

SECTION 06100

ROUGH CARPENTRY

PART 1 GENERAL

1.01 SUMMARY

- A. Provide all labor, material and equipment required to complete all items of carpentry work shown on Drawings and as specified herein, and do all work ordinarily done by carpenters, whether or not specifically mentioned.
- B. Do carpentry work in cooperation with the work of all other trades and subsystems to produce an efficient building operation.
- C. Related requirements
 - 1. Section 03300: Cast-in-Place Concrete
 - 2. Section 04200: Unit Masonry.
 - 3. Section 05120: Structural Steel.
 - 4. Section 08710: Finish Hardware

1.02 INCLUSIONS

- A. Section includes construction of all concrete forms, miscellaneous backing, framing and furring, and temporary construction involving wood.
- B. Section includes work necessary to expedite and protect the Work. Brace metal door frames and bucks, metal sash frames, etc., to hold them securely in place until permanently built into adjacent construction.

1.03 STORAGE

- A. Stack lumber in a manner to insure ventilation, and in a place to insure protection from weather damage. Cover with water proof covering.

1.04 REFERENCES

- A. ALSC - American Lumber Standards Committee: Softwood Lumber Standards.
- B. ANSI/ASTM E84 - Surface Burning Characteristics for Building Materials.
- C. AWWA - American Wood Preservers' Association.
- D. NFPA - National Forest Products Association.
- E. UL - Underwriter's Laboratory.
- F. WWPA - Western Wood Products Association.

1.05 QUALITY ASSURANCE

- A. Lumber Grading Agency: Certified by ALSC.
- B. Plywood Grading Agency: Certified by APA.

1.06 SUBMITTALS

- A. Submit product data for all manufactured products including but not limited to fasteners, adhesives, anchors, wood treatment.

PART 2 PRODUCTS

2.01 LUMBER MATERIALS

- A. Lumber: Grade stamp containing symbol of grading agency, rules under which graded, mill number or name, grade of lumber, species or species grouping and condition of seasoning.
- B. Non-structural light framing and blocking: Douglas Fir-larch, 19 percent maximum moisture content. Construction grade, kiln dried to 15 percent average.

2.02 ACCESSORIES

- A. General anchors and fasteners: Provide products with allowable design loads, as published by manufacturer, that meet or exceed those indicated. Manufacturer's published values shall be determined from empirical data or by rational engineering analysis, and demonstrated by comprehensive testing performed by a qualified independent testing agency.
- B. Fasteners (nails, screws, bolts): Hot dipped galvanized steel for exterior and treated wood locations, plain finish elsewhere. Select size and type of fastener as required for proper installation and to rigidly secure members in place.
- C. Structural adhesive appropriate for condition to fasten carpentry to support or to fasten items to carpentry when mechanical fastening cannot be accomplished.

2.03 WOOD TREATMENT

- A. Wood Preservative Treatment: Pressure impregnate with a waterborne preservative in accordance with the American Wood Preservative Association (AWPA) Standard C22-92 for wood in contact with ground, 0.40 pound/cubic foot retention, or C2-92 for wood in exterior assemblies and not in contact with ground, 0.25 pound/cubic foot retention. Fabricate lumber insofar as possible before treatment. Dry lumber to 19 percent after treatment. Field treat all cut ends per execution requirements of this specification. Treat the following:
 - 1. Framing, blocking, furring, nailing strips built into exterior masonry walls, wood in contact with masonry walls, wood in contact with concrete and foundations, and wood in contact with earth, and wood exposed to the exterior.

2. Wood cants, nailers, curbs, equipment support bases, blocking, stripping and similar members in connection with roofing, flashing, vapor barriers and waterproofing.
- B. Wood Fire-Retardant Treatment: Pressure impregnate with fire-retardant chemical to comply with AWPA C20 for lumber and C27 for plywood. Provide UL label on each piece of fire-retardant lumber or plywood. Treat all wood.

PART 3 EXECUTION

3.01 INSPECTION

- A. Examine substrates to which construction attaches or abuts, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of construction of the work of this section.
- B. Report conditions contrary to contract requirements that would prevent a proper installation. Do not proceed with the installation until unsatisfactory conditions have been corrected.
- C. Failure to call attention to defects or imperfections will be construed as acceptance and approval of substrate conditions. Installation indicates acceptance of substrates with regard to conditions existing at the time of installation and full responsibility for completed work.

3.02 GENERAL

- A. Use only sound, thoroughly seasoned, well-manufactured materials of the longest practical lengths and sizes to minimize jointing. Use materials free from warp which cannot be easily corrected by anchoring and attachment. Sort out and discard warped material and material with other defects which would impair the quality of the Work.
- B. Securely attach carpentry work to substrates by anchoring and fastening as shown and as required by recognized standards. Provide washers under bolt heads and nuts in contact with wood.
- C. When using structural adhesive, follow installation instructions, using product within working time and allowing for setup time.
- D. Set carpentry work accurately to required levels and lines with members plumb and true and accurately cut and fitted. Shim with metal or slate for full-bearing on concrete substances.
- E. Install rough carpentry in accordance with 2006 IBC, unless otherwise shown or specified.

3.03 COORDINATION

- A. Obtain measurements and verify dimensions shown and shop drawing details before proceeding with carpentry work, wherever possible. Correlate location of furring, nailers,

blocking and similar supports so that attached work will comply with design requirements. Fit carpentry work to other work. Scribe and cope as required for accurate fit. Coordinate installation of all wood members and wood materials.

3.04 ATTACHMENT AND ANCHORAGE

- A. Use common wire nails, except as otherwise shown or specified herein. Do not wax or lubricate fasteners that depend on friction for holding power.
- B. Select fasteners of size that will not penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting of wood; predrill as required. Do not drive threaded friction type fasteners; turn into place. Tighten bolts and lag screws at installation and retighten as required for tight connections prior to closing in or at completion of Work.

3.05 WOOD NAILERS, BLOCKING AND SLEEPERS

- A. Provide wherever shown and where required for attachment of other work. Form to shapes as shown and cut as required for true line and level of work to be attached.
- B. Coordinate location with other work involved; refer to Shop Drawings of such work.
- C. Attach to substrate securely with anchor bolts and other attachments devices and materials indicated in Part 2 as required to support applied loading. Countersink bolts and nuts flush with surfaces, unless otherwise shown.

3.06 SITE APPLIED WOOD TREATMENT

- A. Site apply preservative treatment in accordance with manufacturer's instructions.
- B. Treat site-sawn ends. Brush apply two coats of preservative treatment on untreated wood.
- C. Allow preservative to cure prior to erecting members.

3.07 WORKMANSHIP AND INSTALLATION

- A. Protect all carpentry, woodwork, metal work, hardware, and other materials from damage of any character during the progress of the work. Store materials in accordance with manufacturer's recommendations.
- B. Furnish and install all rough hardware required, such as nails, screws, anchor bolts and devices (except those occurring in structural steel), shot anchors, similar devices. All rough hardware shall be of the proper type and size for the use intended. Provide adequate hardware to achieve substantial and positive anchorage. Nailing into wood plugs is not acceptable for any work.
- C. Where mechanical attachment can not be achieved using fasteners, use construction adhesive over entire area of items to be secured to achieve substantial and positive connection to substrate.

- D. Fit and place all finish accurately and in a workmanlike manner. Gouges, dents, hammer marks, splits or other defects will not be permitted in the finished work.

END OF SECTION

