



## BUILDING CODE MANUAL

2301  
Article 2  
05-06-03  
Page 1 of 2

### LIGHT FRAMING LUMBER

Section 2316.1 provides that the species and commercial grades listed in Tables 4A, B, C, and E of the Supplement to the National Design Specification for Wood Construction may be used for design of an assembly of repetitive framing such as joists, rafters and studs provided that they are:

- not over four inches in thickness.
- spaced not over 24 inches on center.
- not less than three in number.
- joined by transverse load distributing elements adequate to support the design load.

Values for species and grades not tabulated may be used only under conditions specifically approved by the Building Official. For conventional construction (Section 2323), the following guidelines apply.

**Studs:** Utility grade studs shall not be spaced more than 16" on center, nor support more than a roof and ceiling, nor exceed 8 feet in height for exterior walls and load-bearing walls or 10 feet for interior non-load bearing walls. Utility grade may be used for other loadings or spacings if justified by Engineer's calculations.

**Sheathing:** Solid sheathing shall conform to Table 23-II-D-1 and 23-II-D-2 for grade, thickness and span. Solid sheathing for spans not exceeding 24 inches may be of utility grade. Spaced sheathing requires standard grade or better.

**Plates:** Bearing or non-bearing wall and partition sill plates may be of utility grade only if the plate is used for interior walls and walls above the first story. Interior walls above raised wood floors may use utility grade sills however, interior cripple walls below the raised wood floor shall not use utility grade sill plates. Plates, sills or sleepers in contact with concrete or masonry shall not be utility grade wood. Also, foundation cedar or No. 2 foundation grade redwood shall not be permitted for exterior sill plates or interior cripple wall sill plates per Section 2306.4.

For bearing double top plates supported by 2 x 4 studs spaced 16 inches on centers supporting roof rafters and ceiling joist spaced 24 inches on centers, utility grade is the minimum acceptable.

**Other:** Utility grade may be used for blocking, bridging, trimmers, etc. but not for joists, rafters, headers, beams, girders, posts, underpinning or isolated load carrying studs.

RECOMMENDED BY:

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