

06 00 00. WOOD, PLASTIC, AND COMPOSITES**06 00 01. SUSTAINABILITY**

- .1 AE shall reference Division 18 “Sustainability” where some of the requirements are related to this division and adopt applicable requirements into the design.

06 00 03. GENERAL PROVISIONS

- .1 USE OF INK MARKING PENS ON SURFACES of any kind of materials is prohibited. Experience has shown that such marks bleed through paint and other finishes.
- .2 ANCHORAGES: POWER OR POWDER DRIVEN ANCHORS: Refer to Appendix V Section 01 35 23 Safety Health & Environment 1.6 USE OF POWER ACTUATED FASTENER TOOLS.

06 05 73. WOOD TREATMENT

- .1 PROTECTION AGAINST DECAY: Wood used in conjunction with roofing installations, canopy structures, and wood which is installed in contact with concrete or masonry shall be pressure treated with an approved preservative to meet American Wood Preservers Association (AWPA) Standards. Other installations shall receive prime coats suitable for finishes specified as soon as installations are completed. Back prime where dampness or warping is anticipated. Wood preservatives containing arsenic such as Chromated Copper Arsenate (CCA) for exterior construction above ground or in ground contact or fresh water is generally prohibited unless the treated materials meet EPA regulatory requirements of structural members.

Commentary: Structural posts of “post frame” type construction in agricultural applications may be CCA treated wood. Fasteners in CCA treated wood shall be hot dipped galvanized or stainless steel.

- .2 The minimum chemical retention (lbs / cubic foot) for wood above ground is to be 0.25, for wood in contact with the ground or fresh water immersion is 0.40, and wood in the ground (structural) 0.60.
- .3 After cutting treated lumber, the cut end is to be retreated. Fire retardant treated wood products: Contractor shall adhere to all manufacturer’s instructions and limitations for cutting and ripping to maintain product rating.
- .4 All wood blocking, sawn lumber and plywood shall be fire resistant treated.
- .5 All fasteners that contact treated wood (including fire retardant treated wood products) shall be hot dipped galvanized or stainless steel.



- .6 FIRE RETARDANT TREATED WOOD: Prevent exposure to precipitation during shipping, storage, and installation.

06 10 00. ROUGH CARPENTRY

- .1 WOOD FRAMING: Stud and furring strip shall be fire resistant treated and spaced 16 inches on center, maximum.
- .2 WOOD BLOCKING: All wood blocking shall be fire resistant treated.
- .3 Fire retardant treated wood products: Contractor shall adhere to all manufacturer's instructions and limitations for cutting and ripping to maintain product rating.
- .4 Posts and columns, including preservative treated wood, shall not be permitted to be in direct contact with the earth.

06 13 00. HEAVY TIMBER

- .1 TIMBER TRUSSES: With the shop drawings, a complete design analysis of structural components shall be submitted. Data shall bear the seal and signature of a professional engineer, registered in Ohio, attesting that the design of trusses meets requirements of the Ohio Building Code (OBC) and design loadings.

06 16 00 SHEATHING

- .1 Exterior Gypsum Sheathing, Moisture-Resistant Sheathing Board, Glass-Mat Gypsum Wall Sheathing shall be 5/8-inch thickness.
- .2 FASTENERS: All fasteners in exterior assemblies or exterior walls to be stainless steel.
- .3 **CFAES: Oriented Strand Board (OSB) sheathing is prohibited.**
- .4 **CFAES: For sheathing in interior applications, Exposure 1 or Exterior plywood shall be used a minimum of 8'-0" above finish floor or finish grade.**

06 17 00. SHOP-FABRICATED STRUCTURAL WOOD

- .1 WOOD TRUSSES: Same as 06 13 00.1 above.

06 20 00. FINISH CARPENTRY**06 22 00. MILLWORK**

- .1 MATERIALS AND FABRICATION: Refer to the Architectural Woodwork Institute “Quality Standards”, latest edition. Use “Custom Grade” for standard finish carpentry and millwork components, trim and paneling. Use “Premium Grade” for unique and special projects or features within a project.
 - .1.1 Do not deliver finish carpentry and millwork until the building is enclosed and weatherproof, wet work in the space is completed and dry, the HVAC system is operating and maintaining temperatures and relative humidity at occupancy levels for the remainder of the construction period. Humidity levels shall be maintained between 25 to 55 percent unless specifically directed otherwise.
 - .1.2 Wood for architectural use needs moisture content within the optimum range of 5-10%.
 - .1.3 Condition finish carpentry and millwork materials to average prevailing humidity in installation areas for a minimum of 24 hours unless a longer conditioning time is recommended by the manufacturer.
- .2 LUMBER MATERIALS: Comply with AWI Quality Standards “Lumber” section.

Ease edges of lumber less than 1 inch thick to 1/16 inch radius and edges of lumber greater than 1 inch thick to 1/8 inch radius.
- .3 SHEET MATERIALS: Comply with AWI Quality Standards “Sheet Products” section.
- .4 HIGH PRESSURE PLASTIC LAMINATE: NEMA LD3.

Horizontal Surfaces: HGS, 0.048 inch nominal thickness.
Vertical Surfaces: VGS, 0.28 inch nominal thickness.
Laminate Backer: BKL, 0.020 inch nominal thickness.
- .5 SITE TOLERANCES
 - .5.1 Maximum variation from true position: 1/16 inch.
 - .5.2 Maximum offset from true alignment with abutting materials: 1/32 inch.
- .6 FACTORY FINISHING: Factory finish wood millwork items unless otherwise required to meet project conditions. Comply with AWI Quality Standards “Finishing” section.

06 40 00. ARCHITECTURAL WOODWORK



- .1 CASEWORK AND CABINET WORK: Materials and fabrication shall conform to Architectural Woodwork Institute specifications for “Premium Grade” work. Written certification is required from the fabricator that Architectural Woodwork materials, construction and installation comply with the specified standards.
 - .1.1 Do not deliver finish carpentry and millwork until the building is enclosed and weatherproof, wet work in the space is completed and dry, the HVAC system is operating and maintaining temperatures and relative humidity at occupancy levels for the remainder of the construction period. Humidity levels shall be maintained between 25 to 55 percent unless specifically directed otherwise.
 - .1.2 Wood for architectural use needs moisture content within the optimum ranges of 5-10 percent.
 - .1.3 Condition finish carpentry and millwork materials to average prevailing humidity in installation areas for a minimum of 24 hours unless a longer conditioning time is recommended by the manufacturer.
 - .1.4 DOOR AND DRAWER FRONT STYLE: Flush overlay.
 - .1.5 1MM Edgebanding on all shelf edges. All cut substrate edges to be sealed regardless of whether they are visible after installation. This includes bottom edges to prevent absorption from spills. Sealing requirement shall prevent moisture penetration and leave the edge cleanable.
- .2 SURFACE DEFINITIONS:
 - .2.1 Cabinet doors and drawers shall have plastic laminate applied to “Exposed” and “semi-exposed” surfaces.
 - 2.1.1 Exposed Exterior Surfaces: Defined as all exterior surfaces exposed to view, including the following:
 - a. All surfaces visible when doors and drawers are closed, including knee spaces.
 - b. Underside of wall hung cabinet bottoms more than 40 inches above the floor and cabinet bottoms behind light valances and bottom edge of light valances.
 - c. Cabinet tops under 80 inches above the finished floor or if 80 inches and over and visible from an upper building level or floor.
 - d. Visible front edges of stretchers, ends, divisions, tops, bottoms, shelves, and nailers.
 - e. Sloping tops of cabinets that are visible.
 - f. Casework surfaces visible after installation with doors and drawers closed. Wall hung cabinet bottoms more than 40 inches above the floor. Visible members in open cases or behind clear glass doors.
 - 2.1.2 Exposed Interior Surfaces: Defined as all interior surfaces exposed to view in open casework or behind transparent doors, including the following:

- a. Shelves, including edgebanding.
 - b. Divisions and partitions.
 - c. Interior face of ends (sides), and bottoms, including pull-outs. Also interior surfaces of cabinet top members 36 inches or more above the finished floor.
 - d. Interior face of door and applied drawer fronts.
- 2.1.3 Semi-Exposed Surfaces to be Finished as Exposed: Defined as those interior surfaces only exposed to view when doors or drawers are opened, including
- a. Shelves and edgebanding.
 - b. Divisions.
 - c. Interior face of ends (sides), and bottoms, including a bank of drawers. Also interior surfaces of cabinet top members 36 inches or more above the finished floor.
 - d. Drawer sides, subfronts, backs, and bottoms.
 - e. The underside of cabinet bottoms between 24 inches and 42 inches above the finished floor.
- .2.2 Remaining Concealed Surfaces of the cabinet shall be considered “Semi-Exposed”.
- 2.2.1 Concealed Surfaces to be Finishes as Semi-Exposed: Sleepers, web frames, dust panels, and other surfaces not visible after installation.

Wexner Medical Center: All interior joints and exposed edges shall be sealed. All core surfaces and edges shall be finished, exposed core materials are prohibited. Coordinate with Wexner Medical Center planner for cabinet locations that require sealant (food service areas).

- .3 HIGH PRESSURE PLASTIC LAMINATE: NEMA LD3.
- Horizontal Surfaces: HGS, 0.048 inch nominal thickness.
Vertical Surfaces: VGS, 0.28 inch nominal thickness.
Laminate Backer: BKL, 0.020 inch nominal thickness.
- .4 CABINET FINISHES: Wood grain veneer direction shall be vertical. Horizontal grain may be used in special locations determined by the University. Back side of doors to match face laminate.
- .4.1 Plastic Laminate Casework:
- a. Exposed Exterior Surfaces: High pressure plastic laminate.
 - b. Exposed Interior Surfaces: High pressure plastic laminate. Open cabinets may be wood grain melamine to match wood grain plastic laminate.
 - c. Semi-Exposed Surfaces Finished as Exposed: High pressure plastic laminate.
 - d. Concealed Surfaces Finished as Semi-Exposed: Low pressure plastic laminate or melamine.

- e. Exposed Edges: Extruded PVC, convex shaped, smooth finish. Doors and drawers edging shall be 3 mm thick. Cabinet face edging shall be 1 mm thick.
 - f. Concealed Edges: Minimum low pressure plastic laminate or melamine or same material as panel surface.
- .4.2 Wood Casework:
- a. Exposed Exterior Surfaces: Wood veneer.
 - b. Exposed Interior Surfaces: Wood veneer to match Exposed Exterior Surface.
 - c. Semi-Exposed Surfaces Finished as Exposed: Wood veneer that is compatible with Exposed Exterior Surfaces.
 - d. Concealed Surfaces Finished as Semi-Exposed: Wood, manufacturer's option.
 - e. FACTORY FINISHING: Factory finish wood cabinet items unless otherwise required to meet project conditions. Comply with AWI Quality Standards "Finishing" section.
 - f. Edges: Wood to match Exposed Exterior Surfaces.
- .5 MOCK UP: Provide mock ups of typical base cabinet, wall cabinet, and countertop, including backsplash, hardware, finishes, and plumbing accessories.
- 5.1 Retain mock ups: during construction in an undisturbed condition as a standard for judging completed work. Accepted in-field mock ups that have not been damaged may remain as part of the final work.
- .6 CABINET HARDWARE: Stainless steel, No. 4 finish.
- .6.1 Hinges: Five-knuckle hinges with hospital tip at clinical / patient care areas and other high use spaces. Concealed hinges can be used in more specialty areas. Verify with the university.
- Wexner Medical Center: Premium grade concealed hinges to be used for public-facing casework.**
- .6.2 Pulls: Pulls shall meet ADAAG. Back mounted, solid metal only, no plated pulls accepted.
- Wexner Medical Center: Style to be directed by OSUWMC**
For public areas: <https://www.mockett.com/dp128.html>
For clinical areas: <https://www.mockett.com/dp57.html>
- .6.3 Adjustable Shelf Supports: Side-mounted system using multiple holes for pin supports and coordinated self-rests, polished chrome finish, with 1 inch spacing adjustments Screw shelf to pin.
- .6.4 Drawer Slides: Steel, 2-section type with nylon, ball bearing rollers for standard drawers and 3-section full extension drawer slides with ball bearings and nylon



rollers for file drawers. Slide lengths and ratings shall suit particular applications
Self-closing.

6.5 Plastic access grommets for wiring; - verify size from IT – they usually want the 3” hole, which accommodates plugs up to 2-3/4”.
<https://www.mockett.com/grommets-wire-management/round-plastic-grommets/xg.html>.

6.6 Plastic grille vents for IT equipment:3-7/8” air vent grommet with ZG1 liner
<https://www.mockett.com/grommets-wire-management/air-vent-grilles/plastic/zgavg2.html>; <https://www.mockett.com/zg1.html>; 2-9/32” and EDPAD1 liner <https://www.mockett.com/edpavg2.html>;
<https://www.mockett.com/edpad1.html>

Wexner Medical Center: Consult OSUWMC Space and Facilities Planning for hardware selection.

.7 COUNTERTOPS Provide drip edge routing at underside of countertop to prevent spills from flowing into base cabinets. Post-formed roll-up lip counter edges are not preferred.

.7.1 Provide 14-gauge Type 316 stainless steel countertops. Edges to be 1-1/2” double turn-down. Substrate to be Type 430 stainless steel hat channels. All exposed edges to be enclosed, welded, ground smooth. All Exposed surfaces to be polished to a #4 finish.no preferred

06 61 16. SOLID SURFACE FABRICATIONS

.1 MATERIALS AND FABRICATION: Most solid surface materials expanded approximately 1/32 inch for every 12 inches of material. Allow for appropriate expansion space. If solid surface is in a location that receives direct sunlight, an increase in potential expansion should be anticipated.

- .1.1 UNDERLAYMENT: All horizontal solid surface shall have an underlayment of plywood or MDF. Particleboard as an underlayment is prohibited. Use moisture resistant underlayment when a sink or other source of water/moisture is present.
 - a. Ladderback Underlayment: Use a ladderback design wherever the surface will be exposed to heat exceeding 175 degrees F. Ladderback design shall be in accordance with the solid surface manufacturer’s recommendations.
 - b. Solid Underlayment: Typical in all other locations.
 - c. Adhere solid surface to the underlayment with 100 percent silicone adhesive.
 - d. When using 1/2 inch thick solid surface, use 1 inch underlayment. Thinner underlayment may be used, however span capabilities will be reduced.
- .1.2 FRONT EDGES: Stacked edge is preferred, unless the solid surface product choice requires a dropped edge. Ease edges.



- .1.3 BACK SPLASH and SIDE SPLASH: Separate from countertop with clear silicone sealant at all edges. Ease top and side edges. Square edge where splashes meet countertop.
- .1.4 OPEN FRONT INSTALLATIONS:
 - a. Provide continuous wall ledger.
 - b. Provide stacked front edge.
 - c. Provide continuous front structural member if possible. When a front structural support is not used, space supports at minimum 2'-8" on center for countertops not scheduled for exceptional heavy loads. Space supports at 2'-0" on center for countertops with known heavy loads.
 - d. Mechanically fasten countertop to support brackets (screws up through the bracket into underlayment).
- .1.5 COUNTERTOPS: Provide drip edge at underside of countertop to prevent spills from flowing into base cabinets. Roll up lip counter edges no preferred.
- 2 FABRICATOR/INSTALLER: Approved by the solid surface manufacturer with not less than 3 years documented experience in fabrication installation of solid surface components of the type required for the project.
- .3 WARRANTY: Manufacturer's 10 year warranty against defects in material. Warranty shall provide material and labor to repair or replace defective materials.
- .4 DEMONSTRATION: Provide a Commercial Care and Maintenance video and review maintenance procedures and warranty details to the University Project Manager at project completion.

Wexner Medical Center: Request through University Project Manager for a copy of the Interior Finish Schedule for approved manufacturer, type, and color.

Wexner Medical Center: Demonstration deliverables to be provided to "Wexner Medical Center Environmental Services and Facilities Operations".

END OF DIVISION 06 – WOOD AND PLASTIC