

Design and Construction Standards

Division 06 – Woods, Plastics and Composites

General

In general, follow the guidelines below when designing, specifying and installing woods, plastics, composites, or finished carpentry work. Unless specifically indicated otherwise, these guidelines are not intended to restrict or replace professional judgment.

1. All wood construction shall be per the American Institute of Timber Construction and National Forest Products Association Standards and Specifications.
2. All engineered wood products, including but not limited too; roof trusses, floor trusses, laminated veneer lumbers, glue-laminated beams; heavy timber trusses, or similar, shall be designed by an engineer licensed in the State of Michigan. Shop drawings, fabrication drawings, and/or erection drawings shall be provided bearing the seal of the Michigan registered engineer.

Section 06 10 00 Rough Carpentry

1. While lumber species and grade may vary in availability or cost depending on seasons or market influences, minimum quality characteristics of structural lumber shall be as follows:
 - a. Dimensional Lumber: Kiln Dried, Douglas Fir. No. 2 or better
 - b. Studs / Framing: Kiln Dried, Spruce-Pine-Fir, No. 2 or better
 - c. Plate Stock: Not Allowed – Use same quality as studs or better
2. Where required for support, provide blocking in wall (behind gypsum or plaster) of appropriate size, dimension, and bearing capacity to support surface mounted equipment (e.g. grab bars, art work, furniture, etc.). Where excessive loads may be present, sheath entire wall with ½” plywood, behind gypsum, to allow for multiple locations of support (e.g. art gallery).
3. All blocking materials, whether included in wood or metal wall framing and whether dimensional lumber or plywood, shall be fire retardant, non-combustible rated.
4. All woods in contact with earth, concrete, or subject to moisture, shall be pressure treated moisture resistant wood. All fasteners in contact with pressure treated lumber shall be galvanized or stainless steel.
5. All wood attached to metal structure (e.g. metal studs or trusses) shall be screw attached.
6. Block all concentrated loads solid to structural steel or concrete support points. Provide “Continuous Load” support / path of travel, including all fastener types, construction details, and construction methods.
7. Under all in-line wall construction (walls parallel to joists), provide four joist ladder construction.
8. All Gable End or “tall” walls shall be balloon framed with appropriate blocking.

Section 06 16 00 Sheathing

1. While lumber species and grade may vary in availability or cost depending on seasons or market influences, minimum quality characteristics of structural lumber shall be as follows:
 - a. Floor Sheathing: 3/4" T&G Floor Underlayment, Fir, Exterior grade glue, 32/16 span rated or better.
 - b. Wall Sheathing: 1/2" plywood or 7/16" OSB, Exterior grade glue, 24/16 span rated or better.
 - c. Roof Sheathing: 5/8" CDX, Fir, Exterior grade glue, 5 ply, 32/16 span rated or better.
2. When wood framing is used as both partition and structure, provide "shear wall" construction as necessary for code compliance.

Section 06 20 00 Finished Carpentry (Interior 062013 & Exterior 062023)

1. Refer to 06 22 00 Millwork.

Section 06 22 00 Millwork

1. Millwork shall conform to the Architectural Woodwork Institute "Quality Standards". Use "Custom Grade" for standard woodwork and "Premium Grade" for unique and special projects as directed by the Physical Plant.
2. Refer to "Hardware" under Division 08 Openings for cabinetry hardware standards.

Section 06 16 00 Wood Paneling

1. All interior wood paneling shall meet minimum Class 'B' finish, whether required by code or not. Locations requiring a more stringent classification shall rule when encountered.
2. Unacceptable styles of wood paneling shall be 1/4" or similar sheet style paneling systems.
3. Acceptable styles of wood paneling shall be finish veneered plywood panels (3/8" or thicker), custom made or milled panels, or appropriate quality lumber stock approved by the Physical Plant.

End of Division 06 – Woods, Plastics and Composites