

SECTION 06173 OPEN WEB WOOD JOISTS

This guide specification has been prepared by Universal Forest Products, Inc. to assist design professionals in the preparation of a specification section covering OPEN JOIST 2000 open web wood joists for use in floor framing in residential and commercial projects. These joists may only be used for roof framing where the roof slope is ½ in 12 or less, and when adequately sized for this condition. Refer to OPEN JOIST 2000 literature for additional information on these products.

OPEN JOIST 2000 products can be used in fire-rated and acoustical-rated floor assemblies when combined with other building components including cementitious toppings, subflooring, and gypsum board as applicable to the tested assembly. Refer to OPEN JOIST 2000 literature and website for information on fire-rated and acoustical-rated assemblies.

This specification may be used as the basis for developing either a project specification or an office master specification. Since it has been prepared according to the principles established in the Manual of Practice published by The Construction Specifications Institute (CSI), it may be used in conjunction with most commercially available master specifications systems with minor editing.

This guide specification is available in a variety of electronic formats to suit most popular word-processing programs. Please contact Universal Forest Products, Inc. by e-mail at ojservice@ufpi.com or visit our website at www.openjoist.com.

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Open web wood floor joists
 - 2. Bracing, blocking, and accessories
- B. Related Sections:
 - 1. Division 1: Administrative, procedural, and temporary work requirements.
 - 2. Section 06110 – Framing and Sheathing
 - a. Wood bracing, blocking, and framing for openings
 - b. Subflooring

1.2 REFERENCES

- A. International Code Council (ICC) (www.iccsafe.org)
 - 2003 International Building Code (IBC)
 - 2003 International Residential Code (IRC)
 - 1999 BOCA National Building Code/1999 (BNBC)
 - 1999 Standard Building Code (SBC)
 - 1997 Uniform Building Code (UBC)
- B. National Institute of Standards and Technology (NIST) (www.nist.gov) PS20
American Softwood Lumber Standard.
- C. Canadian Wood Council member lumber grading agencies qualified by the
American Lumber Standards Board of Review.

1.3 SYSTEM DESCRIPTION

- A. Design Floor Loads:
 - 1. Live Load
 - 2. Dead Load
 - 3. Deflection Maximum

1.4 SUBMITTALS

- A. Submittals for Review:
 - 1. Shop Drawings: Indicate sizes and spacing of joists and associated components, web and chord member sizes, loading, bracing and blocking, and framed openings.
 - 2. Product Data: Include joist configurations, bearing and anchor details, bracing, and blocking.

1.5 QUALITY ASSURANCE

- A. Manufacturer:
 - 1. Experience in manufacture of open web wood joists.
 - 2. Member of Wood Truss Council of America (WTCA).
- B. Lumber Grading Agency: Certified to NIST PS 20.
- C. Joists: Meet requirements of ICC International Building Code; certified by ICC Evaluation Service, Inc.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Handle joists upright by bottom flange.
- B. Prevent excessive flat-wise bending of joists.
- C. For joists stored outdoors:
 - 1. Place joists on blocks or spacers located at ends and maximum 10 feet on center.
 - 2. Cover joists with waterproof coverings, properly vented.
 - 3. Do not stack joist bundles more than three high.
 - 4. Leave joist bundle bands in place until ready to use.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

- A. Contract Documents are based on OPEN JOIST 2000 by Universal Forest Products, Inc.

2.2 MATERIALS

- A. Lumber: Spruce-Pine-Fir, graded to requirements of Canadian Wood Council lumber grading agencies.

2.3 ACCESSORIES

- A. Lumber for Bracing, Blocking, and Framed Openings.
- B. Fasteners

2.4 FABRICATION

- A. Fabricate joists to achieve structural requirements specified.

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Install joists and accessories in accordance with manufacturer's instructions and approved Shop Drawings.
- B. Set joists level, plumb, right side up, in correct position.
- C. Joists may be trimmed maximum 5-1/2 inches on each end; leave minimum 1-3/4 inches of solid end block intact.
- D. Do not cut, notch, or drill joist top chords, bottom chords or webs.
- E. Provide minimum 1-1/2 inches of bearing at each end of joists.
- F. Fasten joists to top plates, bearing plates, rim boards, and other joists butting end-to-end or lapping at ends.
- G. Place temporary 2X4 lumber bracing perpendicular to joists at maximum 8 feet on center, spanning minimum of three joists. Fasten bracing to each joist.
- H. Place triangulated 2X4 lumber bracing or 4 foot wide strip of temporary or permanent sheathing where end walls are not braced.
- I. Remove temporary bracing and sheathing progressively as permanent subflooring is installed.
- J. Install permanent bracing at locations indicated on Shop Drawings.
- K. Frame openings between trusses with lumber in accordance with Section ____.
- L. Coordinate placement of subflooring with work of this section.
- M. Installation Tolerances:
 - 1. Location of framing members: Maximum __ inch(es) from indicated positions.