

Faces Graded = All faces and both ends - WORST CHARACTERISTIC DETERMINES THE GRADE!

Purpose Intended : Strength

Grade Name	Construction - Para. 122b				Standard - Para. 122c				Utility - Para. 122d				Economy - Para. 122e			
Shake/Checks	not through - up to 2' long through - not permitted				through - up to 2' long not through - 3' up to 1/4 length max 3/4 thickness if continuous through wide face				through - several 1/3 length not through - full length 3 face shake - max 1/6 length				no limit			
Skips (S4S stock only)	Hit & Miss = 1/16" Deep x 4' long Surfaced area = 1/2 Width x 2" Long or equiv				Hit or Miss = 1/16" Deep more than 4' long or One Heavy Skip - 1/8" Deep x 2' long				Full Length skip 1/8" Deep - on face or edge, not both				1/4" scant F.L. allowed on both W X T			
Splits	Width of piece				1 1/2 x width				1/6 length				1/3 length			
Slope of Grain (actual size)	1 in 6				1 in 4				1 in 4				no limit			
Wane (based on actual size) don't forget to check width	1/4 Thickness x 1/4 Width F.L. or equiv Max 1/2 Thickness x Max 1/3 Width 1-1/2" Thick = min 3/4" good wood 3-1/2" Width = 2 5/16" good wood				1/3T x 1/3W F.L. or equiv Max 2/3T x Max 1/2W up to 1/4L 1-1/2" Thick = min 1/2" good wood 3-1/2" Width = 1 3/4" good wood				1/2T x 1/2W F.L. or equiv Max 7/8 Thickness x Max 3/4 Width 1-1/2" Thick = min 3/16" good wood 3-1/2" Width = 7/8" good wood				3/4 across width full length. across face 1/4" scant for 1/2 width, 1/3 length If through equiv to holes			
Pin Holes	See Knot Table (48 pin holes per inch of hole permitted) - WORST WIDE FACE ONLY (averaged over full length of the piece)												no limit			
Grub/Teredo Holes	See Knot Table (12 holes per inch of hole permitted) - WORST WIDE FACE ONLY (averaged over the full length of the piece)												no limit			
White Specks	Not Permitted				1/3 volume				no limit (100% permitted)				no limit			
Honeycomb					1/6 actual width Full Length				no limit (100% permitted)				no limit			
Peck (measured between lines parallel to actual width)					1/6 actual width Full Length				max 1/3 cross section Full Length or 2/3 cross section on one face through portion - maximum 1/6 length				3/4 cross section full length			
Unsound Wood must not destroy nailing edge					Maximum area - 1/12 Width x 2" Long or equivalent smaller spots											
Waste					Not Permitted								25% if 9' or Longer minimum 2' from end			
KNOT SIZES PERMITTED measured between lines parallel to the edges	Firm &	UNS NFF	Pin Holes allowed	Grubs allowed	Any	KNOT	Pin Holes allowed	Grubs allowed	Any	KNOT	Pin Holes allowed	Grubs allowed	3/4 cross section			
2" NOMINAL WIDTHS	Tight 3/4"	HOLES 5/8"	every 1' 10	every 1' 2.5	Quality 1"	HOLES 3/4"	every 1' 18	every 1' 4.5	Quality 1 1/4"	HOLES 1"	every 1' 48	every 1' 12				
3" NOMINAL WIDTHS	1 1/4"	3/4"	12	3	1 1/2"	1"	24	6	2"	1 1/4"	60	15				
4" NOMINAL WIDTHS	1 1/2"	1"	16	4	2"	1 1/4"	30	7.5	2 1/2"	1 1/2"	72	18				
	1 Knot Hole per 3' or equivalent smaller				1 Knot Hole per 2' or equivalent smaller				1 Knot Hole per 1' or equivalent smaller							
Spike Knots	equivalent size to round knots				equivalent size to round knots				equivalent size to round knots				equivalent size to round knots			

Round and Oval Knot Size

- Measure knots as the width between imaginary lines running parallel to the edges.
- Average the size on both faces.

Spike Knots

- Spike knot measurements must be converted to an equivalent round knot size.

Fig. 1 simple

Fig. 2 complex

3-Face Knots

Fig. 1

Fig. 2

Knots in Squares

Construction knot

Adjacent Face Knots
(this knot displaces about 16%)

Standard knot

50% displacement Knot

Knot Holes

- Knot holes are measured the same as round and oval knots and each grade limits the size.
- Each grade limits holes to the equivalent of one maximum sized hole for a given lineal measurement.
- Knot holes may be concentrated.