

### PART I – GENERAL

#### WORK SPECIFIED HEREIN

- All labor, materials, equipment and services necessary to furnish and install the rough carpentry and related items as indicated or specified.

#### PRODUCT DELIVERY, STORAGE AND HANDLING

- Carefully store all lumber delivered to the site off the ground in a manner to assure proper drainage, ventilation and protection from the weather.

#### SUBMITTALS

- Unless otherwise notes, the contractor shall prepare all shop drawings, product literature, etc. only as required to properly coordinate and construct the project.
- Review of submittals by the Professional of Record is limited to specific shop drawings as called for in the Project Manual.
- Shop drawings for review by the Professional of Record are not required for this section.

#### GENERAL

##### Lumber:

- For each use, comply with the "American Softwood Lumber Standard" PS 20 by the U.S. Department of Commerce. Nominal sizes are shown or specified; provide actual sizes comply with the minimum size requirements of PS 20 for the moisture content specified for each use. All lumber to be S-Dry.

##### Plywood:

- Comply for each use, with the requirements of the U.S. Product Standard PS 1 for "Softwood Plywood/Construction and Industrial", except as otherwise specified herein. Provide plywood of any PS 1 species classification group, except where particular species is shown or specified or where PS 1 limits groups for particular grade specified.

#### COORDINATION

- Keep carpentry materials dry during delivery. Store lumber and plywood in stacks. Protect bottom of stacks against contact with damp or wet surfaces. Protect exposed materials against weather. Do not store dressed or treated lumber or plywood outdoors.
- Do not store dressed or treated lumber or plywood outdoors.
- Store materials for which a maximum moisture content is specified only in areas where relative humidity has been reduced to a level where specified moisture content can be maintained.

### PART II – PRODUCTS

#### MATERIALS

##### Framing Lumber:

All framing lumber shall be Douglas Fir values as noted.

##### Plywood:

1/2" CDX 5-PLY, 48" X 96" (or as indicated).

##### Miscellaneous Lumber:

Provide wood for support or attachment of other work such as cant strips, bucks, nailers, blocking, furring, grounds, stripping and similar members. Provide lumber of the sizes shown or specified, worked to shapes shown, and as follows:

- Moisture Content: 19% maximum for all lumber items not specified to receive wood preservatives treatment.
- Grade: Construction grade light framing size lumber of any species or board size lumber, as required. Provide construction grade boards (WCLIB) or NO. 2 boards (WWPA).
- Concealed plywood interior standard grade, interior type.
- Backing panels for electrical or telephone equipment standard grade interior type plywood with exterior glue.

##### Anchorage and Fastening Materials:

Select proper type, size, material and finish for each application. Comply with the following:

- Nails and Staples: *FS FF-N-105*
- Wood Screws: *ANSI B-18.6.1*
- Bolts, hexagon and square: *ANSI B-18-2.1*.
- Bolts, round head: *ANSI B-18.5*
- Nuts: *FS FF-N-836*
- Washers: *FS FF-W-92*
- Lag Screws or Lag Bolts: *FS FF-B-561*
- Expansion Shields, Expansion Nails and Drive Screw Devices: *FS FF-B-561*
- Toggle Bolts: *FS FF-B-588*.
- Bar or strap Anchors: *ASTM A525 size coated steel, 18 gauge minimum.*
- Metal Framing Connectors: *Teco, Simpson or Kant Sag.*

##### Wood Preservative Treatment:

Treat wood, including lumber and plywood, as specified herein to be treated, to comply with the applicable requirements of the AWPI.

Pressure treat the following items with water borne preservatives for above-ground use, complying with the AWPB LP 2:

- Wood cants, nailers, blocking, stripping and similar members in connection with roofing, flashing, vapor barriers and waterproofing (except plywood sheathing).
- Wood sills, blocking, furring, stripping, and similar concealed members in contact with masonry or concrete or below grade.

Foundation Grade redwood, grade marked, is acceptable for wood sills in lieu of treated lumber.

***Fire Retardant Treatment:***

For all wood members and plywood required by code as fire retardant treated provide pressure impregnation with Dricon fire retardant chemicals in accordance with the recommendations and quality control of Koppers Co., Inc. to provide a UL RFS Fire Hazard classification. All wood shall be identified with a UL label certifying this classification and the FM diamond.

**PART III – EXECUTION****INSTALLATION**

- 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.
- Securely attached 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.
- Nail plywood to comply with APA recommendations.
- 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 or masonry substrates.
- Attachment and Anchorage:
  - Use common wire nails, except as otherwise shown or specified herein. Do not wax or lubricate fasteners that depend on friction for holding power. 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 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. Counter sink nail heads on exposed carpentry work and fill holes, use finishing nails for finish work.

**WOOD FRAMING INSTALLATION**

- Nail or spike members in accordance with code requirements. All framing 16" o.c. unless otherwise noted.
- Cut framing square on bearings, closely fit, accurately set to required lines and levels. Secure rigidly in place at bearings and connections. Do not use shims for leveling on wood or metal bearings. Use steel shims with full bearing on masonry or concrete substrates.

- Frame members for passage of pipes and ducts to avoid cutting structural members. Do not cut, notch or bore framing members for passage of pipes or conduits without Architect's permission. Reinforce framing members as directed where damaged by cutting. Provide Simpson NS nail stoppers over utilities that penetrate framing members, nailing with 8d nails.

**WOOD GROUNDS, NAILERS AND BLOCKING**

- Provide wherever shown and where required for screeding or attachment of other work. Form to shapes as shown and cut as required for true line and level of work to be attached.
- Provide solid wood backing and wood blocking inside stud wall construction for all wall mounted equipment, accessories, and toilet rooms.
- Coordinate location with other work involved; refer to shop drawings of such work.
- Attach to substrates securely with anchor bolts and other attachment devices as shown and as required to support applied loading. Countersink bolts and nuts flush with surfaces, unless otherwise shown.
- Set true to line and level, plumb, with intersections true to required angle. Build into masonry as work progresses, cutting to fit masonry unit size involved. Anchor to form work before concrete placement.
- Provide grounds of dressed, preservative treated, key-beveled lumber not less than 1-1/2" wide and of the thickness required to bring fact of ground to exact thickness of finish material involved. Remove temporary grounds when no longer required.

**WOOD FURRING**

Install plumb and level with closure strips at all edges and openings. Shim with wood as required.

**END OF SECTION**