

Montgomery County Public Schools Facilities Guide

DIVISION 6 - WOOD & PLASTICS

SECTION 06200

ROUGH AND FINISH CARPENTRY

DESIGNER SHALL DETERMINE NEED FOR FIRE TREATMENT OF WOOD PRODUCTS.

PART 1 - GENERAL

1.01 GUIDE INCLUDES

- A. Rough Carpentry: Framing, sheathing, blocking, nailers, etc. as indicated or required.
- B. Finish Carpentry: Provide woodwork.
 - 1. Standing and running trim - Premium Grade
 - 2. Millwork cabinets - Premium Grade - Transparent Finish
 - 3. Plastic laminate finished casework
 - 4. Plastic laminate counter tops
 - 5. Wood shelving - Premium Grade - Transparent Finish

1.02 RELATED SECTIONS

- A. Manufactured Casework - Division 12
- B. Wood Doors and Door Hardware - Division 8
- C. Wood Flooring - Division 9

1.03 CODES AND STANDARDS (MATERIALS AND INSTALLATION)

- A. Comply with US Product Standards for wood and lumber products. Installations shall comply with American Forest and Paper Association, "Wood Frame Construction Manual".
- B. Comply with American Woodwork Institute's (AWI) "Quality Standards Illustrated" as per:
 - 1. Standing and Running Trim AWI Section 300
 - 2. Cabinets and Countertops AWI Section 400
 - 3. Shelving AWI Section 600
- C. Comply with US Product Standards for plywood and grading per APA - Engineered Wood Association.
- D. Comply with National Electrical Manufacturer's Association (NEMA) for plastic laminated materials.

1.04 SUBMITTALS

- A. Submit location of manufacturer and, if applicable, harvest of wood-based materials.
- B. Submit recycled-content data, designating percentages of post-consumer and pre-consumer recycled materials if applicable.
- C. Submit rapidly renewable material content data, if applicable.
- D. Submit FSC-certification with chain-of-custody for wood-based materials, if applicable.
- E. Submit manufacturer's certification that composite wood products, agrifiber products and field-applied adhesives installed in building interior meet testing and product requirements of California Department of Health Services Standard Practice for The Testing Of Volatile Organic Emissions From Various Sources Using Small-Scale Environmental Chambers, including 2004 Addenda.
- F. Submit manufacturer certification that preservative-treated lumber uses non-CCA wood treatment products.
- G. Submit certification of application of borate treatment to woodwork in contact with slab.

- H. Submit MSDS for any applicable products used.

PART 2 PRODUCTS

Products to be verified for LEED-for Schools compliance.

2.01 WOOD MATERIALS AND ACCESSORIES, GENERAL

- A. Provide products manufactured and from wood that is harvested within a 500-mile radius of the project site.
- B. Give preference to rapidly renewable agrifiber and/or recycled content wood components.
- C. Alternate: Wood components, shall be FSC-certified as originating from a sustainably harvested forestry operation..
- D. Composite wood and agrifiber products installed in building interior shall meet testing and product requirements of California Department of Health Services Standard Practice for The Testing Of Volatile Organic Emissions From Various Sources Using Small-Scale Environmental Chambers, including 2004 Addenda.
 - 1. At minimum, products need to comply with VOC limits specified in LEED-for Schools if alternatives tested to the CA protocol are not available.
- E. Pressure treatment shall use one of following systems products (CCA pressure treatment is prohibited):
 - 1. Chemical Specialties "ACQ Preserve"
 - 2. Arch Treatment Technologies "Wolmanized Natural Select Wood"
 - 3. Osiose Wood Preserving "NatureWood"
- F. Field-applied adhesives used within building interior shall meet testing and product requirements of California Department of Health Services *Standard Practice for The Testing Of Volatile Organic Emissions From Various Sources Using Small-Scale Environmental Chambers*, including 2004 Addenda.
 - 1. At minimum, products need to comply with VOC limits specified in LEED-for Schools if alternatives tested to CA protocol are not available.
- G. Termite treatment: Borate-based surface treatment.

2.02 MOISTURE CONTENT

- A. Finish carpentry and woodwork shall be kiln-dried to an average moisture content within following ranges, or as otherwise recommended by applicable Quality Standards for regional climatic conditions involved:
 - 1. Exterior woodwork 9 percent to 12 percent
 - 2. Interior woodwork 6 percent to 11 percent

2.03 FINISH LUMBER

- A. Finish lumber shall be of nominal sizes shown on drawings. Grade shall be custom unless otherwise indicated. Species shall be Ponderosa Pine, Yellow Poplar, or Birch unless otherwise indicated or approved by Architect.

2.04 FINISH PLYWOOD

- A. Unless otherwise noted, plywood for built-in units and shelving shall be Birch faced (both sides) plywood conforming with AWI Custom Grade requirements with "Select White" Yellow Birch edging 3/16 inch minimum. No plywood edge taping shall be allowed.
- B. Use exterior grade plywood for plastic laminate covered counters with sinks. At counters without sinks and where not specifically noted to be plywood, substrate for plastic laminate covered counters may be particle board equal in quality to Weyerhaeuser Timblend Particleboard, meeting ANSI 208.1, Type 1, Density B, Class 1.
- C. MDO (medium density overlay) plywood where indicated shall be standard grade (B-B) heavy resin-treated facing with a smooth and uniform surface intended for high quality paint finish. Furnish panels with overlay one side only.

2.05 CARPENTRY FOR TRANSPARENT FINISH

- A. Refer to the definitions in AWI Section 400 for the following:
 - 1. Exposed portions: Provide solid wood and plywood (or plywood substitutes) meeting requirements for AWI Custom Grade, species and veneer as specified or indicated.
 - 2. Semi-Exposed portions: Provide materials meeting requirements for AWI Custom Grade.
 - 3. Concealed portions: Provide sound materials of optional wood species.
- B. For concealed portions provide pricing alternate for agrifiber in lieu of wood-based particle board.
 - 1. Environ BioComposites "BioFiber Wheat"
- C. For exposed (clear-finished) portions provide pricing alternate for agrifiber or biocomposite product:
 - 1. Environ BioComposites "BioFiber Wheat"
 - 2. Environ BioComposites "Environ"
 - 3. Environ BioComposites "Dakota Burl"
 - 4. Kirei

2.06 PLASTIC LAMINATES

- A. Formica by Formica Corporation
- B. Wilson Art by Wilsonart Corporation
- C. Nevamar by Nevamar Corporation
 - Grade: GP-50 (nominal thickness - .050 unless noted otherwise.)

2.07 PEGBOARD

- A. Pegboard shall be 1/4 inch tempered perforated hardboard or equal as approved by Architect.

2.08 CABINET HARDWARE

- A. Cabinet Locks
 - 1. Where indicated at lockable cabinets, shall be National Lock No. 68-054 disc tumbler lock or equal as approved by Architect. Locks in a room shall be keyed alike. Locks shall be master keyed. Furnish five sets of all masterkeys.
- B. Except as otherwise specified, hardware shall be Type 2 quality level and comply with BHMA Cabinet Hardware Standard 201 and ANSI A156-9 "America National Standard for Cabinet Hardware".
- C. Hinges: Provide continuous or individual hinges with non-removable pin with eased knuckles attached with screws that are inaccessible when closed, with 270 degrees swing and meeting, or exceeding, the following:
 - 1. One pair of hinges mounted on a 24 inch X 30 inch door shall be capable of supporting a 150 lb. suspended load at positions without causing distortion that would interfere with ease of opening and closing.
 - 2. 1-1/2 pair of hinges mounted on a 24 inch X 60 inch door shall be capable of supporting a 150 lb. suspended load at all positions without causing distortion that would interfere with the ease of opening and closing.
 - 3. Two pair of hinges mounted on a 24 inch X 84 inch door shall be capable of supporting a 150 lb. suspended load at positions without causing distortion that would interfere with ease of opening and closing.
- D. Door and Drawer Pulls: Provide metal handles fastened with non-removable screws as approved by Owner and Architect.
- E. Drawer Hardware: For drawers not higher than 8 inches nor wider than 24 inches, use medium-duty side-mounted, full-extension, ball-bearing, nylon roller drawer slides with load capacity of 150 lbs. per pair. Hettich/Grant Series 345.
- F. Shelf Supports: Provide adjustable slotted-type standards and brackets of type needed to support shelves with uniform 40-lb. per sq. ft. loading.
- G. Closet Bars: Telescoping steel or brass tubing, with forged end brackets; size and wall thickness as required to support full continuous hanging of clothing.
- H. Exposed Hardware Finish: Except where not available, provide exposed hardware with BHMA Code 626 satin chromium plate finish (US26D); where not available, provide either satin aluminum or satin stainless steel finish.
- I. Coat hooks shall be metal #B50 by Volgel Peterson, #572 by Ives or #915 by Raymond

Engineering, Inc. (REI)

PART 3 EXECUTION

3.01 PREPARATION

- A. Condition woodwork to average prevailing humidity conditions in installation areas prior to installing.
- B. Prior to installation of architectural woodwork, examine shop fabricated work for completion, and complete work as required, including back priming and removal of packing.

3.02 WASTE MANAGEMENT

- A. Recycle clean (unpainted, untreated) waste wood materials in accordance with Division 1 Construction Waste Management Requirements.

3.03 INSTALLATION

- A. Install work plumb, level, true and straight with no distortions. Shim as required using concealed shims. Install to a tolerance of 1/8 inch in 8'-0" for plumb and level (including countertops); and with 1/16 inch maximum offset in flush adjoining surface, 1/8 inch maximum offsets in revealed adjoining surfaces.
- B. Install items in accordance with AWI Quality Standards, Section 1700.
- C. Scribe and cut work to fit adjoining work, and refinish cut surfaces or repair damaged finish at cuts.
- D. Anchor woodwork to anchors or blocking built-in or directly attached to substrates. Secure to grounds, stripping and blocking with countersunk, concealed fasteners and blind nailing as required for complete installation.
- E. Casework: Install without distortion so that doors and drawers will fit openings properly and be accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation. Complete installation of hardware and accessory items as indicated. Maintain veneer sequence matching of casework with transparent finish.
- F. Countertops: Anchor securely to base units and other support systems as indicated.
- G. Wood shelving: Complete assembly of units and install in areas indicated, including hardware and accessories as indicated.

3.04 TERMITE TREATMENT

- A. Field-apply borate surface treatment to lower 12 inches of cabinets and other architectural woodwork in contact with slab on grade.

3.05 ADJUSTMENT, CLEANING, FINISHING AND PROTECTION

- A. Repair damaged and defective woodwork wherever possible to eliminate defects functionally and visually; where not possible to repair properly, replace woodwork. Adjust joiner for uniform appearance.
- B. Clean hardware, lubricate and make final adjustments for proper operation.
- C. Clean woodwork on exposed and semi-exposed surfaces. Touch-up shop-applied finishes to restore damaged or soiled areas.
- D. Complete finishing work specified as work of this section, to whatever extent not completed as shop or prior to installation of woodwork.
- E. Protection: Installer of woodwork shall advise Contractor of procedures required to protect woodwork during remainder of construction period to ensure that work will be without damage or deterioration at time of acceptance.

END OF SECTION