**SECTION 06 10 00**

**ROUGH CARPENTRY**

**PART 1 GENERAL**

1. RELATED DOCUMENTS
	1. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 specification sections, apply to work in this section.
2. DESCRIPTION OF WORK
	1. The majority of the carpentry work is shown on the drawings and schedules but includes all rough carpentry such as miscellaneous rough carpentry, roof curbs, cants, blocking, nailers, grounds, concealed wood blocking, panel backboards, etc. whether shown, not shown, or required for proper installation of other work.
3. QUALITY ASSURANCE
	1. Lumber Standard: Comply with PS 20, except as otherwise indicated
	2. Plywood Standard: Comply with PS 1, except as otherwise indicated
	3. Factory-mark each piece of lumber and plywood with type, grade, mill, and grading agency, except omit marking from exposed surfaces with transparent finish or without finish.
	4. AWPA (American Wood Preservers Association) Standards
4. PRODUCT HANDLING
	1. Keep materials dry during delivery and storage.
	2. Protect against exposure to weather and contact with damp or wet surfaces.
	3. Stack lumber and plywood, and provide air circulation within stacks.
5. REFERENCES
	1. ALSC - American Lumber Standards Committee – Softwood Lumber Standards
	2. APA - The Engineered Wood Association
	3. AWPA U1 – Use Category System- User Specification for Treated Wood
	4. AWPA P5 - Standard for Waterborne Preservatives
	5. AF&PA - American Forest and Paper Association
	6. ANSI/APA (American National Standards Institute/American Plywood Association)
	7. ASTM D226 - Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing
	8. FBC - Florida Building Code

**PART 2 PRODUCTS**

1. MATERIALS
	1. Lumber for blocking may be any grade and classified standard and better for western species or classified No. 2 for Southern Pine.
		1. All wood in contact with masonry or concrete shall be pressure treated.
		2. The manufacturer and applicator of pressure treatment shall mark all wood.
	2. Do not install any wood material into any concealed spaces, except under the following conditions and meeting the requirements of FBC:
		1. The Architect or Engineers permitted set of plans show wood blocking.
		2. The wood blocking is a minimum nominal 2" x 4" and spans from metal stud to metal stud.
		3. Wood meets requirements of 2.1.A of this section.
	3. DO NOT use Fire Retardant Treated Wood (FRTW) in educational facilities.
	4. Plywood: APA Rated sheathing or exterior, Grade CDX; Exposure Durability 1; sanded
	5. Building Paper: Asphalt saturated felt, non-perforated, ASTM D226
	6. Fasteners and Anchoring:
		1. Provide size and type as indicated and as recommended by applicable standards, complying with applicable Federal Specifications for nails, staples, screws, bolts, nuts, washers and anchoring devices.
		2. Provide hot-dipped galvanized anchors and hardware installed in contact with concrete, masonry, and roofing.
		3. Use treated wood products containing preservative using water as the preservative carrier.
2. WOOD TREATMENT
	1. Treatment:
		1. Lumber or plywood indicated as "treated," or specified as treated, shall comply with the applicable requirement of the American Wood Preservers Association (AWPA).
		2. Mark each treated item to comply with the AWPA Quality Mark requirements for the specified requirements.
	2. All wood used below grade and in contact with concrete or masonry shall be given pressure treatment with waterborne preservatives for decay and termite protection as follows:
		1. Pressure-treated lumber and plywood shall conform to AWPA U1 to AWPA P5 (waterborne) and bear a mark-certifying conformance.
		2. Retention requirements: Provide retention of 4.0 kg/m3 (0.25 pcf) and the notation that the material is intended for Above Ground Use and retention of 6.4 kg/m3 (0.40 pcf) with the notation that the material is intended for Fresh Water or Soil Contact Use.
		3. After treatment, kiln-dry to a maximum moisture content of 16%.
		4. Koppers "Wolmanized" brand shall be acceptable or approved equal.
		5. Wood treated with materials containing arsenic is not permitted.
	3. Complete fabrication of treated items prior to treatment, wherever possible.
		1. If cut after treatment, coat cut surfaces with heavy brush coat of same preservative.
		2. Inspect each piece of lumber or plywood after drying and discard all damaged pieces.
	4. Do not use treatments known or suspected to be a carcinogen.

# **PART 3 EXECUTION**

1. INSPECTION
	1. Examine the substrates and supporting structure and conditions before installing carpentry work.
	2. Do not install on unsatisfactory conditions.
2. INSTALLATION
	1. General:
		1. Discard units of material with defects that may impair the quality of work, and units too small to fabricate the work with minimum joints or the optimum joint arrangement.
		2. Set carpentry work accurately to required levels and lines, with members plumb and true and accurately cut and fitted.
		3. Securely attach carpentry work to substrate by anchoring and fastening as required by recognized standards.
			1. Countersink nail heads on exposed carpentry work and fill holes.
			2. Use finishing nails for finish work.
			3. Select fasteners of size that will not penetrate members where opposite side will by exposed to view or will receive finish materials.
			4. Make tight connections between members.
			5. Install fasteners without splitting of wood, pre-drill as required.
	2. Wood Grounds, Nailers, Blocking and Sleepers:
		1. Provide as shown and at all locations required for attachment of other work.
			1. Form shapes as shown or required. Coordinate location with other work involved.
		2. Stagger joints at least 6" for individual members in built-up installations.
		3. Attach to substrates as required to support applied loading.
			1. Countersink bolts and nuts flush with surfaces, unless otherwise shown.
			2. Build into masonry during installation of masonry work.
			3. Where possible, anchor to formwork before concrete placement.
	3. Coordination: Fit carpentry work to other work, scribe, and cope as required for accurate fit.
		1. Correlate location of furring, nailers, blocking, grounds, and similar supports to allow proper attachment of other work.
	4. Do not expose wood products in attics, soffits, chases, or other spaces concealed within the building, clarify prior to installation.
	5. Provide panel backboards 12" larger than the mounted equipment to the greatest extent practicable.
		1. Butt adjoining boards to form continuous backboard.

END OF SECTION