

ALTERNATIVE BEAMS AND STRINGERS GRADES

Characteristics and limiting provisions are:

Checks — Seasoning checks, single or opposite each other with a sum total equal to 1/4 the thickness.

Grain — Medium. See Paragraph 204-a (Douglas fir only).

Knots — Sound, tight and well-spaced, are permitted in sizes not to exceed the following or equivalent displacement: Nominal

Nominal Width	At Edge Wide Face	Centerline Wide Face
8"	1-7/8"	2"
10"	2"	2-5/8"
12"	2-1/8"	3-1/8"
14"	2-3/8"	3-3/8"
16"	2-1/2"	3-5/8"
18"	2-3/4"	3-5/8"
20"	2-7/8"	3-7/8"
22"	3"	4"
24"	3-1/8"	4-1/4"

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The size of knots on wide faces may be increased proportionately from the size permitted at the edge to the size permitted at the centerline.

Pin Holes — Limited.

Pitch Streaks.

Pockets — Medium pitch pockets.

Shake — 1/6 the thickness on end.

Skips — Occasional Skips 1/16" deep, 2' in length.

Slope of Grain — 1 in 14.

Splits — Splits equal in length to 1/2 the width of the piece or equivalent of end checks.

Stain — Stained sapwood. Firm heart stain, 10% of width or equivalent.

Torn Grain — Heavy.

Wane — 1/8 of any face, or equivalent slightly more for a short distance.

**POSTS AND TIMBERS
ALL WEST COAST SPECIES**

Limited pin holes.

Heavy torn grain.

Medium grain (Douglas fir only).

Slope of grain full length not to exceed 1 in 12.

Pitch streaks.

Medium pitch pocket.

Occasional skips 1/16" deep and 2' long or equivalent.

Wane approximately 1/8 of any face or equivalent slightly more for short distance.

Shake approximately 1/3 the thickness on end.

Knots are sound, tight and well spaced. They may be present anywhere in the piece in the following approximate sizes:

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Nominal Width	Approx. Knot Size	Nominal Width	Approx. Knot Size
5"	1"	12"	2-3/8"
6"	1-1/4"	14"	2-1/2"
8"	1-5/8"	16"	2-3/4"
10"	2"	18"	3"

In rectangular sizes the wider face determines the size of knots. Proportionately larger knots are permitted in sizes 20" and wider or thicker.

Assigned stress values do not apply to pieces 20" and larger or 50' and longer.

131-bb. "DENSE NO. 1 STRUCTURAL" - POSTS and TIMBERS (Douglas fir only). Conforms to all the grade provisions of Para. 131-b with the additional requirement of density as defined in Para. 204-c.

131-b. "NO. 1 STRUCTURAL" - POSTS and TIMBERS. Timbers of this grade are in great demand because of their excellent strength and appearance. In these respects they rank only slightly below the "SELECT STRUCTURAL" grade and are recommended for similar uses wherever appearance is a less exacting factor but high strength is a requirement. Like the "SELECT STRUCTURAL" grade, these timbers are graded primarily for compression parallel

ALTERNATIVE POSTS AND TIMBERS GRADES

ALL SPECIES

5" x 5" and Larger

Width not more than 2" greater than thickness

ALT 131. Some manufacturers of timber products from species listed in this grade rule prefer to grade the material under the provisions of Posts and Timbers rule of the Western Woods Products Association which is published here. There are three grades: "SELECT STRUCTURAL", "NO. 1 STRUCTURAL", and "NO. 2 STRUCTURAL". In Douglas fir, both "SELECT STUCTURAL" and "NO. 1 STRUCTURAL" may be obtained with an additional specification for density. For design values, See Table 11, Paragraph 200.

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All are graded full length except as provided in the grade descriptions, knots appearing on narrow faces are limited to the same displacement as knots specified for the wide face.

In addition to the following specific provisions applicable to Posts and Timbers, the appropriate provisions in all other paragraphs in the rules apply. For measurement of knots, see Paragraph 201-b.

ALT 131-aa. "DENSE SELECT STRUCTURAL" – POSTS and TIMBERS (Douglas fir only).

Conforms to all the grade provisions in Paragraph ALT 131-a with the additional requirement of density as defined in Paragraph 204-c.

ALT 131-a. "SELECT STRUCTURAL" – POSTS and TIMBERS.

Timbers of this grade have very high strength properties and are of finest appearance. They are recommended for columns, posts, and struts in heavy construction such as warehouses, docks, and other large structures where superior strength is required. They are also recommended for exposed framing where fine appearance is demanded. Because of their size they are highly fire resistive. These timbers are graded primarily for compression parallel to the grain but may also be used for members stressed in tension or bending. Appropriate working stresses for these uses are assigned to the grade.

ALTERNATIVE POSTS AND TIMBERS GRADES

Characteristics and limiting provisions are:

Checks — Seasoning checks, single or opposite each other with a sum total equal to 1/2 the thickness of the piece.

Grain — Medium. See Paragraph 204-a (Douglas fir only).

Knots — Sound, tight and well-spaced. Knot size limitations are permitted in the following sizes or their equivalent displacement:

Nominal Width	Anywhere on Wide Face
5"	1"
6"	1-1/4"
8"	1-5/8"
10"	2"
12"	2-3/8"
14"	2-1/2"
16"	2-3/4"
18"	3"

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Pin Holes — Limited. Pitch Streaks.

Pockets — Medium pitch pockets.

Shake — 1/3 the thickness on end.

Skip — Occasional skips 1/16" deep, 2' in length.

Slope of Grain — 1 in 12.

Splits — Splits equal in length to 3/4 the thickness of the piece or equivalent of end checks.

Stains — Stained sapwood. Firm heart stain, 10% of width or equivalent.

Torn Grain — Heavy.

Wane — 1/8 of any face, or equivalent slightly more for a short distance.