



**2013 ADDENDUM  
to  
ANSI/AWC WFCM-2012  
WOOD FRAME CONSTRUCTION MANUAL FOR ONE- AND TWO-FAMILY DWELLINGS  
(web version dated November 2011)**

**Effective June 1, 2013, the following tables in the 2012 Wood-Frame Construction Manual (WFCM) are revised to reflect changes to all grades of 2x4, 2x6, 2x8, 2x10, and 2x12 Southern Pine. These tables supersede tables published in the AWC May 2013 and April 2012 Addenda.**

2012 WFCM Table	Page Reference	Description	Action
Tables 3.18A and B	224 and 225	Floor joist spans for common lumber species.	<u>Replace</u> with revised Tables 3.18A and B as shown in this Attachment.
Tables 3.20A1 through A6	228 to 239	Maximum exterior stud lengths for common lumber species resisting interior zone wind loads. ( <i>Fully sheathed with a minimum sheathing material</i> )	<u>Replace</u> with revised Tables 3.20A1 through A6 as shown in this Attachment.
Tables 3.20B1 through B6	242 to 253	Maximum exterior stud lengths for common lumber species resisting interior zone wind loads. ( <i>Fully sheathed with a minimum of 3/8" wood structural panels</i> )	<u>Replace</u> with revised Tables 3.20B1 through B6 as shown in this Attachment.
Tables 3.22A1 and A2 through Tables 3.22E1 and E2	256 to 265	Header spans for exterior walls resisting gravity loads.	Revise Footnote 1 as follows: Tabulated spans are based on #2 Grade Hem-Fir, and are applicable to species with equal or greater $F_b$ and E from the NDS Supplement (i.e., Douglas Fir-Larch, <del>Southern Pine</del> , or Spruce-Pine-Fir). <u>Where #2 Grade Southern Pine is used, tabulated spans shall be multiplied by 0.93 or, alternatively, #1 or higher grade of Southern Pine shall be required.</u> For #3 Grade <del>lumber</del> Hem-Fir, Douglas Fir-Larch, or Spruce-Pine-Fir, <u>tabulated spans shall be multiplied by 0.75 and, for #3 Grade Southern Pine, tabulated spans shall be multiplied by 0.70.</u>
Table 3.23A	267 and 268	Header spans for exterior walls resisting (out-of-plane) wind loads.	Revise Footnote 3 as follows: Tabulated values are based on #2 Grade Hem-Fir, and are applicable to species with equal or greater $F_b$ and E from the NDS Supplement (i.e., Douglas Fir-Larch, <del>Southern Pine</del> , or Spruce-Pine-Fir). <u>Where #2 Grade Southern Pine is used, tabulated spans shall be multiplied by 0.93 or, alternatively, #1 or higher grade of Southern Pine shall be required.</u>
Table 3.23B	269	Header spans for exterior non-loadbearing walls and window sill plates resisting (out-of-plane) wind loads.	Revise Footnote 3 as follows: Tabulated values are based on #2 Grade Hem-Fir, and are applicable to species with equal or greater $F_b$ and E from the NDS Supplement (i.e., Douglas Fir-Larch, <del>Southern Pine</del> , or Spruce-Pine-Fir). <u>Where #2 Grade</u>

			<u>Southern Pine is used, tabulated spans shall be multiplied by 0.93 or, alternatively, #1 or higher grade of Southern Pine shall be required.</u>
Tables 3.24A and B	272 to 275	Header spans for interior walls resisting gravity loads.	Revise Footnote 1 as follows: Tabulated spans are based on #2 Grade Hem-Fir, and are applicable to species with equal or greater $F_b$ and E from the NDS Supplement (i.e., Douglas Fir-Larch, <del>Southern Pine</del> , or Spruce-Pine-Fir). <u>Where #2 Grade Southern Pine is used, tabulated spans shall be multiplied by 0.93 or, alternatively, #1 or higher grade of Southern Pine shall be required.</u> For #3 Grade <del>lumber</del> <u>Hem-Fir, Douglas Fir-Larch, or Spruce-Pine-Fir, tabulated spans shall be multiplied by 0.75 and, for #3 Grade Southern Pine, tabulated spans shall be multiplied by 0.70.</u>
Tables 3.25A and B	278 and 279	Ceiling joist spans for common lumber species.	<u>Replace</u> with revised Tables 3.25A and B as shown in this Attachment.
Tables 3.26A through H	280 to 289	Rafter spans for common lumber species.	<u>Replace</u> with revised Tables 3.26A through H as shown in this Attachment.
Table 3.28	292	Hip and valley beam sizes.	Revise Footnote 1 as follows: Tabulated values are based on #2 Grade Hem-Fir, and are applicable to species with equal or greater $F_b$ and E from the NDS Supplement (i.e., Douglas Fir-Larch, <del>Southern Pine</del> , or Spruce-Pine-Fir). <u>Where #2 Grade Southern Pine is used, tabulated spans shall be multiplied by 0.93 or, alternatively, #1 or higher grade of Southern Pine shall be required.</u>
Table 3.29	293	Ridge beam spans.	Revise Footnote 1 as follows: Tabulated spans are based on #2 Grade Hem-Fir, and are applicable to species with equal or greater $F_b$ and E from the NDS Supplement (i.e., Douglas Fir-Larch, <del>Southern Pine</del> , or Spruce-Pine-Fir). <u>Where #2 Grade Southern Pine is used, tabulated spans shall be multiplied by 0.93 or, alternatively, #1 or higher grade of Southern Pine shall be required.</u> For #3 Grade <del>lumber</del> <u>Hem-Fir, Douglas Fir-Larch, or Spruce-Pine-Fir, tabulated spans shall be multiplied by 0.75 and, for #3 Grade Southern Pine, tabulated spans shall be multiplied by 0.70.</u>

**Table 3.18A Floor Joist Spans for Common Lumber Species**

**LL = 30 psf**  
**L/Δ = 360**

(Residential Sleeping Areas, Live Load = 30 psf, L/Δ = 360)

Joist Spacing	Specie and Grade		Dead Load = 10 psf				Dead Load = 20 psf			
			(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)
			2x6	2x8	2x10	2x12	2x6	2x8	2x10	2x12
<b>Maximum Floor Joist Spans</b>										
12 in.	Douglas Fir-Larch	SS	12 - 6	16 - 6	21 - 0	25 - 7	12 - 6	16 - 6	21 - 0	25 - 7
	Douglas Fir-Larch	No.1	12 - 0	15 - 10	20 - 3	24 - 8	12 - 0	15 - 7	19 - 0	22 - 0
	Douglas Fir-Larch	No.2	11 - 10	15 - 7	19 - 10	23 - 4	11 - 8	14 - 9	18 - 0	20 - 11
	Douglas Fir-Larch	No.3	9 - 11	12 - 7	15 - 5	17 - 10	8 - 11	11 - 3	13 - 9	16 - 0
	Hem-Fir	SS	11 - 10	15 - 7	19 - 10	24 - 2	11 - 10	15 - 7	19 - 10	24 - 2
	Hem-Fir	No.1	11 - 7	15 - 3	19 - 5	23 - 7	11 - 7	15 - 3	18 - 9	21 - 9
	Hem-Fir	No.2	11 - 0	14 - 6	18 - 6	22 - 6	11 - 0	14 - 4	17 - 6	20 - 4
	Hem-Fir	No.3	9 - 8	12 - 4	15 - 0	17 - 5	8 - 8	11 - 0	13 - 5	15 - 7
	Southern Pine	SS	12 - 3	16 - 2	20 - 8	25 - 1	12 - 3	16 - 2	20 - 8	25 - 1
	Southern Pine	No.1	11 - 10	15 - 7	19 - 10	24 - 2	11 - 10	15 - 7	18 - 7	22 - 0
	Southern Pine	No.2	11 - 3	14 - 11	18 - 1	21 - 4	10 - 9	13 - 8	16 - 2	19 - 1
	Southern Pine	No.3	9 - 2	11 - 6	14 - 0	16 - 6	8 - 2	10 - 3	12 - 6	14 - 9
	Spruce-Pine Fir	SS	11 - 7	15 - 3	19 - 5	23 - 7	11 - 7	15 - 3	19 - 5	23 - 7
	Spruce-Pine Fir	No.1	11 - 3	14 - 11	19 - 0	23 - 0	11 - 3	14 - 7	17 - 9	20 - 7
	Spruce-Pine Fir	No.2	11 - 3	14 - 11	19 - 0	23 - 0	11 - 3	14 - 7	17 - 9	20 - 7
	Spruce-Pine Fir	No.3	9 - 8	12 - 4	15 - 0	17 - 5	8 - 8	11 - 0	13 - 5	15 - 7
16 in.	Douglas Fir-Larch	SS	11 - 4	15 - 0	19 - 1	23 - 3	11 - 4	15 - 0	19 - 1	23 - 3
	Douglas Fir-Larch	No.1	10 - 11	14 - 5	18 - 5	21 - 4	10 - 8	13 - 6	16 - 5	19 - 1
	Douglas Fir-Larch	No.2	10 - 9	14 - 2	17 - 5	20 - 3	10 - 1	12 - 9	15 - 7	18 - 1
	Douglas Fir-Larch	No.3	8 - 7	10 - 11	13 - 4	15 - 5	7 - 8	9 - 9	11 - 11	13 - 10
	Hem-Fir	SS	10 - 9	14 - 2	18 - 0	21 - 11	10 - 9	14 - 2	18 - 0	21 - 11
	Hem-Fir	No.1	10 - 6	13 - 10	17 - 8	21 - 1	10 - 6	13 - 4	16 - 3	18 - 10
	Hem-Fir	No.2	10 - 0	13 - 2	16 - 10	19 - 8	9 - 10	12 - 5	15 - 2	17 - 7
	Hem-Fir	No.3	8 - 5	10 - 8	13 - 0	15 - 1	7 - 6	9 - 6	11 - 8	13 - 6
	Southern Pine	SS	11 - 2	14 - 8	18 - 9	22 - 10	11 - 2	14 - 8	18 - 9	22 - 10
	Southern Pine	No.1	10 - 9	14 - 2	18 - 0	21 - 4	10 - 9	13 - 9	16 - 1	19 - 1
	Southern Pine	No.2	10 - 3	13 - 3	15 - 8	18 - 6	9 - 4	11 - 10	14 - 0	16 - 6
	Southern Pine	No.3	7 - 11	10 - 0	12 - 1	14 - 4	7 - 1	8 - 11	10 - 10	12 - 10
	Spruce-Pine Fir	SS	10 - 6	13 - 10	17 - 8	21 - 6	10 - 6	13 - 10	17 - 8	21 - 4
	Spruce-Pine Fir	No.1	10 - 3	13 - 6	17 - 2	19 - 11	9 - 11	12 - 7	15 - 5	17 - 10
	Spruce-Pine Fir	No.2	10 - 3	13 - 6	17 - 2	19 - 11	9 - 11	12 - 7	15 - 5	17 - 10
	Spruce-Pine Fir	No.3	8 - 5	10 - 8	13 - 0	15 - 1	7 - 6	9 - 6	11 - 8	13 - 6
19.2 in.	Douglas Fir-Larch	SS	10 - 8	14 - 1	18 - 0	21 - 10	10 - 8	14 - 1	18 - 0	21 - 4
	Douglas Fir-Larch	No.1	10 - 4	13 - 7	16 - 9	19 - 6	9 - 8	12 - 4	15 - 0	17 - 5
	Douglas Fir-Larch	No.2	10 - 1	13 - 0	15 - 11	18 - 6	9 - 3	11 - 8	14 - 3	16 - 6
	Douglas Fir-Larch	No.3	7 - 10	10 - 0	12 - 2	14 - 1	7 - 0	8 - 11	10 - 11	12 - 7
	Hem-Fir	SS	10 - 1	13 - 4	17 - 0	20 - 8	10 - 1	13 - 4	17 - 0	20 - 7
	Hem-Fir	No.1	9 - 10	13 - 0	16 - 7	19 - 3	9 - 7	12 - 2	14 - 10	17 - 2
	Hem-Fir	No.2	9 - 5	12 - 5	15 - 6	17 - 11	8 - 11	11 - 4	13 - 10	16 - 1
	Hem-Fir	No.3	7 - 8	9 - 9	11 - 10	13 - 9	6 - 10	8 - 8	10 - 7	12 - 4
	Southern Pine	SS	10 - 6	13 - 10	17 - 8	21 - 6	10 - 6	13 - 10	17 - 8	21 - 6
	Southern Pine	No.1	10 - 1	13 - 4	16 - 5	19 - 6	9 - 11	12 - 7	14 - 8	17 - 5
	Southern Pine	No.2	9 - 6	12 - 1	14 - 4	16 - 10	8 - 6	10 - 10	12 - 10	15 - 1
	Southern Pine	No.3	7 - 3	9 - 1	11 - 0	13 - 1	6 - 5	8 - 2	9 - 10	11 - 8
	Spruce-Pine Fir	SS	9 - 10	13 - 0	16 - 7	20 - 2	9 - 10	13 - 0	16 - 7	19 - 6
	Spruce-Pine Fir	No.1	9 - 8	12 - 9	15 - 8	18 - 3	9 - 1	11 - 6	14 - 1	16 - 3
	Spruce-Pine Fir	No.2	9 - 8	12 - 9	15 - 8	18 - 3	9 - 1	11 - 6	14 - 1	16 - 3
	Spruce-Pine Fir	No.3	7 - 8	9 - 9	11 - 10	13 - 9	6 - 10	8 - 8	10 - 7	12 - 4
24 in.	Douglas Fir-Larch	SS	9 - 11	13 - 1	16 - 8	20 - 3	9 - 11	13 - 1	16 - 5	19 - 1
	Douglas Fir-Larch	No.1	9 - 7	12 - 4	15 - 0	17 - 5	8 - 8	11 - 0	13 - 5	15 - 7
	Douglas Fir-Larch	No.2	9 - 3	11 - 8	14 - 3	16 - 6	8 - 3	10 - 5	12 - 9	14 - 9
	Douglas Fir-Larch	No.3	7 - 0	8 - 11	10 - 11	12 - 7	6 - 3	8 - 0	9 - 9	11 - 3
	Hem-Fir	SS	9 - 4	12 - 4	15 - 9	19 - 2	9 - 4	12 - 4	15 - 9	18 - 5
	Hem-Fir	No.1	9 - 2	12 - 1	14 - 10	17 - 2	8 - 7	10 - 10	13 - 3	15 - 5
	Hem-Fir	No.2	8 - 9	11 - 4	13 - 10	16 - 1	8 - 0	10 - 2	12 - 5	14 - 4
	Hem-Fir	No.3	6 - 10	8 - 8	10 - 7	12 - 4	6 - 2	7 - 9	9 - 6	11 - 0
	Southern Pine	SS	9 - 9	12 - 10	16 - 5	19 - 11	9 - 9	12 - 10	16 - 5	19 - 8
	Southern Pine	No.1	9 - 4	12 - 4	14 - 8	17 - 5	8 - 10	11 - 3	13 - 1	15 - 7
	Southern Pine	No.2	8 - 6	10 - 10	12 - 10	15 - 1	7 - 7	9 - 8	11 - 5	13 - 6
	Southern Pine	No.3	6 - 5	8 - 2	9 - 10	11 - 8	5 - 9	7 - 3	8 - 10	10 - 5
	Spruce-Pine Fir	SS	9 - 2	12 - 1	15 - 5	18 - 9	9 - 2	12 - 1	15 - 0	17 - 5
	Spruce-Pine Fir	No.1	9 - 0	11 - 6	14 - 1	16 - 3	8 - 1	10 - 3	12 - 7	14 - 7
	Spruce-Pine Fir	No.2	9 - 0	11 - 6	14 - 1	16 - 3	8 - 1	10 - 3	12 - 7	14 - 7
	Spruce-Pine Fir	No.3	6 - 10	8 - 8	10 - 7	12 - 4	6 - 2	7 - 9	9 - 6	11 - 0

Check sources for availability of lumber in lengths greater than 20 feet.

**Table 3.18B Floor Joist Spans for Common Lumber Species**

**LL = 40 psf**  
**L/Δ = 360**

(Residential Living Areas, Live Load = 40 psf, L/Δ = 360)

Joist Spacing	Specie and Grade		Dead Load = 10 psf				Dead Load = 20 psf			
			2x6	2x8	2x10	2x12	2x6	2x8	2x10	2x12
			Maximum Floor Joist Spans							
			(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12 in.	Douglas Fir-Larch	SS	11 - 4	15 - 0	19 - 1	23 - 3	11 - 4	15 - 0	19 - 1	23 - 3
	Douglas Fir-Larch	No.1	10 - 11	14 - 5	18 - 5	22 - 0	10 - 11	14 - 2	17 - 4	20 - 1
	Douglas Fir-Larch	No.2	10 - 9	14 - 2	18 - 0	20 - 11	10 - 8	13 - 6	16 - 5	19 - 1
	Douglas Fir-Larch	No.3	8 - 11	11 - 3	13 - 9	16 - 0	8 - 1	10 - 3	12 - 7	14 - 7
	Hem-Fir	SS	10 - 9	14 - 2	18 - 0	21 - 11	10 - 9	14 - 2	18 - 0	21 - 11
	Hem-Fir	No.1	10 - 6	13 - 10	17 - 8	21 - 6	10 - 6	13 - 10	17 - 1	19 - 10
	Hem-Fir	No.2	10 - 0	13 - 2	16 - 10	20 - 4	10 - 0	13 - 1	16 - 0	18 - 6
	Hem-Fir	No.3	8 - 8	11 - 0	13 - 5	15 - 7	7 - 11	10 - 0	12 - 3	14 - 3
	Southern Pine	SS	11 - 2	14 - 8	18 - 9	22 - 10	11 - 2	14 - 8	18 - 9	22 - 10
	Southern Pine	No.1	10 - 9	14 - 2	18 - 0	21 - 11	10 - 9	14 - 2	16 - 11	20 - 1
	Southern Pine	No.2	10 - 3	13 - 6	16 - 2	19 - 1	9 - 10	12 - 6	14 - 9	17 - 5
	Southern Pine	No.3	8 - 2	10 - 3	12 - 6	14 - 9	7 - 5	9 - 5	11 - 5	13 - 6
	Spruce-Pine Fir	SS	10 - 6	13 - 10	17 - 8	21 - 6	10 - 6	13 - 10	17 - 8	21 - 6
	Spruce-Pine Fir	No.1	10 - 3	13 - 6	17 - 3	20 - 7	10 - 3	13 - 3	16 - 3	18 - 10
	Spruce-Pine Fir	No.2	10 - 3	13 - 6	17 - 3	20 - 7	10 - 3	13 - 3	16 - 3	18 - 10
	Spruce-Pine Fir	No.3	8 - 8	11 - 0	13 - 5	15 - 7	7 - 11	10 - 0	12 - 3	14 - 3
16 in.	Douglas Fir-Larch	SS	10 - 4	13 - 7	17 - 4	21 - 1	10 - 4	13 - 7	17 - 4	21 - 1
	Douglas Fir-Larch	No.1	9 - 11	13 - 1	16 - 5	19 - 1	9 - 8	12 - 4	15 - 0	17 - 5
	Douglas Fir-Larch	No.2	9 - 9	12 - 9	15 - 7	18 - 1	9 - 3	11 - 8	14 - 3	16 - 6
	Douglas Fir-Larch	No.3	7 - 8	9 - 9	11 - 11	13 - 10	7 - 0	8 - 11	10 - 11	12 - 7
	Hem-Fir	SS	9 - 9	12 - 10	16 - 5	19 - 11	9 - 9	12 - 10	16 - 5	19 - 11
	Hem-Fir	No.1	9 - 6	12 - 7	16 - 0	18 - 10	9 - 6	12 - 2	14 - 10	17 - 2
	Hem-Fir	No.2	9 - 1	12 - 0	15 - 2	17 - 7	8 - 11	11 - 4	13 - 10	16 - 1
	Hem-Fir	No.3	7 - 6	9 - 6	11 - 8	13 - 6	6 - 10	8 - 8	10 - 7	12 - 4
	Southern Pine	SS	10 - 2	13 - 4	17 - 0	20 - 9	10 - 2	13 - 4	17 - 0	20 - 9
	Southern Pine	No.1	9 - 9	12 - 10	16 - 1	19 - 1	9 - 9	12 - 7	14 - 8	17 - 5
	Southern Pine	No.2	9 - 4	11 - 10	14 - 0	16 - 6	8 - 6	10 - 10	12 - 10	15 - 1
	Southern Pine	No.3	7 - 1	8 - 11	10 - 10	12 - 10	6 - 5	8 - 2	9 - 10	11 - 8
	Spruce-Pine Fir	SS	9 - 6	12 - 7	16 - 0	19 - 6	9 - 6	12 - 7	16 - 0	19 - 6
	Spruce-Pine Fir	No.1	9 - 4	12 - 3	15 - 5	17 - 10	9 - 1	11 - 6	14 - 1	16 - 3
	Spruce-Pine Fir	No.2	9 - 4	12 - 3	15 - 5	17 - 10	9 - 1	11 - 6	14 - 1	16 - 3
	Spruce-Pine Fir	No.3	7 - 6	9 - 6	11 - 8	13 - 6	6 - 10	8 - 8	10 - 7	12 - 4
19.2 in.	Douglas Fir-Larch	SS	9 - 8	12 - 10	16 - 4	19 - 10	9 - 8	12 - 10	16 - 4	19 - 6
	Douglas Fir-Larch	No.1	9 - 4	12 - 4	15 - 0	17 - 5	8 - 10	11 - 3	13 - 8	15 - 11
	Douglas Fir-Larch	No.2	9 - 2	11 - 8	14 - 3	16 - 6	8 - 5	10 - 8	13 - 0	15 - 1
	Douglas Fir-Larch	No.3	7 - 0	8 - 11	10 - 11	12 - 7	6 - 5	8 - 2	9 - 11	11 - 6
	Hem-Fir	SS	9 - 2	12 - 1	15 - 5	18 - 9	9 - 2	12 - 1	15 - 5	18 - 9
	Hem-Fir	No.1	9 - 0	11 - 10	14 - 10	17 - 2	8 - 9	11 - 1	13 - 6	15 - 8
	Hem-Fir	No.2	8 - 7	11 - 3	13 - 10	16 - 1	8 - 2	10 - 4	12 - 8	14 - 8
	Hem-Fir	No.3	6 - 10	8 - 8	10 - 7	12 - 4	6 - 3	7 - 11	9 - 8	11 - 3
	Southern Pine	SS	9 - 6	12 - 7	16 - 0	19 - 6	9 - 6	12 - 7	16 - 0	19 - 6
	Southern Pine	No.1	9 - 2	12 - 1	14 - 8	17 - 5	9 - 0	11 - 5	13 - 5	15 - 11
	Southern Pine	No.2	8 - 6	10 - 10	12 - 10	15 - 1	7 - 9	9 - 10	11 - 8	13 - 9
	Southern Pine	No.3	6 - 5	8 - 2	9 - 10	11 - 8	5 - 11	7 - 5	9 - 0	10 - 8
	Spruce-Pine Fir	SS	9 - 0	11 - 10	15 - 1	18 - 4	9 - 0	11 - 10	15 - 1	17 - 9
	Spruce-Pine Fir	No.1	8 - 9	11 - 6	14 - 1	16 - 3	8 - 3	10 - 6	12 - 10	14 - 10
	Spruce-Pine Fir	No.2	8 - 9	11 - 6	14 - 1	16 - 3	8 - 3	10 - 6	12 - 10	14 - 10
	Spruce-Pine Fir	No.3	6 - 10	8 - 8	10 - 7	12 - 4	6 - 3	7 - 11	9 - 8	11 - 3
24 in.	Douglas Fir-Larch	SS	9 - 0	11 - 11	15 - 2	18 - 5	9 - 0	11 - 11	15 - 0	17 - 5
	Douglas Fir-Larch	No.1	8 - 8	11 - 0	13 - 5	15 - 7	7 - 11	10 - 0	12 - 3	14 - 3
	Douglas Fir-Larch	No.2	8 - 3	10 - 5	12 - 9	14 - 9	7 - 6	9 - 6	11 - 8	13 - 6
	Douglas Fir-Larch	No.3	6 - 3	8 - 0	9 - 9	11 - 3	5 - 9	7 - 3	8 - 11	10 - 4
	Hem-Fir	SS	8 - 6	11 - 3	14 - 4	17 - 5	8 - 6	11 - 3	14 - 4	16 - 10
	Hem-Fir	No.1	8 - 4	10 - 10	13 - 3	15 - 5	7 - 10	9 - 11	12 - 1	14 - 0
	Hem-Fir	No.2	7 - 11	10 - 2	12 - 5	14 - 4	7 - 4	9 - 3	11 - 4	13 - 1
	Hem-Fir	No.3	6 - 2	7 - 9	9 - 6	11 - 0	5 - 7	7 - 1	8 - 8	10 - 1
	Southern Pine	SS	8 - 10	11 - 8	14 - 11	18 - 1	8 - 10	11 - 8	14 - 11	18 - 0
	Southern Pine	No.1	8 - 6	11 - 3	13 - 1	15 - 7	8 - 1	10 - 3	12 - 0	14 - 3
	Southern Pine	No.2	7 - 7	9 - 8	11 - 5	13 - 6	7 - 0	8 - 10	10 - 5	12 - 4
	Southern Pine	No.3	5 - 9	7 - 3	8 - 10	10 - 5	5 - 3	6 - 8	8 - 1	9 - 6
	Spruce-Pine Fir	SS	8 - 4	11 - 0	14 - 0	17 - 0	8 - 4	11 - 0	13 - 8	15 - 11
	Spruce-Pine Fir	No.1	8 - 1	10 - 3	12 - 7	14 - 7	7 - 5	9 - 5	11 - 6	13 - 4
	Spruce-Pine Fir	No.2	8 - 1	10 - 3	12 - 7	14 - 7	7 - 5	9 - 5	11 - 6	13 - 4
	Spruce-Pine Fir	No.3	6 - 2	7 - 9	9 - 6	11 - 0	5 - 7	7 - 1	8 - 8	10 - 1

Check sources for availability of lumber in lengths greater than 20 feet.

Table 3.20A1 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/180

Exposure B  
H/180

(Fully Sheathed with a Minimum Sheathing Material)<sup>a</sup>

Table with columns for 700-yr. Wind Speed (110, 115, 120, 130, 140 mph) and rows for Stud Spacing (in.), Species, and Grade. The table provides Maximum Allowable Stud Length (ft-in.) for various lumber species and grades across different wind speeds.

See Table 3.20A footnotes.

**Table 3.20A1 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/180 (Cont.)**  
(Fully Sheathed with a Minimum Sheathing Material)<sup>a</sup>

**Exposure B  
H/180**



PRESCRIPTIVE DESIGN

700-yr. Wind Speed 3-second gust (mph)			150			160			170			180			195		
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8
			Maximum Allowable Stud Length (ft.-in.) <sup>1</sup>														
12	DFL	SS	12-1	19-5	20-0†	11-6	18-6	20-0†	11-1	17-9	20-0†	10-8	17-1	20-0†	10-1	16-2	20-0†
	DFL	No.1	11-7	18-8	20-0†	11-1	17-10	20-0†	10-8	17-1	20-0†	10-3	16-5	20-0†	9-8	15-6	20-0†
	DFL	No.2	11-4	18-3	20-0†	10-10	17-5	20-0†	10-5	16-9	20-0†	10-0	16-1	20-0†	9-6	15-2	20-0†
	DFL	No.3/Stud	10-10	16-5	20-0†	10-2	15-4	19-9	9-7	14-4	18-6	9-0	13-6	17-5	8-3	12-5	16-0
	DFL	Standard	9-3	-	-	8-7	-	-	8-1	-	-	-	-	-	-	-	-
	HF	SS	11-4	18-3	20-0†	10-10	17-5	20-0†	10-5	16-9	20-0†	10-0	16-1	20-0†	9-6	15-2	20-0†
	HF	No.1	11-1	17-10	20-0†	10-8	17-1	20-0†	10-2	16-4	20-0†	9-9	15-9	20-0†	9-3	14-10	19-10
	HF	No.2	10-7	17-0	20-0†	10-1	16-3	20-0†	9-8	15-7	20-0†	9-4	14-11	20-0	8-10	14-2	18-11
	HF	No.3/Stud	10-3	16-0	20-0†	9-10	14-11	19-3	9-4	14-0	18-0	8-9	13-2	16-11	8-0	12-1	15-7
	HF	Standard	9-0	-	-	8-5	-	-	7-11	-	-	-	-	-	-	-	-
	SP	SS	11-10	19-0	20-0†	11-4	18-2	20-0†	10-10	17-5	20-0†	10-5	16-9	20-0†	9-10	15-10	20-0†
	SP	No.1	11-4	18-3	20-0†	10-10	17-5	20-0†	10-5	16-9	20-0†	10-0	16-1	20-0†	9-6	15-2	20-0†
	SP	No.2	10-10	17-5	20-0†	10-4	16-8	20-0†	9-11	16-0	20-0†	9-7	15-4	20-0†	9-0	14-6	19-4
	SP	No.3	9-10	15-0	19-2	9-2	14-0	17-11	8-7	13-1	16-9	8-1	12-4	15-9	-	11-4	14-6
	SP	Stud	9-10	15-0	19-2	9-2	14-0	17-11	8-7	13-1	16-9	8-1	12-4	15-9	-	11-4	14-6
	SP	Standard	8-4	-	-	7-9	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	11-1	17-10	20-0†	10-8	17-1	20-0†	10-2	16-4	20-0†	9-9	15-9	20-0†	9-3	14-10	19-10
	SPF	No.1	10-10	17-5	20-0†	10-4	16-8	20-0†	9-11	16-0	20-0†	9-7	15-4	20-0†	9-0	14-6	19-4
SPF	No.2	10-10	17-5	20-0†	10-4	16-8	20-0†	9-11	16-0	20-0†	9-7	15-4	20-0†	9-0	14-6	19-4	
SPF	No.3/Stud	10-3	16-0	20-0†	9-10	14-11	19-3	9-4	14-0	18-0	8-9	13-2	16-11	8-0	12-1	15-7	
SPF	Standard	9-0	-	-	8-5	-	-	7-11	-	-	-	-	-	-	-	-	
16	DFL	SS	10-11	17-6	20-0†	10-5	16-9	20-0†	10-0	16-1	20-0†	9-7	15-5	20-0†	9-1	14-7	19-6
	DFL	No.1	10-6	16-10	20-0†	10-0	16-1	20-0†	9-8	15-5	20-0†	9-3	14-10	19-10	8-9	14-0	18-9
	DFL	No.2	10-3	16-6	20-0†	9-10	15-9	20-0†	9-5	15-1	20-0†	9-1	14-6	19-5	8-7	13-9	18-3
	DFL	No.3/Stud	9-4	14-1	18-1	8-9	13-1	16-11	8-2	12-4	15-10	-	11-7	14-11	-	10-7	13-8
	DFL	Standard	7-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	10-3	16-6	20-0†	9-10	15-9	20-0†	9-5	15-1	20-0†	9-1	14-6	19-5	8-7	13-9	18-4
	HF	No.1	10-1	16-2	20-0†	9-7	15-5	20-0†	9-3	14-9	19-9	8-10	14-2	19-0	8-5	13-5	17-11
	HF	No.2	9-7	15-4	20-0†	9-2	14-8	19-7	8-9	14-1	18-9	8-5	13-6	18-1	8-0	12-9	17-1
	HF	No.3/Stud	9-1	13-8	17-8	8-6	12-9	16-6	8-0	12-0	15-5	-	11-3	14-6	-	10-4	13-4
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	10-9	17-2	20-0†	10-3	16-5	20-0†	9-10	15-9	20-0†	9-5	15-2	20-0†	8-11	14-4	19-2
	SP	No.1	10-3	16-6	20-0†	9-10	15-9	20-0†	9-5	15-1	20-0†	9-1	14-6	19-5	8-7	13-9	18-4
	SP	No.2	9-10	15-9	20-0†	9-5	15-1	20-0†	9-0	14-5	19-3	8-8	13-10	18-4	8-2	13-0	16-10
	SP	No.3	8-5	12-10	16-5	7-11	12-0	15-4	-	11-3	14-4	-	10-7	13-6	-	9-8	12-5
	SP	Stud	8-5	12-10	16-5	7-11	12-0	15-4	-	11-3	14-4	-	10-7	13-6	-	9-8	12-5
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	10-1	16-2	20-0†	9-7	15-5	20-0†	9-3	14-9	19-9	8-10	14-2	19-0	8-5	13-5	17-11
	SPF	No.1	9-10	15-9	20-0†	9-5	15-1	20-0†	9-0	14-5	19-3	8-8	13-10	18-6	8-2	13-1	17-6
SPF	No.2	9-10	15-9	20-0†	9-5	15-1	20-0†	9-0	14-5	19-3	8-8	13-10	18-6	8-2	13-1	17-6	
SPF	No.3/Stud	9-1	13-8	17-8	8-6	12-9	16-6	8-0	12-0	15-5	-	11-3	14-6	-	10-4	13-4	
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
24	DFL	SS	9-6	15-3	20-0†	9-1	14-6	19-5	8-8	13-11	18-7	8-4	13-5	17-11	7-11	12-8	16-11
	DFL	No.1	9-1	14-8	19-7	8-9	14-0	18-8	8-4	13-5	17-11	8-0	12-11	16-11	-	12-1	15-7
	DFL	No.2	8-11	14-4	19-2	8-6	13-8	18-2	8-2	13-2	17-0	7-10	12-5	16-0	-	11-5	14-8
	DFL	No.3/Stud	-	11-4	14-7	-	10-7	13-7	-	9-11	12-9	-	9-4	12-0	-	8-7	11-0
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	8-11	14-4	19-2	8-6	13-8	18-4	8-2	13-2	17-6	7-10	12-7	16-10	-	11-11	15-11
	HF	No.1	8-9	14-0	18-9	8-4	13-5	17-11	8-0	12-10	17-2	-	12-4	16-6	-	11-8	15-4
	HF	No.2	8-4	13-4	17-10	7-11	12-9	17-0	-	12-3	16-4	-	11-9	15-6	-	11-1	14-3
	HF	No.3/Stud	-	11-0	14-2	-	10-3	13-3	-	9-8	12-5	-	9-1	11-8	-	8-4	10-9
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	9-4	14-11	19-11	8-11	14-3	19-1	8-6	13-8	18-3	8-2	13-2	17-7	7-9	12-5	16-7
	SP	No.1	8-11	14-4	19-2	8-6	13-8	18-4	8-2	13-2	17-6	7-10	12-7	16-10	-	11-11	15-11
	SP	No.2	8-6	13-8	17-11	8-2	13-0	16-9	7-10	12-2	15-8	-	11-5	14-9	-	10-6	13-6
	SP	No.3	-	10-4	13-3	-	9-8	12-4	-	9-0	11-7	-	8-6	10-10	-	7-10	10-0
	SP	Stud	-	10-4	13-3	-	9-8	12-4	-	9-0	11-7	-	8-6	10-10	-	7-10	10-0
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	8-9	14-0	18-9	8-4	13-5	17-11	8-0	12-10	17-2	-	12-4	16-6	-	11-8	15-7
	SPF	No.1	8-6	13-8	18-3	8-2	13-1	17-5	7-10	12-6	16-9	-	12-0	15-9	-	11-3	14-6
SPF	No.2	8-6	13-8	18-3	8-2	13-1	17-5	7-10	12-6	16-9	-	12-0	15-9	-	11-3	14-6	
SPF	No.3/Stud	-	11-0	14-2	-	10-3	13-3	-	9-8	12-5	-	9-1	11-8	-	8-4	10-9	
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

See Table 3.20A footnotes.

**Table 3.20A2 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/240**

**Exposure B  
H/240**

(Fully Sheathed with a Minimum Sheathing Material)<sup>a</sup>

700-yr. Wind Speed 3-second gust (mph)			110			115			120			130			140		
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8
			Maximum Allowable Stud Length (ft.-in.) <sup>1</sup>														
12	DFL	SS	13 - 7	20-0†	20-0†	13 - 2	20-0†	20-0†	12 - 9	20-0†	20-0†	12 - 1	19 - 4	20-0†	11 - 5	18 - 5	20-0†
	DFL	No.1	13 - 0	20-0†	20-0†	12 - 8	20-0†	20-0†	12 - 3	19 - 8	20-0†	11 - 7	18 - 8	20-0†	11 - 0	17 - 8	20-0†
	DFL	No.2	12 - 9	20-0†	20-0†	12 - 5	19 - 10	20-0†	12 - 0	19 - 3	20-0†	11 - 4	18 - 3	20-0†	10 - 9	17 - 4	20-0†
	DFL	No.3/Stud	12 - 2	19 - 7	20-0†	11 - 10	19 - 0	20-0†	11 - 6	18 - 5	20-0†	10 - 10	17 - 5	20-0†	10 - 4	16 - 6	20-0†
	DFL	Standard	12 - 2	-	-	11 - 10	-	-	11 - 6	-	-	10 - 9	-	-	9 - 11	-	-
	HF	SS	12 - 9	20-0†	20-0†	12 - 5	19 - 10	20-0†	12 - 0	19 - 3	20-0†	11 - 4	18 - 3	20-0†	10 - 9	17 - 4	20-0†
	HF	No.1	12 - 6	20-0†	20-0†	12 - 1	19 - 5	20-0†	11 - 9	18 - 10	20-0†	11 - 1	17 - 10	20-0†	10 - 7	16 - 11	20-0†
	HF	No.2	11 - 10	19 - 1	20-0†	11 - 6	18 - 6	20-0†	11 - 2	17 - 11	20-0†	10 - 7	17 - 0	20-0†	10 - 0	16 - 1	20-0†
	HF	No.3/Stud	11 - 7	18 - 6	20-0†	11 - 2	18 - 0	20-0†	10 - 10	17 - 5	20-0†	10 - 3	16 - 6	20-0†	9 - 9	15 - 8	20-0†
	HF	Standard	11 - 7	-	-	11 - 2	-	-	10 - 10	-	-	10 - 3	-	-	9 - 8	-	-
	SP	SS	13 - 4	20-0†	20-0†	12 - 11	20-0†	20-0†	12 - 6	20-0†	20-0†	11 - 10	19 - 0	20-0†	11 - 3	18 - 1	20-0†
	SP	No.1	12 - 9	20-0†	20-0†	12 - 5	19 - 10	20-0†	12 - 0	19 - 3	20-0†	11 - 4	18 - 3	20-0†	10 - 9	17 - 4	20-0†
	SP	No.2	12 - 2	19 - 7	20-0†	11 - 10	19 - 0	20-0†	11 - 6	18 - 5	20-0†	10 - 10	17 - 5	20-0†	10 - 4	16 - 6	20-0†
	SP	No.3	11 - 10	19 - 1	20-0†	11 - 6	18 - 6	20-0†	11 - 2	17 - 11	20-0†	10 - 7	17 - 0	20-0†	10 - 0	16 - 1	20-0†
	SP	Stud	11 - 10	19 - 1	20-0†	11 - 6	18 - 6	20-0†	11 - 2	17 - 11	20-0†	10 - 7	17 - 0	20-0†	10 - 0	16 - 1	20-0†
	SP	Standard	11 - 7	-	-	11 - 1	-	-	10 - 7	-	-	9 - 8	-	-	9 - 0	-	-
	SPF	SS	12 - 6	20-0†	20-0†	12 - 1	19 - 5	20-0†	11 - 9	18 - 10	20-0†	11 - 1	17 - 10	20-0†	10 - 7	16 - 11	20-0†
	SPF	No.1	12 - 2	19 - 7	20-0†	11 - 10	19 - 0	20-0†	11 - 6	18 - 5	20-0†	10 - 10	17 - 5	20-0†	10 - 4	16 - 6	20-0†
	SPF	No.2	12 - 2	19 - 7	20-0†	11 - 10	19 - 0	20-0†	11 - 6	18 - 5	20-0†	10 - 10	17 - 5	20-0†	10 - 4	16 - 6	20-0†
	SPF	No.3/Stud	11 - 7	18 - 6	20-0†	11 - 2	18 - 0	20-0†	10 - 10	17 - 5	20-0†	10 - 3	16 - 6	20-0†	9 - 9	15 - 8	20-0†
SPF	Standard	11 - 7	-	-	11 - 2	-	-	10 - 10	-	-	10 - 3	-	-	9 - 8	-	-	
16	DFL	SS	12 - 3	19 - 8	20-0†	11 - 11	19 - 1	20-0†	11 - 6	18 - 6	20-0†	10 - 11	17 - 6	20-0†	10 - 4	16 - 8	20-0†
	DFL	No.1	11 - 10	18 - 11	20-0†	11 - 5	18 - 4	20-0†	11 - 1	17 - 10	20-0†	10 - 6	16 - 10	20-0†	10 - 0	16 - 0	20-0†
	DFL	No.2	11 - 7	18 - 6	20-0†	11 - 2	18 - 0	20-0†	10 - 10	17 - 5	20-0†	10 - 3	16 - 6	20-0†	9 - 9	15 - 8	20-0†
	DFL	No.3/Stud	11 - 0	17 - 8	20-0†	10 - 8	17 - 2	20-0†	10 - 4	16 - 8	20-0†	9 - 10	15 - 9	20-0†	9 - 4	15 - 0	19 - 6
	DFL	Standard	11 - 0	-	-	10 - 6	-	-	10 - 0	-	-	9 - 3	-	-	8 - 6	-	-
	HF	SS	11 - 7	18 - 6	20-0†	11 - 2	18 - 0	20-0†	10 - 10	17 - 5	20-0†	10 - 3	16 - 6	20-0†	9 - 9	15 - 8	20-0†
	HF	No.1	11 - 3	18 - 2	20-0†	10 - 11	17 - 7	20-0†	10 - 8	17 - 1	20-0†	10 - 1	16 - 2	20-0†	9 - 7	15 - 4	20-0†
	HF	No.2	10 - 9	17 - 3	20-0†	10 - 5	16 - 9	20-0†	10 - 1	16 - 3	20-0†	9 - 7	15 - 4	20-0†	9 - 1	14 - 7	19 - 6
	HF	No.3/Stud	10 - 5	16 - 9	20-0†	10 - 2	16 - 3	20-0†	9 - 10	15 - 9	20-0†	9 - 4	14 - 11	19 - 11	8 - 10	14 - 2	18 - 11
	HF	Standard	10 - 5	-	-	10 - 2	-	-	9 - 10	-	-	9 - 0	-	-	8 - 4	-	-
	SP	SS	12 - 0	19 - 4	20-0†	11 - 8	18 - 9	20-0†	11 - 4	18 - 2	20-0†	10 - 9	17 - 2	20-0†	10 - 2	16 - 4	20-0†
	SP	No.1	11 - 7	18 - 6	20-0†	11 - 2	18 - 0	20-0†	10 - 10	17 - 5	20-0†	10 - 3	16 - 6	20-0†	9 - 9	15 - 8	20-0†
	SP	No.2	11 - 0	17 - 8	20-0†	10 - 8	17 - 2	20-0†	10 - 4	16 - 8	20-0†	9 - 10	15 - 9	20-0†	9 - 4	15 - 0	20 - 0
	SP	No.3	10 - 9	17 - 3	20-0†	10 - 5	16 - 9	20-0†	10 - 1	16 - 3	20-0†	9 - 7	15 - 0	19 - 2	9 - 1	13 - 10	17 - 8
	SP	Stud	10 - 9	17 - 3	20-0†	10 - 5	16 - 9	20-0†	10 - 1	16 - 3	20-0†	9 - 7	15 - 0	19 - 2	9 - 1	13 - 10	17 - 8
	SP	Standard	9 - 11	-	-	9 - 6	-	-	9 - 1	-	-	8 - 4	-	-	-	-	-
	SPF	SS	11 - 3	18 - 2	20-0†	10 - 11	17 - 7	20-0†	10 - 8	17 - 1	20-0†	10 - 1	16 - 2	20-0†	9 - 7	15 - 4	20-0†
	SPF	No.1	11 - 0	17 - 8	20-0†	10 - 8	17 - 2	20-0†	10 - 4	16 - 8	20-0†	9 - 10	15 - 9	20-0†	9 - 4	15 - 0	20 - 0
	SPF	No.2	11 - 0	17 - 8	20-0†	10 - 8	17 - 2	20-0†	10 - 4	16 - 8	20-0†	9 - 10	15 - 9	20-0†	9 - 4	15 - 0	20 - 0
	SPF	No.3/Stud	10 - 5	16 - 9	20-0†	10 - 2	16 - 3	20-0†	9 - 10	15 - 9	20-0†	9 - 4	14 - 11	19 - 11	8 - 10	14 - 2	18 - 11
SPF	Standard	10 - 5	-	-	10 - 2	-	-	9 - 10	-	-	9 - 0	-	-	8 - 4	-	-	
24	DFL	SS	10 - 8	17 - 1	20-0†	10 - 4	16 - 7	20-0†	10 - 0	16 - 1	20-0†	9 - 6	15 - 2	20-0†	9 - 0	14 - 5	19 - 3
	DFL	No.1	10 - 3	16 - 5	20-0†	9 - 11	15 - 11	20-0†	9 - 8	15 - 6	20-0†	9 - 1	14 - 7	19 - 6	8 - 8	13 - 11	18 - 7
	DFL	No.2	10 - 0	16 - 1	20-0†	9 - 9	15 - 7	20-0†	9 - 5	15 - 2	20-0†	8 - 11	14 - 4	19 - 2	8 - 6	13 - 7	18 - 2
	DFL	No.3/Stud	9 - 7	15 - 4	20-0†	9 - 3	14 - 11	19 - 5	9 - 0	14 - 4	18 - 6	8 - 6	13 - 2	17 - 0	8 - 1	12 - 2	15 - 8
	DFL	Standard	8 - 10	-	-	8 - 6	-	-	8 - 1	-	-	-	-	-	-	-	-
	HF	SS	10 - 0	16 - 1	20-0†	9 - 9	15 - 7	20-0†	9 - 5	15 - 2	20-0†	8 - 11	14 - 4	19 - 2	8 - 6	13 - 7	18 - 2
	HF	No.1	9 - 10	15 - 9	20-0†	9 - 6	15 - 3	20-0†	9 - 3	14 - 10	19 - 9	8 - 9	14 - 0	18 - 8	8 - 3	13 - 4	17 - 9
	HF	No.2	9 - 4	15 - 0	20 - 0	9 - 1	14 - 6	19 - 5	8 - 9	14 - 1	18 - 10	8 - 4	13 - 4	17 - 9	7 - 11	12 - 8	16 - 11
	HF	No.3/Stud	9 - 1	14 - 7	19 - 5	8 - 10	14 - 1	18 - 10	8 - 6	13 - 8	18 - 1	8 - 1	12 - 10	16 - 7	-	11 - 10	15 - 3
	HF	Standard	8 - 8	-	-	8 - 3	-	-	7 - 11	-	-	-	-	-	-	-	-
	SP	SS	10 - 5	16 - 9	20-0†	10 - 2	16 - 3	20-0†	9 - 10	15 - 9	20-0†	9 - 4	14 - 11	19 - 11	8 - 10	14 - 2	18 - 11
	SP	No.1	10 - 0	16 - 1	20-0†	9 - 9	15 - 7	20-0†	9 - 5	15 - 2	20-0†	8 - 11	14 - 4	19 - 2	8 - 6	13 - 7	18 - 2
	SP	No.2	9 - 7	15 - 4	20-0†	9 - 3	14 - 11	19 - 11	9 - 0	14 - 5	19 - 4	8 - 6	13 - 8	18 - 3	8 - 1	13 - 0	17 - 4
	SP	No.3	9 - 4	14 - 5	18 - 5	9 - 0	13 - 9	17 - 7	8 - 8	13 - 1	16 - 10	7 - 11	12 - 0	15 - 5	-	11 - 1	14 - 3
	SP	Stud	9 - 4	14 - 5	18 - 5	9 - 0	13 - 9	17 - 7	8 - 8	13 - 1	16 - 10	7 - 11	12 - 0	15 - 5	-	11 - 1	14 - 3
	SP	Standard	8 - 0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	9 - 10	15 - 9	20-0†	9 - 6	15 - 3	20-0†	9 - 3	14 - 10	19 - 9	8 - 9	14 - 0	18 - 8	8 - 3	13 - 4	17 - 9
	SPF	No.1	9 - 7	15 - 4	20-0†	9 - 3	14 - 11	19 - 11	9 - 0	14 - 5	19 - 4	8 - 6	13 - 8	18 - 3	8 - 1	13 - 0	17 - 4
	SPF	No.2	9 - 7	15 - 4	20-0†	9 - 3	14 - 11	19 - 11	9 - 0	14 - 5	19 - 4	8 - 6	13 - 8	18 - 3	8 - 1	13 - 0	17 - 4
	SPF	No.3/Stud	9 - 1	14 - 7	19 - 5	8 - 10	14 - 1	18 - 10	8 - 6	13 - 8	18 - 1	8 - 1	12 - 10	16 - 7	-	11 - 10	15 - 3
SPF	Standard	8 - 8	-	-	8 - 3	-	-	7 - 11	-	-	-	-	-	-	-	-	

See Table 3.20A footnotes.

**Table 3.20A2 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/240 (Cont.)**

**Exposure B  
H/240**

(Fully Sheathed with a Minimum Sheathing Material)<sup>a</sup>

700-yr. Wind Speed 3-second gust (mph)			150			160			170			180			195		
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8
			Maximum Allowable Stud Length (ft-in.) <sup>1</sup>														
12	DFL	SS	10-11	17-6	20-0†	10-5	16-9	20-0†	10-0	16-1	20-0†	9-7	15-5	20-0†	9-1	14-7	19-6
	DFL	No.1	10-6	16-10	20-0†	10-0	16-1	20-0†	9-8	15-5	20-0†	9-3	14-10	19-10	8-9	14-0	18-9
	DFL	No.2	10-3	16-6	20-0†	9-10	15-9	20-0†	9-5	15-1	20-0†	9-1	14-6	19-5	8-7	13-9	18-4
	DFL	No.3/Stud	9-10	15-9	20-0†	9-5	15-1	19-9	9-0	14-4	18-6	8-8	13-6	17-5	8-2	12-5	16-0
	DFL	Standard	9-3	-	-	8-7	-	-	8-1	-	-	-	-	-	-	-	-
	HF	SS	10-3	16-6	20-0†	9-10	15-9	20-0†	9-5	15-1	20-0†	9-1	14-6	19-5	8-7	13-9	18-4
	HF	No.1	10-1	16-2	20-0†	9-7	15-5	20-0†	9-3	14-9	19-9	8-10	14-2	19-0	8-5	13-5	17-11
	HF	No.2	9-7	15-4	20-0†	9-2	14-8	19-7	8-9	14-1	18-9	8-5	13-6	18-1	8-0	12-9	17-1
	HF	No.3/Stud	9-4	14-11	19-11	8-11	14-3	19-1	8-6	13-8	18-0	8-2	13-2	16-11	7-9	12-1	15-7
	HF	Standard	9-0	-	-	8-5	-	-	7-11	-	-	-	-	-	-	-	-
	SP	SS	10-9	17-2	20-0†	10-3	16-5	20-0†	9-10	15-9	20-0†	9-5	15-2	20-0†	8-11	14-4	19-2
	SP	No.1	10-3	16-6	20-0†	9-10	15-9	20-0†	9-5	15-1	20-0†	9-1	14-6	19-5	8-7	13-9	18-4
	SP	No.2	9-10	15-9	20-0†	9-5	15-1	20-0†	9-0	14-5	19-3	8-8	13-10	18-6	8-2	13-1	17-6
	SP	No.3	9-7	15-0	19-2	9-2	14-0	17-11	8-7	13-1	16-9	8-1	12-4	15-9	-	11-4	14-6
	SP	Stud	9-7	15-0	19-2	9-2	14-0	17-11	8-7	13-1	16-9	8-1	12-4	15-9	-	11-4	14-6
	SP	Standard	8-4	-	-	7-9	-	-	-	-	-	-	-	-	-	-	-
SPF	SS	10-1	16-2	20-0†	9-7	15-5	20-0†	9-3	14-9	19-9	8-10	14-2	19-0	8-5	13-5	17-11	
SPF	No.1	9-10	15-9	20-0†	9-5	15-1	20-0†	9-0	14-5	19-3	8-8	13-10	18-6	8-2	13-1	17-6	
SPF	No.2	9-10	15-9	20-0†	9-5	15-1	20-0†	9-0	14-5	19-3	8-8	13-10	18-6	8-2	13-1	17-6	
SPF	No.3/Stud	9-4	14-11	19-11	8-11	14-3	19-1	8-6	13-8	18-0	8-2	13-2	16-11	7-9	12-1	15-7	
SPF	Standard	9-0	-	-	8-5	-	-	7-11	-	-	-	-	-	-	-	-	
16	DFL	SS	9-11	15-10	20-0†	9-5	15-2	20-0†	9-1	14-6	19-5	8-8	14-0	18-8	8-3	13-2	17-8
	DFL	No.1	9-6	15-3	20-0†	9-1	14-7	19-6	8-9	14-0	18-8	8-4	13-5	17-11	7-11	12-8	17-0
	DFL	No.2	9-4	14-11	19-11	8-11	14-3	19-1	8-6	13-8	18-3	8-2	13-2	17-7	7-9	12-5	16-7
	DFL	No.3/Stud	8-11	14-1	18-1	8-6	13-1	16-11	8-2	12-4	15-10	-	11-7	14-11	-	10-7	13-8
	DFL	Standard	7-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	9-4	14-11	19-11	8-11	14-3	19-1	8-6	13-8	18-3	8-2	13-2	17-7	7-9	12-5	16-7
	HF	No.1	9-1	14-7	19-6	8-8	14-0	18-8	8-4	13-4	17-10	8-0	12-10	17-2	-	12-2	16-3
	HF	No.2	8-8	13-11	18-7	8-3	13-3	17-9	7-11	12-9	17-0	-	12-3	16-4	-	11-7	15-5
	HF	No.3/Stud	8-5	13-6	17-8	8-1	12-9	16-6	-	12-0	15-5	-	11-3	14-6	-	10-4	13-4
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	9-8	15-7	20-0†	9-3	14-10	19-10	8-11	14-3	19-0	8-6	13-8	18-4	8-1	12-11	17-4
	SP	No.1	9-4	14-11	19-11	8-11	14-3	19-1	8-6	13-8	18-3	8-2	13-2	17-7	7-9	12-5	16-7
	SP	No.2	8-11	14-3	19-0	8-6	13-7	18-2	8-2	13-1	17-5	7-10	12-7	16-9	-	11-10	15-10
	SP	No.3	8-5	12-10	16-5	7-11	12-0	15-4	-	11-3	14-4	-	10-7	13-6	-	9-8	12-5
	SP	Stud	8-5	12-10	16-5	7-11	12-0	15-4	-	11-3	14-4	-	10-7	13-6	-	9-8	12-5
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPF	SS	9-1	14-7	19-6	8-8	14-0	18-8	8-4	13-4	17-10	8-0	12-10	17-2	-	12-2	16-3	
SPF	No.1	8-11	14-3	19-0	8-6	13-7	18-2	8-2	13-1	17-5	7-10	12-7	16-9	-	11-10	15-10	
SPF	No.2	8-11	14-3	19-0	8-6	13-7	18-2	8-2	13-1	17-5	7-10	12-7	16-9	-	11-10	15-10	
SPF	No.3/Stud	8-5	13-6	17-8	8-1	12-9	16-6	-	12-0	15-5	-	11-3	14-6	-	10-4	13-4	
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
24	DFL	SS	8-7	13-9	18-5	8-2	13-2	17-7	7-10	12-7	16-10	-	12-1	16-2	-	11-5	15-4
	DFL	No.1	8-3	13-3	17-8	7-11	12-8	16-11	-	12-2	16-2	-	11-8	15-7	-	11-0	14-9
	DFL	No.2	8-1	13-0	17-4	-	12-5	16-7	-	11-10	15-10	-	11-5	15-3	-	10-9	14-5
	DFL	No.3/Stud	-	11-4	14-7	-	10-7	13-7	-	9-11	12-9	-	9-4	12-0	-	8-7	11-0
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	8-1	13-0	17-4	-	12-5	16-7	-	11-10	15-10	-	11-5	15-3	-	10-9	14-5
	HF	No.1	7-11	12-8	16-11	-	12-1	16-2	-	11-7	15-6	-	11-2	14-11	-	10-7	14-1
	HF	No.2	-	12-1	16-1	-	11-6	15-5	-	11-1	14-9	-	10-7	14-2	-	10-0	13-5
	HF	No.3/Stud	-	11-0	14-2	-	10-3	13-3	-	9-8	12-5	-	9-1	11-8	-	8-4	10-9
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	8-5	13-6	18-0	8-1	12-11	17-3	-	12-4	16-6	-	11-11	15-11	-	11-3	15-0
	SP	No.1	8-1	13-0	17-4	-	12-5	16-7	-	11-10	15-10	-	11-5	15-3	-	10-9	14-5
	SP	No.2	-	12-4	16-6	-	11-10	15-9	-	11-4	15-2	-	10-11	14-7	-	10-4	13-6
	SP	No.3	-	10-4	13-3	-	9-8	12-4	-	9-0	11-7	-	8-6	10-10	-	7-10	10-0
	SP	Stud	-	10-4	13-3	-	9-8	12-4	-	9-0	11-7	-	8-6	10-10	-	7-10	10-0
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPF	SS	7-11	12-8	16-11	-	12-1	16-2	-	11-7	15-6	-	11-2	14-11	-	10-7	14-1	
SPF	No.1	-	12-4	16-6	-	11-10	15-9	-	11-4	15-2	-	10-11	14-7	-	10-4	13-9	
SPF	No.2	-	12-4	16-6	-	11-10	15-9	-	11-4	15-2	-	10-11	14-7	-	10-4	13-9	
SPF	No.3/Stud	-	11-0	14-2	-	10-3	13-3	-	9-8	12-5	-	9-1	11-8	-	8-4	10-9	
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

See Table 3.20A footnotes.



**Table 3.20A3 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/360**

**Exposure B  
H/360**

(Fully Sheathed with a Minimum Sheathing Material)<sup>a</sup>

700-yr. Wind Speed 3-second gust (mph)			110			115			120			130			140		
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8
			Maximum Allowable Stud Length (ft.-in.) <sup>1</sup>														
12	DFL	SS	11-9	18-11	20-0+	11-5	18-4	20-0+	11-1	17-9	20-0+	10-6	16-10	20-0+	9-11	16-0	20-0+
	DFL	No.1	11-4	18-2	20-0+	11-0	17-7	20-0+	10-8	17-1	20-0+	10-1	16-2	20-0+	9-7	15-4	20-0+
	DFL	No.2	11-1	17-10	20-0+	10-9	17-3	20-0+	10-5	16-9	20-0+	9-10	15-10	20-0+	9-4	15-0	20-0+
	DFL	No.3/Stud	10-7	17-0	20-0+	10-3	16-6	20-0+	10-0	16-0	20-0+	9-5	15-1	20-0+	8-11	14-4	19-2
	DFL	Standard	10-7	-	-	10-3	-	-	10-0	-	-	9-5	-	-	8-11	-	-
	HF	SS	11-1	17-10	20-0+	10-9	17-3	20-0+	10-5	16-9	20-0+	9-10	15-10	20-0+	9-4	15-0	20-0+
	HF	No.1	10-10	17-5	20-0+	10-6	16-10	20-0+	10-2	16-4	20-0+	9-8	15-6	20-0+	9-2	14-8	19-8
	HF	No.2	10-4	16-7	20-0+	10-0	16-0	20-0+	9-8	15-7	20-0+	9-2	14-9	19-8	8-9	14-0	18-8
	HF	No.3/Stud	10-0	16-1	20-0+	9-9	15-7	20-0+	9-5	15-2	20-0+	8-11	14-4	19-2	8-6	13-7	18-2
	HF	Standard	10-0	-	-	9-9	-	-	9-5	-	-	8-11	-	-	8-6	-	-
	SP	SS	11-7	18-6	20-0+	11-2	18-0	20-0+	10-10	17-5	20-0+	10-3	16-6	20-0+	9-9	15-8	20-0+
	SP	No.1	11-1	17-10	20-0+	10-9	17-3	20-0+	10-5	16-9	20-0+	9-10	15-10	20-0+	9-4	15-0	20-0+
	SP	No.2	10-7	17-0	20-0+	10-3	16-6	20-0+	10-0	16-0	20-0+	9-5	15-1	20-0+	8-11	14-4	19-2
	SP	No.3	10-4	16-7	20-0+	10-0	16-0	20-0+	9-8	15-7	20-0+	9-2	14-9	19-8	8-9	14-0	18-8
	SP	Stud	10-4	16-7	20-0+	10-0	16-0	20-0+	9-8	15-7	20-0+	9-2	14-9	19-8	8-9	14-0	18-8
	SP	Standard	10-0	-	-	9-9	-	-	9-5	-	-	8-11	-	-	8-6	-	-
	SPF	SS	10-10	17-5	20-0+	10-6	16-10	20-0+	10-2	16-4	20-0+	9-8	15-6	20-0+	9-2	14-8	19-8
	SPF	No.1	10-7	17-0	20-0+	10-3	16-6	20-0+	10-0	16-0	20-0+	9-5	15-1	20-0+	8-11	14-4	19-2
SPF	No.2	10-7	17-0	20-0+	10-3	16-6	20-0+	10-0	16-0	20-0+	9-5	15-1	20-0+	8-11	14-4	19-2	
SPF	No.3/Stud	10-0	16-1	20-0+	9-9	15-7	20-0+	9-5	15-2	20-0+	8-11	14-4	19-2	8-6	13-7	18-2	
SPF	Standard	10-0	-	-	9-9	-	-	9-5	-	-	8-11	-	-	8-6	-	-	
16	DFL	SS	10-8	17-1	20-0+	10-4	16-7	20-0+	10-0	16-1	20-0+	9-6	15-2	20-0+	9-0	14-5	19-3
	DFL	No.1	10-3	16-5	20-0+	9-11	15-11	20-0+	9-8	15-6	20-0+	9-1	14-7	19-6	8-8	13-11	18-7
	DFL	No.2	10-0	16-1	20-0+	9-9	15-7	20-0+	9-5	15-2	20-0+	8-11	14-4	19-2	8-6	13-7	18-2
	DFL	No.3/Stud	9-7	15-4	20-0+	9-3	14-11	19-11	9-0	14-5	19-4	8-6	13-8	18-3	8-1	13-0	17-4
	DFL	Standard	9-7	-	-	9-3	-	-	9-0	-	-	8-6	-	-	8-1	-	-
	HF	SS	10-0	16-1	20-0+	9-9	15-7	20-0+	9-5	15-2	20-0+	8-11	14-4	19-2	8-6	13-7	18-2
	HF	No.1	9-10	15-9	20-0+	9-6	15-3	20-0+	9-3	14-10	19-9	8-9	14-0	18-8	8-3	13-4	17-9
	HF	No.2	9-4	15-0	20-0	9-1	14-6	19-5	8-9	14-1	18-10	8-4	13-4	17-9	7-11	12-8	16-11
	HF	No.3/Stud	9-1	14-7	19-5	8-10	14-1	18-10	8-6	13-8	18-4	8-1	12-11	17-4	-	12-4	16-5
	HF	Standard	9-1	-	-	8-10	-	-	8-6	-	-	8-1	-	-	-	-	-
	SP	SS	10-5	16-9	20-0+	10-2	16-3	20-0+	9-10	15-9	20-0+	9-4	14-11	19-11	8-10	14-2	18-11
	SP	No.1	10-0	16-1	20-0+	9-9	15-7	20-0+	9-5	15-2	20-0+	8-11	14-4	19-2	8-6	13-7	18-2
	SP	No.2	9-7	15-4	20-0+	9-3	14-11	19-11	9-0	14-5	19-4	8-6	13-8	18-3	8-1	13-0	17-4
	SP	No.3	9-4	15-0	20-0	9-1	14-6	19-5	8-9	14-1	18-10	8-4	13-4	17-9	7-11	12-8	16-11
	SP	Stud	9-4	15-0	20-0	9-1	14-6	19-5	8-9	14-1	18-10	8-4	13-4	17-9	7-11	12-8	16-11
	SP	Standard	9-1	-	-	8-10	-	-	8-6	-	-	8-1	-	-	-	-	-
	SPF	SS	9-10	15-9	20-0+	9-6	15-3	20-0+	9-3	14-10	19-9	8-9	14-0	18-8	8-3	13-4	17-9
	SPF	No.1	9-7	15-4	20-0+	9-3	14-11	19-11	9-0	14-5	19-4	8-6	13-8	18-3	8-1	13-0	17-4
SPF	No.2	9-7	15-4	20-0+	9-3	14-11	19-11	9-0	14-5	19-4	8-6	13-8	18-3	8-1	13-0	17-4	
SPF	No.3/Stud	9-1	14-7	19-5	8-10	14-1	18-10	8-6	13-8	18-4	8-1	12-11	17-4	-	12-4	16-5	
SPF	Standard	9-1	-	-	8-10	-	-	8-6	-	-	8-1	-	-	-	-	-	
24	DFL	SS	9-3	14-10	19-10	9-0	14-5	19-2	8-8	14-0	18-8	8-3	13-2	17-8	7-10	12-6	16-9
	DFL	No.1	8-11	14-3	19-1	8-7	13-10	18-6	8-4	13-5	17-11	7-11	12-8	17-0	-	12-1	16-1
	DFL	No.2	8-8	14-0	18-8	8-5	13-6	18-1	8-2	13-2	17-7	7-9	12-5	16-7	-	11-10	15-9
	DFL	No.3/Stud	8-4	13-4	17-10	8-1	12-11	17-3	7-10	12-7	16-9	-	11-10	15-10	-	11-3	15-1
	DFL	Standard	8-4	-	-	8-1	-	-	7-10	-	-	-	-	-	-	-	-
	HF	SS	8-8	14-0	18-8	8-5	13-6	18-1	8-2	13-2	17-7	7-9	12-5	16-7	-	11-10	15-9
	HF	No.1	8-6	13-8	18-3	8-3	13-3	17-8	8-0	12-10	17-2	-	12-2	16-3	-	11-6	15-5
	HF	No.2	8-1	13-0	17-4	7-10	12-7	16-10	-	12-3	16-4	-	11-7	15-5	-	11-0	14-8
	HF	No.3/Stud	7-11	12-8	16-10	-	12-3	16-4	-	11-11	15-11	-	11-3	15-0	-	10-8	14-3
	HF	Standard	7-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	9-1	14-7	19-5	8-10	14-1	18-10	8-6	13-8	18-4	8-1	12-11	17-4	-	12-4	16-5
	SP	No.1	8-8	14-0	18-8	8-5	13-6	18-1	8-2	13-2	17-7	7-9	12-5	16-7	-	11-10	15-9
	SP	No.2	8-4	13-4	17-10	8-1	12-11	17-3	7-10	12-7	16-9	-	11-10	15-10	-	11-3	15-1
	SP	No.3	8-1	13-0	17-4	7-10	12-7	16-10	-	12-3	16-4	-	11-7	15-5	-	11-0	14-3
	SP	Stud	8-1	13-0	17-4	7-10	12-7	16-10	-	12-3	16-4	-	11-7	15-5	-	11-0	14-3
	SP	Standard	7-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	8-6	13-8	18-3	8-3	13-3	17-8	8-0	12-10	17-2	-	12-2	16-3	-	11-6	15-5
	SPF	No.1	8-4	13-4	17-10	8-1	12-11	17-3	7-10	12-7	16-9	-	11-10	15-10	-	11-3	15-1
SPF	No.2	8-4	13-4	17-10	8-1	12-11	17-3	7-10	12-7	16-9	-	11-10	15-10	-	11-3	15-1	
SPF	No.3/Stud	7-11	12-8	16-10	-	12-3	16-4	-	11-11	15-11	-	11-3	15-0	-	10-8	14-3	
SPF	Standard	7-11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

See Table 3.20A footnotes.

**Table 3.20A3 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/360 (Cont.)**

**Exposure B  
H/360**

(Fully Sheathed with a Minimum Sheathing Material)<sup>a</sup>

700-yr. Wind Speed 3-second gust (mph)			150			160			170			180			195			
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	
			Maximum Allowable Stud Length (ft.-in.) <sup>1</sup>															
12	DFL	SS	9-6	15-3	20-0†	9-1	14-6	19-5	8-8	13-11	18-7	8-4	13-5	17-11	7-11	12-8	16-11	
	DFL	No.1	9-1	14-8	19-7	8-9	14-0	18-8	8-4	13-5	17-11	8-0	12-11	17-2	-	12-2	16-3	
	DFL	No.2	8-11	14-4	19-2	8-6	13-8	18-4	8-2	13-2	17-6	7-10	12-7	16-10	-	11-11	15-11	
	DFL	No.3/Stud	8-6	13-8	18-3	8-2	13-1	17-5	7-10	12-6	16-9	-	12-0	16-1	-	11-5	15-2	
	DFL	Standard	8-6	-	-	8-2	-	-	7-10	-	-	-	-	-	-	-	-	-
	HF	SS	8-11	14-4	19-2	8-6	13-8	18-4	8-2	13-2	17-6	7-10	12-7	16-10	-	11-11	15-11	
	HF	No.1	8-9	14-0	18-9	8-4	13-5	17-11	8-0	12-10	17-2	-	12-4	16-6	-	11-8	15-7	
	HF	No.2	8-4	13-4	17-10	7-11	12-9	17-0	-	12-3	16-4	-	11-9	15-8	-	11-1	14-10	
	HF	No.3/Stud	8-1	13-0	17-4	-	12-5	16-7	-	11-10	15-10	-	11-5	15-3	-	10-9	14-5	
	HF	Standard	8-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	9-4	14-11	19-11	8-11	14-3	19-1	8-6	13-8	18-3	8-2	13-2	17-7	7-9	12-5	16-7	
	SP	No.1	8-11	14-4	19-2	8-6	13-8	18-4	8-2	13-2	17-6	7-10	12-7	16-10	-	11-11	15-11	
	SP	No.2	8-6	13-8	18-3	8-2	13-1	17-5	7-10	12-6	16-9	-	12-0	16-1	-	11-5	15-2	
	SP	No.3	8-4	13-4	17-10	7-11	12-9	17-0	-	12-3	16-4	-	11-9	15-8	-	11-1	14-6	
	SP	Stud	8-4	13-4	17-10	7-11	12-9	17-0	-	12-3	16-4	-	11-9	15-8	-	11-1	14-6	
	SP	Standard	8-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	8-9	14-0	18-9	8-4	13-5	17-11	8-0	12-10	17-2	-	12-4	16-6	-	11-8	15-7	
	SPF	No.1	8-6	13-8	18-3	8-2	13-1	17-5	7-10	12-6	16-9	-	12-0	16-1	-	11-5	15-2	
SPF	No.2	8-6	13-8	18-3	8-2	13-1	17-5	7-10	12-6	16-9	-	12-0	16-1	-	11-5	15-2		
SPF	No.3/Stud	8-1	13-0	17-4	-	12-5	16-7	-	11-10	15-10	-	11-5	15-3	-	10-9	14-5		
SPF	Standard	8-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
16	DFL	SS	8-7	13-9	18-5	8-2	13-2	17-7	7-10	12-7	16-10	-	12-1	16-2	-	11-5	15-4	
	DFL	No.1	8-3	13-3	17-8	7-11	12-8	16-11	-	12-2	16-2	-	11-8	15-7	-	11-0	14-9	
	DFL	No.2	8-1	13-0	17-4	-	12-5	16-7	-	11-10	15-10	-	11-5	15-3	-	10-9	14-5	
	DFL	No.3/Stud	-	12-4	16-6	-	11-10	15-9	-	11-4	15-2	-	10-11	14-7	-	10-4	13-8	
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	HF	SS	8-1	13-0	17-4	-	12-5	16-7	-	11-10	15-10	-	11-5	15-3	-	10-9	14-5	
	HF	No.1	7-11	12-8	16-11	-	12-1	16-2	-	11-7	15-6	-	11-2	14-11	-	10-7	14-1	
	HF	No.2	-	12-1	16-1	-	11-6	15-5	-	11-1	14-9	-	10-7	14-2	-	10-0	13-5	
	HF	No.3/Stud	-	11-9	15-8	-	11-2	15-0	-	10-9	14-4	-	10-4	13-9	-	9-9	13-0	
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SP	SS	8-5	13-6	18-0	8-1	12-11	17-3	-	12-4	16-6	-	11-11	15-11	-	11-3	15-0	
	SP	No.1	8-1	13-0	17-4	-	12-5	16-7	-	11-10	15-10	-	11-5	15-3	-	10-9	14-5	
	SP	No.2	-	12-4	16-6	-	11-10	15-9	-	11-4	15-2	-	10-11	14-7	-	10-4	13-9	
	SP	No.3	-	12-1	16-1	-	11-6	15-4	-	11-1	14-4	-	10-7	13-6	-	9-8	12-5	
	SP	Stud	-	12-1	16-1	-	11-6	15-4	-	11-1	14-4	-	10-7	13-6	-	9-8	12-5	
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPF	SS	7-11	12-8	16-11	-	12-1	16-2	-	11-7	15-6	-	11-2	14-11	-	10-7	14-1	
	SPF	No.1	-	12-4	16-6	-	11-10	15-9	-	11-4	15-2	-	10-11	14-7	-	10-4	13-9	
SPF	No.2	-	12-4	16-6	-	11-10	15-9	-	11-4	15-2	-	10-11	14-7	-	10-4	13-9		
SPF	No.3/Stud	-	11-9	15-8	-	11-2	15-0	-	10-9	14-4	-	10-4	13-9	-	9-9	13-0		
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
24	DFL	SS	-	11-11	15-11	-	11-5	15-3	-	10-11	14-7	-	10-6	14-1	-	9-11	13-3	
	DFL	No.1	-	11-6	15-4	-	11-0	14-8	-	10-6	14-1	-	10-1	13-6	-	9-7	12-9	
	DFL	No.2	-	11-3	15-0	-	10-9	14-4	-	10-4	13-9	-	9-11	13-3	-	9-4	12-6	
	DFL	No.3/Stud	-	10-9	14-4	-	10-3	13-7	-	9-10	12-9	-	9-4	12-0	-	8-7	11-0	
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	HF	SS	-	11-3	15-0	-	10-9	14-4	-	10-4	13-9	-	9-11	13-3	-	9-4	12-6	
	HF	No.1	-	11-0	14-8	-	10-6	14-0	-	10-1	13-5	-	9-8	12-11	-	9-2	12-3	
	HF	No.2	-	10-6	14-0	-	10-0	13-4	-	9-7	12-10	-	9-3	12-4	-	8-9	11-8	
	HF	No.3/Stud	-	10-2	13-7	-	9-9	13-0	-	9-4	12-5	-	9-0	11-8	-	8-4	10-9	
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SP	SS	-	11-9	15-8	-	11-2	15-0	-	10-9	14-4	-	10-4	13-9	-	9-9	13-0	
	SP	No.1	-	11-3	15-0	-	10-9	14-4	-	10-4	13-9	-	9-11	13-3	-	9-4	12-6	
	SP	No.2	-	10-9	14-4	-	10-3	13-8	-	9-10	13-2	-	9-5	12-7	-	8-11	11-11	
	SP	No.3	-	10-4	13-3	-	9-8	12-4	-	9-0	11-7	-	8-6	10-10	-	7-10	10-0	
	SP	Stud	-	10-4	13-3	-	9-8	12-4	-	9-0	11-7	-	8-6	10-10	-	7-10	10-0	
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPF	SS	-	11-0	14-8	-	10-6	14-0	-	10-1	13-5	-	9-8	12-11	-	9-2	12-3	
	SPF	No.1	-	10-9	14-4	-	10-3	13-8	-	9-10	13-2	-	9-5	12-7	-	8-11	11-11	
SPF	No.2	-	10-9	14-4	-	10-3	13-8	-	9-10	13-2	-	9-5	12-7	-	8-11	11-11		
SPF	No.3/Stud	-	10-2	13-7	-	9-9	13-0	-	9-4	12-5	-	9-0	11-8	-	8-4	10-9		
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

See Table 3.20A footnotes.

**Table 3.20A4 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/180**

**Exposure C  
H/180**

(Fully Sheathed with a Minimum Sheathing Material)<sup>a</sup>

700-yr. Wind Speed 3-second gust (mph)			110			115			120			130			140		
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8
			Maximum Allowable Stud Length (ft.-in.) <sup>1</sup>														
12	DFL	SS	13-4	20-0†	20-0†	13-0	20-0†	20-0†	12-7	20-0†	20-0†	11-11	19-1	20-0†	11-4	18-2	20-0†
	DFL	No.1	12-10	20-0†	20-0†	12-6	20-0†	20-0†	12-1	19-5	20-0†	11-5	18-4	20-0†	10-10	17-5	20-0†
	DFL	No.2	12-7	20-0†	20-0†	12-2	19-7	20-0†	11-10	19-0	20-0†	11-2	18-0	20-0†	10-8	17-1	20-0†
	DFL	No.3/Stud	12-0	19-2	20-0†	11-8	18-4	20-0†	11-4	17-6	20-0†	10-8	16-0	20-0†	9-10	14-10	19-1
	DFL	Standard	10-9	-	-	10-3	-	-	9-10	-	-	9-0	-	-	8-4	-	-
	HF	SS	12-7	20-0†	20-0†	12-2	19-7	20-0†	11-10	19-0	20-0†	11-2	18-0	20-0†	10-8	17-1	20-0†
	HF	No.1	12-4	19-9	20-0†	11-11	19-2	20-0†	11-7	18-7	20-0†	11-0	17-7	20-0†	10-5	16-8	20-0†
	HF	No.2	11-8	18-10	20-0†	11-4	18-3	20-0†	11-0	17-8	20-0†	10-5	16-9	20-0†	9-11	15-11	20-0†
	HF	No.3/Stud	11-5	18-3	20-0†	11-0	17-9	20-0†	10-9	17-0	20-0†	10-2	15-8	20-0†	9-7	14-5	18-7
	HF	Standard	10-6	-	-	10-0	-	-	9-7	-	-	8-10	-	-	8-2	-	-
	SP	SS	13-1	20-0†	20-0†	12-9	20-0†	20-0†	12-4	19-10	20-0†	11-8	18-9	20-0†	11-1	17-10	20-0†
	SP	No.1	12-7	20-0†	20-0†	12-2	19-7	20-0†	11-10	19-0	20-0†	11-2	18-0	20-0†	10-8	17-1	20-0†
	SP	No.2	12-0	19-3	20-0†	11-8	18-8	20-0†	11-4	18-2	20-0†	10-8	17-2	20-0†	10-2	16-4	20-0†
	SP	No.3	11-6	17-6	20-0†	11-0	16-8	20-0†	10-6	15-11	20-0†	9-8	14-8	18-9	8-11	13-6	17-4
	SP	Stud	11-6	17-6	20-0†	11-0	16-8	20-0†	10-6	15-11	20-0†	9-8	14-8	18-9	8-11	13-6	17-4
	SP	Standard	9-9	-	-	9-3	-	-	8-10	-	-	8-2	-	-	-	-	-
	SPF	SS	12-4	19-9	20-0†	11-11	19-2	20-0†	11-7	18-7	20-0†	11-0	17-7	20-0†	10-5	16-8	20-0†
	SPF	No.1	12-0	19-3	20-0†	11-8	18-8	20-0†	11-4	18-2	20-0†	10-8	17-2	20-0†	10-2	16-4	20-0†
SPF	No.2	12-0	19-3	20-0†	11-8	18-8	20-0†	11-4	18-2	20-0†	10-8	17-2	20-0†	10-2	16-4	20-0†	
SPF	No.3/Stud	11-5	18-3	20-0†	11-0	17-9	20-0†	10-9	17-0	20-0†	10-2	15-8	20-0†	9-7	14-5	18-7	
SPF	Standard	10-6	-	-	10-0	-	-	9-7	-	-	8-10	-	-	8-2	-	-	
16	DFL	SS	12-1	19-5	20-0†	11-9	18-10	20-0†	11-5	18-3	20-0†	10-9	17-3	20-0†	10-3	16-5	20-0†
	DFL	No.1	11-8	18-8	20-0†	11-3	18-1	20-0†	10-11	17-7	20-0†	10-4	16-7	20-0†	9-10	15-9	20-0†
	DFL	No.2	11-5	18-3	20-0†	11-0	17-9	20-0†	10-9	17-2	20-0†	10-2	16-3	20-0†	9-7	15-5	20-0†
	DFL	No.3/Stud	10-10	16-5	20-0†	10-5	15-8	20-0†	10-0	15-0	19-4	9-2	13-9	17-9	8-5	12-8	16-4
	DFL	Standard	9-3	-	-	8-10	-	-	8-5	-	-	-	-	-	-	-	-
	HF	SS	11-5	18-3	20-0†	11-0	17-9	20-0†	10-9	17-2	20-0†	10-2	16-3	20-0†	9-7	15-5	20-0†
	HF	No.1	11-2	17-10	20-0†	10-9	17-4	20-0†	10-6	16-10	20-0†	9-11	15-11	20-0†	9-5	15-1	20-0†
	HF	No.2	10-7	17-0	20-0†	10-3	16-6	20-0†	10-0	16-0	20-0†	9-5	15-1	20-0†	9-0	14-4	19-2
	HF	No.3/Stud	10-4	16-0	20-0†	10-0	15-3	19-8	9-8	14-7	18-10	8-11	13-5	17-3	8-3	12-4	15-11
	HF	Standard	9-0	-	-	8-7	-	-	8-3	-	-	-	-	-	-	-	-
	SP	SS	11-10	19-1	20-0†	11-6	18-6	20-0†	11-2	17-11	20-0†	10-7	16-11	20-0†	10-0	16-1	20-0†
	SP	No.1	11-5	18-3	20-0†	11-0	17-9	20-0†	10-9	17-2	20-0†	10-2	16-3	20-0†	9-7	15-5	20-0†
	SP	No.2	10-10	17-5	20-0†	10-6	16-11	20-0†	10-3	16-5	20-0†	9-8	15-6	20-0†	9-2	14-9	19-8
	SP	No.3	9-10	15-0	19-3	9-5	14-4	18-4	9-0	13-8	17-6	8-3	12-6	16-1	-	11-7	14-10
	SP	Stud	9-10	15-0	19-3	9-5	14-4	18-4	9-0	13-8	17-6	8-3	12-6	16-1	-	11-7	14-10
	SP	Standard	8-4	-	-	8-0	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	11-2	17-10	20-0†	10-9	17-4	20-0†	10-6	16-10	20-0†	9-11	15-11	20-0†	9-5	15-1	20-0†
	SPF	No.1	10-10	17-5	20-0†	10-6	16-11	20-0†	10-3	16-5	20-0†	9-8	15-6	20-0†	9-2	14-9	19-8
SPF	No.2	10-10	17-5	20-0†	10-6	16-11	20-0†	10-3	16-5	20-0†	9-8	15-6	20-0†	9-2	14-9	19-8	
SPF	No.3/Stud	10-4	16-0	20-0†	10-0	15-3	19-8	9-8	14-7	18-10	8-11	13-5	17-3	8-3	12-4	15-11	
SPF	Standard	9-0	-	-	8-7	-	-	8-3	-	-	-	-	-	-	-	-	
24	DFL	SS	10-6	16-10	20-0†	10-2	16-4	20-0†	9-11	15-10	20-0†	9-4	15-0	20-0†	8-10	14-3	19-0
	DFL	No.1	10-1	16-2	20-0†	9-9	15-8	20-0†	9-6	15-3	20-0†	9-0	14-5	19-3	8-6	13-8	18-3
	DFL	No.2	9-11	15-10	20-0†	9-7	15-5	20-0†	9-4	14-11	19-11	8-10	14-1	18-10	8-4	13-5	17-7
	DFL	No.3/Stud	8-10	13-3	17-1	8-5	12-7	16-3	8-0	12-1	15-6	-	11-1	14-3	-	10-3	13-2
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	9-11	15-10	20-0†	9-7	15-5	20-0†	9-4	14-11	19-11	8-10	14-1	18-10	8-4	13-5	17-11
	HF	No.1	9-8	15-6	20-0†	9-4	15-0	20-0†	9-1	14-7	19-6	8-7	13-10	18-5	8-2	13-1	17-6
	HF	No.2	9-2	14-9	19-9	8-11	14-4	19-1	8-8	13-11	18-7	8-2	13-2	17-6	7-9	12-6	16-8
	HF	No.3/Stud	8-7	12-11	16-7	8-2	12-3	15-10	7-10	11-9	15-2	-	10-9	13-11	-	10-0	12-10
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	10-4	16-6	20-0†	10-0	16-0	20-0†	9-8	15-7	20-0†	9-2	14-8	19-8	8-8	14-0	18-8
	SP	No.1	9-11	15-10	20-0†	9-7	15-5	20-0†	9-4	14-11	19-11	8-10	14-1	18-10	8-4	13-5	17-11
	SP	No.2	9-5	15-2	20-0†	9-2	14-8	19-7	8-11	14-3	19-0	8-5	13-6	17-6	8-0	12-6	16-2
	SP	No.3	7-11	12-1	15-5	-	11-6	14-9	-	11-0	14-1	-	10-1	12-11	-	9-4	11-11
	SP	Stud	7-11	12-1	15-5	-	11-6	14-9	-	11-0	14-1	-	10-1	12-11	-	9-4	11-11
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	9-8	15-6	20-0†	9-4	15-0	20-0†	9-1	14-7	19-6	8-7	13-10	18-5	8-2	13-1	17-6
	SPF	No.1	9-5	15-2	20-0†	9-2	14-8	19-7	8-11	14-3	19-0	8-5	13-6	18-0	8-0	12-10	17-1
SPF	No.2	9-5	15-2	20-0†	9-2	14-8	19-7	8-11	14-3	19-0	8-5	13-6	18-0	8-0	12-10	17-1	
SPF	No.3/Stud	8-7	12-11	16-7	8-2	12-3	15-10	7-10	11-9	15-2	-	10-9	13-11	-	10-0	12-10	
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

See Table 3.20A footnotes.

**Table 3.20A4 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/180 (Cont.)**

(Fully Sheathed with a Minimum Sheathing Material)<sup>a</sup>

**Exposure C  
H/180**



PRESCRIPTIVE DESIGN

700-yr. Wind Speed 3-second gust (mph)			150			160			170			180			195		
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8
			Maximum Allowable Stud Length (ft-in.) <sup>1</sup>														
12	DFL	SS	10-9	17-3	20-0†	10-3	16-6	20-0†	9-10	15-10	20-0†	9-6	15-3	20-0†	9-0	14-5	19-3
	DFL	No.1	10-4	16-7	20-0†	9-11	15-11	20-0†	9-6	15-3	20-0†	9-1	14-8	19-7	8-8	13-10	18-6
	DFL	No.2	10-2	16-3	20-0†	9-8	15-7	20-0†	9-4	14-11	19-11	8-11	14-4	19-2	8-5	13-7	17-10
	DFL	No.3/Stud	9-2	13-9	17-9	8-7	12-10	16-6	8-0	12-0	15-6	-	11-4	14-7	-	10-5	13-5
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	10-2	16-3	20-0†	9-8	15-7	20-0†	9-4	14-11	19-11	8-11	14-4	19-2	8-5	13-7	18-1
	HF	No.1	9-11	15-11	20-0†	9-6	15-2	20-0†	9-1	14-7	19-6	8-9	14-0	18-9	8-3	13-3	17-8
	HF	No.2	9-5	15-2	20-0†	9-0	14-6	19-4	8-8	13-10	18-6	8-4	13-4	17-10	7-10	12-7	16-10
	HF	No.3/Stud	8-11	13-5	17-3	8-4	12-6	16-1	7-10	11-9	15-1	-	11-0	14-2	-	10-1	13-0
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	10-7	17-0	20-0†	10-1	16-2	20-0†	9-8	15-6	20-0†	9-4	14-11	19-11	8-10	14-1	18-10
	SP	No.1	10-2	16-3	20-0†	9-8	15-7	20-0†	9-4	14-11	19-11	8-11	14-4	19-2	8-5	13-7	18-1
	SP	No.2	9-8	15-6	20-0†	9-3	14-10	19-10	8-10	14-3	19-0	8-6	13-8	17-11	8-1	12-9	16-5
	SP	No.3	8-3	12-7	16-1	-	11-9	15-0	-	11-0	14-1	-	10-4	13-3	-	9-6	12-2
	SP	Stud	8-3	12-7	16-1	-	11-9	15-0	-	11-0	14-1	-	10-4	13-3	-	9-6	12-2
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	9-11	15-11	20-0†	9-6	15-2	20-0†	9-1	14-7	19-6	8-9	14-0	18-9	8-3	13-3	17-8
	SPF	No.1	9-8	15-6	20-0†	9-3	14-10	19-10	8-10	14-3	19-0	8-6	13-8	18-3	8-1	12-11	17-3
SPF	No.2	9-8	15-6	20-0†	9-3	14-10	19-10	8-10	14-3	19-0	8-6	13-8	18-3	8-1	12-11	17-3	
SPF	No.3/Stud	8-11	13-5	17-3	8-4	12-6	16-1	7-10	11-9	15-1	-	11-0	14-2	-	10-1	13-0	
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
16	DFL	SS	9-9	15-8	20-0†	9-4	14-11	20-0	8-11	14-4	19-2	8-7	13-9	18-5	8-1	12-11	16-2
	DFL	No.1	9-4	15-0	20-0†	9-0	14-4	19-2	8-7	13-9	18-5	8-3	13-3	17-8	7-10	12-6	16-2
	DFL	No.2	9-2	14-9	19-8	8-9	14-1	18-9	8-5	13-6	17-9	8-1	12-11	16-8	-	11-11	15-4
	DFL	No.3/Stud	7-10	11-10	15-2	-	11-0	14-2	-	10-4	13-3	-	9-8	12-6	-	8-11	11-6
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	9-2	14-9	19-8	8-9	14-1	18-9	8-5	13-6	18-0	8-1	13-0	17-4	-	12-3	16-4
	HF	No.1	9-0	14-5	19-3	8-7	13-9	18-4	8-3	13-2	17-7	7-11	12-8	16-11	-	12-0	16-0
	HF	No.2	8-6	13-8	18-3	8-2	13-1	17-6	7-10	12-6	16-9	-	12-1	16-1	-	11-5	14-10
	HF	No.3/Stud	-	11-6	14-10	-	10-9	13-10	-	10-1	12-11	-	9-5	12-2	-	8-8	11-2
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	9-7	15-4	20-0†	9-2	14-8	19-7	8-9	14-1	18-9	8-5	13-6	18-0	8-0	12-9	17-1
	SP	No.1	9-2	14-9	19-8	8-9	14-1	18-9	8-5	13-6	18-0	8-1	13-0	17-4	-	12-3	16-4
	SP	No.2	8-9	14-1	18-8	8-4	13-5	17-5	8-0	12-8	16-4	-	11-11	15-4	-	10-11	14-1
	SP	No.3	-	10-9	13-9	-	10-0	12-10	-	9-5	12-1	-	8-10	11-4	-	8-2	10-5
	SP	Stud	-	10-9	13-9	-	10-0	12-10	-	9-5	12-1	-	8-10	11-4	-	8-2	10-5
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	9-0	14-5	19-3	8-7	13-9	18-4	8-3	13-2	17-7	7-11	12-8	16-11	-	12-0	16-0
	SPF	No.1	8-9	14-1	18-9	8-4	13-5	17-11	8-0	12-10	17-2	-	12-4	16-5	-	11-8	15-1
SPF	No.2	8-9	14-1	18-9	8-4	13-5	17-11	8-0	12-10	17-2	-	12-4	16-5	-	11-8	15-1	
SPF	No.3/Stud	-	11-6	14-10	-	10-9	13-10	-	10-1	12-11	-	9-5	12-2	-	8-8	11-2	
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
24	DFL	SS	8-5	13-7	18-1	8-1	13-0	17-4	7-9	12-5	16-7	-	11-11	15-11	-	11-4	15-1
	DFL	No.1	8-2	13-1	17-3	7-9	12-6	16-1	-	11-9	15-1	-	11-0	14-2	-	10-1	13-0
	DFL	No.2	8-0	12-8	16-4	-	11-10	15-3	-	11-1	14-3	-	10-5	13-5	-	9-7	12-4
	DFL	No.3/Stud	-	9-6	12-3	-	8-10	11-5	-	8-4	10-8	-	7-10	10-1	-	-	9-3
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	8-0	12-9	17-1	-	12-3	16-4	-	11-8	15-8	-	11-3	15-0	-	10-8	14-2
	HF	No.1	7-9	12-6	16-8	-	11-11	15-11	-	11-5	14-11	-	10-11	14-0	-	10-0	12-10
	HF	No.2	-	11-11	15-10	-	11-4	14-9	-	10-9	13-10	-	10-1	13-0	-	9-3	11-11
	HF	No.3/Stud	-	9-3	11-11	-	8-8	11-1	-	8-1	10-5	-	-	9-10	-	-	9-0
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	8-4	13-4	17-9	7-11	12-9	17-0	-	12-2	16-3	-	11-9	15-8	-	11-1	14-10
	SP	No.1	8-0	12-9	17-1	-	12-3	16-4	-	11-8	15-5	-	11-3	14-6	-	10-4	13-4
	SP	No.2	-	11-8	15-0	-	10-10	14-0	-	10-2	13-2	-	9-7	12-4	-	8-10	11-4
	SP	No.3	-	8-8	11-1	-	8-1	10-4	-	-	9-8	-	-	9-1	-	-	8-5
	SP	Stud	-	8-8	11-1	-	8-1	10-4	-	-	9-8	-	-	9-1	-	-	8-5
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	7-9	12-6	16-8	-	11-11	15-11	-	11-5	15-3	-	11-0	14-8	-	10-5	13-11
	SPF	No.1	-	12-2	16-1	-	11-8	15-0	-	10-11	14-1	-	10-3	13-3	-	9-5	12-2
SPF	No.2	-	12-2	16-1	-	11-8	15-0	-	10-11	14-1	-	10-3	13-3	-	9-5	12-2	
SPF	No.3/Stud	-	9-3	11-11	-	8-8	11-1	-	8-1	10-5	-	-	9-10	-	-	9-0	
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

See Table 3.20A footnotes.

**Table 3.20A5 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/240**

**Exposure C  
H/240**

(Fully Sheathed with a Minimum Sheathing Material)<sup>a</sup>

700-yr. Wind Speed 3-second gust (mph)			110			115			120			130			140		
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8
			Maximum Allowable Stud Length (ft.-in.) <sup>1</sup>														
12	DFL	SS	12-1	19-5	20-0+	11-9	18-10	20-0+	11-5	18-3	20-0+	10-9	17-3	20-0+	10-3	16-5	20-0+
	DFL	No.1	11-8	18-8	20-0+	11-3	18-1	20-0+	10-11	17-7	20-0+	10-4	16-7	20-0+	9-10	15-9	20-0+
	DFL	No.2	11-5	18-3	20-0+	11-0	17-9	20-0+	10-9	17-2	20-0+	10-2	16-3	20-0+	9-7	15-5	20-0+
	DFL	No.3/Stud	10-10	17-5	20-0+	10-6	16-11	20-0+	10-3	16-5	20-0+	9-8	15-6	20-0+	9-2	14-9	19-1
	DFL	Standard	10-9	-	-	10-3	-	-	9-10	-	-	9-0	-	-	8-4	-	-
	HF	SS	11-5	18-3	20-0+	11-0	17-9	20-0+	10-9	17-2	20-0+	10-2	16-3	20-0+	9-7	15-5	20-0+
	HF	No.1	11-2	17-10	20-0+	10-9	17-4	20-0+	10-6	16-10	20-0+	9-11	15-11	20-0+	9-5	15-1	20-0+
	HF	No.2	10-7	17-0	20-0+	10-3	16-6	20-0+	10-0	16-0	20-0+	9-5	15-1	20-0+	9-0	14-4	19-2
	HF	No.3/Stud	10-4	16-6	20-0+	10-0	16-0	20-0+	9-8	15-7	20-0+	9-2	14-8	19-8	8-8	14-0	18-7
	HF	Standard	10-4	-	-	10-0	-	-	9-7	-	-	8-10	-	-	8-2	-	-
	SP	SS	11-10	19-1	20-0+	11-6	18-6	20-0+	11-2	17-11	20-0+	10-7	16-11	20-0+	10-0	16-1	20-0+
	SP	No.1	11-5	18-3	20-0+	11-0	17-9	20-0+	10-9	17-2	20-0+	10-2	16-3	20-0+	9-7	15-5	20-0+
	SP	No.2	10-10	17-5	20-0+	10-6	16-11	20-0+	10-3	16-5	20-0+	9-8	15-6	20-0+	9-2	14-9	19-8
	SP	No.3	10-7	17-0	20-0+	10-3	16-6	20-0+	10-0	15-11	20-0+	9-5	14-8	18-9	8-11	13-6	17-4
	SP	Stud	10-7	17-0	20-0+	10-3	16-6	20-0+	10-0	15-11	20-0+	9-5	14-8	18-9	8-11	13-6	17-4
	SP	Standard	9-9	-	-	9-3	-	-	8-10	-	-	8-2	-	-	-	-	-
	SPF	SS	11-2	17-10	20-0+	10-9	17-4	20-0+	10-6	16-10	20-0+	9-11	15-11	20-0+	9-5	15-1	20-0+
	SPF	No.1	10-10	17-5	20-0+	10-6	16-11	20-0+	10-3	16-5	20-0+	9-8	15-6	20-0+	9-2	14-9	19-8
SPF	No.2	10-10	17-5	20-0+	10-6	16-11	20-0+	10-3	16-5	20-0+	9-8	15-6	20-0+	9-2	14-9	19-8	
SPF	No.3/Stud	10-4	16-6	20-0+	10-0	16-0	20-0+	9-8	15-7	20-0+	9-2	14-8	19-8	8-8	14-0	18-7	
SPF	Standard	10-4	-	-	10-0	-	-	9-7	-	-	8-10	-	-	8-2	-	-	
16	DFL	SS	10-11	17-7	20-0+	10-7	17-0	20-0+	10-3	16-6	20-0+	9-9	15-7	20-0+	9-3	14-10	19-10
	DFL	No.1	10-6	16-11	20-0+	10-2	16-4	20-0+	9-11	15-11	20-0+	9-4	15-0	20-0+	8-11	14-3	19-1
	DFL	No.2	10-4	16-6	20-0+	10-0	16-0	20-0+	9-8	15-7	20-0+	9-2	14-8	19-8	8-8	14-0	18-8
	DFL	No.3/Stud	9-10	15-9	20-0+	9-6	15-4	20-0+	9-3	14-10	19-4	8-9	13-9	17-9	8-4	12-8	16-4
	DFL	Standard	9-3	-	-	8-10	-	-	8-5	-	-	-	-	-	-	-	-
	HF	SS	10-4	16-6	20-0+	10-0	16-0	20-0+	9-8	15-7	20-0+	9-2	14-8	19-8	8-8	14-0	18-8
	HF	No.1	10-1	16-2	20-0+	9-9	15-8	20-0+	9-6	15-2	20-0+	9-0	14-5	19-3	8-6	13-8	18-3
	HF	No.2	9-7	15-4	20-0+	9-3	14-11	19-11	9-0	14-6	19-4	8-6	13-8	18-3	8-1	13-0	17-4
	HF	No.3/Stud	9-4	14-11	20-0	9-0	14-6	19-4	8-9	14-1	18-9	8-4	13-4	17-3	7-11	12-4	15-11
	HF	Standard	9-0	-	-	8-7	-	-	8-3	-	-	-	-	-	-	-	-
	SP	SS	10-9	17-3	20-0+	10-5	16-8	20-0+	10-1	16-2	20-0+	9-7	15-4	20-0+	9-1	14-7	19-5
	SP	No.1	10-4	16-6	20-0+	10-0	16-0	20-0+	9-8	15-7	20-0+	9-2	14-8	19-8	8-8	14-0	18-8
	SP	No.2	9-10	15-9	20-0+	9-6	15-4	20-0+	9-3	14-10	19-10	8-9	14-0	18-9	8-4	13-4	17-10
	SP	No.3	9-7	15-0	19-3	9-3	14-4	18-4	9-0	13-8	17-6	8-3	12-6	16-1	-	11-7	14-10
	SP	Stud	9-7	15-0	19-3	9-3	14-4	18-4	9-0	13-8	17-6	8-3	12-6	16-1	-	11-7	14-10
	SP	Standard	8-4	-	-	8-0	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	10-1	16-2	20-0+	9-9	15-8	20-0+	9-6	15-2	20-0+	9-0	14-5	19-3	8-6	13-8	18-3
	SPF	No.1	9-10	15-9	20-0+	9-6	15-4	20-0+	9-3	14-10	19-10	8-9	14-0	18-9	8-4	13-4	17-10
SPF	No.2	9-10	15-9	20-0+	9-6	15-4	20-0+	9-3	14-10	19-10	8-9	14-0	18-9	8-4	13-4	17-10	
SPF	No.3/Stud	9-4	14-11	20-0	9-0	14-6	19-4	8-9	14-1	18-9	8-4	13-4	17-3	7-11	12-4	15-11	
SPF	Standard	9-0	-	-	8-7	-	-	8-3	-	-	-	-	-	-	-	-	
24	DFL	SS	9-6	15-3	20-0+	9-2	14-9	19-9	8-11	14-4	19-2	8-5	13-7	18-1	8-0	12-10	17-2
	DFL	No.1	9-2	14-8	19-7	8-10	14-2	19-0	8-7	13-9	18-5	8-2	13-0	17-5	-	12-5	16-6
	DFL	No.2	8-11	14-4	19-2	8-8	13-11	18-7	8-5	13-6	18-0	8-0	12-9	17-1	-	12-1	16-2
	DFL	No.3/Stud	8-6	13-3	17-1	8-3	12-7	16-3	8-0	12-1	15-6	-	11-1	14-3	-	10-3	13-2
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	8-11	14-4	19-2	8-8	13-11	18-7	8-5	13-6	18-0	8-0	12-9	17-1	-	12-1	16-2
	HF	No.1	8-9	14-0	18-9	8-6	13-7	18-2	8-3	13-2	17-8	7-9	12-6	16-8	-	11-10	15-10
	HF	No.2	8-4	13-4	17-10	8-1	12-11	17-3	7-10	12-7	16-9	-	11-10	15-10	-	11-3	15-1
	HF	No.3/Stud	8-1	12-11	16-7	7-10	12-3	15-10	-	11-9	15-2	-	10-9	13-11	-	10-0	12-10
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	9-4	14-11	20-0	9-0	14-6	19-4	8-9	14-1	18-9	8-4	13-4	17-9	7-11	12-8	16-10
	SP	No.1	8-11	14-4	19-2	8-8	13-11	18-7	8-5	13-6	18-0	8-0	12-9	17-1	-	12-1	16-2
	SP	No.2	8-6	13-8	18-3	8-3	13-3	17-9	8-0	12-11	17-3	-	12-2	16-3	-	11-7	15-5
	SP	No.3	7-11	12-1	15-5	-	11-6	14-9	-	11-0	14-1	-	10-1	12-11	-	9-4	11-11
	SP	Stud	7-11	12-1	15-5	-	11-6	14-9	-	11-0	14-1	-	10-1	12-11	-	9-4	11-11
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	8-9	14-0	18-9	8-6	13-7	18-2	8-3	13-2	17-8	7-9	12-6	16-8	-	11-10	15-10
	SPF	No.1	8-6	13-8	18-3	8-3	13-3	17-9	8-0	12-11	17-3	-	12-2	16-3	-	11-7	15-5
SPF	No.2	8-6	13-8	18-3	8-3	13-3	17-9	8-0	12-11	17-3	-	12-2	16-3	-	11-7	15-5	
SPF	No.3/Stud	8-1	12-11	16-7	7-10	12-3	15-10	-	11-9	15-2	-	10-9	13-11	-	10-0	12-10	
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

See Table 3.20A footnotes.

**Table 3.20A5 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/240 (Cont.)**

**Exposure C  
H/240**

(Fully Sheathed with a Minimum Sheathing Material)<sup>a</sup>

700-yr. Wind Speed 3-second gust (mph)			150			160			170			180			195		
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8
			Maximum Allowable Stud Length (ft.-in.) <sup>1</sup>														
12	DFL	SS	9-9	15-8	20-0†	9-4	14-11	20-0	8-11	14-4	19-2	8-7	13-9	18-5	8-1	13-0	17-5
	DFL	No.1	9-4	15-0	20-0†	9-0	14-4	19-2	8-7	13-9	18-5	8-3	13-3	17-8	7-10	12-6	16-9
	DFL	No.2	9-2	14-9	19-8	8-9	14-1	18-9	8-5	13-6	18-0	8-1	13-0	17-4	-	12-3	16-4
	DFL	No.3/Stud	8-9	13-9	17-9	8-4	12-10	16-6	8-0	12-0	15-6	-	11-4	14-7	-	10-5	13-5
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	9-2	14-9	19-8	8-9	14-1	18-9	8-5	13-6	18-0	8-1	13-0	17-4	-	12-3	16-4
	HF	No.1	9-0	14-5	19-3	8-7	13-9	18-4	8-3	13-2	17-7	7-11	12-8	16-11	-	12-0	16-0
	HF	No.2	8-6	13-8	18-3	8-2	13-1	17-6	7-10	12-6	16-9	-	12-1	16-1	-	11-5	15-3
	HF	No.3/Stud	8-4	13-4	17-3	7-11	12-6	16-1	-	11-9	15-1	-	11-0	14-2	-	10-1	13-0
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	9-7	15-4	20-0†	9-2	14-8	19-7	8-9	14-1	18-9	8-5	13-6	18-0	8-0	12-9	17-1
	SP	No.1	9-2	14-9	19-8	8-9	14-1	18-9	8-5	13-6	18-0	8-1	13-0	17-4	-	12-3	16-4
	SP	No.2	8-9	14-1	18-9	8-4	13-5	17-11	8-0	12-10	17-2	-	12-4	16-6	-	11-8	15-7
	SP	No.3	8-3	12-7	16-1	-	11-9	15-0	-	11-0	14-1	-	10-4	13-3	-	9-6	12-2
	SP	Stud	8-3	12-7	16-1	-	11-9	15-0	-	11-0	14-1	-	10-4	13-3	-	9-6	12-2
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPF	SS	9-0	14-5	19-3	8-7	13-9	18-4	8-3	13-2	17-7	7-11	12-8	16-11	-	12-0	16-0	
SPF	No.1	8-9	14-1	18-9	8-4	13-5	17-11	8-0	12-10	17-2	-	12-4	16-6	-	11-8	15-7	
SPF	No.2	8-9	14-1	18-9	8-4	13-5	17-11	8-0	12-10	17-2	-	12-4	16-6	-	11-8	15-7	
SPF	No.3/Stud	8-4	13-4	17-3	7-11	12-6	16-1	-	11-9	15-1	-	11-0	14-2	-	10-1	13-0	
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
16	DFL	SS	8-10	14-2	18-11	8-5	13-6	18-1	8-1	12-11	17-4	7-9	12-5	16-7	-	11-9	15-9
	DFL	No.1	8-6	13-7	18-2	8-1	13-0	17-4	7-9	12-5	16-8	-	12-0	16-0	-	11-4	15-1
	DFL	No.2	8-4	13-4	17-9	7-11	12-9	17-0	-	12-2	16-3	-	11-9	15-8	-	11-1	14-10
	DFL	No.3/Stud	7-10	11-10	15-2	-	11-0	14-2	-	10-4	13-3	-	9-8	12-6	-	8-11	11-6
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	8-4	13-4	17-9	7-11	12-9	17-0	-	12-2	16-3	-	11-9	15-8	-	11-1	14-10
	HF	No.1	8-1	13-0	17-5	7-9	12-5	16-7	-	11-11	15-11	-	11-6	15-4	-	10-10	14-6
	HF	No.2	-	12-5	16-6	-	11-10	15-10	-	11-4	15-2	-	10-11	14-7	-	10-4	13-9
	HF	No.3/Stud	-	11-6	14-10	-	10-9	13-10	-	10-1	12-11	-	9-5	12-2	-	8-8	11-2
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	8-8	13-10	18-6	8-3	13-3	17-8	7-11	12-8	17-0	-	12-3	16-4	-	11-7	15-5
	SP	No.1	8-4	13-4	17-9	7-11	12-9	17-0	-	12-2	16-3	-	11-9	15-8	-	11-1	14-10
	SP	No.2	7-11	12-8	17-0	-	12-2	16-3	-	11-8	15-7	-	11-2	14-11	-	10-7	14-1
	SP	No.3	-	10-9	13-9	-	10-0	12-10	-	9-5	12-1	-	8-10	11-4	-	8-2	10-5
	SP	Stud	-	10-9	13-9	-	10-0	12-10	-	9-5	12-1	-	8-10	11-4	-	8-2	10-5
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPF	SS	8-1	13-0	17-5	7-9	12-5	16-7	-	11-11	15-11	-	11-6	15-4	-	10-10	14-6	
SPF	No.1	7-11	12-8	17-0	-	12-2	16-3	-	11-8	15-7	-	11-2	14-11	-	10-7	14-2	
SPF	No.2	7-11	12-8	17-0	-	12-2	16-3	-	11-8	15-7	-	11-2	14-11	-	10-7	14-2	
SPF	No.3/Stud	-	11-6	14-10	-	10-9	13-10	-	10-1	12-11	-	9-5	12-2	-	8-8	11-2	
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
24	DFL	SS	-	12-3	16-5	-	11-9	15-8	-	11-3	15-0	-	10-10	14-5	-	10-3	13-8
	DFL	No.1	-	11-10	15-9	-	11-3	15-1	-	10-10	14-5	-	10-5	13-11	-	9-10	13-0
	DFL	No.2	-	11-7	15-5	-	11-1	14-9	-	10-7	14-2	-	10-2	13-5	-	9-7	12-4
	DFL	No.3/Stud	-	9-6	12-3	-	8-10	11-5	-	8-4	10-8	-	7-10	10-1	-	-	9-3
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	-	11-7	15-5	-	11-1	14-9	-	10-7	14-2	-	10-2	13-7	-	9-7	12-10
	HF	No.1	-	11-4	15-1	-	10-10	14-5	-	10-4	13-10	-	9-11	13-3	-	9-5	12-7
	HF	No.2	-	10-9	14-4	-	10-3	13-9	-	9-10	13-2	-	9-6	12-8	-	9-0	11-11
	HF	No.3/Stud	-	9-3	11-11	-	8-8	11-1	-	8-1	10-5	-	-	9-10	-	-	9-0
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	-	12-0	16-1	-	11-6	15-4	-	11-0	14-9	-	10-7	14-2	-	10-0	13-5
	SP	No.1	-	11-7	15-5	-	11-1	14-9	-	10-7	14-2	-	10-2	13-7	-	9-7	12-10
	SP	No.2	-	11-0	14-9	-	10-7	14-0	-	10-1	13-2	-	9-7	12-4	-	8-10	11-4
	SP	No.3	-	8-8	11-1	-	8-1	10-4	-	-	9-8	-	-	9-1	-	-	8-5
	SP	Stud	-	8-8	11-1	-	8-1	10-4	-	-	9-8	-	-	9-1	-	-	8-5
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPF	SS	-	11-4	15-1	-	10-10	14-5	-	10-4	13-10	-	9-11	13-3	-	9-5	12-7	
SPF	No.1	-	11-0	14-9	-	10-7	14-1	-	10-1	13-6	-	9-9	13-0	-	9-2	12-2	
SPF	No.2	-	11-0	14-9	-	10-7	14-1	-	10-1	13-6	-	9-9	13-0	-	9-2	12-2	
SPF	No.3/Stud	-	9-3	11-11	-	8-8	11-1	-	8-1	10-5	-	-	9-10	-	-	9-0	
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

See Table 3.20A footnotes.

**Table 3.20A6 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/360**

**Exposure C  
H/360**

(Fully Sheathed with a Minimum Sheathing Material)<sup>a</sup>

700-yr. Wind Speed 3-second gust (mph)			110			115			120			130			140		
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8
			Maximum Allowable Stud Length (ft-in.) <sup>1</sup>														
12	DFL	SS	10-6	16-10	20-0†	10-2	16-4	20-0†	9-11	15-10	20-0†	9-4	15-0	20-0†	8-10	14-3	19-0
	DFL	No.1	10-1	16-2	20-0†	9-9	15-8	20-0†	9-6	15-3	20-0†	9-0	14-5	19-3	8-6	13-8	18-3
	DFL	No.2	9-11	15-10	20-0†	9-7	15-5	20-0†	9-4	14-11	19-11	8-10	14-1	18-10	8-4	13-5	17-11
	DFL	No.3/Stud Standard	9-5	15-2	20-0†	9-2	14-8	19-7	8-11	14-3	19-0	8-5	13-6	18-0	8-0	12-10	17-1
	DFL		9-5	-	-	9-2	-	-	8-11	-	-	8-5	-	-	8-0	-	-
	HF	SS	9-11	15-10	20-0†	9-7	15-5	20-0†	9-4	14-11	19-11	8-10	14-1	18-10	8-4	13-5	17-11
	HF	No.1	9-8	15-6	20-0†	9-4	15-0	20-0†	9-1	14-7	19-6	8-7	13-10	18-5	8-2	13-1	17-6
	HF	No.2	9-2	14-9	19-9	8-11	14-4	19-1	8-8	13-11	18-7	8-2	13-2	17-6	7-9	12-6	16-8
	HF	No.3/Stud Standard	8-11	14-4	19-2	8-8	13-11	18-7	8-5	13-6	18-0	8-0	12-9	17-1	-	12-1	16-2
	HF		8-11	-	-	8-8	-	-	8-5	-	-	8-0	-	-	-	-	-
	SP	SS	10-4	16-6	20-0†	10-0	16-0	20-0†	9-8	15-7	20-0†	9-2	14-8	19-8	8-8	14-0	18-8
	SP	No.1	9-11	15-10	20-0†	9-7	15-5	20-0†	9-4	14-11	19-11	8-10	14-1	18-10	8-4	13-5	17-11
	SP	No.2	9-5	15-2	20-0†	9-2	14-8	19-7	8-11	14-3	19-0	8-5	13-6	18-0	8-0	12-10	17-1
	SP	No.3	9-2	14-9	19-9	8-11	14-4	19-1	8-8	13-11	18-7	8-2	13-2	17-6	7-9	12-6	16-8
	SP	Stud	9-2	14-9	19-9	8-11	14-4	19-1	8-8	13-11	18-7	8-2	13-2	17-6	7-9	12-6	16-8
	SP	Standard	8-11	-	-	8-8	-	-	8-5	-	-	8-0	-	-	-	-	-
	SPF	SS	9-8	15-6	20-0†	9-4	15-0	20-0†	9-1	14-7	19-6	8-7	13-10	18-5	8-2	13-1	17-6
	SPF	No.1	9-5	15-2	20-0†	9-2	14-8	19-7	8-11	14-3	19-0	8-5	13-6	18-0	8-0	12-10	17-1
	SPF	No.2	9-5	15-2	20-0†	9-2	14-8	19-7	8-11	14-3	19-0	8-5	13-6	18-0	8-0	12-10	17-1
	SPF	No.3/Stud Standard	8-11	14-4	19-2	8-8	13-11	18-7	8-5	13-6	18-0	8-0	12-9	17-1	-	12-1	16-2
SPF		8-11	-	-	8-8	-	-	8-5	-	-	8-0	-	-	-	-	-	
16	DFL	SS	9-6	15-3	20-0†	9-2	14-9	19-9	8-11	14-4	19-2	8-5	13-7	18-1	8-0	12-10	17-2
	DFL	No.1	9-2	14-8	19-7	8-10	14-2	19-0	8-7	13-9	18-5	8-2	13-0	17-5	-	12-5	16-6
	DFL	No.2	8-11	14-4	19-2	8-8	13-11	18-7	8-5	13-6	18-0	8-0	12-9	17-1	-	12-1	16-2
	DFL	No.3/Stud Standard	8-6	13-8	18-3	8-3	13-3	17-9	8-0	12-11	17-3	-	12-2	16-3	-	11-7	15-5
	DFL		8-6	-	-	8-3	-	-	8-0	-	-	-	-	-	-	-	-
	HF	SS	8-11	14-4	19-2	8-8	13-11	18-7	8-5	13-6	18-0	8-0	12-9	17-1	-	12-1	16-2
	HF	No.1	8-9	14-0	18-9	8-6	13-7	18-2	8-3	13-2	17-8	7-9	12-6	16-8	-	11-10	15-10
	HF	No.2	8-4	13-4	17-10	8-1	12-11	17-3	7-10	12-7	16-9	-	11-10	15-10	-	11-3	15-1
	HF	No.3/Stud Standard	8-1	13-0	17-4	7-10	12-7	16-10	-	12-3	16-4	-	11-7	15-5	-	11-0	14-8
	HF		8-1	-	-	7-10	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	9-4	14-11	20-0	9-0	14-6	19-4	8-9	14-1	18-9	8-4	13-4	17-9	7-11	12-8	16-10
	SP	No.1	8-11	14-4	19-2	8-8	13-11	18-7	8-5	13-6	18-0	8-0	12-9	17-1	-	12-1	16-2
	SP	No.2	8-6	13-8	18-3	8-3	13-3	17-9	8-0	12-11	17-3	-	12-2	16-3	-	11-7	15-5
	SP	No.3	8-4	13-4	17-10	8-1	12-11	17-3	7-10	12-7	16-9	-	11-10	15-10	-	11-3	14-10
	SP	Stud	8-4	13-4	17-10	8-1	12-11	17-3	7-10	12-7	16-9	-	11-10	15-10	-	11-3	14-10
	SP	Standard	8-1	-	-	7-10	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	8-9	14-0	18-9	8-6	13-7	18-2	8-3	13-2	17-8	7-9	12-6	16-8	-	11-10	15-10
	SPF	No.1	8-6	13-8	18-3	8-3	13-3	17-9	8-0	12-11	17-3	-	12-2	16-3	-	11-7	15-5
	SPF	No.2	8-6	13-8	18-3	8-3	13-3	17-9	8-0	12-11	17-3	-	12-2	16-3	-	11-7	15-5
	SPF	No.3/Stud Standard	8-1	13-0	17-4	7-10	12-7	16-10	-	12-3	16-4	-	11-7	15-5	-	11-0	14-8
SPF		8-1	-	-	7-10	-	-	-	-	-	-	-	-	-	-	-	
24	DFL	SS	8-3	13-3	17-8	8-0	12-10	17-1	7-9	12-5	16-7	-	11-9	15-9	-	11-2	14-11
	DFL	No.1	7-11	12-9	17-0	-	12-4	16-6	-	12-0	16-0	-	11-4	15-1	-	10-9	14-4
	DFL	No.2	7-9	12-5	16-8	-	12-1	16-1	-	11-9	15-8	-	11-1	14-10	-	10-6	14-1
	DFL	No.3/Stud Standard	-	11-11	15-10	-	11-6	15-5	-	11-2	14-11	-	10-7	14-2	-	10-1	13-2
	DFL		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	7-9	12-5	16-8	-	12-1	16-1	-	11-9	15-8	-	11-1	14-10	-	10-6	14-1
	HF	No.1	-	12-2	16-3	-	11-10	15-9	-	11-6	15-4	-	10-10	14-6	-	10-3	13-9
	HF	No.2	-	11-7	15-6	-	11-3	15-0	-	10-11	14-7	-	10-4	13-9	-	9-9	13-1
	HF	No.3/Stud Standard	-	11-3	15-1	-	10-11	14-7	-	10-7	14-2	-	10-0	13-5	-	9-6	12-9
	HF		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	8-1	13-0	17-4	7-10	12-7	16-10	-	12-3	16-4	-	11-7	15-5	-	11-0	14-8
	SP	No.1	7-9	12-5	16-8	-	12-1	16-1	-	11-9	15-8	-	11-1	14-10	-	10-6	14-1
	SP	No.2	-	11-11	15-10	-	11-6	15-5	-	11-2	14-11	-	10-7	14-2	-	10-1	13-5
	SP	No.3	-	11-7	15-5	-	11-3	14-9	-	10-11	14-1	-	10-1	12-11	-	9-4	11-11
	SP	Stud	-	11-7	15-5	-	11-3	14-9	-	10-11	14-1	-	10-1	12-11	-	9-4	11-11
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	-	12-2	16-3	-	11-10	15-9	-	11-6	15-4	-	10-10	14-6	-	10-3	13-9
	SPF	No.1	-	11-11	15-10	-	11-6	15-5	-	11-2	14-11	-	10-7	14-2	-	10-1	13-5
	SPF	No.2	-	11-11	15-10	-	11-6	15-5	-	11-2	14-11	-	10-7	14-2	-	10-1	13-5
	SPF	No.3/Stud Standard	-	11-3	15-1	-	10-11	14-7	-	10-7	14-2	-	10-0	13-5	-	9-6	12-9
SPF		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

See Table 3.20A footnotes.

**Table 3.20A6 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/360 (Cont.)**

**Exposure C  
H/360**

(Fully Sheathed with a Minimum Sheathing Material)<sup>a</sup>

**PRESCRIPTIVE DESIGN**

700-yr. Wind Speed 3-second gust (mph)			150			160			170			180			195			
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	
			Maximum Allowable Stud Length (ft-in.) <sup>1</sup>															
12	DFL	SS	8 - 5	13 - 7	18 - 1	8 - 1	13 - 0	17 - 4	7 - 9	12 - 5	16 - 7	-	11 - 11	15 - 11	-	11 - 4	15 - 1	
	DFL	No.1	8 - 2	13 - 1	17 - 5	7 - 9	12 - 6	16 - 8	-	12 - 0	16 - 0	-	11 - 6	15 - 4	-	10 - 10	14 - 6	
	DFL	No.2	8 - 0	12 - 9	17 - 1	-	12 - 3	16 - 4	-	11 - 8	15 - 8	-	11 - 3	15 - 0	-	10 - 8	14 - 2	
	DFL	No.3/Stud	-	12 - 2	16 - 3	-	11 - 8	15 - 7	-	11 - 2	14 - 11	-	10 - 9	14 - 4	-	10 - 2	13 - 5	
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	8 - 0	12 - 9	17 - 1	-	12 - 3	16 - 4	-	11 - 8	15 - 8	-	11 - 3	15 - 0	-	10 - 8	14 - 2	
	HF	No.1	7 - 9	12 - 6	16 - 8	-	11 - 11	15 - 11	-	11 - 5	15 - 3	-	11 - 0	14 - 8	-	10 - 5	13 - 11	
	HF	No.2	-	11 - 11	15 - 10	-	11 - 4	15 - 2	-	10 - 11	14 - 6	-	10 - 6	14 - 0	-	9 - 11	13 - 3	
	HF	No.3/Stud	-	11 - 7	15 - 5	-	11 - 1	14 - 9	-	10 - 7	14 - 2	-	10 - 2	13 - 7	-	9 - 7	12 - 10	
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	8 - 4	13 - 4	17 - 9	7 - 11	12 - 9	17 - 0	-	12 - 2	16 - 3	-	11 - 9	15 - 8	-	11 - 1	14 - 10	
	SP	No.1	8 - 0	12 - 9	17 - 1	-	12 - 3	16 - 4	-	11 - 8	15 - 8	-	11 - 3	15 - 0	-	10 - 8	14 - 2	
	SP	No.2	-	12 - 2	16 - 3	-	11 - 8	15 - 7	-	11 - 2	14 - 11	-	10 - 9	14 - 4	-	10 - 2	13 - 7	
	SP	No.3	-	11 - 11	15 - 10	-	11 - 4	15 - 0	-	10 - 11	14 - 1	-	10 - 4	13 - 3	-	9 - 6	12 - 2	
	SP	Stud	-	11 - 11	15 - 10	-	11 - 4	15 - 0	-	10 - 11	14 - 1	-	10 - 4	13 - 3	-	9 - 6	12 - 2	
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	7 - 9	12 - 6	16 - 8	-	11 - 11	15 - 11	-	11 - 5	15 - 3	-	11 - 0	14 - 8	-	10 - 5	13 - 11	
	SPF	No.1	-	12 - 2	16 - 3	-	11 - 8	15 - 7	-	11 - 2	14 - 11	-	10 - 9	14 - 4	-	10 - 2	13 - 7	
	SPF	No.2	-	12 - 2	16 - 3	-	11 - 8	15 - 7	-	11 - 2	14 - 11	-	10 - 9	14 - 4	-	10 - 2	13 - 7	
	SPF	No.3/Stud	-	11 - 7	15 - 5	-	11 - 1	14 - 9	-	10 - 7	14 - 2	-	10 - 2	13 - 7	-	9 - 7	12 - 10	
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
16	DFL	SS	-	12 - 3	16 - 5	-	11 - 9	15 - 8	-	11 - 3	15 - 0	-	10 - 10	14 - 5	-	10 - 3	13 - 8	
	DFL	No.1	-	11 - 10	15 - 9	-	11 - 3	15 - 1	-	10 - 10	14 - 5	-	10 - 5	13 - 11	-	9 - 10	13 - 1	
	DFL	No.2	-	11 - 7	15 - 5	-	11 - 1	14 - 9	-	10 - 7	14 - 2	-	10 - 2	13 - 7	-	9 - 7	12 - 10	
	DFL	No.3/Stud	-	11 - 0	14 - 9	-	10 - 7	14 - 1	-	10 - 1	13 - 3	-	9 - 8	12 - 6	-	8 - 11	11 - 6	
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	HF	SS	-	11 - 7	15 - 5	-	11 - 1	14 - 9	-	10 - 7	14 - 2	-	10 - 2	13 - 7	-	9 - 7	12 - 10	
	HF	No.1	-	11 - 4	15 - 1	-	10 - 10	14 - 5	-	10 - 4	13 - 10	-	9 - 11	13 - 3	-	9 - 5	12 - 7	
	HF	No.2	-	10 - 9	14 - 4	-	10 - 3	13 - 9	-	9 - 10	13 - 2	-	9 - 6	12 - 8	-	9 - 0	11 - 11	
	HF	No.3/Stud	-	10 - 5	14 - 0	-	10 - 0	13 - 4	-	9 - 7	12 - 9	-	9 - 2	12 - 2	-	8 - 8	11 - 2	
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	-	12 - 0	16 - 1	-	11 - 6	15 - 4	-	11 - 0	14 - 9	-	10 - 7	14 - 2	-	10 - 0	13 - 5	
	SP	No.1	-	11 - 7	15 - 5	-	11 - 1	14 - 9	-	10 - 7	14 - 2	-	10 - 2	13 - 7	-	9 - 7	12 - 10	
	SP	No.2	-	11 - 0	14 - 9	-	10 - 7	14 - 1	-	10 - 1	13 - 6	-	9 - 9	13 - 0	-	9 - 2	12 - 3	
	SP	No.3	-	10 - 9	13 - 9	-	10 - 0	12 - 10	-	9 - 5	12 - 1	-	8 - 10	11 - 4	-	8 - 2	10 - 5	
	SP	Stud	-	10 - 9	13 - 9	-	10 - 0	12 - 10	-	9 - 5	12 - 1	-	8 - 10	11 - 4	-	8 - 2	10 - 5	
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	-	11 - 4	15 - 1	-	10 - 10	14 - 5	-	10 - 4	13 - 10	-	9 - 11	13 - 3	-	9 - 5	12 - 7	
	SPF	No.1	-	11 - 0	14 - 9	-	10 - 7	14 - 1	-	10 - 1	13 - 6	-	9 - 9	13 - 0	-	9 - 2	12 - 3	
	SPF	No.2	-	11 - 0	14 - 9	-	10 - 7	14 - 1	-	10 - 1	13 - 6	-	9 - 9	13 - 0	-	9 - 2	12 - 3	
	SPF	No.3/Stud	-	10 - 5	14 - 0	-	10 - 0	13 - 4	-	9 - 7	12 - 9	-	9 - 2	12 - 2	-	8 - 8	11 - 2	
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
24	DFL	SS	-	10 - 8	14 - 3	-	10 - 2	13 - 7	-	9 - 9	13 - 0	-	9 - 5	12 - 6	-	8 - 10	11 - 10	
	DFL	No.1	-	10 - 3	13 - 8	-	9 - 10	13 - 1	-	9 - 5	12 - 6	-	9 - 0	12 - 1	-	8 - 6	11 - 5	
	DFL	No.2	-	10 - 0	13 - 5	-	9 - 7	12 - 10	-	9 - 2	12 - 3	-	8 - 10	11 - 10	-	8 - 4	11 - 2	
	DFL	No.3/Stud	-	9 - 6	12 - 3	-	8 - 10	11 - 5	-	8 - 4	10 - 8	-	7 - 10	10 - 1	-	-	9 - 3	
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	HF	SS	-	10 - 0	13 - 5	-	9 - 7	12 - 10	-	9 - 2	12 - 3	-	8 - 10	11 - 10	-	8 - 4	11 - 2	
	HF	No.1	-	9 - 10	13 - 1	-	9 - 5	12 - 6	-	9 - 0	12 - 0	-	8 - 8	11 - 6	-	8 - 2	10 - 11	
	HF	No.2	-	9 - 4	12 - 5	-	8 - 11	11 - 11	-	8 - 7	11 - 5	-	8 - 3	11 - 0	-	7 - 9	10 - 4	
	HF	No.3/Stud	-	9 - 1	11 - 11	-	8 - 8	11 - 1	-	8 - 1	10 - 5	-	-	9 - 10	-	-	9 - 0	
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	-	10 - 5	14 - 0	-	10 - 0	13 - 4	-	9 - 7	12 - 9	-	9 - 2	12 - 3	-	8 - 8	11 - 7	
	SP	No.1	-	10 - 0	13 - 5	-	9 - 7	12 - 10	-	9 - 2	12 - 3	-	8 - 10	11 - 10	-	8 - 4	11 - 2	
	SP	No.2	-	9 - 7	12 - 9	-	9 - 2	12 - 3	-	8 - 9	11 - 9	-	8 - 5	11 - 3	-	8 - 0	10 - 8	
	SP	No.3	-	8 - 8	11 - 1	-	8 - 1	10 - 4	-	-	9 - 8	-	-	9 - 1	-	-	8 - 5	
	SP	Stud	-	8 - 8	11 - 1	-	8 - 1	10 - 4	-	-	9 - 8	-	-	9 - 1	-	-	8 - 5	
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	-	9 - 10	13 - 1	-	9 - 5	12 - 6	-	9 - 0	12 - 0	-	8 - 8	11 - 6	-	8 - 2	10 - 11	
	SPF	No.1	-	9 - 7	12 - 9	-	9 - 2	12 - 3	-	8 - 9	11 - 9	-	8 - 5	11 - 3	-	8 - 0	10 - 8	
	SPF	No.2	-	9 - 7	12 - 9	-	9 - 2	12 - 3	-	8 - 9	11 - 9	-	8 - 5	11 - 3	-	8 - 0	10 - 8	
	SPF	No.3/Stud	-	9 - 1	11 - 11	-	8 - 8	11 - 1	-	8 - 1	10 - 5	-	-	9 - 10	-	-	9 - 0	
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

See Table 3.20A footnotes.



**Table 3.20B1 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/180**  
(Fully Sheathed with a Minimum of 3/8" Wood Structural Panels)<sup>a</sup>

**Exposure B  
H/180  
3/8" WSP**

700-yr. Wind Speed 3-second gust (mph)			110			115			120			130			140		
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8
			Maximum Allowable Stud Length (ft.-in.) <sup>1</sup>														
12	DFL	SS	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†
	DFL	No.1	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†
	DFL	No.2	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-9	20-0†	20-0†
	DFL	No.3/Stud	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-10	20-0†	20-0†
	DFL	Standard	14-0††	-	-	14-0††	-	-	13-6	-	-	12-5	-	-	13-1	19-3	20-0†
	HF	SS	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-9	20-0†	20-0†
	HF	No.1	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-5	20-0†	20-0†
	HF	No.2	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-5	20-0†	20-0†	12-9	19-9	20-0†
	HF	No.3/Stud	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-10	20-0†	20-0†	13-1	20-0†	20-0†	12-5	18-9	20-0†
	HF	Standard	14-0††	-	-	13-10	-	-	13-2	-	-	12-1	-	-	11-2	-	-
	SP	SS	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†
	SP	No.1	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-9	20-0†	20-0†
	SP	No.2	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-10	20-0†	20-0†	13-1	20-0†	20-0†
	SP	No.3	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-3	19-0	20-0†	12-3	17-7	20-0†
	SP	Stud	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-3	19-0	20-0†	12-3	17-7	20-0†
	SP	Standard	13-5	-	-	12-9	-	-	12-2	-	-	11-2	-	-	10-4	-	-
SPF	SS	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-5	20-0†	20-0†	
SPF	No.1	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-10	20-0†	20-0†	13-1	20-0†	20-0†	
SPF	No.2	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-10	20-0†	20-0†	13-1	20-0†	20-0†	
SPF	No.3/Stud	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-10	20-0†	20-0†	13-1	20-0†	20-0†	12-5	18-9	20-0†	
SPF	Standard	14-0††	-	-	13-10	-	-	13-2	-	-	12-1	-	-	11-2	-	-	
16	DFL	SS	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-11	20-0†	20-0†	13-2	20-0†	20-0†
	DFL	No.1	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-4	20-0†	20-0†	12-8	19-8	20-0†
	DFL	No.2	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-10	20-0†	20-0†	13-1	20-0†	20-0†	12-5	19-3	20-0†
	DFL	No.3/Stud	14-0††	20-0†	20-0†	13-7	20-0†	20-0†	13-3	19-6	20-0†	12-6	17-10	20-0†	11-7	16-6	20-0†
	DFL	Standard	12-8	-	-	12-1	-	-	11-7	-	-	10-7	-	-	9-10	-	-
	HF	SS	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-10	20-0†	20-0†	13-1	20-0†	20-0†	12-5	19-3	20-0†
	HF	No.1	14-0††	20-0†	20-0†	13-11	20-0†	20-0†	13-6	20-0†	20-0†	12-10	19-10	20-0†	12-2	18-10	20-0†
	HF	No.2	13-8	20-0†	20-0†	13-3	20-0†	20-0†	12-10	19-11	20-0†	12-2	18-10	20-0†	11-7	17-11	20-0†
	HF	No.3/Stud	13-4	20-0†	20-0†	12-11	19-10	20-0†	12-6	19-0	20-0†	11-10	17-5	20-0†	11-3	16-1	19-11
	HF	Standard	12-5	-	-	11-10	-	-	11-4	-	-	10-4	-	-	9-7	-	-
	SP	SS	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-8	20-0†	20-0†	12-11	20-0†	20-0†
	SP	No.1	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13-10	20-0†	20-0†	13-1	20-0†	20-0†	12-5	19-3	20-0†
	SP	No.2	14-0††	20-0†	20-0†	13-7	20-0†	20-0†	13-3	20-0†	20-0†	12-6	19-4	20-0†	11-10	18-4	20-0†
	SP	No.3	13-7	19-6	20-0†	12-11	18-7	20-0†	12-4	17-9	20-0†	11-4	16-4	20-0†	10-6	15-1	18-6
	SP	Stud	13-7	19-6	20-0†	12-11	18-7	20-0†	12-4	17-9	20-0†	11-4	16-4	20-0†	10-6	15-1	18-6
	SP	Standard	11-6	-	-	10-11	-	-	10-5	-	-	9-7	-	-	8-10	-	-
SPF	SS	14-0††	20-0†	20-0†	13-11	20-0†	20-0†	13-6	20-0†	20-0†	12-10	19-10	20-0†	12-2	18-10	20-0†	
SPF	No.1	14-0††	20-0†	20-0†	13-7	20-0†	20-0†	13-3	20-0†	20-0†	12-6	19-4	20-0†	11-10	18-4	20-0†	
SPF	No.2	14-0††	20-0†	20-0†	13-7	20-0†	20-0†	13-3	20-0†	20-0†	12-6	19-4	20-0†	11-10	18-4	20-0†	
SPF	No.3/Stud	13-4	20-0†	20-0†	12-11	19-10	20-0†	12-6	19-0	20-0†	11-10	17-5	20-0†	11-3	16-1	19-11	
SPF	Standard	12-5	-	-	11-10	-	-	11-4	-	-	10-4	-	-	9-7	-	-	
24	DFL	SS	13-7	20-0†	20-0†	13-2	20-0†	20-0†	12-9	19-9	20-0†	12-1	18-8	20-0†	11-5	17-9	20-0†
	DFL	No.1	13-0	20-0†	20-0†	12-8	19-7	20-0†	12-3	19-0	20-0†	11-7	18-0	20-0†	11-0	17-1	20-0†
	DFL	No.2	12-9	19-9	20-0†	12-5	19-2	20-0†	12-0	18-7	20-0†	11-4	17-7	20-0†	10-9	16-8	20-0†
	DFL	No.3/Stud	12-1	17-2	20-0†	11-6	16-5	20-0†	11-0	15-8	19-4	10-1	14-4	17-9	9-4	13-3	16-5
	DFL	Standard	10-3	-	-	9-9	-	-	9-4	-	-	8-7	-	-	7-11	-	-
	HF	SS	12-9	19-9	20-0†	12-5	19-2	20-0†	12-0	18-7	20-0†	11-4	17-7	20-0†	10-9	16-8	20-0†
	HF	No.1	12-6	19-4	20-0†	12-1	18-9	20-0†	11-9	18-2	20-0†	11-1	17-2	20-0†	10-7	16-4	20-0†
	HF	No.2	11-10	18-5	20-0†	11-6	17-10	20-0†	11-2	17-4	20-0†	10-7	16-4	20-0†	10-0	15-6	20-0†
	HF	No.3/Stud	11-7	16-9	20-0†	11-2	16-0	19-9	10-9	15-3	18-10	9-10	14-0	17-4	9-1	12-11	16-0
	HF	Standard	10-0	-	-	9-6	-	-	9-1	-	-	8-4	-	-	-	-	-
	SP	SS	13-4	20-0†	20-0†	12-11	20-0	20-0†	12-6	19-5	20-0†	11-10	18-4	20-0†	11-3	17-5	20-0†
	SP	No.1	12-9	19-9	20-0†	12-5	19-2	20-0†	12-0	18-7	20-0†	11-4	17-7	20-0†	10-9	16-8	20-0†
	SP	No.2	12-2	18-10	20-0†	11-10	18-3	20-0†	11-6	17-9	20-0†	10-10	16-9	20-0†	10-4	15-11	20-0†
	SP	No.3	10-11	15-8	19-3	10-5	15-0	18-5	9-11	14-3	17-7	9-2	13-1	16-1	8-5	12-1	14-11
	SP	Stud	10-11	15-8	19-3	10-5	15-0	18-5	9-11	14-3	17-7	9-2	13-1	16-1	8-5	12-1	14-11
	SP	Standard	9-3	-	-	8-10	-	-	8-5	-	-	-	-	-	-	-	-
SPF	SS	12-6	19-4	20-0†	12-1	18-9	20-0†	11-9	18-2	20-0†	11-1	17-2	20-0†	10-7	16-4	20-0†	
SPF	No.1	12-2	18-10	20-0†	11-10	18-3	20-0†	11-6	17-9	20-0†	10-10	16-9	20-0†	10-4	15-11	20-0†	
SPF	No.2	12-2	18-10	20-0†	11-10	18-3	20-0†	11-6	17-9	20-0†	10-10	16-9	20-0†	10-4	15-11	20-0†	
SPF	No.3/Stud	11-7	16-9	20-0†	11-2	16-0	19-9	10-9	15-3	18-10	9-10	14-0	17-4	9-1	12-11	16-0	
SPF	Standard	10-0	-	-	9-6	-	-	9-1	-	-	8-4	-	-	-	-	-	

See Table 3.20B footnotes.

**Table 3.20B1 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/180 (Cont.)**  
 (Fully Sheathed with a Minimum of 3/8" Wood Structural Panels)<sup>a</sup>

**Exposure B  
H/180  
3/8" WSP**

700-yr. Wind Speed 3-second gust (mph)			150			160			170			180			195		
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8
			Maximum Allowable Stud Length (ft.-in.) <sup>1</sup>														
12	DFL	SS	13-11	20-0†	20-0†	13-3	20-0†	20-0†	12-9	19-9	20-0†	12-3	18-11	20-0†	11-7	17-11	20-0†
	DFL	No.1	13-4	20-0†	20-0†	12-9	19-9	20-0†	12-3	19-0	20-0†	11-9	18-3	20-0†	11-2	17-3	20-0†
	DFL	No.2	13-1	20-0†	20-0†	12-6	19-5	20-0†	12-0	18-7	20-0†	11-6	17-10	20-0†	10-11	16-10	20-0†
	DFL	No.3/Stud	12-6	17-11	20-0†	11-9	16-8	20-0†	11-0	15-8	19-4	10-4	14-8	18-2	9-6	13-6	16-8
	DFL	Standard	10-8	-	-	9-11	-	-	9-4	-	-	8-9	-	-	8-0	-	-
	HF	SS	13-1	20-0†	20-0†	12-6	19-5	20-0†	12-0	18-7	20-0†	11-6	17-10	20-0†	10-11	16-10	20-0†
	HF	No.1	12-10	19-10	20-0†	12-3	18-11	20-0†	11-9	18-2	20-0†	11-3	17-5	20-0†	10-8	16-6	20-0†
	HF	No.2	12-2	18-10	20-0†	11-8	18-0	20-0†	11-2	17-3	20-0†	10-9	16-7	20-0†	10-2	15-8	20-0†
	HF	No.3/Stud	11-10	17-5	20-0†	11-4	16-3	20-0†	10-9	15-3	18-10	10-1	14-4	17-9	9-3	13-2	16-3
	HF	Standard	10-5	-	-	9-8	-	-	9-1	-	-	8-7	-	-	7-10	-	-
	SP	SS	13-8	20-0†	20-0†	13-1	20-0†	20-0†	12-6	19-4	20-0†	12-0	18-7	20-0†	11-4	17-7	20-0†
	SP	No.1	13-1	20-0†	20-0†	12-6	19-5	20-0†	12-0	18-7	20-0†	11-6	17-10	20-0†	10-11	16-10	20-0†
	SP	No.2	12-6	19-4	20-0†	11-11	18-6	20-0†	11-5	17-9	20-0†	11-0	17-0	20-0†	10-5	16-1	20-0†
	SP	No.3	11-4	16-4	20-0†	10-7	15-3	18-9	9-11	14-3	17-6	9-4	13-5	16-6	8-7	12-4	15-2
	SP	Stud	11-4	16-4	20-0†	10-7	15-3	18-9	9-11	14-3	17-6	9-4	13-5	16-6	8-7	12-4	15-2
	SP	Standard	9-7	-	-	9-0	-	-	8-5	-	-	7-11	-	-	-	-	-
	SPF	SS	12-10	19-10	20-0†	12-3	18-11	20-0†	11-9	18-2	20-0†	11-3	17-5	20-0†	10-8	16-6	20-0†
	SPF	No.1	12-6	19-4	20-0†	11-11	18-6	20-0†	11-5	17-9	20-0†	11-0	17-0	20-0†	10-5	16-1	20-0†
	SPF	No.2	12-6	19-4	20-0†	11-11	18-6	20-0†	11-5	17-9	20-0†	11-0	17-0	20-0†	10-5	16-1	20-0†
SPF	No.3/Stud	11-10	17-5	20-0†	11-4	16-3	20-0†	10-9	15-3	18-10	10-1	14-4	17-9	9-3	13-2	16-3	
SPF	Standard	10-5	-	-	9-8	-	-	9-1	-	-	8-7	-	-	7-10	-	-	
16	DFL	SS	12-7	19-6	20-0†	12-0	18-7	20-0†	11-6	17-10	20-0†	11-1	17-2	20-0†	10-6	16-2	20-0†
	DFL	No.1	12-1	18-9	20-0†	11-7	17-11	20-0†	11-1	17-2	20-0†	10-8	16-6	20-0†	10-1	15-7	20-0†
	DFL	No.2	11-10	18-4	20-0†	11-4	17-6	20-0†	10-10	16-10	20-0†	10-5	16-2	20-0†	9-10	15-3	19-1
	DFL	No.3/Stud	10-9	15-4	19-0	10-1	14-4	17-8	9-5	13-5	16-7	8-11	12-7	15-7	8-2	11-7	14-4
	DFL	Standard	9-1	-	-	8-6	-	-	8-0	-	-	-	-	-	-	-	-
	HF	SS	11-10	18-4	20-0†	11-4	17-6	20-0†	10-10	16-10	20-0†	10-5	16-2	20-0†	9-10	15-3	19-10
	HF	No.1	11-7	17-11	20-0†	11-1	17-2	20-0†	10-7	16-5	20-0†	10-2	15-9	20-0†	9-8	14-11	19-5
	HF	No.2	11-0	17-1	20-0†	10-6	16-4	20-0†	10-1	15-7	20-0†	9-8	15-0	19-6	9-2	14-2	18-5
	HF	No.3/Stud	10-6	14-11	18-6	9-10	13-11	17-3	9-2	13-1	16-2	8-8	12-3	15-2	7-11	11-3	13-11
	HF	Standard	8-11	-	-	8-4	-	-	7-9	-	-	-	-	-	-	-	-
	SP	SS	12-4	19-1	20-0†	11-10	18-3	20-0†	11-4	17-6	20-0†	10-10	16-10	20-0†	10-3	15-11	20-0†
	SP	No.1	11-10	18-4	20-0†	11-4	17-6	20-0†	10-10	16-10	20-0†	10-5	16-2	20-0†	9-10	15-3	19-10
	SP	No.2	11-4	17-6	20-0†	10-10	16-9	20-0†	10-4	16-0	20-0†	10-0	15-5	19-2	9-5	14-2	17-7
	SP	No.3	9-9	14-0	17-2	9-1	13-1	16-0	8-6	12-3	15-0	8-0	11-6	14-2	-	10-7	13-0
	SP	Stud	9-9	14-0	17-2	9-1	13-1	16-0	8-6	12-3	15-0	8-0	11-6	14-2	-	10-7	13-0
	SP	Standard	8-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	11-7	17-11	20-0†	11-1	17-2	20-0†	10-7	16-5	20-0†	10-2	15-9	20-0†	9-8	14-11	19-5
	SPF	No.1	11-4	17-6	20-0†	10-10	16-9	20-0†	10-4	16-0	20-0†	10-0	15-5	20-0†	9-5	14-7	18-10
	SPF	No.2	11-4	17-6	20-0†	10-10	16-9	20-0†	10-4	16-0	20-0†	10-0	15-5	20-0†	9-5	14-7	18-10
SPF	No.3/Stud	10-6	14-11	18-6	9-10	13-11	17-3	9-2	13-1	16-2	8-8	12-3	15-2	7-11	11-3	13-11	
SPF	Standard	8-11	-	-	8-4	-	-	7-9	-	-	-	-	-	-	-	-	
24	DFL	SS	10-11	16-11	20-0†	10-5	16-2	20-0†	10-0	15-6	20-0†	9-7	14-10	19-4	9-1	14-1	18-3
	DFL	No.1	10-6	16-3	20-0†	10-0	15-6	20-0†	9-8	14-11	18-10	9-3	14-4	17-9	8-9	13-2	16-3
	DFL	No.2	10-3	15-11	20-0†	9-10	15-2	19-0	9-5	14-5	17-10	9-1	13-6	16-9	8-7	12-5	15-4
	DFL	No.3/Stud	8-8	12-4	15-3	8-1	11-6	14-3	-	10-9	13-4	-	10-2	12-6	-	9-4	11-6
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	10-3	15-11	20-0†	9-10	15-2	19-9	9-5	14-7	19-0	9-1	14-0	18-3	8-7	13-3	17-3
	HF	No.1	10-1	15-7	20-0†	9-7	14-10	19-4	9-3	14-3	18-6	8-10	13-8	17-6	8-5	13-0	16-0
	HF	No.2	9-7	14-10	19-3	9-2	14-2	18-5	8-9	13-7	17-3	8-5	13-0	16-3	8-0	12-1	14-11
	HF	No.3/Stud	8-6	12-0	14-10	7-11	11-3	13-10	-	10-6	13-0	-	9-11	12-3	-	9-1	11-3
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	10-9	16-7	20-0†	10-3	15-10	20-0†	9-10	15-2	19-9	9-5	14-7	19-0	8-11	13-10	17-11
	SP	No.1	10-3	15-11	20-0†	9-10	15-2	19-9	9-5	14-7	19-0	9-1	14-0	18-1	8-7	13-3	16-7
	SP	No.2	9-10	15-2	18-9	9-5	14-1	17-6	9-0	13-3	16-5	8-7	12-5	15-5	7-10	11-5	14-2
	SP	No.3	7-10	11-3	13-10	-	10-6	12-11	-	9-10	12-1	-	9-3	11-4	-	8-6	10-5
	SP	Stud	7-10	11-3	13-10	-	10-6	12-11	-	9-10	12-1	-	9-3	11-4	-	8-6	10-5
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	10-1	15-7	20-0†	9-7	14-10	19-4	9-3	14-3	18-6	8-10	13-8	17-10	8-5	12-11	16-10
	SPF	No.1	9-10	15-2	19-9	9-5	14-6	18-9	9-0	13-11	17-6	8-8	13-4	16-6	8-2	12-3	15-2
	SPF	No.2	9-10	15-2	19-9	9-5	14-6	18-9	9-0	13-11	17-6	8-8	13-4	16-6	8-2	12-3	15-2
SPF	No.3/Stud	8-6	12-0	14-10	7-11	11-3	13-10	-	10-6	13-0	-	9-11	12-3	-	9-1	11-3	
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

See Table 3.20B footnotes.

**Table 3.20B2 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/240**

(Fully Sheathed with a Minimum of 3/8" Wood Structural Panels)<sup>a</sup>

**Exposure B  
H/240  
3/8" WSP**

700-yr. Wind Speed 3-second gust (mph)			110			115			120			130			140		
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8
			Maximum Allowable Stud Length (ft.-in.) <sup>1</sup>														
12	DFL	SS	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 11	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 2	20-0 <sup>+</sup>	20-0 <sup>+</sup>
	DFL	No.1	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 4	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 8	19- 8	20-0 <sup>+</sup>
	DFL	No.2	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 10	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 1	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 5	19- 3	20-0 <sup>+</sup>
	DFL	No.3/Stud	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 7	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 3	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 6	19- 4	20-0 <sup>+</sup>	11- 10	18- 4	20-0 <sup>+</sup>
	DFL	Standard	14-0 <sup>+</sup>	-	-	13- 7	-	-	13- 3	-	-	12- 5	-	-	11- 5	-	-
	HF	SS	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 10	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 1	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 5	19- 3	20-0 <sup>+</sup>
	HF	No.1	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 11	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 6	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 10	19- 10	20-0 <sup>+</sup>	12- 2	18- 10	20-0 <sup>+</sup>
	HF	No.2	13- 8	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 3	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 10	19- 11	20-0 <sup>+</sup>	12- 2	18- 10	20-0 <sup>+</sup>	11- 7	17- 11	20-0 <sup>+</sup>
	HF	No.3/Stud	13- 4	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 11	20- 0	20-0 <sup>+</sup>	12- 6	19- 5	20-0 <sup>+</sup>	11- 10	18- 4	20-0 <sup>+</sup>	11- 3	17- 5	20-0 <sup>+</sup>
	HF	Standard	13- 4	-	-	12- 11	-	-	12- 6	-	-	11- 10	-	-	11- 2	-	-
	SP	SS	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 8	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 11	20-0 <sup>+</sup>	20-0 <sup>+</sup>
	SP	No.1	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 10	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 1	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 5	19- 3	20-0 <sup>+</sup>
	SP	No.2	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 7	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 3	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 6	19- 4	20-0 <sup>+</sup>	11- 10	18- 4	20-0 <sup>+</sup>
	SP	No.3	13- 8	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 3	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 10	19- 11	20-0 <sup>+</sup>	12- 2	18- 10	20-0 <sup>+</sup>	11- 7	17- 7	20-0 <sup>+</sup>
	SP	Stud	13- 8	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 3	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 10	19- 11	20-0 <sup>+</sup>	12- 2	18- 10	20-0 <sup>+</sup>	11- 7	17- 7	20-0 <sup>+</sup>
	SP	Standard	13- 4	-	-	12- 9	-	-	12- 2	-	-	11- 2	-	-	10- 4	-	-
SPF	SS	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 11	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 6	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 10	19- 10	20-0 <sup>+</sup>	12- 2	18- 10	20-0 <sup>+</sup>	
SPF	No.1	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 7	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 3	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 6	19- 4	20-0 <sup>+</sup>	11- 10	18- 4	20-0 <sup>+</sup>	
SPF	No.2	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 7	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 3	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 6	19- 4	20-0 <sup>+</sup>	11- 10	18- 4	20-0 <sup>+</sup>	
SPF	No.3/Stud	13- 4	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 11	20- 0	20-0 <sup>+</sup>	12- 6	19- 5	20-0 <sup>+</sup>	11- 10	18- 4	20-0 <sup>+</sup>	11- 3	17- 5	20-0 <sup>+</sup>	
SPF	Standard	13- 4	-	-	12- 11	-	-	12- 6	-	-	11- 10	-	-	11- 2	-	-	
16	DFL	SS	14-0 <sup>+</sup>	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 8	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 3	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 7	19- 5	20-0 <sup>+</sup>	11- 11	18- 6	20-0 <sup>+</sup>
	DFL	No.1	13- 7	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 2	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 9	19- 9	20-0 <sup>+</sup>	12- 1	18- 9	20-0 <sup>+</sup>	11- 6	17- 9	20-0 <sup>+</sup>
	DFL	No.2	13- 4	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 11	20- 0	20-0 <sup>+</sup>	12- 6	19- 5	20-0 <sup>+</sup>	11- 10	18- 4	20-0 <sup>+</sup>	11- 3	17- 5	20-0 <sup>+</sup>
	DFL	No.3/Stud	12- 8	19- 8	20-0 <sup>+</sup>	12- 4	19- 1	20-0 <sup>+</sup>	11- 11	18- 6	20-0 <sup>+</sup>	11- 4	17- 6	20-0 <sup>+</sup>	10- 9	16- 6	20-0 <sup>+</sup>
	DFL	Standard	12- 8	-	-	12- 1	-	-	11- 7	-	-	10- 7	-	-	9- 10	-	-
	HF	SS	13- 4	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 11	20- 0	20-0 <sup>+</sup>	12- 6	19- 5	20-0 <sup>+</sup>	11- 10	18- 4	20-0 <sup>+</sup>	11- 3	17- 5	20-0 <sup>+</sup>
	HF	No.1	13- 0	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 7	19- 6	20-0 <sup>+</sup>	12- 3	18- 11	20-0 <sup>+</sup>	11- 7	17- 11	20-0 <sup>+</sup>	11- 0	17- 0	20-0 <sup>+</sup>
	HF	No.2	12- 4	19- 2	20-0 <sup>+</sup>	12- 0	18- 7	20-0 <sup>+</sup>	11- 8	18- 0	20-0 <sup>+</sup>	11- 0	17- 0	20-0 <sup>+</sup>	10- 5	16- 2	20-0 <sup>+</sup>
	HF	No.3/Stud	12- 0	18- 7	20-0 <sup>+</sup>	11- 8	18- 1	20-0 <sup>+</sup>	11- 4	17- 6	20-0 <sup>+</sup>	10- 9	16- 7	20-0 <sup>+</sup>	10- 2	15- 9	19- 11
	HF	Standard	12- 0	-	-	11- 8	-	-	11- 4	-	-	10- 4	-	-	9- 7	-	-
	SP	SS	13- 10	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 5	20-0 <sup>+</sup>	20-0 <sup>+</sup>	13- 1	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 4	19- 1	20-0 <sup>+</sup>	11- 9	18- 2	20-0 <sup>+</sup>
	SP	No.1	13- 4	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 11	20- 0	20-0 <sup>+</sup>	12- 6	19- 5	20-0 <sup>+</sup>	11- 10	18- 4	20-0 <sup>+</sup>	11- 3	17- 5	20-0 <sup>+</sup>
	SP	No.2	12- 8	19- 8	20-0 <sup>+</sup>	12- 4	19- 1	20-0 <sup>+</sup>	11- 11	18- 6	20-0 <sup>+</sup>	11- 4	17- 6	20-0 <sup>+</sup>	10- 9	16- 7	20-0 <sup>+</sup>
	SP	No.3	12- 4	19- 2	20-0 <sup>+</sup>	12- 0	18- 7	20-0 <sup>+</sup>	11- 8	17- 9	20-0 <sup>+</sup>	11- 0	16- 4	20-0 <sup>+</sup>	10- 5	15- 1	18- 6
	SP	Stud	12- 4	19- 2	20-0 <sup>+</sup>	12- 0	18- 7	20-0 <sup>+</sup>	11- 8	17- 9	20-0 <sup>+</sup>	11- 0	16- 4	20-0 <sup>+</sup>	10- 5	15- 1	18- 6
	SP	Standard	11- 6	-	-	10- 11	-	-	10- 5	-	-	9- 7	-	-	8- 10	-	-
SPF	SS	13- 0	20-0 <sup>+</sup>	20-0 <sup>+</sup>	12- 7	19- 6	20-0 <sup>+</sup>	12- 3	18- 11	20-0 <sup>+</sup>	11- 7	17- 11	20-0 <sup>+</sup>	11- 0	17- 0	20-0 <sup>+</sup>	
SPF	No.1	12- 8	19- 8	20-0 <sup>+</sup>	12- 4	19- 1	20-0 <sup>+</sup>	11- 11	18- 6	20-0 <sup>+</sup>	11- 4	17- 6	20-0 <sup>+</sup>	10- 9	16- 7	20-0 <sup>+</sup>	
SPF	No.2	12- 8	19- 8	20-0 <sup>+</sup>	12- 4	19- 1	20-0 <sup>+</sup>	11- 11	18- 6	20-0 <sup>+</sup>	11- 4	17- 6	20-0 <sup>+</sup>	10- 9	16- 7	20-0 <sup>+</sup>	
SPF	No.3/Stud	12- 0	18- 7	20-0 <sup>+</sup>	11- 8	18- 1	20-0 <sup>+</sup>	11- 4	17- 6	20-0 <sup>+</sup>	10- 9	16- 7	20-0 <sup>+</sup>	10- 2	15- 9	19- 11	
SPF	Standard	12- 0	-	-	11- 8	-	-	11- 4	-	-	10- 4	-	-	9- 7	-	-	
24	DFL	SS	12- 3	19- 0	20-0 <sup>+</sup>	11- 11	18- 5	20-0 <sup>+</sup>	11- 6	17- 10	20-0 <sup>+</sup>	10- 11	16- 11	20-0 <sup>+</sup>	10- 4	16- 0	20-0 <sup>+</sup>
	DFL	No.1	11- 10	18- 3	20-0 <sup>+</sup>	11- 5	17- 8	20-0 <sup>+</sup>	11- 1	17- 2	20-0 <sup>+</sup>	10- 6	16- 3	20-0 <sup>+</sup>	10- 0	15- 5	20-0 <sup>+</sup>
	DFL	No.2	11- 7	17- 10	20-0 <sup>+</sup>	11- 2	17- 4	20-0 <sup>+</sup>	10- 10	16- 10	20-0 <sup>+</sup>	10- 3	15- 11	20-0 <sup>+</sup>	9- 9	15- 1	19- 8
	DFL	No.3/Stud	11- 0	17- 1	20-0 <sup>+</sup>	10- 8	16- 5	20-0 <sup>+</sup>	10- 4	15- 8	19- 4	9- 10	14- 4	17- 9	9- 4	13- 3	16- 5
	DFL	Standard	10- 3	-	-	9- 9	-	-	9- 4	-	-	8- 7	-	-	7- 11	-	-
	HF	SS	11- 7	17- 10	20-0 <sup>+</sup>	11- 2	17- 4	20-0 <sup>+</sup>	10- 10	16- 10	20-0 <sup>+</sup>	10- 3	15- 11	20-0 <sup>+</sup>	9- 9	15- 1	19- 8
	HF	No.1	11- 3	17- 6	20-0 <sup>+</sup>	10- 11	16- 11	20-0 <sup>+</sup>	10- 8	16- 5	20-0 <sup>+</sup>	10- 1	15- 7	20-0 <sup>+</sup>	9- 7	14- 9	19- 2
	HF	No.2	10- 9	16- 7	20-0 <sup>+</sup>	10- 5	16- 1	20-0 <sup>+</sup>	10- 1	15- 8	20-0 <sup>+</sup>	9- 7	14- 9	19- 3	9- 1	14- 1	18- 3
	HF	No.3/Stud	10- 5	16- 2	20-0 <sup>+</sup>	10- 2	15- 8	19- 9	9- 10	15- 2	18- 10	9- 4	14- 0	17- 4	8- 10	12- 11	16- 0
	HF	Standard	10- 0	-	-	9- 6	-	-	9- 1	-	-	8- 4	-	-	-	-	-
	SP	SS	12- 0	18- 7	20-0 <sup>+</sup>	11- 8	18- 1	20-0 <sup>+</sup>	11- 4	17- 6	20-0 <sup>+</sup>	10- 9	16- 7	20-0 <sup>+</sup>	10- 2	15- 9	20-0 <sup>+</sup>
	SP	No.1	11- 7	17- 10	20-0 <sup>+</sup>	11- 2	17- 4	20-0 <sup>+</sup>	10- 10	16- 10	20-0 <sup>+</sup>	10- 3	15- 11	20-0 <sup>+</sup>	9- 9	15- 1	19- 8
	SP	No.2	11- 0	17- 1	20-0 <sup>+</sup>	10- 8	16- 6	20-0 <sup>+</sup>	10- 4	16- 1	20-0 <sup>+</sup>	9- 10	15- 2	19- 9	9- 4	14- 5	18- 9
	SP	No.3	10- 9	15- 8	19- 3	10- 5	15- 0	18- 5	9- 11	14- 3	17- 7	9- 2	13- 1	16- 1	8- 5	12- 1	14- 11
	SP	Stud	10- 9	15- 8	19- 3	10- 5	15- 0	18- 5	9- 11	14- 3	17- 7	9- 2	13- 1	16- 1	8- 5	12- 1	14- 11
	SP	Standard	9- 3	-	-	8- 10	-	-	8- 5	-	-	-	-	-	-	-	-
SPF	SS	11- 3	17- 6	20-0 <sup>+</sup>	10- 11	16- 11	20-0 <sup>+</sup>	10- 8	16- 5	20-0 <sup>+</sup>	10- 1	15- 7	20-0 <sup>+</sup>	9- 7	14- 9	1	

**Table 3.20B2 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/240 (Cont.)**  
 (Fully Sheathed with a Minimum of 3/8" Wood Structural Panels)<sup>a</sup>

**Exposure B  
H/240  
3/8" WSP**



**PRESCRIPTIVE DESIGN**

700-yr. Wind Speed 3-second gust (mph)			150			160			170			180			195		
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8
			Maximum Allowable Stud Length (ft.-in.) <sup>1</sup>														
12	DFL	SS	12-7	19-6	20-0+	12-0	18-7	20-0+	11-6	17-10	20-0+	11-1	17-2	20-0+	10-6	16-2	20-0+
	DFL	No.1	12-1	18-9	20-0+	11-7	17-11	20-0+	11-1	17-2	20-0+	10-8	16-6	20-0+	10-1	15-7	20-0+
	DFL	No.2	11-10	18-4	20-0+	11-4	17-6	20-0+	10-10	16-10	20-0+	10-5	16-2	20-0+	9-10	15-3	19-10
	DFL	No.3/Stud	11-4	17-6	20-0+	10-10	16-8	20-0+	10-4	15-8	19-4	10-0	14-8	18-2	9-5	13-6	16-8
	DFL	Standard	10-8	-	-	9-11	-	-	9-4	-	-	8-9	-	-	8-0	-	-
	HF	SS	11-10	18-4	20-0+	11-4	17-6	20-0+	10-10	16-10	20-0+	10-5	16-2	20-0+	9-10	15-3	19-10
	HF	No.1	11-7	17-11	20-0+	11-1	17-2	20-0+	10-7	16-5	20-0+	10-2	15-9	20-0+	9-8	14-11	19-5
	HF	No.2	11-0	17-1	20-0+	10-6	16-4	20-0+	10-1	15-7	20-0+	9-8	15-0	19-6	9-2	14-2	18-5
	HF	No.3/Stud	10-9	16-7	20-0+	10-3	15-10	20-0+	9-10	15-2	18-10	9-5	14-4	17-9	8-11	13-2	16-3
	HF	Standard	10-5	-	-	9-8	-	-	9-1	-	-	8-7	-	-	7-10	-	-
	SP	SS	12-4	19-1	20-0+	11-10	18-3	20-0+	11-4	17-6	20-0+	10-10	16-10	20-0+	10-3	15-11	20-0+
	SP	No.1	11-10	18-4	20-0+	11-4	17-6	20-0+	10-10	16-10	20-0+	10-5	16-2	20-0+	9-10	15-3	19-10
	SP	No.2	11-4	17-6	20-0+	10-10	16-9	20-0+	10-4	16-0	20-0+	10-0	15-5	20-0+	9-5	14-7	18-11
	SP	No.3	11-0	16-4	20-0+	10-6	15-3	18-9	9-11	14-3	17-6	9-4	13-5	16-6	8-7	12-4	15-2
	SP	Stud	11-0	16-4	20-0+	10-6	15-3	18-9	9-11	14-3	17-6	9-4	13-5	16-6	8-7	12-4	15-2
	SP	Standard	9-7	-	-	9-0	-	-	8-5	-	-	7-11	-	-	-	-	-
	SPF	SS	11-7	17-11	20-0+	11-1	17-2	20-0+	10-7	16-5	20-0+	10-2	15-9	20-0+	9-8	14-11	19-5
	SPF	No.1	11-4	17-6	20-0+	10-10	16-9	20-0+	10-4	16-0	20-0+	10-0	15-5	20-0+	9-5	14-7	18-11
	SPF	No.2	11-4	17-6	20-0+	10-10	16-9	20-0+	10-4	16-0	20-0+	10-0	15-5	20-0+	9-5	14-7	18-11
	SPF	No.3/Stud	10-9	16-7	20-0+	10-3	15-10	20-0+	9-10	15-2	18-10	9-5	14-4	17-9	8-11	13-2	16-3
	SPF	Standard	10-5	-	-	9-8	-	-	9-1	-	-	8-7	-	-	7-10	-	-
16	DFL	SS	11-5	17-7	20-0+	10-11	16-10	20-0+	10-5	16-2	20-0+	10-0	15-6	20-0+	9-6	14-8	19-1
	DFL	No.1	10-11	16-11	20-0+	10-6	16-2	20-0+	10-0	15-6	20-0+	9-8	14-11	19-5	9-1	14-1	18-4
	DFL	No.2	10-9	16-7	20-0+	10-3	15-10	20-0+	9-10	15-2	19-9	9-5	14-7	19-0	8-11	13-10	17-11
	DFL	No.3/Stud	10-3	15-4	19-0	9-9	14-4	17-8	9-4	13-5	16-7	8-11	12-7	15-7	8-2	11-7	14-4
	DFL	Standard	9-1	-	-	8-6	-	-	8-0	-	-	-	-	-	-	-	-
	HF	SS	10-9	16-7	20-0+	10-3	15-10	20-0+	9-10	15-2	19-9	9-5	14-7	19-0	8-11	13-10	17-11
	HF	No.1	10-6	16-2	20-0+	10-0	15-6	20-0+	9-7	14-10	19-4	9-3	14-3	18-7	8-9	13-6	17-7
	HF	No.2	10-0	15-5	20-0+	9-6	14-9	19-2	9-2	14-2	18-4	8-9	13-7	17-8	8-4	12-10	16-8
	HF	No.3/Stud	9-8	14-11	18-6	9-3	13-11	17-3	8-11	13-1	16-2	8-6	12-3	15-2	7-11	11-3	13-11
	HF	Standard	8-11	-	-	8-4	-	-	7-9	-	-	-	-	-	-	-	-
	SP	SS	11-2	17-3	20-0+	10-8	16-6	20-0+	10-3	15-10	20-0+	9-10	15-2	19-9	9-4	14-5	18-8
	SP	No.1	10-9	16-7	20-0+	10-3	15-10	20-0+	9-10	15-2	19-9	9-5	14-7	19-0	8-11	13-10	17-11
	SP	No.2	10-3	15-10	20-0+	9-9	15-1	19-8	9-4	14-6	18-10	9-0	13-11	18-1	8-6	13-2	17-2
	SP	No.3	9-9	14-0	17-2	9-1	13-1	16-0	8-6	12-3	15-0	8-0	11-6	14-2	-	10-7	13-0
	SP	Stud	9-9	14-0	17-2	9-1	13-1	16-0	8-6	12-3	15-0	8-0	11-6	14-2	-	10-7	13-0
	SP	Standard	8-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	10-6	16-2	20-0+	10-0	15-6	20-0+	9-7	14-10	19-4	9-3	14-3	18-7	8-9	13-6	17-7
	SPF	No.1	10-3	15-10	20-0+	9-9	15-1	19-8	9-4	14-6	18-10	9-0	13-11	18-1	8-6	13-2	17-2
	SPF	No.2	10-3	15-10	20-0+	9-9	15-1	19-8	9-4	14-6	18-10	9-0	13-11	18-1	8-6	13-2	17-2
	SPF	No.3/Stud	9-8	14-11	18-6	9-3	13-11	17-3	8-11	13-1	16-2	8-6	12-3	15-2	7-11	11-3	13-11
	SPF	Standard	8-11	-	-	8-4	-	-	7-9	-	-	-	-	-	-	-	-
24	DFL	SS	9-11	15-3	19-10	9-5	14-7	19-0	9-1	14-0	18-2	8-8	13-5	17-6	8-3	12-9	16-6
	DFL	No.1	9-6	14-8	19-1	9-1	14-1	18-3	8-9	13-6	17-6	8-4	12-11	16-10	7-11	12-3	15-11
	DFL	No.2	9-4	14-5	18-9	8-11	13-9	17-11	8-6	13-2	17-2	8-2	12-8	16-6	7-9	12-0	15-4
	DFL	No.3/Stud	8-8	12-4	15-3	8-1	11-6	14-3	-	10-9	13-4	-	10-2	12-6	-	9-4	11-6
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	9-4	14-5	18-9	8-11	13-9	17-11	8-6	13-2	17-2	8-2	12-8	16-6	7-9	12-0	15-7
	HF	No.1	9-1	14-1	18-4	8-8	13-5	17-6	8-4	12-11	16-9	8-0	12-5	16-1	-	11-9	15-3
	HF	No.2	8-8	13-5	17-5	8-3	12-10	16-8	7-11	12-3	15-11	-	11-9	15-4	-	11-2	14-6
	HF	No.3/Stud	8-5	12-0	14-10	7-11	11-3	13-10	-	10-6	13-0	-	9-11	12-3	-	9-1	11-3
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	9-8	15-0	19-6	9-3	14-4	18-8	8-11	13-9	17-10	8-6	13-2	17-2	8-1	12-6	16-3
	SP	No.1	9-4	14-5	18-9	8-11	13-9	17-11	8-6	13-2	17-2	8-2	12-8	16-6	7-9	12-0	15-7
	SP	No.2	8-11	13-9	17-10	8-6	13-2	17-1	8-2	12-7	16-4	7-10	12-1	15-5	-	11-5	14-2
	SP	No.3	7-10	11-3	13-10	-	10-6	12-11	-	9-10	12-1	-	9-3	11-4	-	8-6	10-5
	SP	Stud	7-10	11-3	13-10	-	10-6	12-11	-	9-10	12-1	-	9-3	11-4	-	8-6	10-5
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	9-1	14-1	18-4	8-8	13-5	17-6	8-4	12-11	16-9	8-0	12-5	16-1	-	11-9	15-3
	SPF	No.1	8-11	13-9	17-10	8-6	13-2	17-1	8-2	12-7	16-4	7-10	12-1	15-9	-	11-5	14-10
	SPF	No.2	8-11	13-9	17-10	8-6	13-2	17-1	8-2	12-7	16-4	7-10	12-1	15-9	-	11-5	14-10
	SPF	No.3/Stud	8-5	12-0	14-10	7-11	11-3	13-10	-	10-6	13-0	-	9-11	12-3	-	9-1	11-3
	SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See Table 3.20B footnotes.

**Table 3.20B3 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/360**

(Fully Sheathed with a Minimum of 3/8" Wood Structural Panels)<sup>a</sup>

**Exposure B  
H/360  
3/8" WSP**

700-yr. Wind Speed 3-second gust (mph)			110			115			120			130			140		
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8
			Maximum Allowable Stud Length (ft.-in.) <sup>1</sup>														
12	DFL	SS	13-7	20-0†	20-0†	13-2	20-0†	20-0†	12-9	19-9	20-0†	12-1	18-8	20-0†	11-5	17-9	20-0†
	DFL	No.1	13-0	20-0†	20-0†	12-8	19-7	20-0†	12-3	19-0	20-0†	11-7	18-0	20-0†	11-0	17-1	20-0†
	DFL	No.2	12-9	19-9	20-0†	12-5	19-2	20-0†	12-0	18-7	20-0†	11-4	17-7	20-0†	10-9	16-8	20-0†
	DFL	No.3/Stud	12-2	18-10	20-0†	11-10	18-3	20-0†	11-6	17-9	20-0†	10-10	16-9	20-0†	10-4	15-11	20-0†
	DFL	Standard	12-2	-	-	11-10	-	-	11-6	-	-	10-10	-	-	10-4	-	-
	HF	SS	12-9	19-9	20-0†	12-5	19-2	20-0†	12-0	18-7	20-0†	11-4	17-7	20-0†	10-9	16-8	20-0†
	HF	No.1	12-6	19-4	20-0†	12-1	18-9	20-0†	11-9	18-2	20-0†	11-1	17-2	20-0†	10-7	16-4	20-0†
	HF	No.2	11-10	18-5	20-0†	11-6	17-10	20-0†	11-2	17-4	20-0†	10-7	16-4	20-0†	10-0	15-6	20-0†
	HF	No.3/Stud	11-7	17-10	20-0†	11-2	17-4	20-0†	10-10	16-10	20-0†	10-3	15-11	20-0†	9-9	15-1	19-8
	HF	Standard	11-7	-	-	11-2	-	-	10-10	-	-	10-3	-	-	9-9	-	-
	SP	SS	13-4	20-0†	20-0†	12-11	20-0	20-0†	12-6	19-5	20-0†	11-10	18-4	20-0†	11-3	17-5	20-0†
	SP	No.1	12-9	19-9	20-0†	12-5	19-2	20-0†	12-0	18-7	20-0†	11-4	17-7	20-0†	10-9	16-8	20-0†
	SP	No.2	12-2	18-10	20-0†	11-10	18-3	20-0†	11-6	17-9	20-0†	10-10	16-9	20-0†	10-4	15-11	20-0†
	SP	No.3	11-10	18-5	20-0†	11-6	17-10	20-0†	11-2	17-4	20-0†	10-7	16-4	20-0†	10-0	15-6	20-0†
	SP	Stud	11-10	18-5	20-0†	11-6	17-10	20-0†	11-2	17-4	20-0†	10-7	16-4	20-0†	10-0	15-6	20-0†
	SP	Standard	11-7	-	-	11-2	-	-	10-10	-	-	10-3	-	-	9-9	-	-
	SPF	SS	12-6	19-4	20-0†	12-1	18-9	20-0†	11-9	18-2	20-0†	11-1	17-2	20-0†	10-7	16-4	20-0†
	SPF	No.1	12-2	18-10	20-0†	11-10	18-3	20-0†	11-6	17-9	20-0†	10-10	16-9	20-0†	10-4	15-11	20-0†
	SPF	No.2	12-2	18-10	20-0†	11-10	18-3	20-0†	11-6	17-9	20-0†	10-10	16-9	20-0†	10-4	15-11	20-0†
	SPF	No.3/Stud	11-7	17-10	20-0†	11-2	17-4	20-0†	10-10	16-10	20-0†	10-3	15-11	20-0†	9-9	15-1	19-8
	SPF	Standard	11-7	-	-	11-2	-	-	10-10	-	-	10-3	-	-	9-9	-	-
16	DFL	SS	12-3	19-0	20-0†	11-11	18-5	20-0†	11-6	17-10	20-0†	10-11	16-11	20-0†	10-4	16-0	20-0†
	DFL	No.1	11-10	18-3	20-0†	11-5	17-8	20-0†	11-1	17-2	20-0†	10-6	16-3	20-0†	10-0	15-5	20-0†
	DFL	No.2	11-7	17-10	20-0†	11-2	17-4	20-0†	10-10	16-10	20-0†	10-3	15-11	20-0†	9-9	15-1	19-8
	DFL	No.3/Stud	11-0	17-1	20-0†	10-8	16-6	20-0†	10-4	16-1	20-0†	9-10	15-2	19-9	9-4	14-5	18-9
	DFL	Standard	11-0	-	-	10-8	-	-	10-4	-	-	9-10	-	-	9-4	-	-
	HF	SS	11-7	17-10	20-0†	11-2	17-4	20-0†	10-10	16-10	20-0†	10-3	15-11	20-0†	9-9	15-1	19-8
	HF	No.1	11-3	17-6	20-0†	10-11	16-11	20-0†	10-8	16-5	20-0†	10-1	15-7	20-0†	9-7	14-9	19-2
	HF	No.2	10-9	16-7	20-0†	10-5	16-1	20-0†	10-1	15-8	20-0†	9-7	14-9	19-3	9-1	14-1	18-3
	HF	No.3/Stud	10-5	16-2	20-0†	10-2	15-8	20-0†	9-10	15-2	19-9	9-4	14-5	18-8	8-10	13-8	17-9
	HF	Standard	10-5	-	-	10-2	-	-	9-10	-	-	9-4	-	-	8-10	-	-
	SP	SS	12-0	18-7	20-0†	11-8	18-1	20-0†	11-4	17-6	20-0†	10-9	16-7	20-0†	10-2	15-9	20-0†
	SP	No.1	11-7	17-10	20-0†	11-2	17-4	20-0†	10-10	16-10	20-0†	10-3	15-11	20-0†	9-9	15-1	19-8
	SP	No.2	11-0	17-1	20-0†	10-8	16-6	20-0†	10-4	16-1	20-0†	9-10	15-2	19-9	9-4	14-5	18-9
	SP	No.3	10-9	16-7	20-0†	10-5	16-1	20-0†	10-1	15-8	20-0†	9-7	14-9	19-3	9-1	14-1	18-3
	SP	Stud	10-9	16-7	20-0†	10-5	16-1	20-0†	10-1	15-8	20-0†	9-7	14-9	19-3	9-1	14-1	18-3
	SP	Standard	10-5	-	-	10-2	-	-	9-10	-	-	9-4	-	-	8-10	-	-
	SPF	SS	11-3	17-6	20-0†	10-11	16-11	20-0†	10-8	16-5	20-0†	10-1	15-7	20-0†	9-7	14-9	19-2
	SPF	No.1	11-0	17-1	20-0†	10-8	16-6	20-0†	10-4	16-1	20-0†	9-10	15-2	19-9	9-4	14-5	18-9
	SPF	No.2	11-0	17-1	20-0†	10-8	16-6	20-0†	10-4	16-1	20-0†	9-10	15-2	19-9	9-4	14-5	18-9
	SPF	No.3/Stud	10-5	16-2	20-0†	10-2	15-8	20-0†	9-10	15-2	19-9	9-4	14-5	18-8	8-10	13-8	17-9
	SPF	Standard	10-5	-	-	10-2	-	-	9-10	-	-	9-4	-	-	8-10	-	-
24	DFL	SS	10-8	16-6	20-0†	10-4	16-0	20-0†	10-0	15-6	20-0†	9-6	14-8	19-1	9-0	13-11	18-1
	DFL	No.1	10-3	15-10	20-0†	9-11	15-4	20-0	9-8	14-11	19-5	9-1	14-1	18-4	8-8	13-5	17-5
	DFL	No.2	10-0	15-6	20-0†	9-9	15-0	19-7	9-5	14-7	19-0	8-11	13-10	17-11	8-6	13-1	17-0
	DFL	No.3/Stud	9-7	14-10	19-3	9-3	14-4	18-8	9-0	13-11	18-1	8-6	13-2	17-2	8-1	12-6	16-3
	DFL	Standard	9-7	-	-	9-3	-	-	9-0	-	-	8-6	-	-	7-11	-	-
	HF	SS	10-0	15-6	20-0†	9-9	15-0	19-7	9-5	14-7	19-0	8-11	13-10	17-11	8-6	13-1	17-0
	HF	No.1	9-10	15-2	19-9	9-6	14-8	19-1	9-3	14-3	18-7	8-9	13-6	17-7	8-3	12-10	16-8
	HF	No.2	9-4	14-5	18-9	9-1	14-0	18-2	8-9	13-7	17-8	8-4	12-10	16-8	7-11	12-2	15-10
	HF	No.3/Stud	9-1	14-0	18-3	8-10	13-7	17-8	8-6	13-2	17-2	8-1	12-6	16-3	-	11-10	15-5
	HF	Standard	9-1	-	-	8-10	-	-	8-6	-	-	8-1	-	-	-	-	-
	SP	SS	10-5	16-2	20-0†	10-2	15-8	20-0†	9-10	15-2	19-9	9-4	14-5	18-8	8-10	13-8	17-9
	SP	No.1	10-0	15-6	20-0†	9-9	15-0	19-7	9-5	14-7	19-0	8-11	13-10	17-11	8-6	13-1	17-0
	SP	No.2	9-7	14-10	19-3	9-3	14-4	18-8	9-0	13-11	18-1	8-6	13-2	17-2	8-1	12-6	16-3
	SP	No.3	9-4	14-5	18-9	9-1	14-0	18-2	8-9	13-7	17-7	8-4	12-10	16-1	7-11	12-1	14-11
	SP	Stud	9-4	14-5	18-9	9-1	14-0	18-2	8-9	13-7	17-7	8-4	12-10	16-1	7-11	12-1	14-11
	SP	Standard	9-1	-	-	8-10	-	-	8-5	-	-	-	-	-	-	-	-
	SPF	SS	9-10	15-2	19-9	9-6	14-8	19-1	9-3	14-3	18-7	8-9	13-6	17-7	8-3	12-10	16-8
	SPF	No.1	9-7	14-10	19-3	9-3	14-4	18-8	9-0	13-11	18-1	8-6	13-2	17-2	8-1	12-6	16-3
	SPF	No.2	9-7	14-10	19-3	9-3	14-4	18-8	9-0	13-11	18-1	8-6	13-2	17-2	8-1	12-6	16-3
	SPF	No.3/Stud	9-1	14-0	18-3	8-10	13-7	17-8	8-6	13-2	17-2	8-1	12-6	16-3	-	11-10	15-5
	SPF	Standard	9-1	-	-	8-10	-	-	8-6	-	-	8-1	-	-	-	-	-

See Table 3.20B footnotes.

**Table 3.20B3 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/360 (Cont.)**

**Exposure B  
H/360  
3/8" WSP**

(Fully Sheathed with a Minimum of 3/8" Wood Structural Panels)<sup>a</sup>

700-yr. Wind Speed 3-second gust (mph)			150			160			170			180			195		
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8
			Maximum Allowable Stud Length (ft-in.) <sup>1</sup>														
12	DFL	SS	10-11	16-11	20-0†	10-5	16-2	20-0†	10-0	15-6	20-0†	9-7	14-10	19-4	9-1	14-1	18-3
	DFL	No.1	10-6	16-3	20-0†	10-0	15-6	20-0†	9-8	14-11	19-4	9-3	14-4	18-7	8-9	13-6	17-7
	DFL	No.2	10-3	15-11	20-0†	9-10	15-2	19-9	9-5	14-7	19-0	9-1	14-0	18-3	8-7	13-3	17-3
	DFL	No.3/Stud	9-10	15-2	19-9	9-5	14-6	18-10	9-0	13-11	18-1	8-8	13-4	17-5	8-2	12-8	16-5
	DFL	Standard	9-10	-	-	9-5	-	-	9-0	-	-	8-8	-	-	8-0	-	-
	HF	SS	10-3	15-11	20-0†	9-10	15-2	19-9	9-5	14-7	19-0	9-1	14-0	18-3	8-7	13-3	17-3
	HF	No.1	10-1	15-7	20-0†	9-7	14-10	19-4	9-3	14-3	18-6	8-10	13-8	17-10	8-5	12-11	16-10
	HF	No.2	9-7	14-10	19-3	9-2	14-2	18-5	8-9	13-7	17-8	8-5	13-0	16-11	8-0	12-4	16-0
	HF	No.3/Stud	9-4	14-5	18-9	8-11	13-9	17-11	8-6	13-2	17-2	8-2	12-8	16-6	7-9	12-0	15-7
	HF	Standard	9-4	-	-	8-11	-	-	8-6	-	-	8-2	-	-	7-9	-	-
	SP	SS	10-9	16-7	20-0†	10-3	15-10	20-0†	9-10	15-2	19-9	9-5	14-7	19-0	9-1	14-0	18-3
	SP	No.1	10-3	15-11	20-0†	9-10	15-2	19-9	9-5	14-7	19-0	9-1	14-0	18-3	8-7	13-3	17-3
	SP	No.2	9-10	15-2	19-9	9-5	14-6	18-10	9-0	13-11	18-1	8-8	13-4	17-5	8-2	12-8	16-5
	SP	No.3	9-7	14-10	19-3	9-2	14-2	18-5	8-9	13-7	17-6	8-5	13-0	16-6	8-0	12-4	15-2
	SP	Stud	9-7	14-10	19-3	9-2	14-2	18-5	8-9	13-7	17-6	8-5	13-0	16-6	8-0	12-4	15-2
	SP	Standard	9-4	-	-	8-11	-	-	8-5	-	-	7-11	-	-	-	-	-
	SPF	SS	10-1	15-7	20-0†	9-7	14-10	19-4	9-3	14-3	18-6	8-10	13-8	17-10	8-5	12-11	16-10
	SPF	No.1	9-10	15-2	19-9	9-5	14-6	18-10	9-0	13-11	18-1	8-8	13-4	17-5	8-2	12-8	16-5
SPF	No.2	9-10	15-2	19-9	9-5	14-6	18-10	9-0	13-11	18-1	8-8	13-4	17-5	8-2	12-8	16-5	
SPF	No.3/Stud	9-4	14-5	18-9	8-11	13-9	17-11	8-6	13-2	17-2	8-2	12-8	16-6	7-9	12-0	15-7	
SPF	Standard	9-4	-	-	8-11	-	-	8-6	-	-	8-2	-	-	7-9	-	-	
16	DFL	SS	9-11	15-3	19-10	9-5	14-7	19-0	9-1	14-0	18-2	8-8	13-5	17-6	8-3	12-9	16-6
	DFL	No.1	9-6	14-8	19-1	9-1	14-1	18-3	8-9	13-6	17-6	8-4	12-11	16-10	7-11	12-3	15-11
	DFL	No.2	9-4	14-5	18-9	8-11	13-9	17-11	8-6	13-2	17-2	8-2	12-8	16-6	7-9	12-0	15-7
	DFL	No.3/Stud	8-11	13-9	17-10	8-6	13-2	17-1	8-2	12-7	16-4	7-10	12-1	15-7	-	11-5	14-4
	DFL	Standard	8-11	-	-	8-6	-	-	8-0	-	-	-	-	-	-	-	-
	HF	SS	9-4	14-5	18-9	8-11	13-9	17-11	8-6	13-2	17-2	8-2	12-8	16-6	7-9	12-0	15-7
	HF	No.1	9-1	14-1	18-4	8-8	13-5	17-6	8-4	12-11	16-9	8-0	12-5	16-1	-	11-9	15-3
	HF	No.2	8-8	13-5	17-5	8-3	12-10	16-8	7-11	12-3	15-11	-	11-9	15-4	-	11-2	14-6
	HF	No.3/Stud	8-5	13-0	16-11	8-1	12-5	16-2	-	11-11	15-6	-	11-6	14-11	-	10-10	13-11
	HF	Standard	8-5	-	-	8-1	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	9-8	15-0	19-6	9-3	14-4	18-8	8-11	13-9	17-10	8-6	13-2	17-2	8-1	12-6	16-3
	SP	No.1	9-4	14-5	18-9	8-11	13-9	17-11	8-6	13-2	17-2	8-2	12-8	16-6	7-9	12-0	15-7
	SP	No.2	8-11	13-9	17-10	8-6	13-2	17-1	8-2	12-7	16-4	7-10	12-1	15-9	-	11-5	14-10
	SP	No.3	8-8	13-5	17-2	8-3	12-10	16-0	7-11	12-3	15-0	-	11-6	14-2	-	10-7	13-0
	SP	Stud	8-8	13-5	17-2	8-3	12-10	16-0	7-11	12-3	15-0	-	11-6	14-2	-	10-7	13-0
	SP	Standard	8-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	9-1	14-1	18-4	8-8	13-5	17-6	8-4	12-11	16-9	8-0	12-5	16-1	-	11-9	15-3
	SPF	No.1	8-11	13-9	17-10	8-6	13-2	17-1	8-2	12-7	16-4	7-10	12-1	15-9	-	11-5	14-10
SPF	No.2	8-11	13-9	17-10	8-6	13-2	17-1	8-2	12-7	16-4	7-10	12-1	15-9	-	11-5	14-10	
SPF	No.3/Stud	8-5	13-0	16-11	8-1	12-5	16-2	-	11-11	15-6	-	11-6	14-11	-	10-10	13-11	
SPF	Standard	8-5	-	-	8-1	-	-	-	-	-	-	-	-	-	-	-	
24	DFL	SS	8-7	13-3	17-3	8-2	12-8	16-6	7-10	12-2	15-10	-	11-8	15-2	-	11-1	14-4
	DFL	No.1	8-3	12-9	16-7	7-11	12-2	15-10	-	11-8	15-2	-	11-3	14-7	-	10-7	13-10
	DFL	No.2	8-1	12-6	16-3	-	11-11	15-6	-	11-5	14-11	-	11-0	14-4	-	10-5	13-6
	DFL	No.3/Stud	-	11-11	15-3	-	11-5	14-3	-	10-9	13-4	-	10-2	12-6	-	9-4	11-6
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	8-1	12-6	16-3	-	11-11	15-6	-	11-5	14-11	-	11-0	14-4	-	10-5	13-6
	HF	No.1	7-11	12-3	15-11	-	11-8	15-2	-	11-2	14-7	-	10-9	14-0	-	10-2	13-3
	HF	No.2	-	11-7	15-1	-	11-1	14-5	-	10-8	13-10	-	10-3	13-4	-	9-8	12-7
	HF	No.3/Stud	-	11-4	14-8	-	10-10	13-10	-	10-4	13-0	-	9-11	12-3	-	9-1	11-3
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	8-5	13-0	16-11	8-1	12-5	16-2	-	11-11	15-6	-	11-6	14-11	-	10-10	14-1
	SP	No.1	8-1	12-6	16-3	-	11-11	15-6	-	11-5	14-11	-	11-0	14-4	-	10-5	13-6
	SP	No.2	-	11-11	15-6	-	11-5	14-10	-	10-11	14-2	-	10-6	13-8	-	9-11	12-11
	SP	No.3	-	11-3	13-10	-	10-6	12-11	-	9-10	12-1	-	9-3	11-4	-	8-6	10-5
	SP	Stud	-	11-3	13-10	-	10-6	12-11	-	9-10	12-1	-	9-3	11-4	-	8-6	10-5
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	7-11	12-3	15-11	-	11-8	15-2	-	11-2	14-7	-	10-9	14-0	-	10-2	13-3
	SPF	No.1	-	11-11	15-6	-	11-5	14-10	-	10-11	14-2	-	10-6	13-8	-	9-11	12-11
SPF	No.2	-	11-11	15-6	-	11-5	14-10	-	10-11	14-2	-	10-6	13-8	-	9-11	12-11	
SPF	No.3/Stud	-	11-4	14-8	-	10-10	13-10	-	10-4	13-0	-	9-11	12-3	-	9-1	11-3	
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

See Table 3.20B footnotes.

3 PRESCRIPTIVE DESIGN

**Table 3.20B4 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/180**

(Fully Sheathed with a Minimum of 3/8" Wood Structural Panels)<sup>a</sup>

**Exposure C  
H/180  
3/8" WSP**

700-yr. Wind Speed 3-second gust (mph)			110			115			120			130			140		
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8
			Maximum Allowable Stud Length (ft.-in.) <sup>1</sup>														
12	DFL	SS	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13 - 8	20-0†	20-0†	13 - 0	20-0†	20-0†
	DFL	No.1	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13 - 11	20-0†	20-0†	13 - 2	20-0†	20-0†	12 - 6	19 - 4	20-0†
	DFL	No.2	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13 - 8	20-0†	20-0†	12 - 11	20-0	20-0†	12 - 3	19 - 0	20-0†
	DFL	No.3/Stud	13 - 10	20-0†	20-0†	13 - 5	19 - 11	20-0†	13 - 0	19 - 1	20-0†	12 - 4	17 - 6	20-0†	11 - 4	16 - 2	20 - 0
	DFL	Standard	12 - 5	-	-	11 - 10	-	-	11 - 4	-	-	10 - 5	-	-	9 - 7	-	-
	HF	SS	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13 - 8	20-0†	20-0†	12 - 11	20 - 0	20-0†	12 - 3	19 - 0	20-0†
	HF	No.1	14-0††	20-0†	20-0†	13 - 9	20-0†	20-0†	13 - 4	20-0†	20-0†	12 - 7	19 - 6	20-0†	12 - 0	18 - 6	20-0†
	HF	No.2	13 - 6	20-0†	20-0†	13 - 1	20-0†	20-0†	12 - 8	19 - 8	20-0†	12 - 0	18 - 7	20-0†	11 - 5	17 - 8	20-0†
	HF	No.3/Stud	13 - 1	20-0†	20-0†	12 - 9	19 - 5	20-0†	12 - 4	18 - 7	20-0†	11 - 8	17 - 0	20-0†	11 - 1	15 - 9	19 - 5
	HF	Standard	12 - 2	-	-	11 - 7	-	-	11 - 1	-	-	10 - 2	-	-	9 - 5	-	-
	SP	SS	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13 - 5	20-0†	20-0†	12 - 9	19 - 9	20-0†
	SP	No.1	14-0††	20-0†	20-0†	14-0††	20-0†	20-0†	13 - 8	20-0†	20-0†	12 - 11	20 - 0	20-0†	12 - 3	19 - 0	20-0†
	SP	No.2	13 - 10	20-0†	20-0†	13 - 5	20-0†	20-0†	13 - 0	20-0†	20-0†	12 - 4	19 - 1	20-0†	11 - 8	18 - 1	20-0†
	SP	No.3	13 - 3	19 - 1	20-0†	12 - 8	18 - 2	20-0†	12 - 1	17 - 5	20-0†	11 - 1	15 - 11	19 - 7	10 - 3	14 - 9	18 - 1
	SP	Stud	13 - 3	19 - 1	20-0†	12 - 8	18 - 2	20-0†	12 - 1	17 - 5	20-0†	11 - 1	15 - 11	19 - 7	10 - 3	14 - 9	18 - 1
	SP	Standard	11 - 3	-	-	10 - 8	-	-	10 - 3	-	-	9 - 5	-	-	8 - 8	-	-
	SPF	SS	14-0††	20-0†	20-0†	13 - 9	20-0†	20-0†	13 - 4	20-0†	20-0†	12 - 7	19 - 6	20-0†	12 - 0	18 - 6	20-0†
	SPF	No.1	13 - 10	20-0†	20-0†	13 - 5	20-0†	20-0†	13 - 0	20-0†	20-0†	12 - 4	19 - 1	20-0†	11 - 8	18 - 1	20-0†
SPF	No.2	13 - 10	20-0†	20-0†	13 - 5	20-0†	20-0†	13 - 0	20-0†	20-0†	12 - 4	19 - 1	20-0†	11 - 8	18 - 1	20-0†	
SPF	No.3/Stud	13 - 1	20-0†	20-0†	12 - 9	19 - 5	20-0†	12 - 4	18 - 7	20-0†	11 - 8	17 - 0	20-0†	11 - 1	15 - 9	19 - 5	
SPF	Standard	12 - 2	-	-	11 - 7	-	-	11 - 1	-	-	10 - 2	-	-	9 - 5	-	-	
16	DFL	SS	13 - 11	20-0†	20-0†	13 - 6	20-0†	20-0†	13 - 1	20-0†	20-0†	12 - 5	19 - 2	20-0†	11 - 9	18 - 3	20-0†
	DFL	No.1	13 - 5	20-0†	20-0†	13 - 0	20-0†	20-0†	12 - 7	19 - 6	20-0†	11 - 11	18 - 5	20-0†	11 - 4	17 - 6	20-0†
	DFL	No.2	13 - 1	20-0†	20-0†	12 - 9	19 - 8	20-0†	12 - 4	19 - 1	20-0†	11 - 8	18 - 1	20-0†	11 - 1	17 - 2	20-0†
	DFL	No.3/Stud	12 - 6	17 - 11	20-0†	12 - 0	17 - 1	20-0†	11 - 6	16 - 4	20-0†	10 - 7	15 - 0	18 - 6	9 - 9	13 - 10	17 - 1
	DFL	Standard	10 - 8	-	-	10 - 2	-	-	9 - 9	-	-	8 - 11	-	-	8 - 3	-	-
	HF	SS	13 - 1	20-0†	20-0†	12 - 9	19 - 8	20-0†	12 - 4	19 - 1	20-0†	11 - 8	18 - 1	20-0†	11 - 1	17 - 2	20-0†
	HF	No.1	12 - 10	19 - 10	20-0†	12 - 5	19 - 3	20-0†	12 - 1	18 - 8	20-0†	11 - 5	17 - 8	20-0†	10 - 10	16 - 9	20-0†
	HF	No.2	12 - 2	18 - 11	20-0†	11 - 10	18 - 4	20-0†	11 - 6	17 - 9	20-0†	10 - 10	16 - 10	20-0†	10 - 4	15 - 11	20-0†
	HF	No.3/Stud	11 - 10	17 - 6	20-0†	11 - 6	16 - 8	20-0†	11 - 2	15 - 11	19 - 8	10 - 3	14 - 7	18 - 1	9 - 6	13 - 6	16 - 8
	HF	Standard	10 - 5	-	-	9 - 11	-	-	9 - 6	-	-	8 - 8	-	-	8 - 1	-	-
	SP	SS	13 - 8	20-0†	20-0†	13 - 3	20-0†	20-0†	12 - 10	19 - 11	20-0†	12 - 2	18 - 10	20-0†	11 - 7	17 - 10	20-0†
	SP	No.1	13 - 1	20-0†	20-0†	12 - 9	19 - 8	20-0†	12 - 4	19 - 1	20-0†	11 - 8	18 - 1	20-0†	11 - 1	17 - 2	20-0†
	SP	No.2	12 - 6	19 - 4	20-0†	12 - 2	18 - 9	20-0†	11 - 9	18 - 3	20-0†	11 - 2	17 - 3	20-0†	10 - 7	16 - 4	20-0†
	SP	No.3	11 - 5	16 - 4	20-0†	10 - 10	15 - 7	19 - 2	10 - 4	14 - 11	18 - 4	9 - 6	13 - 8	16 - 10	8 - 10	12 - 7	15 - 6
	SP	Stud	11 - 5	16 - 4	20-0†	10 - 10	15 - 7	19 - 2	10 - 4	14 - 11	18 - 4	9 - 6	13 - 8	16 - 10	8 - 10	12 - 7	15 - 6
	SP	Standard	9 - 7	-	-	9 - 2	-	-	8 - 9	-	-	8 - 1	-	-	-	-	-
	SPF	SS	12 - 10	19 - 10	20-0†	12 - 5	19 - 3	20-0†	12 - 1	18 - 8	20-0†	11 - 5	17 - 8	20-0†	10 - 10	16 - 9	20-0†
	SPF	No.1	12 - 6	19 - 4	20-0†	12 - 2	18 - 9	20-0†	11 - 9	18 - 3	20-0†	11 - 2	17 - 3	20-0†	10 - 7	16 - 4	20-0†
SPF	No.2	12 - 6	19 - 4	20-0†	12 - 2	18 - 9	20-0†	11 - 9	18 - 3	20-0†	11 - 2	17 - 3	20-0†	10 - 7	16 - 4	20-0†	
SPF	No.3/Stud	11 - 10	17 - 6	20-0†	11 - 6	16 - 8	20-0†	11 - 2	15 - 11	19 - 8	10 - 3	14 - 7	18 - 1	9 - 6	13 - 6	16 - 8	
SPF	Standard	10 - 5	-	-	9 - 11	-	-	9 - 6	-	-	8 - 8	-	-	8 - 1	-	-	
24	DFL	SS	12 - 1	18 - 8	20-0†	11 - 9	18 - 2	20-0†	11 - 5	17 - 7	20-0†	10 - 9	16 - 8	20-0†	10 - 3	15 - 10	20-0†
	DFL	No.1	11 - 8	18 - 0	20-0†	11 - 3	17 - 5	20-0†	10 - 11	16 - 11	20-0†	10 - 4	16 - 0	20-0†	9 - 10	15 - 2	19 - 5
	DFL	No.2	11 - 5	17 - 7	20-0†	11 - 0	17 - 1	20-0†	10 - 9	16 - 7	20-0†	10 - 2	15 - 8	19 - 11	9 - 7	14 - 10	18 - 5
	DFL	No.3/Stud	10 - 2	14 - 5	17 - 10	9 - 8	13 - 9	17 - 0	9 - 3	13 - 2	16 - 3	8 - 6	12 - 1	14 - 11	7 - 10	11 - 2	13 - 9
	DFL	Standard	8 - 7	-	-	8 - 2	-	-	7 - 10	-	-	-	-	-	-	-	-
	HF	SS	11 - 5	17 - 7	20-0†	11 - 0	17 - 1	20-0†	10 - 9	16 - 7	20-0†	10 - 2	15 - 8	20-0†	9 - 7	14 - 11	19 - 4
	HF	No.1	11 - 2	17 - 3	20-0†	10 - 9	16 - 8	20-0†	10 - 6	16 - 2	20-0†	9 - 11	15 - 4	19 - 11	9 - 5	14 - 7	18 - 11
	HF	No.2	10 - 7	16 - 5	20-0†	10 - 3	15 - 11	20-0†	10 - 0	15 - 5	20-0†	9 - 5	14 - 7	19 - 0	9 - 0	13 - 10	17 - 10
	HF	No.3/Stud	9 - 11	14 - 1	17 - 4	9 - 5	13 - 5	16 - 7	9 - 0	12 - 10	15 - 10	8 - 3	11 - 9	14 - 6	-	10 - 10	13 - 5
	HF	Standard	8 - 5	-	-	8 - 0	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	11 - 10	18 - 4	20-0†	11 - 6	17 - 10	20-0†	11 - 2	17 - 3	20-0†	10 - 7	16 - 4	20-0†	10 - 0	15 - 6	20-0†
	SP	No.1	11 - 5	17 - 7	20-0†	11 - 0	17 - 1	20-0†	10 - 9	16 - 7	20-0†	10 - 2	15 - 8	20-0†	9 - 7	14 - 11	19 - 4
	SP	No.2	10 - 10	16 - 10	20-0†	10 - 6	16 - 4	20-0†	10 - 3	15 - 10	20 - 0	9 - 8	14 - 10	18 - 4	9 - 2	13 - 8	16 - 11
	SP	No.3	9 - 2	13 - 2	16 - 2	8 - 9	12 - 6	15 - 5	8 - 4	12 - 0	14 - 9	-	11 - 0	13 - 6	-	10 - 2	12 - 6
	SP	Stud	9 - 2	13 - 2	16 - 2	8 - 9	12 - 6	15 - 5	8 - 4	12 - 0	14 - 9	-	11 - 0	13 - 6	-	10 - 2	12 - 6
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	11 - 2	17 - 3	20-0†	10 - 9	16 - 8	20-0†	10 - 6	16 - 2	20-0†	9 - 11	15 - 4	19 - 11	9 - 5	14 - 7	18 - 11
	SPF	No.1	10 - 10	16 - 10	20-0†	10 - 6	16 - 4	20-0†	10 - 3	15 - 10	20-0†	9 - 8	15 - 0	19 - 5	9 - 2	14 - 2	18 - 1
SPF	No.2	10 - 10	16 - 10	20-0†	10 - 6	16 - 4	20-0†	10 - 3	15 - 10	20-0†	9 - 8	15 - 0	19 - 5	9 - 2	14 - 2	18 - 1	
SPF	No.3/Stud	9 - 11	14 - 1	17 - 4	9 - 5	13 - 5	16 - 7	9 - 0	12 - 10	15 - 10	8 - 3	11 - 9	14 - 6	-	10 - 10	13 - 5	
SPF	Standard	8 - 5	-	-	8 - 0	-	-	-	-	-	-	-	-	-	-	-	

See Table 3.20B footnotes.

**Table 3.20B4 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/180 (Cont.)**  
(Fully Sheathed with a Minimum of 3/8" Wood Structural Panels)<sup>a</sup>

**Exposure C  
H/180  
3/8" WSP**

700-yr. Wind Speed 3-second gust (mph)			150			160			170			180			195			
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	
			Maximum Allowable Stud Length (ft.-in.) <sup>1</sup>															
12	DFL	SS	12-5	19-2	20-0†	11-10	18-4	20-0†	11-4	17-7	20-0†	10-11	16-11	20-0†	10-4	16-0	20-0†	
	DFL	No.1	11-11	18-5	20-0†	11-5	17-8	20-0†	10-11	16-11	20-0†	10-6	16-3	20-0†	9-11	15-4	19-9	
	DFL	No.2	11-8	18-1	20-0†	11-2	17-3	20-0†	10-8	16-7	20-0†	10-3	15-11	20-0†	9-9	15-1	18-8	
	DFL	No.3/Stud Standard	10-7	15-0	18-6	9-10	14-0	17-4	9-3	13-1	16-2	8-8	12-4	15-3	8-0	11-4	14-0	
	DFL	Standard	8-11	-	-	8-4	-	-	7-10	-	-	-	-	-	-	-	-	
	HF	SS	11-8	18-1	20-0†	11-2	17-3	20-0†	10-8	16-7	20-0†	10-3	15-11	20-0†	9-9	15-1	19-7	
	HF	No.1	11-5	17-8	20-0†	10-11	16-11	20-0†	10-6	16-2	20-0†	10-1	15-7	20-0†	9-6	14-8	19-2	
	HF	No.2	10-10	16-10	20-0†	10-5	16-1	20-0†	10-0	15-5	20-0†	9-7	14-10	19-3	9-1	14-0	18-1	
	HF	No.3/Stud Standard	10-3	14-7	18-1	9-7	13-8	16-10	9-0	12-9	15-9	8-6	12-0	14-10	7-9	11-0	13-8	
	HF	Standard	8-9	-	-	8-2	-	-	-	-	-	-	-	-	-	-	-	
	SP	SS	12-2	18-10	20-0†	11-8	18-0	20-0†	11-2	17-3	20-0†	10-9	16-7	20-0†	10-2	15-8	20-0†	
	SP	No.1	11-8	18-1	20-0†	11-2	17-3	20-0†	10-8	16-7	20-0†	10-3	15-11	20-0†	9-9	15-1	19-7	
	SP	No.2	11-2	17-3	20-0†	10-8	16-6	20-0†	10-3	15-10	19-11	9-10	15-2	18-9	9-3	13-11	17-2	
	SP	No.3	9-6	13-8	16-10	8-11	12-9	15-8	8-4	12-0	14-8	7-10	11-3	13-10	-	10-4	12-8	
	SP	Stud	9-6	13-8	16-10	8-11	12-9	15-8	8-4	12-0	14-8	7-10	11-3	13-10	-	10-4	12-8	
	SP	Standard	8-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPF	SS	11-5	17-8	20-0†	10-11	16-11	20-0†	10-6	16-2	20-0†	10-1	15-7	20-0†	9-6	14-8	19-2	
	SPF	No.1	11-2	17-3	20-0†	10-8	16-6	20-0†	10-3	15-10	20-0†	9-10	15-2	19-9	9-3	14-4	18-5	
	SPF	No.2	11-2	17-3	20-0†	10-8	16-6	20-0†	10-3	15-10	20-0†	9-10	15-2	19-9	9-3	14-4	18-5	
	SPF	No.3/Stud Standard	10-3	14-7	18-1	9-7	13-8	16-10	9-0	12-9	15-9	8-6	12-0	14-10	7-9	11-0	13-8	
	SPF	Standard	8-9	-	-	8-2	-	-	-	-	-	-	-	-	-	-	-	
	16	DFL	SS	11-3	17-4	20-0†	10-9	16-7	20-0†	10-3	15-11	20-0†	9-11	15-3	19-10	9-4	14-5	18-9
		DFL	No.1	10-9	16-8	20-0†	10-4	16-0	20-0†	9-11	15-4	19-8	9-6	14-8	18-6	9-0	13-8	16-11
		DFL	No.2	10-7	16-4	20-0†	10-1	15-7	19-10	9-8	15-0	18-7	9-4	14-1	17-5	8-10	12-11	16-0
DFL		No.3/Stud Standard	9-1	12-10	15-11	8-5	12-0	14-10	7-11	11-3	13-11	-	10-7	13-1	-	9-8	12-0	
DFL		Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HF		SS	10-7	16-4	20-0†	10-1	15-7	20-0†	9-8	15-0	19-6	9-4	14-5	18-9	8-10	13-7	17-8	
HF		No.1	10-4	16-0	20-0†	9-10	15-3	19-10	9-6	14-8	19-0	9-1	14-1	18-3	8-7	13-4	16-9	
HF		No.2	9-10	15-2	19-9	9-5	14-6	18-11	9-0	13-11	18-0	8-8	13-5	16-11	8-2	12-7	15-6	
HF		No.3/Stud Standard	8-10	12-6	15-6	8-3	11-8	14-5	-	10-11	13-6	-	10-4	12-9	-	9-5	11-8	
HF		Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SP		SS	11-0	17-0	20-0†	10-6	16-3	20-0†	10-1	15-7	20-0†	9-8	15-0	19-6	9-2	14-2	18-5	
SP		No.1	10-7	16-4	20-0†	10-1	15-7	20-0†	9-8	15-0	19-6	9-4	14-5	18-9	8-10	13-7	17-4	
SP		No.2	10-1	15-7	19-6	9-8	14-9	18-3	9-3	13-9	17-1	8-11	13-0	16-1	8-2	11-11	14-9	
SP		No.3	8-2	11-9	14-5	-	10-11	13-5	-	10-3	12-7	-	9-8	11-10	-	8-10	10-11	
SP		Stud	8-2	11-9	14-5	-	10-11	13-5	-	10-3	12-7	-	9-8	11-10	-	8-10	10-11	
SP		Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPF		SS	10-4	16-0	20-0†	9-10	15-3	19-10	9-6	14-8	19-0	9-1	14-1	18-4	8-7	13-4	17-4	
SPF		No.1	10-1	15-7	20-0†	9-8	14-11	19-5	9-3	14-3	18-3	8-11	13-9	17-2	8-5	12-9	15-9	
SPF		No.2	10-1	15-7	20-0†	9-8	14-11	19-5	9-3	14-3	18-3	8-11	13-9	17-2	8-5	12-9	15-9	
SPF		No.3/Stud Standard	8-10	12-6	15-6	8-3	11-8	14-5	-	10-11	13-6	-	10-4	12-9	-	9-5	11-8	
SPF		Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
24		DFL	SS	9-9	15-1	19-7	9-4	14-5	18-9	8-11	13-10	17-11	8-7	13-3	17-3	8-1	12-6	16-4
		DFL	No.1	9-4	14-6	18-1	9-0	13-8	16-10	8-7	12-9	15-9	8-3	12-0	14-10	7-9	11-0	13-8
		DFL	No.2	9-2	13-10	17-1	8-9	12-11	15-11	8-5	12-1	14-11	8-0	11-4	14-0	-	10-5	12-11
	DFL	No.3/Stud Standard	-	10-4	12-9	-	9-8	11-11	-	9-1	11-2	-	8-6	10-6	-	7-10	9-8	
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	HF	SS	9-2	14-2	18-5	8-9	13-7	17-8	8-5	13-0	16-11	8-1	12-6	16-3	-	11-10	15-4	
	HF	No.1	9-0	13-10	17-10	8-7	13-3	16-7	8-3	12-7	15-7	7-11	11-10	14-8	-	10-11	13-5	
	HF	No.2	8-6	13-2	16-7	8-2	12-6	15-5	7-10	11-8	14-6	-	11-0	13-7	-	10-1	12-6	
	HF	No.3/Stud Standard	-	10-1	12-5	-	9-5	11-7	-	8-10	10-11	-	8-4	10-3	-	-	9-5	
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SP	SS	9-7	14-9	19-3	9-2	14-2	18-4	8-9	13-7	17-7	8-5	13-0	16-11	8-0	12-4	16-0	
	SP	No.1	9-2	14-2	18-5	8-9	13-7	17-3	8-5	13-0	16-2	8-1	12-3	15-2	-	11-3	13-11	
	SP	No.2	8-9	12-8	15-8	8-2	11-10	14-8	-	11-1	13-9	-	10-5	12-11	-	9-7	11-10	
	SP	No.3	-	9-5	11-7	-	8-10	10-10	-	8-3	10-2	-	7-9	9-6	-	-	8-9	
	SP	Stud	-	9-5	11-7	-	8-10	10-10	-	8-3	10-2	-	7-9	9-6	-	-	8-9	
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPF	SS	9-0	13-10	18-0	8-7	13-3	17-3	8-3	12-8	16-6	7-11	12-3	15-11	-	11-7	15-0	
	SPF	No.1	8-9	13-6	16-10	8-4	12-8	15-8	8-0	11-11	14-8	-	11-2	13-10	-	10-3	12-8	
	SPF	No.2	8-9	13-6	16-10	8-4	12-8	15-8	8-0	11-11	14-8	-	11-2	13-10	-	10-3	12-8	
	SPF	No.3/Stud Standard	-	10-1	12-5	-	9-5	11-7	-	8-10	10-11	-	8-4	10-3	-	-	9-5	
	SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

See Table 3.20B footnotes.



**Table 3.20B5 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/240**

**Exposure C  
H/240  
3/8" WSP**

(Fully Sheathed with a Minimum of 3/8" Wood Structural Panels)<sup>a</sup>

700-yr. Wind Speed 3-second gust (mph)			110			115			120			130			140			
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	
			Maximum Allowable Stud Length (ft.-in.) <sup>1</sup>															
12	DFL	SS	13 - 11	20-0†	20-0†	13 - 6	20-0†	20-0†	13 - 1	20-0†	20-0†	12 - 5	19 - 2	20-0†	11 - 9	18 - 3	20-0†	
	DFL	No.1	13 - 5	20-0†	20-0†	13 - 0	20-0†	20-0†	12 - 7	19 - 6	20-0†	11 - 11	18 - 5	20-0†	11 - 4	17 - 6	20-0†	
	DFL	No.2	13 - 1	20-0†	20-0†	12 - 9	19 - 8	20-0†	12 - 4	19 - 1	20-0†	11 - 8	18 - 1	20-0†	11 - 1	17 - 2	20-0†	
	DFL	No.3/Stud	12 - 6	19 - 4	20-0†	12 - 2	18 - 9	20-0†	11 - 9	18 - 3	20-0†	11 - 2	17 - 3	20-0†	10 - 7	16 - 2	20 - 0	
	DFL	Standard	12 - 5	-	-	11 - 10	-	-	11 - 4	-	-	10 - 5	-	-	9 - 7	-	-	
	HF	SS	13 - 1	20-0†	20-0†	12 - 9	19 - 8	20-0†	12 - 4	19 - 1	20-0†	11 - 8	18 - 1	20-0†	11 - 1	17 - 2	20-0†	
	HF	No.1	12 - 10	19 - 10	20-0†	12 - 5	19 - 3	20-0†	12 - 1	18 - 8	20-0†	11 - 5	17 - 8	20-0†	10 - 10	16 - 9	20-0†	
	HF	No.2	12 - 2	18 - 11	20-0†	11 - 10	18 - 4	20-0†	11 - 6	17 - 9	20-0†	10 - 10	16 - 10	20-0†	10 - 4	15 - 11	20-0†	
	HF	No.3/Stud	11 - 10	18 - 4	20-0†	11 - 6	17 - 10	20-0†	11 - 2	17 - 3	20-0†	10 - 7	16 - 4	20-0†	10 - 0	15 - 6	19 - 5	
	HF	Standard	11 - 10	-	-	11 - 6	-	-	11 - 1	-	-	10 - 2	-	-	9 - 5	-	-	
	SP	SS	13 - 8	20-0†	20-0†	13 - 3	20-0†	20-0†	12 - 10	19 - 11	20-0†	12 - 2	18 - 10	20-0†	11 - 7	17 - 10	20-0†	
	SP	No.1	13 - 1	20-0†	20-0†	12 - 9	19 - 8	20-0†	12 - 4	19 - 1	20-0†	11 - 8	18 - 1	20-0†	11 - 1	17 - 2	20-0†	
	SP	No.2	12 - 6	19 - 4	20-0†	12 - 2	18 - 9	20-0†	11 - 9	18 - 3	20-0†	11 - 2	17 - 3	20-0†	10 - 7	16 - 4	20-0†	
	SP	No.3	12 - 2	18 - 11	20-0†	11 - 10	18 - 2	20-0†	11 - 6	17 - 5	20-0†	10 - 10	15 - 11	19 - 7	10 - 3	14 - 9	18 - 1	
	SP	Stud	12 - 2	18 - 11	20-0†	11 - 10	18 - 2	20-0†	11 - 6	17 - 5	20-0†	10 - 10	15 - 11	19 - 7	10 - 3	14 - 9	18 - 1	
	SP	Standard	11 - 3	-	-	10 - 8	-	-	10 - 3	-	-	9 - 5	-	-	8 - 8	-	-	
	SPF	SS	12 - 10	19 - 10	20-0†	12 - 5	19 - 3	20-0†	12 - 1	18 - 8	20-0†	11 - 5	17 - 8	20-0†	10 - 10	16 - 9	20-0†	
	SPF	No.1	12 - 6	19 - 4	20-0†	12 - 2	18 - 9	20-0†	11 - 9	18 - 3	20-0†	11 - 2	17 - 3	20-0†	10 - 7	16 - 4	20-0†	
	SPF	No.2	12 - 6	19 - 4	20-0†	12 - 2	18 - 9	20-0†	11 - 9	18 - 3	20-0†	11 - 2	17 - 3	20-0†	10 - 7	16 - 4	20-0†	
	SPF	No.3/Stud	11 - 10	18 - 4	20-0†	11 - 6	17 - 10	20-0†	11 - 2	17 - 3	20-0†	10 - 7	16 - 4	20-0†	10 - 0	15 - 6	19 - 5	
	SPF	Standard	11 - 10	-	-	11 - 6	-	-	11 - 1	-	-	10 - 2	-	-	9 - 5	-	-	
	16	DFL	SS	12 - 7	19 - 6	20-0†	12 - 3	18 - 11	20-0†	11 - 10	18 - 4	20-0†	11 - 3	17 - 4	20-0†	10 - 8	16 - 6	20-0†
		DFL	No.1	12 - 1	18 - 9	20-0†	11 - 9	18 - 2	20-0†	11 - 5	17 - 8	20-0†	10 - 9	16 - 8	20-0†	10 - 3	15 - 10	20-0†
		DFL	No.2	11 - 10	18 - 4	20-0†	11 - 6	17 - 10	20-0†	11 - 2	17 - 3	20-0†	10 - 7	16 - 4	20-0†	10 - 0	15 - 6	20-0†
DFL		No.3/Stud	11 - 4	17 - 6	20-0†	11 - 0	17 - 0	20-0†	10 - 8	16 - 4	20-0†	10 - 1	15 - 0	18 - 6	9 - 7	13 - 10	17 - 1	
DFL		Standard	10 - 8	-	-	10 - 2	-	-	9 - 9	-	-	8 - 11	-	-	8 - 3	-	-	
HF		SS	11 - 10	18 - 4	20-0†	11 - 6	17 - 10	20-0†	11 - 2	17 - 3	20-0†	10 - 7	16 - 4	20-0†	10 - 0	15 - 6	20-0†	
HF		No.1	11 - 7	17 - 11	20-0†	11 - 3	17 - 5	20-0†	10 - 11	16 - 11	20-0†	10 - 4	16 - 0	20-0†	9 - 10	15 - 2	19 - 9	
HF		No.2	11 - 0	17 - 1	20-0†	10 - 8	16 - 7	20-0†	10 - 5	16 - 1	20-0†	9 - 10	15 - 2	19 - 9	9 - 4	14 - 5	18 - 9	
HF		No.3/Stud	10 - 9	16 - 7	20-0†	10 - 5	16 - 1	20-0†	10 - 1	15 - 7	19 - 8	9 - 7	14 - 7	18 - 1	9 - 1	13 - 6	16 - 8	
HF		Standard	10 - 5	-	-	9 - 11	-	-	9 - 6	-	-	8 - 8	-	-	8 - 1	-	-	
SP		SS	12 - 4	19 - 2	20-0†	12 - 0	18 - 7	20-0†	11 - 8	18 - 0	20-0†	11 - 0	17 - 0	20-0†	10 - 5	16 - 2	20-0†	
SP		No.1	11 - 10	18 - 4	20-0†	11 - 6	17 - 10	20-0†	11 - 2	17 - 3	20-0†	10 - 7	16 - 4	20-0†	10 - 0	15 - 6	20-0†	
SP		No.2	11 - 4	17 - 6	20-0†	11 - 0	17 - 0	20-0†	10 - 8	16 - 6	20-0†	10 - 1	15 - 7	20-0†	9 - 7	14 - 10	19 - 3	
SP		No.3	11 - 0	16 - 4	20-0†	10 - 8	15 - 7	19 - 2	10 - 4	14 - 11	18 - 4	9 - 6	13 - 8	16 - 10	8 - 10	12 - 7	15 - 6	
SP		Stud	11 - 0	16 - 4	20-0†	10 - 8	15 - 7	19 - 2	10 - 4	14 - 11	18 - 4	9 - 6	13 - 8	16 - 10	8 - 10	12 - 7	15 - 6	
SP		Standard	9 - 7	-	-	9 - 2	-	-	8 - 9	-	-	8 - 1	-	-	-	-	-	
SPF		SS	11 - 7	17 - 11	20-0†	11 - 3	17 - 5	20-0†	10 - 11	16 - 11	20-0†	10 - 4	16 - 0	20-0†	9 - 10	15 - 2	19 - 9	
SPF		No.1	11 - 4	17 - 6	20-0†	11 - 0	17 - 0	20-0†	10 - 8	16 - 6	20-0†	10 - 1	15 - 7	20-0†	9 - 7	14 - 10	19 - 3	
SPF		No.2	11 - 4	17 - 6	20-0†	11 - 0	17 - 0	20-0†	10 - 8	16 - 6	20-0†	10 - 1	15 - 7	20-0†	9 - 7	14 - 10	19 - 3	
SPF		No.3/Stud	10 - 9	16 - 7	20-0†	10 - 5	16 - 1	20-0†	10 - 1	15 - 7	19 - 8	9 - 7	14 - 7	18 - 1	9 - 1	13 - 6	16 - 8	
SPF		Standard	10 - 5	-	-	9 - 11	-	-	9 - 6	-	-	8 - 8	-	-	8 - 1	-	-	
24		DFL	SS	10 - 11	16 - 11	20-0†	10 - 7	16 - 5	20-0†	10 - 3	15 - 11	20-0†	9 - 9	15 - 1	19 - 7	9 - 3	14 - 4	18 - 7
		DFL	No.1	10 - 6	16 - 3	20-0†	10 - 2	15 - 9	20-0†	9 - 11	15 - 4	19 - 11	9 - 4	14 - 6	18 - 10	8 - 11	13 - 9	17 - 11
		DFL	No.2	10 - 4	15 - 11	20-0†	10 - 0	15 - 5	20-0†	9 - 8	15 - 0	19 - 6	9 - 2	14 - 2	18 - 5	8 - 8	13 - 6	17 - 6
	DFL	No.3/Stud	9 - 10	14 - 5	17 - 10	9 - 6	13 - 9	17 - 0	9 - 3	13 - 2	16 - 3	8 - 6	12 - 1	14 - 11	7 - 10	11 - 2	13 - 9	
	DFL	Standard	8 - 7	-	-	8 - 2	-	-	7 - 10	-	-	-	-	-	-	-		
	HF	SS	10 - 4	15 - 11	20-0†	10 - 0	15 - 5	20-0†	9 - 8	15 - 0	19 - 6	9 - 2	14 - 2	18 - 5	8 - 8	13 - 6	17 - 6	
	HF	No.1	10 - 1	15 - 7	20-0†	9 - 9	15 - 1	19 - 8	9 - 6	14 - 8	19 - 1	9 - 0	13 - 10	18 - 0	8 - 6	13 - 2	17 - 1	
	HF	No.2	9 - 7	14 - 10	19 - 3	9 - 3	14 - 4	18 - 8	9 - 0	13 - 11	18 - 2	8 - 6	13 - 2	17 - 2	8 - 1	12 - 6	16 - 3	
	HF	No.3/Stud	9 - 4	14 - 1	17 - 4	9 - 0	13 - 5	16 - 7	8 - 9	12 - 10	15 - 10	8 - 3	11 - 9	14 - 6	-	10 - 10	13 - 5	
	HF	Standard	8 - 5	-	-	8 - 0	-	-	-	-	-	-	-	-	-	-		
	SP	SS	10 - 9	16 - 7	20-0†	10 - 5	16 - 1	20-0†	10 - 1	15 - 7	20-0†	9 - 7	14 - 9	19 - 3	9 - 1	14 - 0	18 - 3	
	SP	No.1	10 - 4	15 - 11	20-0†	10 - 0	15 - 5	20-0†	9 - 8	15 - 0	19 - 6	9 - 2	14 - 2	18 - 5	8 - 8	13 - 6	17 - 6	
	SP	No.2	9 - 10	15 - 2	19 - 9	9 - 6	14 - 9	19 - 2	9 - 3	14 - 4	18 - 7	8 - 9	13 - 6	17 - 7	8 - 4	12 - 10	16 - 8	
	SP	No.3	9 - 2	13 - 2	16 - 2	8 - 9	12 - 6	15 - 5	8 - 4	12 - 0	14 - 9	-	11 - 0	13 - 6	-	10 - 2	12 - 6	
	SP	Stud	9 - 2	13 - 2	16 - 2	8 - 9	12 - 6	15 - 5	8 - 4	12 - 0	14 - 9	-	11 - 0	13 - 6	-	10 - 2	12 - 6	
	SP	Standard	8 - 5	-	-	8 - 0	-	-	-	-	-	-	-	-	-	-		
	SPF	SS	10 - 1	15 - 7	20-0†	9 - 9	15 - 1	19 - 8	9 - 6	14 - 8	19 - 1	9 - 0	13 - 10	18 - 0	8 - 6	13 - 2	17 - 1	
	SPF	No.1	9 - 10	15 - 2	19 - 9	9 - 6	14 - 9	19 - 2	9 - 3	14 - 4	18 - 7	8 - 9	13 - 6	17 - 7	8 - 4	12 - 10	16 - 8	
	SPF	No.2	9 - 10	15 - 2	19 - 9	9 - 6	14 - 9	19 - 2	9 - 3	14 - 4	18 - 7	8 - 9	13 - 6	17 - 7	8 - 4	12 - 10	16 - 8	
	SPF	No.3/Stud	9 - 4	14 - 1	17 - 4	9 - 0	13 - 5	16 - 7	8 - 9	12 - 10	15 - 10	8 - 3	11 - 9	14 - 6	-	10 - 10	13 - 5	
	SPF	Standard	8 - 5	-	-	8 - 0	-	-	-	-	-	-	-	-	-	-		

See Table 3.20B footnotes.

**Table 3.20B5 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/240 (Cont.)**

**Exposure C  
H/240  
3/8" WSP**

(Fully Sheathed with a Minimum of 3/8" Wood Structural Panels)<sup>a</sup>

700-yr. Wind Speed 3-second gust (mph)			150			160			170			180			195		
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8
			Maximum Allowable Stud Length (ft.-in.) <sup>1</sup>														
12	DFL	SS	11-3	17-4	20-0†	10-9	16-7	20-0†	10-3	15-11	20-0†	9-11	15-3	19-10	9-4	14-5	18-9
	DFL	No.1	10-9	16-8	20-0†	10-4	16-0	20-0†	9-11	15-4	19-11	9-6	14-8	19-1	9-0	13-11	18-1
	DFL	No.2	10-7	16-4	20-0†	10-1	15-7	20-0†	9-8	15-0	19-6	9-4	14-5	18-9	8-10	13-7	17-8
	DFL	No.3/Stud	10-1	15-0	18-6	9-8	14-0	17-4	9-3	13-1	16-2	8-8	12-4	15-3	8-0	11-4	14-0
	DFL	Standard	8-11	-	-	8-4	-	-	7-10	-	-	-	-	-	-	-	-
	HF	SS	10-7	16-4	20-0†	10-1	15-7	20-0†	9-8	15-0	19-6	9-4	14-5	18-9	8-10	13-7	17-8
	HF	No.1	10-4	16-0	20-0†	9-10	15-3	19-10	9-6	14-8	19-0	9-1	14-1	18-4	8-7	13-4	17-4
	HF	No.2	9-10	15-2	19-9	9-5	14-6	18-11	9-0	13-11	18-1	8-8	13-5	17-5	8-2	12-8	16-5
	HF	No.3/Stud	9-7	14-7	18-1	9-2	13-8	16-10	8-9	12-9	15-9	8-5	12-0	14-10	7-9	11-0	13-8
	HF	Standard	8-9	-	-	8-2	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	11-0	17-0	20-0†	10-6	16-3	20-0†	10-1	15-7	20-0†	9-8	15-0	19-6	9-2	14-2	18-5
	SP	No.1	10-7	16-4	20-0†	10-1	15-7	20-0†	9-8	15-0	19-6	9-4	14-5	18-9	8-10	13-7	17-8
	SP	No.2	10-1	15-7	20-0†	9-8	14-11	19-5	9-3	14-3	18-7	8-11	13-9	17-10	8-5	13-0	16-11
	SP	No.3	9-6	13-8	16-10	8-11	12-9	15-8	8-4	12-0	14-8	7-10	11-3	13-10	-	10-4	12-8
	SP	Stud	9-6	13-8	16-10	8-11	12-9	15-8	8-4	12-0	14-8	7-10	11-3	13-10	-	10-4	12-8
	SP	Standard	8-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	10-4	16-0	20-0†	9-10	15-3	19-10	9-6	14-8	19-0	9-1	14-1	18-4	8-7	13-4	17-4
	SPF	No.1	10-1	15-7	20-0†	9-8	14-11	19-5	9-3	14-3	18-7	8-11	13-9	17-10	8-5	13-0	16-11
	SPF	No.2	10-1	15-7	20-0†	9-8	14-11	19-5	9-3	14-3	18-7	8-11	13-9	17-10	8-5	13-0	16-11
	SPF	No.3/Stud	9-7	14-7	18-1	9-2	13-8	16-10	8-9	12-9	15-9	8-5	12-0	14-10	7-9	11-0	13-8
SPF	Standard	8-9	-	-	8-2	-	-	-	-	-	-	-	-	-	-	-	
16	DFL	SS	10-2	15-8	20-0†	9-8	15-0	19-6	9-4	14-5	18-8	8-11	13-10	18-0	8-5	13-1	17-0
	DFL	No.1	9-9	15-1	19-8	9-4	14-5	18-9	8-11	13-10	18-0	8-7	13-3	17-3	8-2	12-7	16-4
	DFL	No.2	9-7	14-9	19-3	9-2	14-2	18-4	8-9	13-7	17-7	8-5	13-0	16-11	8-0	12-4	16-0
	DFL	No.3/Stud	9-1	12-10	15-11	8-5	12-0	14-10	7-11	11-3	13-11	-	10-7	13-1	-	9-8	12-0
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	9-7	14-9	19-3	9-2	14-2	18-4	8-9	13-7	17-7	8-5	13-0	16-11	8-0	12-4	16-0
	HF	No.1	9-4	14-5	18-9	8-11	13-10	18-0	8-7	13-3	17-3	8-3	12-9	16-7	7-9	12-0	15-8
	HF	No.2	8-11	13-9	17-10	8-6	13-2	17-1	8-2	12-7	16-5	7-10	12-1	15-9	-	11-5	14-11
	HF	No.3/Stud	8-8	12-6	15-6	8-3	11-8	14-5	-	10-11	13-6	-	10-4	12-9	-	9-5	11-8
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	10-0	15-5	20-0†	9-6	14-9	19-2	9-1	14-1	18-4	8-9	13-7	17-8	8-4	12-10	16-8
	SP	No.1	9-7	14-9	19-3	9-2	14-2	18-4	8-9	13-7	17-7	8-5	13-0	16-11	8-0	12-4	16-0
	SP	No.2	9-1	14-1	18-4	8-9	13-6	17-6	8-4	12-11	16-10	8-0	12-5	16-1	-	11-9	14-9
	SP	No.3	8-2	11-9	14-5	-	10-11	13-5	-	10-3	12-7	-	9-8	11-10	-	8-10	10-11
	SP	Stud	8-2	11-9	14-5	-	10-11	13-5	-	10-3	12-7	-	9-8	11-10	-	8-10	10-11
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	9-4	14-5	18-9	8-11	13-10	18-0	8-7	13-3	17-3	8-3	12-9	16-7	7-9	12-0	15-8
	SPF	No.1	9-1	14-1	18-4	8-9	13-6	17-6	8-4	12-11	16-10	8-0	12-5	16-2	-	11-9	15-3
	SPF	No.2	9-1	14-1	18-4	8-9	13-6	17-6	8-4	12-11	16-10	8-0	12-5	16-2	-	11-9	15-3
	SPF	No.3/Stud	8-8	12-6	15-6	8-3	11-8	14-5	-	10-11	13-6	-	10-4	12-9	-	9-5	11-8
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
24	DFL	SS	8-10	13-7	17-9	8-5	13-0	16-11	8-1	12-6	16-3	7-9	12-0	15-7	-	11-4	14-9
	DFL	No.1	8-6	13-1	17-0	8-1	12-6	16-3	7-9	12-0	15-7	-	11-6	14-10	-	10-11	13-8
	DFL	No.2	8-4	12-10	16-8	7-11	12-3	15-11	-	11-9	14-11	-	11-4	14-0	-	10-5	12-11
	DFL	No.3/Stud	-	10-4	12-9	-	9-8	11-11	-	9-1	11-2	-	8-6	10-6	-	7-10	9-8
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	8-4	12-10	16-8	7-11	12-3	15-11	-	11-9	15-3	-	11-4	14-8	-	10-8	13-11
	HF	No.1	8-1	12-7	16-4	7-9	12-0	15-7	-	11-6	14-11	-	11-1	14-4	-	10-5	13-5
	HF	No.2	-	11-11	15-6	-	11-5	14-10	-	10-11	14-3	-	10-6	13-7	-	9-11	12-6
	HF	No.3/Stud	-	10-1	12-5	-	9-5	11-7	-	8-10	10-11	-	8-4	10-3	-	-	9-5
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	8-8	13-4	17-5	8-3	12-9	16-7	7-11	12-3	15-11	-	11-9	15-4	-	11-2	14-6
	SP	No.1	8-4	12-10	16-8	7-11	12-3	15-11	-	11-9	15-3	-	11-4	14-8	-	10-8	13-11
	SP	No.2	7-11	12-3	15-8	-	11-8	14-8	-	11-1	13-9	-	10-5	12-11	-	9-7	11-10
	SP	No.3	-	9-5	11-7	-	8-10	10-10	-	8-3	10-2	-	7-9	9-6	-	-	8-9
	SP	Stud	-	9-5	11-7	-	8-10	10-10	-	8-3	10-2	-	7-9	9-6	-	-	8-9
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	8-1	12-7	16-4	7-9	12-0	15-7	-	11-6	14-11	-	11-1	14-4	-	10-5	13-7
	SPF	No.1	7-11	12-3	15-11	-	11-8	15-3	-	11-3	14-7	-	10-9	13-10	-	10-2	12-8
	SPF	No.2	7-11	12-3	15-11	-	11-8	15-3	-	11-3	14-7	-	10-9	13-10	-	10-2	12-8
	SPF	No.3/Stud	-	10-1	12-5	-	9-5	11-7	-	8-10	10-11	-	8-4	10-3	-	-	9-5
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

See Table 3.20B footnotes.

**Table 3.20B6 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/360**

(Fully Sheathed with a Minimum of 3/8" Wood Structural Panels)<sup>a</sup>

**Exposure C  
H/360  
3/8" WSP**

700-yr. Wind Speed 3-second gust (mph)			110			115			120			130			140			
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	
			Maximum Allowable Stud Length (ft-in.) <sup>1</sup>															
12	DFL	SS	12-1	18-8	20-0†	11-9	18-2	20-0†	11-5	17-7	20-0†	10-9	16-8	20-0†	10-3	15-10	20-0†	
	DFL	No.1	11-8	18-0	20-0†	11-3	17-5	20-0†	10-11	16-11	20-0†	10-4	16-0	20-0†	9-10	15-2	19-9	
	DFL	No.2	11-5	17-7	20-0†	11-0	17-1	20-0†	10-9	16-7	20-0†	10-2	15-8	20-0†	9-7	14-11	19-4	
	DFL	No.3/Stud	10-10	16-10	20-0†	10-6	16-4	20-0†	10-3	15-10	20-0†	9-8	15-0	19-5	9-2	14-2	18-6	
	DFL	Standard	10-10	-	-	10-6	-	-	10-3	-	-	9-8	-	-	9-2	-	-	
	HF	SS	11-5	17-7	20-0†	11-0	17-1	20-0†	10-9	16-7	20-0†	10-2	15-8	20-0†	9-7	14-11	19-4	
	HF	No.1	11-2	17-3	20-0†	10-9	16-8	20-0†	10-6	16-2	20-0†	9-11	15-4	19-11	9-5	14-7	18-11	
	HF	No.2	10-7	16-5	20-0†	10-3	15-11	20-0†	10-0	15-5	20-0†	9-5	14-7	19-0	9-0	13-10	18-0	
	HF	No.3/Stud	10-4	15-11	20-0†	10-0	15-5	20-0†	9-8	15-0	19-6	9-2	14-2	18-5	8-8	13-6	17-6	
	HF	Standard	10-4	-	-	10-0	-	-	9-8	-	-	9-2	-	-	8-8	-	-	
	SP	SS	11-10	18-4	20-0†	11-6	17-10	20-0†	11-2	17-3	20-0†	10-7	16-4	20-0†	10-0	15-6	20-0†	
	SP	No.1	11-5	17-7	20-0†	11-0	17-1	20-0†	10-9	16-7	20-0†	10-2	15-8	20-0†	9-7	14-11	19-4	
	SP	No.2	10-10	16-10	20-0†	10-6	16-4	20-0†	10-3	15-10	20-0†	9-8	15-0	19-5	9-2	14-2	18-6	
	SP	No.3	10-7	16-5	20-0†	10-3	15-11	20-0†	10-0	15-5	20-0†	9-5	14-7	19-0	9-0	13-10	18-0	
	SP	Stud	10-7	16-5	20-0†	10-3	15-11	20-0†	10-0	15-5	20-0†	9-5	14-7	19-0	9-0	13-10	18-0	
	SP	Standard	10-4	-	-	10-0	-	-	9-8	-	-	9-2	-	-	8-8	-	-	
	SPF	SS	11-2	17-3	20-0†	10-9	16-8	20-0†	10-6	16-2	20-0†	9-11	15-4	19-11	9-5	14-7	18-11	
	SPF	No.1	10-10	16-10	20-0†	10-6	16-4	20-0†	10-3	15-10	20-0†	9-8	15-0	19-5	9-2	14-2	18-6	
	SPF	No.2	10-10	16-10	20-0†	10-6	16-4	20-0†	10-3	15-10	20-0†	9-8	15-0	19-5	9-2	14-2	18-6	
	SPF	No.3/Stud	10-4	15-11	20-0†	10-0	15-5	20-0†	9-8	15-0	19-6	9-2	14-2	18-5	8-8	13-6	17-6	
	SPF	Standard	10-4	-	-	10-0	-	-	9-8	-	-	9-2	-	-	8-8	-	-	
	16	DFL	SS	10-11	16-11	20-0†	10-7	16-5	20-0†	10-3	15-11	20-0†	9-9	15-1	19-7	9-3	14-4	18-7
		DFL	No.1	10-6	16-3	20-0†	10-2	15-9	20-0†	9-11	15-4	19-11	9-4	14-6	18-10	8-11	13-9	17-11
		DFL	No.2	10-4	15-11	20-0†	10-0	15-5	20-0†	9-8	15-0	19-6	9-2	14-2	18-5	8-8	13-6	17-6
DFL		No.3/Stud	9-10	15-2	19-9	9-6	14-9	19-2	9-3	14-4	18-7	8-9	13-6	17-7	8-4	12-10	16-8	
DFL		Standard	9-10	-	-	9-6	-	-	9-3	-	-	8-9	-	-	8-3	-	-	
HF		SS	10-4	15-11	20-0†	10-0	15-5	20-0†	9-8	15-0	19-6	9-2	14-2	18-5	8-8	13-6	17-6	
HF		No.1	10-1	15-7	20-0†	9-9	15-1	19-8	9-6	14-8	19-1	9-0	13-10	18-0	8-6	13-2	17-1	
HF		No.2	9-7	14-10	19-3	9-3	14-4	18-8	9-0	13-11	18-2	8-6	13-2	17-2	8-1	12-6	16-3	
HF		No.3/Stud	9-4	14-5	18-9	9-0	14-0	18-2	8-9	13-7	17-8	8-4	12-10	16-8	7-11	12-2	15-10	
HF		Standard	9-4	-	-	9-0	-	-	8-9	-	-	8-4	-	-	7-11	-	-	
SP		SS	10-9	16-7	20-0†	10-5	16-1	20-0†	10-1	15-7	20-0†	9-7	14-9	19-3	9-1	14-0	18-3	
SP		No.1	10-4	15-11	20-0†	10-0	15-5	20-0†	9-8	15-0	19-6	9-2	14-2	18-5	8-8	13-6	17-6	
SP		No.2	9-10	15-2	19-9	9-6	14-9	19-2	9-3	14-4	18-7	8-9	13-6	17-7	8-4	12-10	16-8	
SP		No.3	9-7	14-10	19-3	9-3	14-4	18-8	9-0	13-11	18-2	8-6	13-2	16-10	8-1	12-6	15-6	
SP		Stud	9-7	14-10	19-3	9-3	14-4	18-8	9-0	13-11	18-2	8-6	13-2	16-10	8-1	12-6	15-6	
SP		Standard	9-4	-	-	9-0	-	-	8-9	-	-	8-1	-	-	-	-	-	
SPF		SS	10-1	15-7	20-0†	9-9	15-1	19-8	9-6	14-8	19-1	9-0	13-10	18-0	8-6	13-2	17-1	
SPF		No.1	9-10	15-2	19-9	9-6	14-9	19-2	9-3	14-4	18-7	8-9	13-6	17-7	8-4	12-10	16-8	
SPF		No.2	9-10	15-2	19-9	9-6	14-9	19-2	9-3	14-4	18-7	8-9	13-6	17-7	8-4	12-10	16-8	
SPF		No.3/Stud	9-4	14-5	18-9	9-0	14-0	18-2	8-9	13-7	17-8	8-4	12-10	16-8	7-11	12-2	15-10	
SPF		Standard	9-4	-	-	9-0	-	-	8-9	-	-	8-4	-	-	7-11	-	-	
24		DFL	SS	9-6	14-8	19-1	9-2	14-3	18-6	8-11	13-10	18-0	8-5	13-1	17-0	8-0	12-5	16-2
		DFL	No.1	9-2	14-1	18-4	8-10	13-8	17-10	8-7	13-3	17-3	8-2	12-7	16-4	-	11-11	15-6
		DFL	No.2	8-11	13-10	18-0	8-8	13-5	17-5	8-5	13-0	16-11	8-0	12-4	16-0	-	11-8	15-2
	DFL	No.3/Stud	8-6	13-2	17-2	8-3	12-10	16-8	8-0	12-5	16-2	-	11-9	14-11	-	11-2	13-9	
	DFL	Standard	8-6	-	-	8-2	-	-	7-10	-	-	-	-	-	-	-	-	
	HF	SS	8-11	13-10	18-0	8-8	13-5	17-5	8-5	13-0	16-11	8-0	12-4	16-0	-	11-8	15-2	
	HF	No.1	8-9	13-6	17-7	8-6	13-1	17-1	8-3	12-9	16-7	7-9	12-0	15-8	-	11-5	14-10	
	HF	No.2	8-4	12-10	16-9	8-1	12-6	16-3	7-10	12-1	15-9	-	11-5	14-11	-	10-10	14-2	
	HF	No.3/Stud	8-1	12-6	16-3	7-10	12-1	15-9	-	11-9	15-4	-	11-2	14-6	-	10-7	13-5	
	HF	Standard	8-1	-	-	7-10	-	-	-	-	-	-	-	-	-	-	-	
	SP	SS	9-4	14-5	18-9	9-0	14-0	18-2	8-9	13-7	17-8	8-4	12-10	16-8	7-11	12-2	15-10	
	SP	No.1	8-11	13-10	18-0	8-8	13-5	17-5	8-5	13-0	16-11	8-0	12-4	16-0	-	11-8	15-2	
	SP	No.2	8-6	13-2	17-2	8-3	12-10	16-8	8-0	12-5	16-2	-	11-9	15-3	-	11-2	14-6	
	SP	No.3	8-4	12-10	16-2	8-1	12-6	15-5	7-10	12-0	14-9	-	11-0	13-6	-	10-2	12-6	
	SP	Stud	8-4	12-10	16-2	8-1	12-6	15-5	7-10	12-0	14-9	-	11-0	13-6	-	10-2	12-6	
	SP	Standard	8-9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPF	SS	8-9	13-6	17-7	8-6	13-1	17-1	8-3	12-9	16-7	7-9	12-0	15-8	-	11-5	14-10	
	SPF	No.1	8-6	13-2	17-2	8-3	12-10	16-8	8-0	12-5	16-2	-	11-9	15-3	-	11-2	14-6	
	SPF	No.2	8-6	13-2	17-2	8-3	12-10	16-8	8-0	12-5	16-2	-	11-9	15-3	-	11-2	14-6	
	SPF	No.3/Stud	8-1	12-6	16-3	7-10	12-1	15-9	-	11-9	15-4	-	11-2	14-6	-	10-7	13-5	
	SPF	Standard	8-1	-	-	7-10	-	-	-	-	-	-	-	-	-	-	-	

See Table 3.20B footnotes.

**Table 3.20B6 Maximum Exterior Loadbearing<sup>1</sup> and Non-Loadbearing Stud Lengths for Common Lumber Species Resisting Interior Zone Wind Loads - Stud Deflection Limit = H/360 (Cont.)**  
(Fully Sheathed with a Minimum of 3/8" Wood Structural Panels)<sup>a</sup>

**Exposure C  
H/360  
3/8" WSP**

700-yr. Wind Speed 3-second gust (mph)			150			160			170			180			195		
Stud Spacing (in.)	Species	Grade	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8	2x4	2x6	2x8
			Maximum Allowable Stud Length (ft.-in.) <sup>1</sup>														
12	DFL	SS	9-9	15-1	19-7	9-4	14-5	18-9	8-11	13-10	17-11	8-7	13-3	17-3	8-1	12-6	16-4
	DFL	No.1	9-4	14-6	18-10	9-0	13-10	18-0	8-7	13-3	17-3	8-3	12-9	16-7	7-10	12-1	15-8
	DFL	No.2	9-2	14-2	18-5	8-9	13-7	17-8	8-5	13-0	16-11	8-1	12-6	16-3	-	11-10	15-4
	DFL	No.3/Stud	8-9	13-6	17-7	8-4	12-11	16-10	8-0	12-5	16-2	-	11-11	15-3	-	11-3	14-0
	DFL	Standard	8-9	-	-	8-4	-	-	7-10	-	-	-	-	-	-	-	-
	HF	SS	9-2	14-2	18-5	8-9	13-7	17-8	8-5	13-0	16-11	8-1	12-6	16-3	-	11-10	15-4
	HF	No.1	9-0	13-10	18-0	8-7	13-3	17-3	8-3	12-8	16-6	7-11	12-3	15-11	-	11-7	15-0
	HF	No.2	8-6	13-2	17-2	8-2	12-7	16-5	7-10	12-1	15-9	-	11-7	15-1	-	11-0	14-3
	HF	No.3/Stud	8-4	12-10	16-8	7-11	12-3	15-11	-	11-9	15-3	-	11-4	14-8	-	10-8	13-8
	HF	Standard	8-4	-	-	7-11	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	9-7	14-9	19-3	9-2	14-2	18-4	8-9	13-7	17-7	8-5	13-0	16-11	8-0	12-4	16-0
	SP	No.1	9-2	14-2	18-5	8-9	13-7	17-8	8-5	13-0	16-11	8-1	12-6	16-3	-	11-10	15-4
	SP	No.2	8-9	13-6	17-7	8-4	12-11	16-10	8-0	12-5	16-2	-	11-11	15-6	-	11-3	14-8
	SP	No.3	8-6	13-2	16-10	8-2	12-7	15-8	7-10	12-0	14-8	-	11-3	13-10	-	10-4	12-8
	SP	Stud	8-6	13-2	16-10	8-2	12-7	15-8	7-10	12-0	14-8	-	11-3	13-10	-	10-4	12-8
	SP	Standard	8-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	9-0	13-10	18-0	8-7	13-3	17-3	8-3	12-8	16-6	7-11	12-3	15-11	-	11-7	15-0
	SPF	No.1	8-9	13-6	17-7	8-4	12-11	16-10	8-0	12-5	16-2	-	11-11	15-6	-	11-3	14-8
	SPF	No.2	8-9	13-6	17-7	8-4	12-11	16-10	8-0	12-5	16-2	-	11-11	15-6	-	11-3	14-8
	SPF	No.3/Stud	8-4	12-10	16-8	7-11	12-3	15-11	-	11-9	15-3	-	11-4	14-8	-	10-8	13-8
SPF	Standard	8-4	-	-	7-11	-	-	-	-	-	-	-	-	-	-	-	
16	DFL	SS	8-10	13-7	17-9	8-5	13-0	16-11	8-1	12-6	16-3	7-9	12-0	15-7	-	11-4	14-9
	DFL	No.1	8-6	13-1	17-0	8-1	12-6	16-3	7-9	12-0	15-7	-	11-6	15-0	-	10-11	14-2
	DFL	No.2	8-4	12-10	16-8	7-11	12-3	15-11	-	11-9	15-3	-	11-4	14-8	-	10-8	13-11
	DFL	No.3/Stud	7-11	12-3	15-11	-	11-8	14-10	-	11-3	13-11	-	10-7	13-1	-	9-8	12-0
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	8-4	12-10	16-8	7-11	12-3	15-11	-	11-9	15-3	-	11-4	14-8	-	10-8	13-11
	HF	No.1	8-1	12-7	16-4	7-9	12-0	15-7	-	11-6	14-11	-	11-1	14-4	-	10-5	13-7
	HF	No.2	-	11-11	15-6	-	11-5	14-10	-	10-11	14-3	-	10-6	13-8	-	9-11	12-11
	HF	No.3/Stud	-	11-7	15-1	-	11-1	14-5	-	10-8	13-6	-	10-3	12-9	-	9-5	11-8
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	8-8	13-4	17-5	8-3	12-9	16-7	7-11	12-3	15-11	-	11-9	15-4	-	11-2	14-6
	SP	No.1	8-4	12-10	16-8	7-11	12-3	15-11	-	11-9	15-3	-	11-4	14-8	-	10-8	13-11
	SP	No.2	7-11	12-3	15-11	-	11-8	15-3	-	11-3	14-7	-	10-9	14-0	-	10-2	13-3
	SP	No.3	-	11-9	14-5	-	10-11	13-5	-	10-3	12-7	-	9-8	11-10	-	8-10	10-11
	SP	Stud	-	11-9	14-5	-	10-11	13-5	-	10-3	12-7	-	9-8	11-10	-	8-10	10-11
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	8-1	12-7	16-4	7-9	12-0	15-7	-	11-6	14-11	-	11-1	14-4	-	10-5	13-7
	SPF	No.1	7-11	12-3	15-11	-	11-8	15-3	-	11-3	14-7	-	10-9	14-0	-	10-2	13-3
	SPF	No.2	7-11	12-3	15-11	-	11-8	15-3	-	11-3	14-7	-	10-9	14-0	-	10-2	13-3
	SPF	No.3/Stud	-	11-7	15-1	-	11-1	14-5	-	10-8	13-6	-	10-3	12-9	-	9-5	11-8
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
24	DFL	SS	-	11-10	15-4	-	11-4	14-8	-	10-10	14-1	-	10-5	13-6	-	9-10	12-10
	DFL	No.1	-	11-5	14-9	-	10-10	14-2	-	10-5	13-7	-	10-0	13-0	-	9-6	12-4
	DFL	No.2	-	11-2	14-6	-	10-8	13-10	-	10-2	13-3	-	9-10	12-9	-	9-3	12-1
	DFL	No.3/Stud	-	10-4	12-9	-	9-8	11-11	-	9-1	11-2	-	8-6	10-6	-	7-10	9-8
	DFL	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HF	SS	-	11-2	14-6	-	10-8	13-10	-	10-2	13-3	-	9-10	12-9	-	9-3	12-1
	HF	No.1	-	10-11	14-2	-	10-5	13-6	-	10-0	13-0	-	9-7	12-6	-	9-1	11-9
	HF	No.2	-	10-4	13-6	-	9-11	12-10	-	9-6	12-4	-	9-1	11-10	-	8-8	11-3
	HF	No.3/Stud	-	10-1	12-5	-	9-5	11-7	-	8-10	10-11	-	8-4	10-3	-	-	9-5
	HF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SP	SS	-	11-7	15-1	-	11-1	14-5	-	10-8	13-10	-	10-3	13-3	-	9-8	12-7
	SP	No.1	-	11-2	14-6	-	10-8	13-10	-	10-2	13-3	-	9-10	12-9	-	9-3	12-1
	SP	No.2	-	10-8	13-10	-	10-2	13-3	-	9-9	12-8	-	9-4	12-2	-	8-10	11-6
	SP	No.3	-	9-5	11-7	-	8-10	10-10	-	8-3	10-2	-	7-9	9-6	-	-	8-9
	SP	Stud	-	9-5	11-7	-	8-10	10-10	-	8-3	10-2	-	7-9	9-6	-	-	8-9
	SP	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPF	SS	-	10-11	14-2	-	10-5	13-6	-	10-0	13-0	-	9-7	12-6	-	9-1	11-9
	SPF	No.1	-	10-8	13-10	-	10-2	13-3	-	9-9	12-8	-	9-4	12-2	-	8-10	11-6
	SPF	No.2	-	10-8	13-10	-	10-2	13-3	-	9-9	12-8	-	9-4	12-2	-	8-10	11-6
	SPF	No.3/Stud	-	10-1	12-5	-	9-5	11-7	-	8-10	10-11	-	8-4	10-3	-	-	9-5
SPF	Standard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

See Table 3.20B footnotes.

**Table 3.25A Ceiling Joist Spans for Common Lumber Species** **LL = 10 psf**  
(Uninhabitable Attics Without Storage, Live Load = 10 psf, L/Δ = 240) **L/Δ = 240**  
Dead Load = 5 psf

Joist Spacing (in.)	Species	Grade	Maximum Ceiling Joist Spans <sup>1</sup>			
			2x4	2x6	2x8	2x10
			(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)
12	Douglas Fir-Larch	SS	13 - 2	20 - 8	26 - 0	26 - 0
	Douglas Fir-Larch	No.1	12 - 8	19 - 11	26 - 0	26 - 0
	Douglas Fir-Larch	No.2	12 - 5	19 - 6	25 - 8	26 - 0
	Douglas Fir-Larch	No.3	11 - 1	16 - 3	20 - 7	25 - 2
	Hem-Fir	SS	12 - 5	19 - 6	25 - 8	26 - 0
	Hem-Fir	No.1	12 - 2	19 - 1	25 - 2	26 - 0
	Hem-Fir	No.2	11 - 7	18 - 2	24 - 0	26 - 0
	Hem-Fir	No.3	10 - 10	15 - 10	20 - 1	24 - 6
	Southern Pine	SS	12 - 11	20 - 3	26 - 0	26 - 0
	Southern Pine	No.1	12 - 5	19 - 6	25 - 8	26 - 0
	Southern Pine	No.2	11 - 10	18 - 8	24 - 7	26 - 0
	Southern Pine	No.3	10 - 1	14 - 11	18 - 9	22 - 9
	Spruce-Pine Fir	SS	12 - 2	19 - 1	25 - 2	26 - 0
	Spruce-Pine Fir	No.1	11 - 10	18 - 8	24 - 7	26 - 0
	Spruce-Pine Fir	No.2	11 - 10	18 - 8	24 - 7	26 - 0
	Spruce-Pine Fir	No.3	10 - 10	15 - 10	20 - 1	24 - 6
16	Douglas Fir-Larch	SS	11 - 11	18 - 9	24 - 8	26 - 0
	Douglas Fir-Larch	No.1	11 - 6	18 - 1	23 - 10	26 - 0
	Douglas Fir-Larch	No.2	11 - 3	17 - 8	23 - 4	26 - 0
	Douglas Fir-Larch	No.3	9 - 7	14 - 1	17 - 10	21 - 9
	Hem-Fir	SS	11 - 3	17 - 8	23 - 4	26 - 0
	Hem-Fir	No.1	11 - 0	17 - 4	22 - 10	26 - 0
	Hem-Fir	No.2	10 - 6	16 - 6	21 - 9	26 - 0
	Hem-Fir	No.3	9 - 5	13 - 9	17 - 5	21 - 3
	Southern Pine	SS	11 - 9	18 - 5	24 - 3	26 - 0
	Southern Pine	No.1	11 - 3	17 - 8	23 - 4	26 - 0
	Southern Pine	No.2	10 - 9	16 - 11	21 - 7	25 - 7
	Southern Pine	No.3	8 - 9	12 - 11	16 - 3	19 - 9
	Spruce-Pine Fir	SS	11 - 0	17 - 4	22 - 10	26 - 0
	Spruce-Pine Fir	No.1	10 - 9	16 - 11	22 - 4	26 - 0
	Spruce-Pine Fir	No.2	10 - 9	16 - 11	22 - 4	26 - 0
	Spruce-Pine Fir	No.3	9 - 5	13 - 9	17 - 5	21 - 3
19.2	Douglas Fir-Larch	SS	11 - 3	17 - 8	23 - 3	26 - 0
	Douglas Fir-Larch	No.1	10 - 10	17 - 0	22 - 5	26 - 0
	Douglas Fir-Larch	No.2	10 - 7	16 - 8	21 - 4	26 - 0
	Douglas Fir-Larch	No.3	8 - 9	12 - 10	16 - 3	19 - 10
	Hem-Fir	SS	10 - 7	16 - 8	22 - 0	26 - 0
	Hem-Fir	No.1	10 - 4	16 - 4	21 - 6	26 - 0
	Hem-Fir	No.2	9 - 11	15 - 7	20 - 6	25 - 3
	Hem-Fir	No.3	8 - 7	12 - 6	15 - 10	19 - 5
	Southern Pine	SS	11 - 0	17 - 4	22 - 10	26 - 0
	Southern Pine	No.1	10 - 7	16 - 8	22 - 0	26 - 0
	Southern Pine	No.2	10 - 2	15 - 7	19 - 8	23 - 5
	Southern Pine	No.3	8 - 0	11 - 9	14 - 10	18 - 0
	Spruce-Pine Fir	SS	10 - 4	16 - 4	21 - 6	26 - 0
	Spruce-Pine Fir	No.1	10 - 2	15 - 11	21 - 0	25 - 8
	Spruce-Pine Fir	No.2	10 - 2	15 - 11	21 - 0	25 - 8
	Spruce-Pine Fir	No.3	8 - 7	12 - 6	15 - 10	19 - 5
24	Douglas Fir-Larch	SS	10 - 5	16 - 4	21 - 7	26 - 0
	Douglas Fir-Larch	No.1	10 - 0	15 - 9	20 - 1	24 - 6
	Douglas Fir-Larch	No.2	9 - 10	15 - 0	19 - 1	23 - 3
	Douglas Fir-Larch	No.3	7 - 10	11 - 6	14 - 7	17 - 9
	Hem-Fir	SS	9 - 10	15 - 6	20 - 5	26 - 0
	Hem-Fir	No.1	9 - 8	15 - 2	19 - 10	24 - 3
	Hem-Fir	No.2	9 - 2	14 - 5	18 - 6	22 - 7
	Hem-Fir	No.3	7 - 8	11 - 2	14 - 2	17 - 4
	Southern Pine	SS	10 - 3	16 - 1	21 - 2	26 - 0
	Southern Pine	No.1	9 - 10	15 - 6	20 - 5	24 - 0
	Southern Pine	No.2	9 - 3	13 - 11	17 - 7	20 - 11
	Southern Pine	No.3	7 - 2	10 - 6	13 - 3	16 - 1
	Spruce-Pine Fir	SS	9 - 8	15 - 2	19 - 11	25 - 5
	Spruce-Pine Fir	No.1	9 - 5	14 - 9	18 - 9	22 - 11
	Spruce-Pine Fir	No.2	9 - 5	14 - 9	18 - 9	22 - 11
	Spruce-Pine Fir	No.3	7 - 8	11 - 2	14 - 2	17 - 4

1 Bracing shall be provided in accordance with 3.3.1.4.

NOTE: Spans are limited to 26 feet in length. Check sources for availability of lumber in lengths greater than 20 feet.

**Table 3.25B Ceiling Joist Spans for Common Lumber Species** **LL = 20 psf**  
 (Uninhabitable Attics With Storage, Live Load = 20 psf, L/Δ = 240) **L/Δ = 240**  
 Dead Load = 10 psf

Joist Spacing (in.)	Species	Grade	Maximum Ceiling Joist Spans <sup>1</sup>			
			2x4	2x6	2x8	2x10
			(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)
12	Douglas Fir-Larch	SS	10 - 5	16 - 4	21 - 7	26 - 0
	Douglas Fir-Larch	No.1	10 - 0	15 - 9	20 - 1	24 - 6
	Douglas Fir-Larch	No.2	9 - 10	15 - 0	19 - 1	23 - 3
	Douglas Fir-Larch	No.3	7 - 10	11 - 6	14 - 7	17 - 9
	Hem-Fir	SS	9 - 10	15 - 6	20 - 5	26 - 0
	Hem-Fir	No.1	9 - 8	15 - 2	19 - 10	24 - 3
	Hem-Fir	No.2	9 - 2	14 - 5	18 - 6	22 - 7
	Hem-Fir	No.3	7 - 8	11 - 2	14 - 2	17 - 4
	Southern Pine	SS	10 - 3	16 - 1	21 - 2	26 - 0
	Southern Pine	No.1	9 - 10	15 - 6	20 - 5	24 - 0
	Southern Pine	No.2	9 - 3	13 - 11	17 - 7	20 - 11
	Southern Pine	No.3	7 - 2	10 - 6	13 - 3	16 - 1
	Spruce-Pine Fir	SS	9 - 8	15 - 2	19 - 11	25 - 5
	Spruce-Pine Fir	No.1	9 - 5	14 - 9	18 - 9	22 - 11
	Spruce-Pine Fir	No.2	9 - 5	14 - 9	18 - 9	22 - 11
	Spruce-Pine Fir	No.3	7 - 8	11 - 2	14 - 2	17 - 4
16	Douglas Fir-Larch	SS	9 - 6	14 - 11	19 - 7	25 - 0
	Douglas Fir-Larch	No.1	9 - 1	13 - 9	17 - 5	21 - 3
	Douglas Fir-Larch	No.2	8 - 11	13 - 0	16 - 6	20 - 2
	Douglas Fir-Larch	No.3	6 - 10	9 - 11	12 - 7	15 - 5
	Hem-Fir	SS	8 - 11	14 - 1	18 - 6	23 - 8
	Hem-Fir	No.1	8 - 9	13 - 7	17 - 2	21 - 0
	Hem-Fir	No.2	8 - 4	12 - 8	16 - 0	19 - 7
	Hem-Fir	No.3	6 - 8	9 - 8	12 - 4	15 - 0
	Southern Pine	SS	9 - 4	14 - 7	19 - 3	24 - 7
	Southern Pine	No.1	8 - 11	14 - 0	17 - 9	20 - 9
	Southern Pine	No.2	8 - 0	12 - 0	15 - 3	18 - 1
	Southern Pine	No.3	6 - 2	9 - 2	11 - 6	14 - 0
	Spruce-Pine Fir	SS	8 - 9	13 - 9	18 - 2	23 - 1
	Spruce-Pine Fir	No.1	8 - 7	12 - 10	16 - 3	19 - 10
	Spruce-Pine Fir	No.2	8 - 7	12 - 10	16 - 3	19 - 10
	Spruce-Pine Fir	No.3	6 - 8	9 - 8	12 - 4	15 - 0
19.2	Douglas Fir-Larch	SS	8 - 11	14 - 0	18 - 5	23 - 7
	Douglas Fir-Larch	No.1	8 - 7	12 - 6	15 - 10	19 - 5
	Douglas Fir-Larch	No.2	8 - 2	11 - 11	15 - 1	18 - 5
	Douglas Fir-Larch	No.3	6 - 2	9 - 1	11 - 6	14 - 1
	Hem-Fir	SS	8 - 5	13 - 3	17 - 5	22 - 3
	Hem-Fir	No.1	8 - 3	12 - 4	15 - 8	19 - 2
	Hem-Fir	No.2	7 - 10	11 - 7	14 - 8	17 - 10
	Hem-Fir	No.3	6 - 1	8 - 10	11 - 3	13 - 8
	Southern Pine	SS	8 - 9	13 - 9	18 - 2	23 - 1
	Southern Pine	No.1	8 - 5	12 - 9	16 - 2	18 - 11
	Southern Pine	No.2	7 - 4	11 - 0	13 - 11	16 - 6
	Southern Pine	No.3	5 - 8	8 - 4	10 - 6	12 - 9
	Spruce-Pine Fir	SS	8 - 3	12 - 11	17 - 1	21 - 8
	Spruce-Pine Fir	No.1	8 - 0	11 - 9	14 - 10	18 - 2
	Spruce-Pine Fir	No.2	8 - 0	11 - 9	14 - 10	18 - 2
	Spruce-Pine Fir	No.3	6 - 1	8 - 10	11 - 3	13 - 8
24	Douglas Fir-Larch	SS	8 - 3	13 - 0	17 - 2	21 - 3
	Douglas Fir-Larch	No.1	7 - 8	11 - 2	14 - 2	17 - 4
	Douglas Fir-Larch	No.2	7 - 3	10 - 8	13 - 6	16 - 5
	Douglas Fir-Larch	No.3	5 - 7	8 - 1	10 - 3	12 - 7
	Hem-Fir	SS	7 - 10	12 - 3	16 - 2	20 - 6
	Hem-Fir	No.1	7 - 7	11 - 1	14 - 0	17 - 1
	Hem-Fir	No.2	7 - 1	10 - 4	13 - 1	16 - 0
	Hem-Fir	No.3	5 - 5	7 - 11	10 - 0	12 - 3
	Southern Pine	SS	8 - 1	12 - 9	16 - 10	21 - 6
	Southern Pine	No.1	7 - 8	11 - 5	14 - 6	16 - 11
	Southern Pine	No.2	6 - 7	9 - 10	12 - 6	14 - 9
	Southern Pine	No.3	5 - 1	7 - 5	9 - 5	11 - 5
	Spruce-Pine Fir	SS	7 - 8	12 - 0	15 - 10	19 - 5
	Spruce-Pine Fir	No.1	7 - 2	10 - 6	13 - 3	16 - 3
	Spruce-Pine Fir	No.2	7 - 2	10 - 6	13 - 3	16 - 3
	Spruce-Pine Fir	No.3	5 - 5	7 - 11	10 - 0	12 - 3

<sup>1</sup> Bracing shall be provided in accordance with 3.3.1.4.

NOTE: Spans are limited to 26 feet in length. Check sources for availability of lumber in lengths greater than 20 feet.

**Table 3.26A Rafter Spans for Common Lumber Species**

(Ceiling Not Attached to Rafters, Live Load = 20 psf, L/Δ = 180)

**LL = 20 psf**  
**L/Δ = 180**

Joist Spacing (in.)	Species	Grade	Dead Load = 10 psf					Dead Load = 20 psf				
			2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
			Maximum Rafter Spans <sup>1,2,3</sup>									
			(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Douglas Fir-Larch	SS	11 - 6	18 - 0	23 - 9	26-0†	26-0†	11 - 6	18 - 0	23 - 9	26-0†	26-0†
	Douglas Fir-Larch	No.1	11 - 1	17 - 4	22 - 5	26-0†	26-0†	10 - 6	15 - 4	19 - 5	23 - 9	26-0†
	Douglas Fir-Larch	No.2	10 - 10	16 - 10	21 - 4	26-0†	26-0†	10 - 0	14 - 7	18 - 5	22 - 6	26-0†
	Douglas Fir-Larch	No.3	8 - 9	12 - 10	16 - 3	19 - 10	23 - 0	7 - 7	11 - 1	14 - 1	17 - 2	19 - 11
	Hem-Fir	SS	10 - 10	17 - 0	22 - 5	26-0†	26-0†	10 - 10	17 - 0	22 - 5	26-0†	26-0†
	Hem-Fir	No.1	10 - 7	16 - 8	22 - 0	26-0†	26-0†	10 - 4	15 - 2	19 - 2	23 - 5	26-0†
	Hem-Fir	No.2	10 - 1	15 - 11	20 - 8	25 - 3	26-0†	9 - 8	14 - 2	17 - 11	21 - 11	25 - 5
	Hem-Fir	No.3	8 - 7	12 - 6	15 - 10	19 - 5	22 - 6	7 - 5	10 - 10	13 - 9	16 - 9	19 - 6
	Southern Pine	SS	11 - 3	17 - 8	23 - 4	26-0†	26-0†	11 - 3	17 - 8	23 - 4	26-0†	26-0†
	Southern Pine	No.1	10 - 10	17 - 0	22 - 5	26-0†	26-0†	10 - 6	15 - 8	19 - 10	23 - 2	26-0†
	Southern Pine	No.2	10 - 4	15 - 7	19 - 8	23 - 5	26-0†	9 - 0	13 - 6	17 - 1	20 - 3	23 - 10
	Southern Pine	No.3	8 - 0	11 - 9	14 - 10	18 - 0	21 - 4	6 - 11	10 - 2	12 - 10	15 - 7	18 - 6
	Spruce-Pine Fir	SS	10 - 7	16 - 8	22 - 0	26-0†	26-0†	10 - 7	16 - 8	21 - 9	26-0†	26-0†
	Spruce-Pine Fir	No.1	10 - 4	16 - 3	21 - 0	25 - 8	26-0†	9 - 10	14 - 4	18 - 2	22 - 3	25 - 9
Spruce-Pine Fir	No.2	10 - 4	16 - 3	21 - 0	25 - 8	26-0†	9 - 10	14 - 4	18 - 2	22 - 3	25 - 9	
Spruce-Pine Fir	No.3	8 - 7	12 - 6	15 - 10	19 - 5	22 - 6	7 - 5	10 - 10	13 - 9	16 - 9	19 - 6	
16	Douglas Fir-Larch	SS	10 - 5	16 - 4	21 - 7	26-0†	26-0†	10 - 5	16 - 3	20 - 7	25 - 2	26-0†
	Douglas Fir-Larch	No.1	10 - 0	15 - 4	19 - 5	23 - 9	26-0†	9 - 1	13 - 3	16 - 10	20 - 7	23 - 10
	Douglas Fir-Larch	No.2	9 - 10	14 - 7	18 - 5	22 - 6	26-0†	8 - 7	12 - 7	16 - 0	19 - 6	22 - 7
	Douglas Fir-Larch	No.3	7 - 7	11 - 1	14 - 1	17 - 2	19 - 11	6 - 7	9 - 8	12 - 2	14 - 11	17 - 3
	Hem-Fir	SS	9 - 10	15 - 6	20 - 5	26-0†	26-0†	9 - 10	15 - 6	19 - 11	24 - 4	26-0†
	Hem-Fir	No.1	9 - 8	15 - 2	19 - 2	23 - 5	26-0†	9 - 0	13 - 1	16 - 7	20 - 4	23 - 7
	Hem-Fir	No.2	9 - 2	14 - 2	17 - 11	21 - 11	25 - 5	8 - 5	12 - 3	15 - 6	19 - 0	22 - 0
	Hem-Fir	No.3	7 - 5	10 - 10	13 - 9	16 - 9	19 - 6	6 - 5	9 - 5	11 - 11	14 - 6	16 - 10
	Southern Pine	SS	10 - 3	16 - 1	21 - 2	26-0†	26-0†	10 - 3	16 - 1	21 - 2	25 - 7	26-0†
	Southern Pine	No.1	9 - 10	15 - 6	19 - 10	23 - 2	26-0†	9 - 1	13 - 7	17 - 2	20 - 1	23 - 10
	Southern Pine	No.2	9 - 0	13 - 6	17 - 1	20 - 3	23 - 10	7 - 9	11 - 8	14 - 9	17 - 6	20 - 8
	Southern Pine	No.3	6 - 11	10 - 2	12 - 10	15 - 7	18 - 6	6 - 0	8 - 10	11 - 2	13 - 6	16 - 0
	Spruce-Pine Fir	SS	9 - 8	15 - 2	19 - 11	25 - 5	26-0†	9 - 8	14 - 10	18 - 10	23 - 0	26-0†
	Spruce-Pine Fir	No.1	9 - 5	14 - 4	18 - 2	22 - 3	25 - 9	8 - 6	12 - 5	15 - 9	19 - 3	22 - 4
Spruce-Pine Fir	No.2	9 - 5	14 - 4	18 - 2	22 - 3	25 - 9	8 - 6	12 - 5	15 - 9	19 - 3	22 - 4	
Spruce-Pine Fir	No.3	7 - 5	10 - 10	13 - 9	16 - 9	19 - 6	6 - 5	9 - 5	11 - 11	14 - 6	16 - 10	
19.2	Douglas Fir-Larch	SS	9 - 10	15 - 5	20 - 4	25 - 11	26-0†	9 - 10	14 - 10	18 - 10	23 - 0	26-0†
	Douglas Fir-Larch	No.1	9 - 5	14 - 0	17 - 9	21 - 8	25 - 2	8 - 4	12 - 2	15 - 4	18 - 9	21 - 9
	Douglas Fir-Larch	No.2	9 - 1	13 - 3	16 - 10	20 - 7	23 - 10	7 - 10	11 - 6	14 - 7	17 - 10	20 - 8
	Douglas Fir-Larch	No.3	6 - 11	10 - 2	12 - 10	15 - 8	18 - 3	6 - 0	8 - 9	11 - 2	13 - 7	15 - 9
	Hem-Fir	SS	9 - 3	14 - 7	19 - 2	24 - 6	26-0†	9 - 3	14 - 4	18 - 2	22 - 3	25 - 9
	Hem-Fir	No.1	9 - 1	13 - 10	17 - 6	21 - 5	24 - 10	8 - 2	12 - 0	15 - 2	18 - 6	21 - 6
	Hem-Fir	No.2	8 - 8	12 - 11	16 - 4	20 - 0	23 - 2	7 - 8	11 - 2	14 - 2	17 - 4	20 - 1
	Hem-Fir	No.3	6 - 9	9 - 11	12 - 7	15 - 4	17 - 9	5 - 10	8 - 7	10 - 10	13 - 3	15 - 5
	Southern Pine	SS	9 - 8	15 - 2	19 - 11	25 - 5	26-0†	9 - 8	15 - 2	19 - 7	23 - 4	26-0†
	Southern Pine	No.1	9 - 3	14 - 3	18 - 1	21 - 2	25 - 2	8 - 4	12 - 4	15 - 8	18 - 4	21 - 9
	Southern Pine	No.2	8 - 2	12 - 3	15 - 7	18 - 6	21 - 9	7 - 1	10 - 8	13 - 6	16 - 0	18 - 10
	Southern Pine	No.3	6 - 4	9 - 4	11 - 9	14 - 3	16 - 10	5 - 6	8 - 1	10 - 2	12 - 4	14 - 7
	Spruce-Pine Fir	SS	9 - 1	14 - 3	18 - 9	24 - 0	26-0†	9 - 1	13 - 7	17 - 2	21 - 0	24 - 4
	Spruce-Pine Fir	No.1	8 - 10	13 - 1	16 - 7	20 - 3	23 - 6	7 - 9	11 - 4	14 - 4	17 - 7	20 - 4
Spruce-Pine Fir	No.2	8 - 10	13 - 1	16 - 7	20 - 3	23 - 6	7 - 9	11 - 4	14 - 4	17 - 7	20 - 4	
Spruce-Pine Fir	No.3	6 - 9	9 - 11	12 - 7	15 - 4	17 - 9	5 - 10	8 - 7	10 - 10	13 - 3	15 - 5	
24	Douglas Fir-Larch	SS	9 - 1	14 - 4	18 - 10	23 - 9	26-0†	9 - 1	13 - 3	16 - 10	20 - 7	23 - 10
	Douglas Fir-Larch	No.1	8 - 7	12 - 6	15 - 10	19 - 5	22 - 6	7 - 5	10 - 10	13 - 9	16 - 9	19 - 6
	Douglas Fir-Larch	No.2	8 - 2	11 - 11	15 - 1	18 - 5	21 - 4	7 - 0	10 - 4	13 - 0	15 - 11	18 - 6
	Douglas Fir-Larch	No.3	6 - 2	9 - 1	11 - 6	14 - 1	16 - 3	5 - 4	7 - 10	10 - 0	12 - 2	14 - 1
	Hem-Fir	SS	8 - 7	13 - 6	17 - 10	22 - 9	26-0†	8 - 7	12 - 10	16 - 3	19 - 10	23 - 0
	Hem-Fir	No.1	8 - 5	12 - 4	15 - 8	19 - 2	22 - 2	7 - 4	10 - 9	13 - 7	16 - 7	19 - 3
	Hem-Fir	No.2	7 - 11	11 - 7	14 - 8	17 - 10	20 - 9	6 - 10	10 - 0	12 - 8	15 - 6	17 - 11
	Hem-Fir	No.3	6 - 1	8 - 10	11 - 3	13 - 8	15 - 11	5 - 3	7 - 8	9 - 9	11 - 10	13 - 9
	Southern Pine	SS	8 - 11	14 - 1	18 - 6	23 - 8	26-0†	8 - 11	13 - 10	17 - 6	20 - 10	24 - 8
	Southern Pine	No.1	8 - 7	12 - 9	16 - 2	18 - 11	22 - 6	7 - 5	11 - 1	14 - 0	16 - 5	19 - 6
	Southern Pine	No.2	7 - 4	11 - 0	13 - 11	16 - 6	19 - 6	6 - 4	9 - 6	12 - 1	14 - 4	16 - 10
	Southern Pine	No.3	5 - 8	8 - 4	10 - 6	12 - 9	15 - 1	4 - 11	7 - 3	9 - 1	11 - 0	13 - 1
	Spruce-Pine Fir	SS	8 - 5	13 - 3	17 - 5	21 - 8	25 - 2	8 - 4	12 - 2	15 - 4	18 - 9	21 - 9
	Spruce-Pine Fir	No.1	8 - 0	11 - 9	14 - 10	18 - 2	21 - 0	6 - 11	10 - 2	12 - 10	15 - 8	18 - 3
Spruce-Pine Fir	No.2	8 - 0	11 - 9	14 - 10	18 - 2	21 - 0	6 - 11	10 - 2	12 - 10	15 - 8	18 - 3	
Spruce-Pine Fir	No.3	6 - 1	8 - 10	11 - 3	13 - 8	15 - 11	5 - 3	7 - 8	9 - 9	11 - 10	13 - 9	

† Spans are limited to 26 feet in length.  
See footnotes 1-3.

**Table 3.26B Rafter Spans for Common Lumber Species**

(Ceiling Attached to Rafters, Live Load = 20 psf, L/Δ = 240)

**LL = 20 psf**  
**L/Δ = 240**

Joist Spacing (in.)	Species	Grade	Dead Load = 10 psf					Dead Load = 20 psf				
			2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
			Maximum Rafter Spans <sup>1,2,3</sup>									
			(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Douglas Fir-Larch	SS	10 - 5	16 - 4	21 - 7	26-0†	26-0†	10 - 5	16 - 4	21 - 7	26-0†	26-0†
	Douglas Fir-Larch	No.1	10 - 0	15 - 9	20 - 10	26-0†	26-0†	10 - 0	15 - 4	19 - 5	23 - 9	26-0†
	Douglas Fir-Larch	No.2	9 - 10	15 - 6	20 - 5	26-0†	26-0†	9 - 10	14 - 7	18 - 5	22 - 6	26-0†
	Douglas Fir-Larch	No.3	8 - 9	12 - 10	16 - 3	19 - 10	23 - 0	7 - 7	11 - 1	14 - 1	17 - 2	19 - 11
	Hem-Fir	SS	9 - 10	15 - 6	20 - 5	26-0†	26-0†	9 - 10	15 - 6	20 - 5	26-0†	26-0†
	Hem-Fir	No.1	9 - 8	15 - 2	19 - 11	25 - 5	26-0†	9 - 8	15 - 2	19 - 2	23 - 5	26-0†
	Hem-Fir	No.2	9 - 2	14 - 5	19 - 0	24 - 3	26-0†	9 - 2	14 - 2	17 - 11	21 - 11	25 - 5
	Hem-Fir	No.3	8 - 7	12 - 6	15 - 10	19 - 5	22 - 6	7 - 5	10 - 10	13 - 9	16 - 9	19 - 6
	Southern Pine	SS	10 - 3	16 - 1	21 - 2	26-0†	26-0†	10 - 3	16 - 1	21 - 2	26-0†	26-0†
	Southern Pine	No.1	9 - 10	15 - 6	20 - 5	26-0†	26-0†	9 - 10	15 - 6	19 - 10	23 - 2	26-0†
	Southern Pine	No.2	9 - 5	14 - 9	19 - 6	23 - 5	26-0†	9 - 0	13 - 6	17 - 1	20 - 3	23 - 10
	Southern Pine	No.3	8 - 0	11 - 9	14 - 10	18 - 0	21 - 4	6 - 11	10 - 2	12 - 10	15 - 7	18 - 6
	Spruce-Pine Fir	SS	9 - 8	15 - 2	19 - 11	25 - 5	26-0†	9 - 8	15 - 2	19 - 11	25 - 5	26-0†
	Spruce-Pine Fir	No.1	9 - 5	14 - 9	19 - 6	24 - 10	26-0†	9 - 5	14 - 4	18 - 2	22 - 3	25 - 9
Spruce-Pine Fir	No.2	9 - 5	14 - 9	19 - 6	24 - 10	26-0†	9 - 5	14 - 4	18 - 2	22 - 3	25 - 9	
Spruce-Pine Fir	No.3	8 - 7	12 - 6	15 - 10	19 - 5	22 - 6	7 - 5	10 - 10	13 - 9	16 - 9	19 - 6	
16	Douglas Fir-Larch	SS	9 - 6	14 - 11	19 - 7	25 - 0	26-0†	9 - 6	14 - 11	19 - 7	25 - 0	26-0†
	Douglas Fir-Larch	No.1	9 - 1	14 - 4	18 - 11	23 - 9	26-0†	9 - 1	13 - 3	16 - 10	20 - 7	23 - 10
	Douglas Fir-Larch	No.2	8 - 11	14 - 1	18 - 5	22 - 6	26-0†	8 - 7	12 - 7	16 - 0	19 - 6	22 - 7
	Douglas Fir-Larch	No.3	7 - 7	11 - 1	14 - 1	17 - 2	19 - 11	6 - 7	9 - 8	12 - 2	14 - 11	17 - 3
	Hem-Fir	SS	8 - 11	14 - 1	18 - 6	23 - 8	26-0†	8 - 11	14 - 1	18 - 6	23 - 8	26-0†
	Hem-Fir	No.1	8 - 9	13 - 9	18 - 2	23 - 1	26-0†	8 - 9	13 - 1	16 - 7	20 - 4	23 - 7
	Hem-Fir	No.2	8 - 4	13 - 1	17 - 3	21 - 11	25 - 5	8 - 4	12 - 3	15 - 6	19 - 0	22 - 0
	Hem-Fir	No.3	7 - 5	10 - 10	13 - 9	16 - 9	19 - 6	6 - 5	9 - 5	11 - 11	14 - 6	16 - 10
	Southern Pine	SS	9 - 4	14 - 7	19 - 3	24 - 7	26-0†	9 - 4	14 - 7	19 - 3	24 - 7	26-0†
	Southern Pine	No.1	8 - 11	14 - 1	18 - 6	23 - 2	26-0†	8 - 11	13 - 7	17 - 2	20 - 1	23 - 10
	Southern Pine	No.2	8 - 7	13 - 5	17 - 1	20 - 3	23 - 10	7 - 9	11 - 8	14 - 9	17 - 6	20 - 8
	Southern Pine	No.3	6 - 11	10 - 2	12 - 10	15 - 7	18 - 6	6 - 0	8 - 10	11 - 2	13 - 6	16 - 0
	Spruce-Pine Fir	SS	8 - 9	13 - 9	18 - 2	23 - 1	26-0†	8 - 9	13 - 9	18 - 2	23 - 0	26-0†
	Spruce-Pine Fir	No.1	8 - 7	13 - 5	17 - 9	22 - 3	25 - 9	8 - 6	12 - 5	15 - 9	19 - 3	22 - 4
Spruce-Pine Fir	No.2	8 - 7	13 - 5	17 - 9	22 - 3	25 - 9	8 - 6	12 - 5	15 - 9	19 - 3	22 - 4	
Spruce-Pine Fir	No.3	7 - 5	10 - 10	13 - 9	16 - 9	19 - 6	6 - 5	9 - 5	11 - 11	14 - 6	16 - 10	
19.2	Douglas Fir-Larch	SS	8 - 11	14 - 0	18 - 5	23 - 7	26-0†	8 - 11	14 - 0	18 - 5	23 - 0	26-0†
	Douglas Fir-Larch	No.1	8 - 7	13 - 6	17 - 9	21 - 8	25 - 2	8 - 4	12 - 2	15 - 4	18 - 9	21 - 9
	Douglas Fir-Larch	No.2	8 - 5	13 - 3	16 - 10	20 - 7	23 - 10	7 - 10	11 - 6	14 - 7	17 - 10	20 - 8
	Douglas Fir-Larch	No.3	6 - 11	10 - 2	12 - 10	15 - 8	18 - 3	6 - 0	8 - 9	11 - 2	13 - 7	15 - 9
	Hem-Fir	SS	8 - 5	13 - 3	17 - 5	22 - 3	26-0†	8 - 5	13 - 3	17 - 5	22 - 3	25 - 9
	Hem-Fir	No.1	8 - 3	12 - 11	17 - 1	21 - 5	24 - 10	8 - 2	12 - 0	15 - 2	18 - 6	21 - 6
	Hem-Fir	No.2	7 - 10	12 - 4	16 - 3	20 - 0	23 - 2	7 - 8	11 - 2	14 - 2	17 - 4	20 - 1
	Hem-Fir	No.3	6 - 9	9 - 11	12 - 7	15 - 4	17 - 9	5 - 10	8 - 7	10 - 10	13 - 3	15 - 5
	Southern Pine	SS	8 - 9	13 - 9	18 - 2	23 - 1	26-0†	8 - 9	13 - 9	18 - 2	23 - 1	26-0†
	Southern Pine	No.1	8 - 5	13 - 3	17 - 5	21 - 2	25 - 2	8 - 4	12 - 4	15 - 8	18 - 4	21 - 9
	Southern Pine	No.2	8 - 1	12 - 3	15 - 7	18 - 6	21 - 9	7 - 1	10 - 8	13 - 6	16 - 0	18 - 10
	Southern Pine	No.3	6 - 4	9 - 4	11 - 9	14 - 3	16 - 10	5 - 6	8 - 1	10 - 2	12 - 4	14 - 7
	Spruce-Pine Fir	SS	8 - 3	12 - 11	17 - 1	21 - 9	26-0†	8 - 3	12 - 11	17 - 1	21 - 0	24 - 4
	Spruce-Pine Fir	No.1	8 - 1	12 - 8	16 - 7	20 - 3	23 - 6	7 - 9	11 - 4	14 - 4	17 - 7	20 - 4
Spruce-Pine Fir	No.2	8 - 1	12 - 8	16 - 7	20 - 3	23 - 6	7 - 9	11 - 4	14 - 4	17 - 7	20 - 4	
Spruce-Pine Fir	No.3	6 - 9	9 - 11	12 - 7	15 - 4	17 - 9	5 - 10	8 - 7	10 - 10	13 - 3	15 - 5	
24	Douglas Fir-Larch	SS	8 - 3	13 - 0	17 - 2	21 - 10	26-0†	8 - 3	13 - 0	16 - 10	20 - 7	23 - 10
	Douglas Fir-Larch	No.1	8 - 0	12 - 6	15 - 10	19 - 5	22 - 6	7 - 5	10 - 10	13 - 9	16 - 9	19 - 6
	Douglas Fir-Larch	No.2	7 - 10	11 - 11	15 - 1	18 - 5	21 - 4	7 - 0	10 - 4	13 - 0	15 - 11	18 - 6
	Douglas Fir-Larch	No.3	6 - 2	9 - 1	11 - 6	14 - 1	16 - 3	5 - 4	7 - 10	10 - 0	12 - 2	14 - 1
	Hem-Fir	SS	7 - 10	12 - 3	16 - 2	20 - 8	25 - 1	7 - 10	12 - 3	16 - 2	19 - 10	23 - 0
	Hem-Fir	No.1	7 - 8	12 - 0	15 - 8	19 - 2	22 - 2	7 - 4	10 - 9	13 - 7	16 - 7	19 - 3
	Hem-Fir	No.2	7 - 3	11 - 5	14 - 8	17 - 10	20 - 9	6 - 10	10 - 0	12 - 8	15 - 6	17 - 11
	Hem-Fir	No.3	6 - 1	8 - 10	11 - 3	13 - 8	15 - 11	5 - 3	7 - 8	9 - 9	11 - 10	13 - 9
	Southern Pine	SS	8 - 1	12 - 9	16 - 10	21 - 6	26-0†	8 - 1	12 - 9	16 - 10	20 - 10	24 - 8
	Southern Pine	No.1	7 - 10	12 - 3	16 - 2	18 - 11	22 - 6	7 - 5	11 - 1	14 - 0	16 - 5	19 - 6
	Southern Pine	No.2	7 - 4	11 - 0	13 - 11	16 - 6	19 - 6	6 - 4	9 - 6	12 - 1	14 - 4	16 - 10
	Southern Pine	No.3	5 - 8	8 - 4	10 - 6	12 - 9	15 - 1	4 - 11	7 - 3	9 - 1	11 - 0	13 - 1
	Spruce-Pine Fir	SS	7 - 8	12 - 0	15 - 10	20 - 2	24 - 7	7 - 8	12 - 0	15 - 4	18 - 9	21 - 9
	Spruce-Pine Fir	No.1	7 - 6	11 - 9	14 - 10	18 - 2	21 - 0	6 - 11	10 - 2	12 - 10	15 - 8	18 - 3
Spruce-Pine Fir	No.2	7 - 6	11 - 9	14 - 10	18 - 2	21 - 0	6 - 11	10 - 2	12 - 10	15 - 8	18 - 3	
Spruce-Pine Fir	No.3	6 - 1	8 - 10	11 - 3	13 - 8	15 - 11	5 - 3	7 - 8	9 - 9	11 - 10	13 - 9	

† Spans are limited to 26 feet in length.

See footnotes 1-3.



**Table 3.26C Rafter Spans for Common Lumber Species**

(Ceiling Not Attached to Rafters,  
Ground Snow Load = 30 psf, L/Δ = 180)

**GSL = 30 psf**  
**L/Δ = 180**

			Dead Load = 10 psf					Dead Load = 20 psf				
			2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
Maximum Rafter Spans <sup>1</sup>												
Joist Spacing (in.)	Species	Grade	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)
12	Douglas Fir-Larch	SS	10 - 0	15 - 9	20-0†	20-0†	20-0†	10 - 0	15 - 9	20-0†	20-0†	20-0†
	Douglas Fir-Larch	No.1	9 - 8	14 - 9	18 - 8	20-0†	20-0†	9 - 0	13 - 2	16 - 8	20-0†	20-0†
	Douglas Fir-Larch	No.2	9 - 6	14 - 0	17 - 8	20-0†	20-0†	8 - 6	12 - 6	15 - 10	19 - 4	20-0†
	Douglas Fir-Larch	No.3	7 - 3	10 - 8	13 - 6	16 - 6	19 - 2	6 - 6	9 - 6	12 - 1	14 - 9	17 - 1
	Hem-Fir	SS	9 - 6	14 - 10	19 - 7	20-0†	20-0†	9 - 6	14 - 10	19 - 7	20-0†	20-0†
	Hem-Fir	No.1	9 - 3	14 - 6	18 - 5	20-0†	20-0†	8 - 11	13 - 0	16 - 6	20-0†	20-0†
	Hem-Fir	No.2	8 - 10	13 - 7	17 - 2	20-0†	20-0†	8 - 4	12 - 2	15 - 4	18 - 9	20-0†
	Hem-Fir	No.3	7 - 1	10 - 5	13 - 2	16 - 1	18 - 8	6 - 4	9 - 4	11 - 9	14 - 5	16 - 8
	Southern Pine	SS	9 - 10	15 - 6	20-0†	20-0†	20-0†	9 - 10	15 - 6	20-0†	20-0†	20-0†
	Southern Pine	No.1	9 - 6	14 - 10	19 - 0	20-0†	20-0†	9 - 0	13 - 5	17 - 0	19 - 11	20-0†
	Southern Pine	No.2	8 - 7	12 - 11	16 - 4	19 - 5	20-0†	7 - 8	11 - 7	14 - 8	17 - 4	20-0†
	Southern Pine	No.3	6 - 7	9 - 9	12 - 4	15 - 0	17 - 9	5 - 11	8 - 9	11 - 0	13 - 5	15 - 10
	Spruce-Pine Fir	SS	9 - 3	14 - 7	19 - 2	20-0†	20-0†	9 - 3	14 - 7	18 - 8	20-0†	20-0†
	Spruce-Pine Fir	No.1	9 - 1	13 - 9	17 - 5	20-0†	20-0†	8 - 5	12 - 4	15 - 7	19 - 1	20-0†
Spruce-Pine Fir	No.2	9 - 1	13 - 9	17 - 5	20-0†	20-0†	8 - 5	12 - 4	15 - 7	19 - 1	20-0†	
Spruce-Pine Fir	No.3	7 - 1	10 - 5	13 - 2	16 - 1	18 - 8	6 - 4	9 - 4	11 - 9	14 - 5	16 - 8	
16	Douglas Fir-Larch	SS	9 - 1	14 - 4	18 - 10	20-0†	20-0†	9 - 1	14 - 0	17 - 8	20-0†	20-0†
	Douglas Fir-Larch	No.1	8 - 9	12 - 9	16 - 2	19 - 9	20-0†	7 - 10	11 - 5	14 - 5	17 - 8	20-0†
	Douglas Fir-Larch	No.2	8 - 3	12 - 1	15 - 4	18 - 9	20-0†	7 - 5	10 - 10	13 - 8	16 - 9	19 - 5
	Douglas Fir-Larch	No.3	6 - 4	9 - 3	11 - 8	14 - 3	16 - 7	5 - 8	8 - 3	10 - 6	12 - 9	14 - 10
	Hem-Fir	SS	8 - 7	13 - 6	17 - 10	20-0†	20-0†	8 - 7	13 - 6	17 - 1	20-0†	20-0†
	Hem-Fir	No.1	8 - 5	12 - 7	15 - 11	19 - 6	20-0†	7 - 8	11 - 3	14 - 3	17 - 5	20-0†
	Hem-Fir	No.2	8 - 0	11 - 9	14 - 11	18 - 2	20-0†	7 - 2	10 - 6	13 - 4	16 - 3	18 - 10
	Hem-Fir	No.3	6 - 2	9 - 0	11 - 5	13 - 11	16 - 2	5 - 6	8 - 1	10 - 3	12 - 6	14 - 6
	Southern Pine	SS	8 - 11	14 - 1	18 - 6	20-0†	20-0†	8 - 11	14 - 1	18 - 5	20-0†	20-0†
	Southern Pine	No.1	8 - 7	13 - 0	16 - 6	19 - 3	20-0†	7 - 10	11 - 7	14 - 9	17 - 3	20-0†
	Southern Pine	No.2	7 - 6	11 - 2	14 - 2	16 - 10	19 - 10	6 - 8	10 - 0	12 - 8	15 - 1	17 - 9
	Southern Pine	No.3	5 - 9	8 - 6	10 - 8	13 - 0	15 - 4	5 - 2	7 - 7	9 - 7	11 - 7	13 - 9
	Spruce-Pine Fir	SS	8 - 5	13 - 3	17 - 5	20-0†	20-0†	8 - 5	12 - 9	16 - 2	19 - 9	20-0†
	Spruce-Pine Fir	No.1	8 - 2	11 - 11	15 - 1	18 - 5	20-0†	7 - 3	10 - 8	13 - 6	16 - 6	19 - 2
Spruce-Pine Fir	No.2	8 - 2	11 - 11	15 - 1	18 - 5	20-0†	7 - 3	10 - 8	13 - 6	16 - 6	19 - 2	
Spruce-Pine Fir	No.3	6 - 2	9 - 0	11 - 5	13 - 11	16 - 2	5 - 6	8 - 1	10 - 3	12 - 6	14 - 6	
19.2	Douglas Fir-Larch	SS	8 - 7	13 - 6	17 - 9	20-0†	20-0†	8 - 7	12 - 9	16 - 2	19 - 9	20-0†
	Douglas Fir-Larch	No.1	8 - 0	11 - 8	14 - 9	18 - 0	20-0†	7 - 1	10 - 5	13 - 2	16 - 1	18 - 8
	Douglas Fir-Larch	No.2	7 - 7	11 - 0	14 - 0	17 - 1	19 - 10	6 - 9	9 - 10	12 - 6	15 - 3	17 - 9
	Douglas Fir-Larch	No.3	5 - 9	8 - 5	10 - 8	13 - 1	15 - 2	5 - 2	7 - 7	9 - 7	11 - 8	13 - 6
	Hem-Fir	SS	8 - 1	12 - 9	16 - 9	20-0†	20-0†	8 - 1	12 - 4	15 - 7	19 - 1	20-0†
	Hem-Fir	No.1	7 - 10	11 - 6	14 - 7	17 - 9	20-0†	7 - 0	10 - 3	13 - 0	15 - 11	18 - 5
	Hem-Fir	No.2	7 - 4	10 - 9	13 - 7	16 - 7	19 - 3	6 - 7	9 - 7	12 - 2	14 - 10	17 - 3
	Hem-Fir	No.3	5 - 8	8 - 3	10 - 5	12 - 9	14 - 9	5 - 0	7 - 4	9 - 4	11 - 5	13 - 2
	Southern Pine	SS	8 - 5	13 - 3	17 - 5	20-0†	20-0†	8 - 5	13 - 3	16 - 10	20-0†	20-0†
	Southern Pine	No.1	8 - 0	11 - 10	15 - 1	17 - 7	20-0†	7 - 1	10 - 7	13 - 5	15 - 9	18 - 8
	Southern Pine	No.2	6 - 10	10 - 2	12 - 11	15 - 4	18 - 1	6 - 1	9 - 2	11 - 7	13 - 9	16 - 2
	Southern Pine	No.3	5 - 3	7 - 9	9 - 9	11 - 10	14 - 0	4 - 8	6 - 11	8 - 9	10 - 7	12 - 6
	Spruce-Pine Fir	SS	7 - 11	12 - 5	16 - 5	20-0†	20-0†	7 - 11	11 - 8	14 - 9	18 - 0	20-0†
	Spruce-Pine Fir	No.1	7 - 5	10 - 11	13 - 9	16 - 10	19 - 6	6 - 8	9 - 9	12 - 4	15 - 1	17 - 6
Spruce-Pine Fir	No.2	7 - 5	10 - 11	13 - 9	16 - 10	19 - 6	6 - 8	9 - 9	12 - 4	15 - 1	17 - 6	
Spruce-Pine Fir	No.3	5 - 8	8 - 3	10 - 5	12 - 9	14 - 9	5 - 0	7 - 4	9 - 4	11 - 5	13 - 2	
24	Douglas Fir-Larch	SS	8 - 0	12 - 6	16 - 2	19 - 9	20-0†	7 - 10	11 - 5	14 - 5	17 - 8	20-0†
	Douglas Fir-Larch	No.1	7 - 1	10 - 5	13 - 2	16 - 1	18 - 8	6 - 4	9 - 4	11 - 9	14 - 5	16 - 8
	Douglas Fir-Larch	No.2	6 - 9	9 - 10	12 - 6	15 - 3	17 - 9	6 - 0	8 - 10	11 - 2	13 - 8	15 - 10
	Douglas Fir-Larch	No.3	5 - 2	7 - 7	9 - 7	11 - 8	13 - 6	4 - 7	6 - 9	8 - 7	10 - 5	12 - 1
	Hem-Fir	SS	7 - 6	11 - 10	15 - 7	19 - 1	20-0†	7 - 6	11 - 0	14 - 0	17 - 1	19 - 9
	Hem-Fir	No.1	7 - 0	10 - 3	13 - 0	15 - 11	18 - 5	6 - 3	9 - 2	11 - 8	14 - 3	16 - 6
	Hem-Fir	No.2	6 - 7	9 - 7	12 - 2	14 - 10	17 - 3	5 - 10	8 - 7	10 - 10	13 - 3	15 - 5
	Hem-Fir	No.3	5 - 0	7 - 4	9 - 4	11 - 5	13 - 2	4 - 6	6 - 7	8 - 4	10 - 2	11 - 10
	Southern Pine	SS	7 - 10	12 - 3	16 - 2	20-0†	20-0†	7 - 10	11 - 10	15 - 0	17 - 11	20-0†
	Southern Pine	No.1	7 - 1	10 - 7	13 - 5	15 - 9	18 - 8	6 - 4	9 - 6	12 - 0	14 - 1	16 - 8
	Southern Pine	No.2	6 - 1	9 - 2	11 - 7	13 - 9	16 - 2	5 - 5	8 - 2	10 - 4	12 - 3	14 - 6
	Southern Pine	No.3	4 - 8	6 - 11	8 - 9	10 - 7	12 - 6	4 - 2	6 - 2	7 - 10	9 - 6	11 - 2
	Spruce-Pine Fir	SS	7 - 4	11 - 7	14 - 9	18 - 0	20-0†	7 - 1	10 - 5	13 - 2	16 - 1	18 - 8
	Spruce-Pine Fir	No.1	6 - 8	9 - 9	12 - 4	15 - 1	17 - 6	6 - 0	8 - 9	11 - 0	13 - 6	15 - 7
Spruce-Pine Fir	No.2	6 - 8	9 - 9	12 - 4	15 - 1	17 - 6	6 - 0	8 - 9	11 - 0	13 - 6	15 - 7	
Spruce-Pine Fir	No.3	5 - 0	7 - 4	9 - 4	11 - 5	13 - 2	4 - 6	6 - 7	8 - 4	10 - 2	11 - 10	

† Spans are limited to 20 feet in length.  
See footnote 1.

**Table 3.26D Rafter Spans for Common Lumber Species**

(Ceiling Attached to Rafters,  
Ground Snow Load = 30 psf, L/Δ = 240)

**GSL = 30 psf**  
**L/Δ = 240**

Joist Spacing (in.)	Species	Grade	Dead Load = 10 psf					Dead Load = 20 psf				
			2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
			Maximum Rafter Spans <sup>1</sup>									
			(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)
12	Douglas Fir-Larch	SS	9 - 1	14 - 4	18 - 10	20-0†	20-0†	9 - 1	14 - 4	18 - 10	20-0†	20-0†
	Douglas Fir-Larch	No.1	8 - 9	13 - 9	18 - 2	20-0†	20-0†	8 - 9	13 - 2	16 - 8	20-0†	20-0†
	Douglas Fir-Larch	No.2	8 - 7	13 - 6	17 - 8	20-0†	20-0†	8 - 6	12 - 6	15 - 10	19 - 4	20-0†
	Douglas Fir-Larch	No.3	7 - 3	10 - 8	13 - 6	16 - 6	19 - 2	6 - 6	9 - 6	12 - 1	14 - 9	17 - 1
	Hem-Fir	SS	8 - 7	13 - 6	17 - 10	20-0†	20-0†	8 - 7	13 - 6	17 - 10	20-0†	20-0†
	Hem-Fir	No.1	8 - 5	13 - 3	17 - 5	20-0†	20-0†	8 - 5	13 - 0	16 - 6	20-0†	20-0†
	Hem-Fir	No.2	8 - 0	12 - 7	16 - 7	20-0†	20-0†	8 - 0	12 - 2	15 - 4	18 - 9	20-0†
	Hem-Fir	No.3	7 - 1	10 - 5	13 - 2	16 - 1	18 - 8	6 - 4	9 - 4	11 - 9	14 - 5	16 - 8
	Southern Pine	SS	8 - 11	14 - 1	18 - 6	20-0†	20-0†	8 - 11	14 - 1	18 - 6	20-0†	20-0†
	Southern Pine	No.1	8 - 7	13 - 6	17 - 10	20-0†	20-0†	8 - 7	13 - 5	17 - 0	19 - 11	20-0†
	Southern Pine	No.2	8 - 3	12 - 11	16 - 4	19 - 5	20-0†	7 - 8	11 - 7	14 - 8	17 - 4	20-0†
	Southern Pine	No.3	6 - 7	9 - 9	12 - 4	15 - 0	17 - 9	5 - 11	8 - 9	11 - 0	13 - 5	15 - 10
	Spruce-Pine Fir	SS	8 - 5	13 - 3	17 - 5	20-0†	20-0†	8 - 5	13 - 3	17 - 5	20-0†	20-0†
	Spruce-Pine Fir	No.1	8 - 3	12 - 11	17 - 0	20-0†	20-0†	8 - 3	12 - 4	15 - 7	19 - 1	20-0†
	Spruce-Pine Fir	No.2	8 - 3	12 - 11	17 - 0	20-0†	20-0†	8 - 3	12 - 4	15 - 7	19 - 1	20-0†
Spruce-Pine Fir	No.3	7 - 1	10 - 5	13 - 2	16 - 1	18 - 8	6 - 4	9 - 4	11 - 9	14 - 5	16 - 8	
16	Douglas Fir-Larch	SS	8 - 3	13 - 0	17 - 2	20-0†	20-0†	8 - 3	13 - 0	17 - 2	20-0†	20-0†
	Douglas Fir-Larch	No.1	8 - 0	12 - 6	16 - 2	19 - 9	20-0†	7 - 10	11 - 5	14 - 5	17 - 8	20-0†
	Douglas Fir-Larch	No.2	7 - 10	12 - 1	15 - 4	18 - 9	20-0†	7 - 5	10 - 10	13 - 8	16 - 9	19 - 5
	Douglas Fir-Larch	No.3	6 - 4	9 - 3	11 - 8	14 - 3	16 - 7	5 - 8	8 - 3	10 - 6	12 - 9	14 - 10
	Hem-Fir	SS	7 - 10	12 - 3	16 - 2	20-0†	20-0†	7 - 10	12 - 3	16 - 2	20-0†	20-0†
	Hem-Fir	No.1	7 - 8	12 - 0	15 - 10	19 - 6	20-0†	7 - 8	11 - 3	14 - 3	17 - 5	20-0†
	Hem-Fir	No.2	7 - 3	11 - 5	14 - 11	18 - 2	20-0†	7 - 2	10 - 6	13 - 4	16 - 3	18 - 10
	Hem-Fir	No.3	6 - 2	9 - 0	11 - 5	13 - 11	16 - 2	5 - 6	8 - 1	10 - 3	12 - 6	14 - 6
	Southern Pine	SS	8 - 1	12 - 9	16 - 10	20-0†	20-0†	8 - 1	12 - 9	16 - 10	20-0†	20-0†
	Southern Pine	No.1	7 - 10	12 - 3	16 - 2	19 - 3	20-0†	7 - 10	11 - 7	14 - 9	17 - 3	20-0†
	Southern Pine	No.2	7 - 6	11 - 2	14 - 2	16 - 10	19 - 10	6 - 8	10 - 0	12 - 8	15 - 1	17 - 9
	Southern Pine	No.3	5 - 9	8 - 6	10 - 8	13 - 0	15 - 4	5 - 2	7 - 7	9 - 7	11 - 7	13 - 9
	Spruce-Pine Fir	SS	7 - 8	12 - 0	15 - 10	20-0†	20-0†	7 - 8	12 - 0	15 - 10	19 - 9	20-0†
	Spruce-Pine Fir	No.1	7 - 6	11 - 9	15 - 1	18 - 5	20-0†	7 - 3	10 - 8	13 - 6	16 - 6	19 - 2
	Spruce-Pine Fir	No.2	7 - 6	11 - 9	15 - 1	18 - 5	20-0†	7 - 3	10 - 8	13 - 6	16 - 6	19 - 2
Spruce-Pine Fir	No.3	6 - 2	9 - 0	11 - 5	13 - 11	16 - 2	5 - 6	8 - 1	10 - 3	12 - 6	14 - 6	
19.2	Douglas Fir-Larch	SS	7 - 9	12 - 3	16 - 1	20-0†	20-0†	7 - 9	12 - 3	16 - 1	19 - 9	20-0†
	Douglas Fir-Larch	No.1	7 - 6	11 - 8	14 - 9	18 - 0	20-0†	7 - 1	10 - 5	13 - 2	16 - 1	18 - 8
	Douglas Fir-Larch	No.2	7 - 4	11 - 0	14 - 0	17 - 1	19 - 10	6 - 9	9 - 10	12 - 6	15 - 3	17 - 9
	Douglas Fir-Larch	No.3	5 - 9	8 - 5	10 - 8	13 - 1	15 - 2	5 - 2	7 - 7	9 - 7	11 - 8	13 - 6
	Hem-Fir	SS	7 - 4	11 - 7	15 - 3	19 - 5	20-0†	7 - 4	11 - 7	15 - 3	19 - 1	20-0†
	Hem-Fir	No.1	7 - 2	11 - 4	14 - 7	17 - 9	20-0†	7 - 0	10 - 3	13 - 0	15 - 11	18 - 5
	Hem-Fir	No.2	6 - 10	10 - 9	13 - 7	16 - 7	19 - 3	6 - 7	9 - 7	12 - 2	14 - 10	17 - 3
	Hem-Fir	No.3	5 - 8	8 - 3	10 - 5	12 - 9	14 - 9	5 - 0	7 - 4	9 - 4	11 - 5	13 - 2
	Southern Pine	SS	7 - 8	12 - 0	15 - 10	20-0†	20-0†	7 - 8	12 - 0	15 - 10	20-0†	20-0†
	Southern Pine	No.1	7 - 4	11 - 7	15 - 1	17 - 7	20-0†	7 - 1	10 - 7	13 - 5	15 - 9	18 - 8
	Southern Pine	No.2	6 - 10	10 - 2	12 - 11	15 - 4	18 - 1	6 - 1	9 - 2	11 - 7	13 - 9	16 - 2
	Southern Pine	No.3	5 - 3	7 - 9	9 - 9	11 - 10	14 - 0	4 - 8	6 - 11	8 - 9	10 - 7	12 - 6
	Spruce-Pine Fir	SS	7 - 2	11 - 4	14 - 11	19 - 0	20-0†	7 - 2	11 - 4	14 - 9	18 - 0	20-0†
	Spruce-Pine Fir	No.1	7 - 0	10 - 11	13 - 9	16 - 10	19 - 6	6 - 8	9 - 9	12 - 4	15 - 1	17 - 6
	Spruce-Pine Fir	No.2	7 - 0	10 - 11	13 - 9	16 - 10	19 - 6	6 - 8	9 - 9	12 - 4	15 - 1	17 - 6
Spruce-Pine Fir	No.3	5 - 8	8 - 3	10 - 5	12 - 9	14 - 9	5 - 0	7 - 4	9 - 4	11 - 5	13 - 2	
24	Douglas Fir-Larch	SS	7 - 3	11 - 4	15 - 0	19 - 1	20-0†	7 - 3	11 - 4	14 - 5	17 - 8	20-0†
	Douglas Fir-Larch	No.1	7 - 0	10 - 5	13 - 2	16 - 1	18 - 8	6 - 4	9 - 4	11 - 9	14 - 5	16 - 8
	Douglas Fir-Larch	No.2	6 - 9	9 - 10	12 - 6	15 - 3	17 - 9	6 - 0	8 - 10	11 - 2	13 - 8	15 - 10
	Douglas Fir-Larch	No.3	5 - 2	7 - 7	9 - 7	11 - 8	13 - 6	4 - 7	6 - 9	8 - 7	10 - 5	12 - 1
	Hem-Fir	SS	6 - 10	10 - 9	14 - 2	18 - 0	20-0†	6 - 10	10 - 9	14 - 0	17 - 1	19 - 9
	Hem-Fir	No.1	6 - 8	10 - 3	13 - 0	15 - 11	18 - 5	6 - 3	9 - 2	11 - 8	14 - 3	16 - 6
	Hem-Fir	No.2	6 - 4	9 - 7	12 - 2	14 - 10	17 - 3	5 - 10	8 - 7	10 - 10	13 - 3	15 - 5
	Hem-Fir	No.3	5 - 0	7 - 4	9 - 4	11 - 5	13 - 2	4 - 6	6 - 7	8 - 4	10 - 2	11 - 10
	Southern Pine	SS	7 - 1	11 - 2	14 - 8	18 - 9	20-0†	7 - 1	11 - 2	14 - 8	17 - 11	20-0†
	Southern Pine	No.1	6 - 10	10 - 7	13 - 5	15 - 9	18 - 8	6 - 4	9 - 6	12 - 0	14 - 1	16 - 8
	Southern Pine	No.2	6 - 1	9 - 2	11 - 7	13 - 9	16 - 2	5 - 5	8 - 2	10 - 4	12 - 3	14 - 6
	Southern Pine	No.3	4 - 8	6 - 11	8 - 9	10 - 7	12 - 6	4 - 2	6 - 2	7 - 10	9 - 6	11 - 2
	Spruce-Pine Fir	SS	6 - 8	10 - 6	13 - 10	17 - 8	20-0†	6 - 8	10 - 5	13 - 2	16 - 1	18 - 8
	Spruce-Pine Fir	No.1	6 - 6	9 - 9	12 - 4	15 - 1	17 - 6	6 - 0	8 - 9	11 - 0	13 - 6	15 - 7
	Spruce-Pine Fir	No.2	6 - 6	9 - 9	12 - 4	15 - 1	17 - 6	6 - 0	8 - 9	11 - 0	13 - 6	15 - 7
Spruce-Pine Fir	No.3	5 - 0	7 - 4	9 - 4	11 - 5	13 - 2	4 - 6	6 - 7	8 - 4	10 - 2	11 - 10	

† Spans are limited to 20 feet in length.  
See footnote 1.

**Table 3.26E Rafter Spans for Common Lumber Species**

(Ceiling Not Attached to Rafters,  
Ground Snow Load = 50 psf, L/Δ = 180)

**GSL = 50 psf**  
**L/Δ = 180**

Joist Spacing (in.)	Species	Grade	Dead Load = 10 psf					Dead Load = 20 psf				
			2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
			Maximum Rafter Spans <sup>1</sup>									
(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	(ft-in.)	
12	Douglas Fir-Larch	SS	8-5	13-3	17-6	20-0†	20-0†	8-5	13-3	17-3	20-0†	20-0†
	Douglas Fir-Larch	No.1	8-2	12-0	15-3	18-7	20-0†	7-7	11-2	14-1	17-3	20-0
	Douglas Fir-Larch	No.2	7-10	11-5	14-5	17-8	20-0†	7-3	10-7	13-4	16-4	18-11
	Douglas Fir-Larch	No.3	6-0	8-9	11-0	13-6	15-7	5-6	8-1	10-3	12-6	14-6
	Hem-Fir	SS	8-0	12-6	16-6	20-0†	20-0†	8-0	12-6	16-6	20-0†	20-0†
	Hem-Fir	No.1	7-10	11-10	15-0	18-4	20-0†	7-6	11-0	13-11	17-0	19-9
	Hem-Fir	No.2	7-5	11-1	14-0	17-2	19-11	7-0	10-3	13-0	15-10	18-5
	Hem-Fir	No.3	5-10	8-6	10-9	13-2	15-3	5-5	7-10	10-0	12-2	14-1
	Southern Pine	SS	8-4	13-1	17-2	20-0†	20-0†	8-4	13-1	17-2	20-0†	20-0†
	Southern Pine	No.1	8-0	12-3	15-6	18-2	20-0†	7-7	11-4	14-5	16-10	20-0
	Southern Pine	No.2	7-0	10-6	13-4	15-10	18-8	6-6	9-9	12-4	14-8	17-3
	Southern Pine	No.3	5-5	8-0	10-1	12-3	14-6	5-0	7-5	9-4	11-4	13-5
	Spruce-Pine Fir	SS	7-10	12-3	16-2	20-0†	20-0†	7-10	12-3	15-9	19-3	20-0†
	Spruce-Pine Fir	No.1	7-8	11-3	14-3	17-5	20-0†	7-1	10-5	13-2	16-1	18-8
Spruce-Pine Fir	No.2	7-8	11-3	14-3	17-5	20-0†	7-1	10-5	13-2	16-1	18-8	
Spruce-Pine Fir	No.3	5-10	8-6	10-9	13-2	15-3	5-5	7-10	10-0	12-2	14-1	
16	Douglas Fir-Larch	SS	7-8	12-1	15-11	19-9	20-0†	7-8	11-10	14-11	18-3	20-0†
	Douglas Fir-Larch	No.1	7-1	10-5	13-2	16-1	18-8	6-7	9-8	12-2	14-11	17-3
	Douglas Fir-Larch	No.2	6-9	9-10	12-6	15-3	17-9	6-3	9-2	11-7	14-2	16-5
	Douglas Fir-Larch	No.3	5-2	7-7	9-7	11-8	13-6	4-9	7-0	8-10	10-10	12-6
	Hem-Fir	SS	7-3	11-5	15-0	19-1	20-0†	7-3	11-5	14-5	17-8	20-0†
	Hem-Fir	No.1	7-0	10-3	13-0	15-11	18-5	6-6	9-6	12-1	14-9	17-1
	Hem-Fir	No.2	6-7	9-7	12-2	14-10	17-3	6-1	8-11	11-3	13-9	15-11
	Hem-Fir	No.3	5-0	7-4	9-4	11-5	13-2	4-8	6-10	8-8	10-7	12-3
	Southern Pine	SS	7-6	11-10	15-7	19-11	20-0†	7-6	11-10	15-7	18-6	20-0†
	Southern Pine	No.1	7-1	10-7	13-5	15-9	18-8	6-7	9-10	12-5	14-7	17-3
	Southern Pine	No.2	6-1	9-2	11-7	13-9	16-2	5-8	8-5	10-9	12-9	15-0
	Southern Pine	No.3	4-8	6-11	8-9	10-7	12-6	4-4	6-5	8-1	9-10	11-7
	Spruce-Pine Fir	SS	7-1	11-2	14-8	18-0	20-0†	7-1	10-9	13-8	16-8	19-4
	Spruce-Pine Fir	No.1	6-8	9-9	12-4	15-1	17-6	6-2	9-0	11-5	13-11	16-2
Spruce-Pine Fir	No.2	6-8	9-9	12-4	15-1	17-6	6-2	9-0	11-5	13-11	16-2	
Spruce-Pine Fir	No.3	5-0	7-4	9-4	11-5	13-2	4-8	6-10	8-8	10-7	12-3	
19.2	Douglas Fir-Larch	SS	7-3	11-4	14-9	18-0	20-0†	7-3	10-9	13-8	16-8	19-4
	Douglas Fir-Larch	No.1	6-6	9-6	12-0	14-8	17-1	6-0	8-10	11-2	13-7	15-9
	Douglas Fir-Larch	No.2	6-2	9-0	11-5	13-11	16-2	5-8	8-4	10-7	12-11	15-0
	Douglas Fir-Larch	No.3	4-8	6-11	8-9	10-8	12-4	4-4	6-4	8-1	9-10	11-5
	Hem-Fir	SS	6-10	10-9	14-2	17-5	20-0†	6-10	10-5	13-2	16-1	18-8
	Hem-Fir	No.1	6-5	9-5	11-11	14-6	16-10	5-11	8-8	11-0	13-5	15-7
	Hem-Fir	No.2	6-0	8-9	11-1	13-7	15-9	5-7	8-1	10-3	12-7	14-7
	Hem-Fir	No.3	4-7	6-9	8-6	10-5	12-1	4-3	6-3	7-11	9-7	11-2
	Southern Pine	SS	7-1	11-2	14-8	18-3	20-0†	7-1	11-2	14-2	16-11	20-0
	Southern Pine	No.1	6-6	9-8	12-3	14-4	17-1	6-0	9-0	11-4	13-4	15-9
	Southern Pine	No.2	5-7	8-4	10-7	12-6	14-9	5-2	7-9	9-9	11-7	13-8
	Southern Pine	No.3	4-3	6-4	8-0	9-8	11-5	4-0	5-10	7-4	8-11	10-7
	Spruce-Pine Fir	SS	6-8	10-6	13-5	16-5	19-1	6-8	9-10	12-5	15-3	17-8
	Spruce-Pine Fir	No.1	6-1	8-11	11-3	13-9	15-11	5-8	8-3	10-5	12-9	14-9
Spruce-Pine Fir	No.2	6-1	8-11	11-3	13-9	15-11	5-8	8-3	10-5	12-9	14-9	
Spruce-Pine Fir	No.3	4-7	6-9	8-6	10-5	12-1	4-3	6-3	7-11	9-7	11-2	
24	Douglas Fir-Larch	SS	6-8	10-5	13-2	16-1	18-8	6-7	9-8	12-2	14-11	17-3
	Douglas Fir-Larch	No.1	5-10	8-6	10-9	13-2	15-3	5-5	7-10	10-0	12-2	14-1
	Douglas Fir-Larch	No.2	5-6	8-1	10-3	12-6	14-6	5-1	7-6	9-5	11-7	13-5
	Douglas Fir-Larch	No.3	4-3	6-2	7-10	9-6	11-1	3-11	5-8	7-3	8-10	10-3
	Hem-Fir	SS	6-4	10-0	12-9	15-7	18-0	6-4	9-4	11-9	14-5	16-8
	Hem-Fir	No.1	5-9	8-5	10-8	13-0	15-1	5-4	7-9	9-10	12-0	13-11
	Hem-Fir	No.2	5-4	7-10	9-11	12-1	14-1	5-0	7-3	9-2	11-3	13-0
	Hem-Fir	No.3	4-1	6-0	7-7	9-4	10-9	3-10	5-7	7-1	8-7	10-0
	Southern Pine	SS	6-7	10-4	13-8	16-4	19-3	6-7	10-0	12-8	15-2	17-10
	Southern Pine	No.1	5-10	8-8	11-0	12-10	15-3	5-5	8-0	10-2	11-11	14-1
	Southern Pine	No.2	5-0	7-5	9-5	11-3	13-2	4-7	6-11	8-9	10-5	12-3
	Southern Pine	No.3	3-10	5-8	7-1	8-8	10-3	3-6	5-3	6-7	8-0	9-6
	Spruce-Pine Fir	SS	6-2	9-6	12-0	14-8	17-1	6-0	8-10	11-2	13-7	15-9
	Spruce-Pine Fir	No.1	5-5	8-0	10-1	12-4	14-3	5-0	7-4	9-4	11-5	13-2
Spruce-Pine Fir	No.2	5-5	8-0	10-1	12-4	14-3	5-0	7-4	9-4	11-5	13-2	
Spruce-Pine Fir	No.3	4-1	6-0	7-7	9-4	10-9	3-10	5-7	7-1	8-7	10-0	

† Spans are limited to 20 feet in length.  
See footnote 1.

**Table 3.26F Rafter Spans for Common Lumber Species**

(Ceiling Attached to Rafters,  
Ground Snow Load = 50 psf, L/Δ = 240)

**GSL = 50 psf**  
**L/Δ = 240**

Joist Spacing (in.)	Species	Grade	Dead Load = 10 psf					Dead Load = 20 psf				
			2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
			Maximum Rafter Spans <sup>1</sup>									
(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	
12	Douglas Fir-Larch	SS	7-8	12-1	15-11	20-0†	20-0†	7-8	12-1	15-11	20-0†	20-0†
	Douglas Fir-Larch	No.1	7-5	11-8	15-3	18-7	20-0†	7-5	11-2	14-1	17-3	20-0
	Douglas Fir-Larch	No.2	7-3	11-5	14-5	17-8	20-0†	7-3	10-7	13-4	16-4	18-11
	Douglas Fir-Larch	No.3	6-0	8-9	11-0	13-6	15-7	5-6	8-1	10-3	12-6	14-6
	Hem-Fir	SS	7-3	11-5	15-0	19-2	20-0†	7-3	11-5	15-0	19-2	20-0†
	Hem-Fir	No.1	7-1	11-2	14-8	18-4	20-0†	7-1	11-0	13-11	17-0	19-9
	Hem-Fir	No.2	6-9	10-8	14-0	17-2	19-11	6-9	10-3	13-0	15-10	18-5
	Hem-Fir	No.3	5-10	8-6	10-9	13-2	15-3	5-5	7-10	10-0	12-2	14-1
	Southern Pine	SS	7-6	11-10	15-7	19-11	20-0†	7-6	11-10	15-7	19-11	20-0†
	Southern Pine	No.1	7-3	11-5	15-0	18-2	20-0†	7-3	11-4	14-5	16-10	20-0
	Southern Pine	No.2	6-11	10-6	13-4	15-10	18-8	6-6	9-9	12-4	14-8	17-3
	Southern Pine	No.3	5-5	8-0	10-1	12-3	14-6	5-0	7-5	9-4	11-4	13-5
	Spruce-Pine Fir	SS	7-1	11-2	14-8	18-9	20-0†	7-1	11-2	14-8	18-9	20-0†
	Spruce-Pine Fir	No.1	6-11	10-11	14-3	17-5	20-0†	6-11	10-5	13-2	16-1	18-8
Spruce-Pine Fir	No.2	6-11	10-11	14-3	17-5	20-0†	6-11	10-5	13-2	16-1	18-8	
Spruce-Pine Fir	No.3	5-10	8-6	10-9	13-2	15-3	5-5	7-10	10-0	12-2	14-1	
16	Douglas Fir-Larch	SS	7-0	11-0	14-5	18-5	20-0†	7-0	11-0	14-5	18-3	20-0†
	Douglas Fir-Larch	No.1	6-9	10-5	13-2	16-1	18-8	6-7	9-8	12-2	14-11	17-3
	Douglas Fir-Larch	No.2	6-7	9-10	12-6	15-3	17-9	6-3	9-2	11-7	14-2	16-5
	Douglas Fir-Larch	No.3	5-2	7-7	9-7	11-8	13-6	4-9	7-0	8-10	10-10	12-6
	Hem-Fir	SS	6-7	10-4	13-8	17-5	20-0†	6-7	10-4	13-8	17-5	20-0†
	Hem-Fir	No.1	6-5	10-2	13-0	15-11	18-5	6-5	9-6	12-1	14-9	17-1
	Hem-Fir	No.2	6-2	9-7	12-2	14-10	17-3	6-1	8-11	11-3	13-9	15-11
	Hem-Fir	No.3	5-0	7-4	9-4	11-5	13-2	4-8	6-10	8-8	10-7	12-3
	Southern Pine	SS	6-10	10-9	14-2	18-1	20-0†	6-10	10-9	14-2	18-1	20-0†
	Southern Pine	No.1	6-7	10-4	13-5	15-9	18-8	6-7	9-10	12-5	14-7	17-3
	Southern Pine	No.2	6-1	9-2	11-7	13-9	16-2	5-8	8-5	10-9	12-9	15-0
	Southern Pine	No.3	4-8	6-11	8-9	10-7	12-6	4-4	6-5	8-1	9-10	11-7
	Spruce-Pine Fir	SS	6-5	10-2	13-4	17-0	20-0†	6-5	10-2	13-4	16-8	19-4
	Spruce-Pine Fir	No.1	6-4	9-9	12-4	15-1	17-6	6-2	9-0	11-5	13-11	16-2
Spruce-Pine Fir	No.2	6-4	9-9	12-4	15-1	17-6	6-2	9-0	11-5	13-11	16-2	
Spruce-Pine Fir	No.3	5-0	7-4	9-4	11-5	13-2	4-8	6-10	8-8	10-7	12-3	
19.2	Douglas Fir-Larch	SS	6-7	10-4	13-7	17-4	20-0†	6-7	10-4	13-7	16-8	19-4
	Douglas Fir-Larch	No.1	6-4	9-6	12-0	14-8	17-1	6-0	8-10	11-2	13-7	15-9
	Douglas Fir-Larch	No.2	6-2	9-0	11-5	13-11	16-2	5-8	8-4	10-7	12-11	15-0
	Douglas Fir-Larch	No.3	4-8	6-11	8-9	10-8	12-4	4-4	6-4	8-1	9-10	11-5
	Hem-Fir	SS	6-2	9-9	12-10	16-5	19-11	6-2	9-9	12-10	16-1	18-8
	Hem-Fir	No.1	6-1	9-5	11-11	14-6	16-10	5-11	8-8	11-0	13-5	15-7
	Hem-Fir	No.2	5-9	8-9	11-1	13-7	15-9	5-7	8-1	10-3	12-7	14-7
	Hem-Fir	No.3	4-7	6-9	8-6	10-5	12-1	4-3	6-3	7-11	9-7	11-2
	Southern Pine	SS	6-5	10-2	13-4	17-0	20-0†	6-5	10-2	13-4	16-11	20-0
	Southern Pine	No.1	6-2	9-8	12-3	14-4	17-1	6-0	9-0	11-4	13-4	15-9
	Southern Pine	No.2	5-7	8-4	10-7	12-6	14-9	5-2	7-9	9-9	11-7	13-8
	Southern Pine	No.3	4-3	6-4	8-0	9-8	11-5	4-0	5-10	7-4	8-11	10-7
	Spruce-Pine Fir	SS	6-1	9-6	12-7	16-0	19-1	6-1	9-6	12-5	15-3	17-8
	Spruce-Pine Fir	No.1	5-11	8-11	11-3	13-9	15-11	5-8	8-3	10-5	12-9	14-9
Spruce-Pine Fir	No.2	5-11	8-11	11-3	13-9	15-11	5-8	8-3	10-5	12-9	14-9	
Spruce-Pine Fir	No.3	4-7	6-9	8-6	10-5	12-1	4-3	6-3	7-11	9-7	11-2	
24	Douglas Fir-Larch	SS	6-1	9-7	12-7	16-1	18-8	6-1	9-7	12-2	14-11	17-3
	Douglas Fir-Larch	No.1	5-10	8-6	10-9	13-2	15-3	5-5	7-10	10-0	12-2	14-1
	Douglas Fir-Larch	No.2	5-6	8-1	10-3	12-6	14-6	5-1	7-6	9-5	11-7	13-5
	Douglas Fir-Larch	No.3	4-3	6-2	7-10	9-6	11-1	3-11	5-8	7-3	8-10	10-3
	Hem-Fir	SS	5-9	9-1	11-11	15-2	18-0	5-9	9-1	11-9	14-5	16-8
	Hem-Fir	No.1	5-8	8-5	10-8	13-0	15-1	5-4	7-9	9-10	12-0	13-11
	Hem-Fir	No.2	5-4	7-10	9-11	12-1	14-1	5-0	7-3	9-2	11-3	13-0
	Hem-Fir	No.3	4-1	6-0	7-7	9-4	10-9	3-10	5-7	7-1	8-7	10-0
	Southern Pine	SS	6-0	9-5	12-5	15-10	19-3	6-0	9-5	12-5	15-2	17-10
	Southern Pine	No.1	5-9	8-8	11-0	12-10	15-3	5-5	8-0	10-2	11-11	14-1
	Southern Pine	No.2	5-0	7-5	9-5	11-3	13-2	4-7	6-11	8-9	10-5	12-3
	Southern Pine	No.3	3-10	5-8	7-1	8-8	10-3	3-6	5-3	6-7	8-0	9-6
	Spruce-Pine Fir	SS	5-8	8-10	11-8	14-8	17-1	5-8	8-10	11-2	13-7	15-9
	Spruce-Pine Fir	No.1	5-5	8-0	10-1	12-4	14-3	5-0	7-4	9-4	11-5	13-2
Spruce-Pine Fir	No.2	5-5	8-0	10-1	12-4	14-3	5-0	7-4	9-4	11-5	13-2	
Spruce-Pine Fir	No.3	4-1	6-0	7-7	9-4	10-9	3-10	5-7	7-1	8-7	10-0	

† Spans are limited to 20 feet in length.  
See footnote 1.

**Table 3.26G Rafter Spans for Common Lumber Species**

(Ceiling Not Attached to Rafters,  
Ground Snow Load = 70 psf, L/Δ = 180)

**GSL = 70 psf**  
**L/Δ = 180**

Joist Spacing (in.)	Species	Grade	Dead Load = 10 psf					Dead Load = 20 psf				
			2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
			Maximum Rafter Spans <sup>†</sup>									
			(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Douglas Fir-Larch	SS	7 - 7	11 - 10	15 - 8	19 - 9	20-0†	7 - 7	11 - 10	15 - 3	18 - 7	20-0†
	Douglas Fir-Larch	No.1	7 - 1	10 - 5	13 - 2	16 - 1	18 - 8	6 - 8	9 - 10	12 - 5	15 - 2	17 - 7
	Douglas Fir-Larch	No.2	6 - 9	9 - 10	12 - 6	15 - 3	17 - 9	6 - 4	9 - 4	11 - 9	14 - 5	16 - 8
	Douglas Fir-Larch	No.3	5 - 2	7 - 7	9 - 7	11 - 8	13 - 6	4 - 10	7 - 1	9 - 0	11 - 0	12 - 9
	Hem-Fir	SS	7 - 2	11 - 3	14 - 9	18 - 10	20-0†	7 - 2	11 - 3	14 - 8	18 - 0	20-0†
	Hem-Fir	No.1	7 - 0	10 - 3	13 - 0	15 - 11	18 - 5	6 - 7	9 - 8	12 - 3	15 - 0	17 - 5
	Hem-Fir	No.2	6 - 7	9 - 7	12 - 2	14 - 10	17 - 3	6 - 2	9 - 1	11 - 6	14 - 0	16 - 3
	Hem-Fir	No.3	5 - 0	7 - 4	9 - 4	11 - 5	13 - 2	4 - 9	6 - 11	8 - 9	10 - 9	12 - 5
	Southern Pine	SS	7 - 5	11 - 8	15 - 4	19 - 7	20-0†	7 - 5	11 - 8	15 - 4	18 - 10	20-0†
	Southern Pine	No.1	7 - 1	10 - 7	13 - 5	15 - 9	18 - 8	6 - 9	10 - 0	12 - 8	14 - 10	17 - 7
	Southern Pine	No.2	6 - 1	9 - 2	11 - 7	13 - 9	16 - 2	5 - 9	8 - 7	10 - 11	12 - 11	15 - 3
	Southern Pine	No.3	4 - 8	6 - 11	8 - 9	10 - 7	12 - 6	4 - 5	6 - 6	8 - 3	10 - 0	11 - 10
	Spruce-Pine Fir	SS	7 - 0	11 - 0	14 - 6	18 - 0	20-0†	7 - 0	11 - 0	13 - 11	17 - 0	19 - 8
	Spruce-Pine Fir	No.1	6 - 8	9 - 9	12 - 4	15 - 1	17 - 6	6 - 3	9 - 2	11 - 8	14 - 2	16 - 6
Spruce-Pine Fir	No.2	6 - 8	9 - 9	12 - 4	15 - 1	17 - 6	6 - 3	9 - 2	11 - 8	14 - 2	16 - 6	
Spruce-Pine Fir	No.3	5 - 0	7 - 4	9 - 4	11 - 5	13 - 2	4 - 9	6 - 11	8 - 9	10 - 9	12 - 5	
16	Douglas Fir-Larch	SS	6 - 10	10 - 9	14 - 0	17 - 1	19 - 10	6 - 10	10 - 5	13 - 2	16 - 1	18 - 8
	Douglas Fir-Larch	No.1	6 - 2	9 - 0	11 - 5	13 - 11	16 - 2	5 - 10	8 - 6	10 - 9	13 - 2	15 - 3
	Douglas Fir-Larch	No.2	5 - 10	8 - 7	10 - 10	13 - 3	15 - 4	5 - 6	8 - 1	10 - 3	12 - 6	14 - 6
	Douglas Fir-Larch	No.3	4 - 6	6 - 6	8 - 3	10 - 1	11 - 9	4 - 3	6 - 2	7 - 10	9 - 6	11 - 1
	Hem-Fir	SS	6 - 6	10 - 2	13 - 5	16 - 6	19 - 2	6 - 6	10 - 1	12 - 9	15 - 7	18 - 0
	Hem-Fir	No.1	6 - 1	8 - 11	11 - 3	13 - 9	16 - 0	5 - 9	8 - 5	10 - 8	13 - 0	15 - 1
	Hem-Fir	No.2	5 - 8	8 - 4	10 - 6	12 - 10	14 - 11	5 - 4	7 - 10	9 - 11	12 - 1	14 - 1
	Hem-Fir	No.3	4 - 4	6 - 4	8 - 1	9 - 10	11 - 5	4 - 1	6 - 0	7 - 7	9 - 4	10 - 9
	Southern Pine	SS	6 - 9	10 - 7	14 - 0	17 - 4	20-0†	6 - 9	10 - 7	13 - 9	16 - 4	19 - 3
	Southern Pine	No.1	6 - 2	9 - 2	11 - 8	13 - 8	16 - 2	5 - 10	8 - 8	11 - 0	12 - 10	15 - 3
	Southern Pine	No.2	5 - 3	7 - 11	10 - 0	11 - 11	14 - 0	5 - 0	7 - 5	9 - 5	11 - 3	13 - 2
	Southern Pine	No.3	4 - 1	6 - 0	7 - 7	9 - 2	10 - 10	3 - 10	5 - 8	7 - 1	8 - 8	10 - 3
	Spruce-Pine Fir	SS	6 - 4	10 - 0	12 - 9	15 - 7	18 - 1	6 - 4	9 - 6	12 - 0	14 - 8	17 - 1
	Spruce-Pine Fir	No.1	5 - 9	8 - 5	10 - 8	13 - 1	15 - 2	5 - 5	8 - 0	10 - 1	12 - 4	14 - 3
Spruce-Pine Fir	No.2	5 - 9	8 - 5	10 - 8	13 - 1	15 - 2	5 - 5	8 - 0	10 - 1	12 - 4	14 - 3	
Spruce-Pine Fir	No.3	4 - 4	6 - 4	8 - 1	9 - 10	11 - 5	4 - 1	6 - 0	7 - 7	9 - 4	10 - 9	
19.2	Douglas Fir-Larch	SS	6 - 6	10 - 1	12 - 9	15 - 7	18 - 1	6 - 6	9 - 6	12 - 0	14 - 8	17 - 1
	Douglas Fir-Larch	No.1	5 - 8	8 - 3	10 - 5	12 - 9	14 - 9	5 - 4	7 - 9	9 - 10	12 - 0	13 - 11
	Douglas Fir-Larch	No.2	5 - 4	7 - 10	9 - 11	12 - 1	14 - 0	5 - 0	7 - 4	9 - 4	11 - 5	13 - 2
	Douglas Fir-Larch	No.3	4 - 1	6 - 0	7 - 7	9 - 3	10 - 8	3 - 10	5 - 7	7 - 1	8 - 8	10 - 1
	Hem-Fir	SS	6 - 1	9 - 7	12 - 4	15 - 1	17 - 6	6 - 1	9 - 2	11 - 8	14 - 2	16 - 6
	Hem-Fir	No.1	5 - 7	8 - 2	10 - 3	12 - 7	14 - 7	5 - 3	7 - 8	9 - 8	11 - 10	13 - 9
	Hem-Fir	No.2	5 - 2	7 - 7	9 - 7	11 - 9	13 - 7	4 - 11	7 - 2	9 - 1	11 - 1	12 - 10
	Hem-Fir	No.3	4 - 0	5 - 10	7 - 4	9 - 0	10 - 5	3 - 9	5 - 6	6 - 11	8 - 6	9 - 10
	Southern Pine	SS	6 - 4	10 - 0	13 - 2	15 - 10	18 - 8	6 - 4	9 - 10	12 - 6	14 - 11	17 - 7
	Southern Pine	No.1	5 - 8	8 - 5	10 - 8	12 - 5	14 - 9	5 - 4	7 - 11	10 - 0	11 - 9	13 - 11
	Southern Pine	No.2	4 - 10	7 - 3	9 - 2	10 - 10	12 - 9	4 - 6	6 - 10	8 - 8	10 - 3	12 - 1
	Southern Pine	No.3	3 - 8	5 - 6	6 - 11	8 - 4	9 - 11	3 - 6	5 - 2	6 - 6	7 - 11	9 - 4
	Spruce-Pine Fir	SS	6 - 0	9 - 2	11 - 8	14 - 3	16 - 6	5 - 11	8 - 8	11 - 0	13 - 5	15 - 7
	Spruce-Pine Fir	No.1	5 - 3	7 - 8	9 - 9	11 - 11	13 - 10	5 - 0	7 - 3	9 - 2	11 - 3	13 - 0
Spruce-Pine Fir	No.2	5 - 3	7 - 8	9 - 9	11 - 11	13 - 10	5 - 0	7 - 3	9 - 2	11 - 3	13 - 0	
Spruce-Pine Fir	No.3	4 - 0	5 - 10	7 - 4	9 - 0	10 - 5	3 - 9	5 - 6	6 - 11	8 - 6	9 - 10	
24	Douglas Fir-Larch	SS	6 - 0	9 - 0	11 - 5	13 - 11	16 - 2	5 - 10	8 - 6	10 - 9	13 - 2	15 - 3
	Douglas Fir-Larch	No.1	5 - 0	7 - 4	9 - 4	11 - 5	13 - 2	4 - 9	6 - 11	8 - 9	10 - 9	12 - 5
	Douglas Fir-Larch	No.2	4 - 9	7 - 0	8 - 10	10 - 10	12 - 6	4 - 6	6 - 7	8 - 4	10 - 2	11 - 10
	Douglas Fir-Larch	No.3	3 - 8	5 - 4	6 - 9	8 - 3	9 - 7	3 - 5	5 - 0	6 - 4	7 - 9	9 - 0
	Hem-Fir	SS	5 - 8	8 - 9	11 - 0	13 - 6	15 - 7	5 - 7	8 - 3	10 - 5	12 - 8	14 - 9
	Hem-Fir	No.1	5 - 0	7 - 3	9 - 2	11 - 3	13 - 0	4 - 8	6 - 10	8 - 8	10 - 7	12 - 4
	Hem-Fir	No.2	4 - 8	6 - 9	8 - 7	10 - 6	12 - 2	4 - 4	6 - 5	8 - 1	9 - 11	11 - 6
	Hem-Fir	No.3	3 - 7	5 - 2	6 - 7	8 - 1	9 - 4	3 - 4	4 - 11	6 - 3	7 - 7	8 - 10
	Southern Pine	SS	5 - 11	9 - 3	11 - 11	14 - 2	16 - 8	5 - 11	8 - 10	11 - 2	13 - 4	15 - 9
	Southern Pine	No.1	5 - 0	7 - 6	9 - 6	11 - 1	13 - 2	4 - 9	7 - 1	9 - 0	10 - 6	12 - 5
	Southern Pine	No.2	4 - 4	6 - 5	8 - 2	9 - 9	11 - 5	4 - 1	6 - 1	7 - 9	9 - 2	10 - 9
	Southern Pine	No.3	3 - 4	4 - 11	6 - 2	7 - 6	8 - 10	3 - 1	4 - 7	5 - 10	7 - 1	8 - 4
	Spruce-Pine Fir	SS	5 - 6	8 - 3	10 - 5	12 - 9	14 - 9	5 - 4	7 - 9	9 - 10	12 - 0	13 - 11
	Spruce-Pine Fir	No.1	4 - 8	6 - 11	8 - 9	10 - 8	12 - 4	4 - 5	6 - 6	8 - 3	10 - 1	11 - 8
Spruce-Pine Fir	No.2	4 - 8	6 - 11	8 - 9	10 - 8	12 - 4	4 - 5	6 - 6	8 - 3	10 - 1	11 - 8	
Spruce-Pine Fir	No.3	3 - 7	5 - 2	6 - 7	8 - 1	9 - 4	3 - 4	4 - 11	6 - 3	7 - 7	8 - 10	

† Spans are limited to 20 feet in length.  
See footnote 1.

**Table 3.26H Rafter Spans for Common Lumber Species**

(Ceiling Attached to Rafters,  
Ground Snow Load = 70 psf, L/Δ = 240)

**GSL = 70 psf**  
**L/Δ = 240**

Joist Spacing (in.)	Species	Grade	Dead Load = 10 psf					Dead Load = 20 psf				
			2x4	2x6	2x8	2x10	2x12	2x4	2x6	2x8	2x10	2x12
			Maximum Rafter Spans <sup>†</sup>									
			(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)	(ft.-in.)
12	Douglas Fir-Larch	SS	6-10	10-9	14-3	18-2	20-0†	6-10	10-9	14-3	18-2	20-0†
	Douglas Fir-Larch	No.1	6-7	10-5	13-2	16-1	18-8	6-7	9-10	12-5	15-2	17-7
	Douglas Fir-Larch	No.2	6-6	9-10	12-6	15-3	17-9	6-4	9-4	11-9	14-5	16-8
	Douglas Fir-Larch	No.3	5-2	7-7	9-7	11-8	13-6	4-10	7-1	9-0	11-0	12-9
	Hem-Fir	SS	6-6	10-2	13-5	17-2	20-0†	6-6	10-2	13-5	17-2	20-0†
	Hem-Fir	No.1	6-4	10-0	13-0	15-11	18-5	6-4	9-8	12-3	15-0	17-5
	Hem-Fir	No.2	6-1	9-6	12-2	14-10	17-3	6-1	9-1	11-6	14-0	16-3
	Hem-Fir	No.3	5-0	7-4	9-4	11-5	13-2	4-9	6-11	8-9	10-9	12-5
	Southern Pine	SS	6-9	10-7	14-0	17-10	20-0†	6-9	10-7	14-0	17-10	20-0†
	Southern Pine	No.1	6-6	10-2	13-5	15-9	18-8	6-6	10-0	12-8	14-10	17-7
	Southern Pine	No.2	6-1	9-2	11-7	13-9	16-2	5-9	8-7	10-11	12-11	15-3
	Southern Pine	No.3	4-8	6-11	8-9	10-7	12-6	4-5	6-6	8-3	10-0	11-10
	Spruce-Pine Fir	SS	6-4	10-0	13-2	16-9	20-0†	6-4	10-0	13-2	16-9	19-8
	Spruce-Pine Fir	No.1	6-2	9-9	12-4	15-1	17-6	6-2	9-2	11-8	14-2	16-6
Spruce-Pine Fir	No.2	6-2	9-9	12-4	15-1	17-6	6-2	9-2	11-8	14-2	16-6	
Spruce-Pine Fir	No.3	5-0	7-4	9-4	11-5	13-2	4-9	6-11	8-9	10-9	12-5	
16	Douglas Fir-Larch	SS	6-3	9-10	12-11	16-6	19-10	6-3	9-10	12-11	16-1	18-8
	Douglas Fir-Larch	No.1	6-0	9-0	11-5	13-11	16-2	5-10	8-6	10-9	13-2	15-3
	Douglas Fir-Larch	No.2	5-10	8-7	10-10	13-3	15-4	5-6	8-1	10-3	12-6	14-6
	Douglas Fir-Larch	No.3	4-6	6-6	8-3	10-1	11-9	4-3	6-2	7-10	9-6	11-1
	Hem-Fir	SS	5-11	9-3	12-2	15-7	18-11	5-11	9-3	12-2	15-7	18-0
	Hem-Fir	No.1	5-9	8-11	11-3	13-9	16-0	5-9	8-5	10-8	13-0	15-1
	Hem-Fir	No.2	5-6	8-4	10-6	12-10	14-11	5-4	7-10	9-11	12-1	14-1
	Hem-Fir	No.3	4-4	6-4	8-1	9-10	11-5	4-1	6-0	7-7	9-4	10-9
	Southern Pine	SS	6-1	9-7	12-8	16-2	19-8	6-1	9-7	12-8	16-2	19-3
	Southern Pine	No.1	5-11	9-2	11-8	13-8	16-2	5-10	8-8	11-0	12-10	15-3
	Southern Pine	No.2	5-3	7-11	10-0	11-11	14-0	5-0	7-5	9-5	11-3	13-2
	Southern Pine	No.3	4-1	6-0	7-7	9-2	10-10	3-10	5-8	7-1	8-8	10-3
	Spruce-Pine Fir	SS	5-9	9-1	11-11	15-3	18-1	5-9	9-1	11-11	14-8	17-1
	Spruce-Pine Fir	No.1	5-8	8-5	10-8	13-1	15-2	5-5	8-0	10-1	12-4	14-3
Spruce-Pine Fir	No.2	5-8	8-5	10-8	13-1	15-2	5-5	8-0	10-1	12-4	14-3	
Spruce-Pine Fir	No.3	4-4	6-4	8-1	9-10	11-5	4-1	6-0	7-7	9-4	10-9	
19.2	Douglas Fir-Larch	SS	5-10	9-3	12-2	15-6	18-1	5-10	9-3	12-0	14-8	17-1
	Douglas Fir-Larch	No.1	5-8	8-3	10-5	12-9	14-9	5-4	7-9	9-10	12-0	13-11
	Douglas Fir-Larch	No.2	5-4	7-10	9-11	12-1	14-0	5-0	7-4	9-4	11-5	13-2
	Douglas Fir-Larch	No.3	4-1	6-0	7-7	9-3	10-8	3-10	5-7	7-1	8-8	10-1
	Hem-Fir	SS	5-6	8-8	11-6	14-8	17-6	5-6	8-8	11-6	14-2	16-6
	Hem-Fir	No.1	5-5	8-2	10-3	12-7	14-7	5-3	7-8	9-8	11-10	13-9
	Hem-Fir	No.2	5-2	7-7	9-7	11-9	13-7	4-11	7-2	9-1	11-1	12-10
	Hem-Fir	No.3	4-0	5-10	7-4	9-0	10-5	3-9	5-6	6-11	8-6	9-10
	Southern Pine	SS	5-9	9-1	11-11	15-3	18-6	5-9	9-1	11-11	14-11	17-7
	Southern Pine	No.1	5-6	8-5	10-8	12-5	14-9	5-4	7-11	10-0	11-9	13-11
	Southern Pine	No.2	4-10	7-3	9-2	10-10	12-9	4-6	6-10	8-8	10-3	12-1
	Southern Pine	No.3	3-8	5-6	6-11	8-4	9-11	3-6	5-2	6-6	7-11	9-4
	Spruce-Pine Fir	SS	5-5	8-6	11-3	14-3	16-6	5-5	8-6	11-0	13-5	15-7
	Spruce-Pine Fir	No.1	5-3	7-8	9-9	11-11	13-10	5-0	7-3	9-2	11-3	13-0
Spruce-Pine Fir	No.2	5-3	7-8	9-9	11-11	13-10	5-0	7-3	9-2	11-3	13-0	
Spruce-Pine Fir	No.3	4-0	5-10	7-4	9-0	10-5	3-9	5-6	6-11	8-6	9-10	
24	Douglas Fir-Larch	SS	5-5	8-7	11-3	13-11	16-2	5-5	8-6	10-9	13-2	15-3
	Douglas Fir-Larch	No.1	5-0	7-4	9-4	11-5	13-2	4-9	6-11	8-9	10-9	12-5
	Douglas Fir-Larch	No.2	4-9	7-0	8-10	10-10	12-6	4-6	6-7	8-4	10-2	11-10
	Douglas Fir-Larch	No.3	3-8	5-4	6-9	8-3	9-7	3-5	5-0	6-4	7-9	9-0
	Hem-Fir	SS	5-2	8-1	10-8	13-6	15-7	5-2	8-1	10-5	12-8	14-9
	Hem-Fir	No.1	5-0	7-3	9-2	11-3	13-0	4-8	6-10	8-8	10-7	12-4
	Hem-Fir	No.2	4-8	6-9	8-7	10-6	12-2	4-4	6-5	8-1	9-11	11-6
	Hem-Fir	No.3	3-7	5-2	6-7	8-1	9-4	3-4	4-11	6-3	7-7	8-10
	Southern Pine	SS	5-4	8-5	11-1	14-2	16-8	5-4	8-5	11-1	13-4	15-9
	Southern Pine	No.1	5-0	7-6	9-6	11-1	13-2	4-9	7-1	9-0	10-6	12-5
	Southern Pine	No.2	4-4	6-5	8-2	9-9	11-5	4-1	6-1	7-9	9-2	10-9
	Southern Pine	No.3	3-4	4-11	6-2	7-6	8-10	3-1	4-7	5-10	7-1	8-4
	Spruce-Pine Fir	SS	5-0	7-11	10-5	12-9	14-9	5-0	7-9	9-10	12-0	13-11
	Spruce-Pine Fir	No.1	4-8	6-11	8-9	10-8	12-4	4-5	6-6	8-3	10-1	11-8
Spruce-Pine Fir	No.2	4-8	6-11	8-9	10-8	12-4	4-5	6-6	8-3	10-1	11-8	
Spruce-Pine Fir	No.3	3-7	5-2	6-7	8-1	9-4	3-4	4-11	6-3	7-7	8-10	

† Spans are limited to 20 feet in length.  
See footnote 1.