between components using manufacturer's standard joint adhesive without conspicuous joints.
    - a. Reinforce with strip of solid polymer material, 2" wide.
  - 2. Rout and finish component edges with clean, sharp returns and smooth edges.

## PART 3 — EXECUTION

### 3.01 EXAMINATION

- A. Examine substrates and conditions, with fabricator present for compliance with requirements for installation tolerances and other conditions affecting performance of work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.02 INSTALLATION

- A. Install components plumb, level and rigid, scribed to adjacent finishes, in accordance with approved shop drawings and product data.
  - 1. Provide product in the largest pieces available.
  - 2. Form field joints using manufacturer's recommended adhesive, with joints inconspicuous in finished work. Exposed joints/seams shall not be allowed.
  - 3. Reinforce field joints with solid surface strips extending a minimum of 1 inch on either side of the seam with the strip being the same thickness as the top.
  - 4. Cut and finish component edges with clean, sharp returns.
  - 5. Rout radii and contours to template.
  - 6. Anchor securely to base cabinets or other supports.
  - 7. Align adjacent countertops and form seams to comply with manufacturer's written recommendations using adhesive in color to match countertop.
  - 8. Carefully dress joints smooth, remove surface scratches and clean entire surface.
  - 9. Install countertops with no more than 1/8-inch (3 mm) sag, bow or variation from a straight line.
- B. Backsplashes and side splashes:
  - 1. Adhere applied back & side splashes to countertops using manufacturer's standard color-matched silicone sealant.

### 3.03 REPAIR

- A. Repair or replace damaged work which cannot be repaired to architect's satisfaction.

### 3.04 CLEANING AND PROTECTION

- A. Remove adhesives, sealants and other stains.

END OF SECTION