**PART 1 - GENERAL**

**1.01 SUMMARY**

A. Provisions of Division 01 apply to this section.

B. Section Includes:

1. Finish carpentry.

C. Related Sections:

1. Section 06 10 00: Rough Carpentry.

2. Section 08 21 00: Wood Doors.

3. Section 08 71 00: Door Hardware.

4. Section 08 80 00: Glazing.

5. Section 09 25 00: Gypsum Board.

**1.02 SUBMITTALS**

A. Shop Drawings: Submit Shop Drawings of each item of finish carpentry and millwork, indicating materials, dimensions, construction, and anchorage details.

**1.03 QUALITY ASSURANCE**

A. Comply with the following as a minimum requirement:

1. Douglas fir finish lumber shall be manufactured and graded in accordance with WCLIB - Standard Grading and Dressing Rule No. 17.

2. Redwood finish lumber shall be manufactured and graded in accordance with RIS - Standard Specifications for Grades of California Redwood Lumber.

3. Hardwood finish lumber shall be manufactured and graded in accordance with NHLA - Rules for the Measurement and Inspection of Hardwood and Cypress Lumber.

4. Softwood Plywood: Plywood shall comply with APA - Product Standard PS 1-95. Plywood shall be grade marked by APA.

B. Finish lumber shall be kiln-dried according to recognized methods for the thickness and species. Lumber one inch thick or less shall be dried to an average moisture content of not more than 15 percent. Lumber 1-1/4 inches to 2 inches in thickness shall be dried to an average moisture content of not more than 19 percent.

**1.04 DELIVERY, STORAGE AND HANDLING**

A. Materials shall be delivered to the Project site in undamaged condition, stored in fully covered, well ventilated areas, and protected from extreme changes in temperature and humidity.

B. Interior millwork and finish carpentry shall not be installed unless interior building temperature and humidity levels are within the ranges recommended by the manufacturer and/or recognized standards.

**PART 2 - PRODUCTS**

**2.01 MATERIALS**

A. Douglas Fir: Interior trim, solid lumber shelves, partitions, door frames and other concealed members of interior finish; WIC Economy Grade.

B. Hardwood: Birch, maple firsts and seconds.

1. Birch: WIC Custom Grade.

2. Maple: WIC Custom Grade.

C. Softwood Plywood: Except where otherwise specified, WIC Custom Grade, Douglas fir unless otherwise indicated.

D. Hardwood Plywood: WIC Premium Grade, species as indicated.

E. Redwood: Exterior millwork, except framing lumber, shall be clear heartwood redwood. Where installed in direct contact with earth or provided for exterior storage units, install Foundation Grade.

F. Wall Panels:

1. Wall panels shall be 5/32 inch thick "Marlite Deluxe Hi-Gloss Panels" by Masonite Corporation, or equal.

2. Panels shall be factory finished with a baked-on modified melamine resin finish, permanently bonded to oil tempered hardboard.

3. Aluminum molding for panels shall be bright anodized:

a. Exposed edges, "Marlite M70-BA".

b. Inside corner, "Marlite M50-BA”

c. Panel Joints: Marlite M65-BA, or equal.

4. Adhesive: Marlite C-375, or equal.

G. Perforated Hardboard Panels: Panels shall be 1/4 inch thick tempered hardboard, SIS with 1/4 inch diameter holes spaced one inch on center.

**2.02 FABRICATION**

A. General:

1. The means of fastening various parts together shall be concealed in finished Work. Work, which is curved, shall be fabricated from solid stock, or if veneered, shall be bent to a uniform radius.

B. Cutting Boards: Maple cutting boards shall be at least 1-1/16 inch thick, doweled and glued to hair line joints, with end pieces 1-1/2 inch wide flush with board. Install with hardwood guides for a neat sliding fit without binding.

C. Potting Table:

1. Potting table shall be as detailed. Legs shall be 4 inch x 4 inch Douglas fir, secured to cross rails with 1/2 inch round galvanized bolts, and fitted with galvanized metal shoes.

2. Tabletop shall be fabricated of 2 x 8 tongue-and-groove Douglas fir lumber. Cut out top for sink and pitch top 1/4 inch towards sink for drainage. Cover top with sheet steel and line sink with 24 gage galvanized sheet metal.

D. Storage Bins: Fabricate storage bins in Agricultural Lab Room as detailed. Top shall be fabricated of 1 x 10 shiplap redwood lumber with 2 x 3 nailed on underside. Sides, back, ends and division partitions shall be of shiplap boards as specified.

E. Tool Cabinets: Cabinets shall be fabricated with joints glued and reinforced. Provide continuous extruded rubber gasket, thickness as indicated, full strength of center partition. Shelves shall be drilled and/or cut plywood.

**PART 3 - EXECUTION**

**3.01 GENERAL**

A. Interior and exterior wood, millwork, blocking, and lumber shall be installed level, plumb, and true to line. Members shall be neatly and accurately scribed in place, maintaining full widths of end members, wherever possible. Trim shall be installed in full lengths, without piecing, except where use of single lengths is not required. Butt joints, if necessary, shall be beveled. Exterior angles shall be mitered, and interior angles of molding parts coped. Nails shall be set for putty. Grain and color of adjoining interior finish shall match adjacent finishes. Where Work specified in this section adjoins other Work, provide a neat tight joint.

B. Interior and exterior finish carpentry and other fixed wooden equipment having hammer marks or other visible damage will be deemed defective Work.

C. Staff or brick moulds of exterior wood doorframes shall be attached to frames after frames have been set and caulked. Moulds shall be mitered at corners and coped to sills, accurately secured in place with finish nails, and nails set.

**3.02 INSTALLATION**

A. Install Work of this section as specified in the WIC Manual of Millwork.

B. Wood shoe base shall be fitted and temporarily tacked in place until floor covering is installed. Provide and install corner fillets, same contour and materials as shoe base, in corners where shoe base is installed.

C. Compost Bin Openings: Provide 2 inch x 8 inch redwood planks in openings at Compost Bins as indicated.

D. Wall Panels: Panels shall be fastened to walls with adhesive in accordance with manufacturer's written recommendations. Where panels are fastened behind sink areas, aluminum moldings shall be caulked with waterproof caulking, Marlite T-627, or T-628.

E. Platform Front: Plywood at platform front and adjoining steps in Multi-Purpose Building shall be provided with face veneers of unselect birch. Trim and frames shall match face veneer of panels. Joints shall be V-shaped where indicated.

F. Bumpers in Piano Storage: Cover bumpers in Piano Storage with layer of 1/2-inch thick fiberboard nailed sufficiently to fasten in place. Set nails at least 1/4 inch through board, and then cover with No. 8 canvas stretched and nailed to top and bottom of bumper. Turn edges of canvas under and nail through hemmed edges with galvanized large head roofing nails spaced not over 4 inches apart.

G. Outside Storage Units: Storage units shall be provided with redwood sills, tapered to fit so cabinets set level. Doors and plywood siding on exterior of units shall be B-B-Medium Density overlay plywood, of thickness indicated. Other plywood shall be Exterior Type, Group 1, Grade A-B, of thickness indicated. Exposed edges of plywood shall be edge banded. Floor covering shall be 1/8 inch thick tempered hardboard, fastened with 14 gage 1-1/4 inch long galvanized shingle nails at 8 inches on center over skids and end spacers, and 12 inches on center over intermediate spacers. Door louvers shall be 24 gage galvanized steel, fastened to outside face of doors as detailed, with galvanized stove bolt at each corner of louver.

H. Door Frames: Frames shall be installed plumb and true, solidly blocked, reinforced for butts and hardware, and shall be fastened to structural frame with 16d set finish nails at not more than 24 inches on centers. Nails securing exterior door and window frames shall be cement coated. Doorframes shall be dadoed together at the head.

I. Oak poles, where indicated, shall be 1-1/4 inches round, supported by brass plated, metal pole sockets, with closed flanges.

J. Perforated panels shall be glued to wood blocking and nailed at 6 inches on center with 3/4 inch, No. 16 brads. Align holes in adjacent panels.

K. Mop Rack and Peg Racks: Construct as detailed, with hardwood pegs tightly fitted. Fasten rack to wall studs with 3/8 inch lag screws of sufficient length to penetrate studs approximately 2 inches. Fasten to masonry or concrete walls with 3/8 inch cinch anchors to provide 1-1/2 inch minimum penetration into the walls.

L. Combination Shelf and Pole: Hanging poles shall be 1-1/4 inch round oak, supported on brackets fastened to the underside of the shelf.

M. Drying Shelf: Shelf shall be fabricated of Douglas fir, B and Better slats spaced as indicated and fastened to cleats with countersunk brass wood screws.

N. Loudspeaker: Provide wood loudspeaker and grille in wall of Multi-Purpose Room as indicated and detailed. Inside face of grille shall be covered with plastic speaker cloth glued and/or tacked into place. Cloth shall be "Mellotone" grille fabric, color as selected by the Architect.

O. Rubber Inserts: Where indicated, doorframes in Instrumental Music Room shall be provided with 1/4 inch thick sponge rubber inserts glued in place around openings. Wood stops shall be fastened to frame through rubber inserts with No. 9 flat-head wood screws at 12 inches on center.

P. Provide as indicated, rubber covering over instrument cradles and fasten with rust-resistant oval head tacks.

Q. Caulking of Joints: Joints between exterior frames and adjoining surfaces shall be primed before caulking.

# **CLEAN UP**

1. Remove debris, rubbish and waste material and legally dispose of off the Project site.

**3.04 PROTECTION**

A. Protect the Work of this section until Substantial Completion.

**END OF SECTION**