

WOOD SPECIES USED IN CONSTRUCTION

Canadian Species

SPECIES COMBINATION	ABBREVIATIONS	SPECIES INCLUDED IN COMBINATION	PHYSICAL CHARACTERISTICS	COLOR RANGES
Spruce-Pine-Fir	S-P-F	Spruce (all Species except Cost Sitka), Jack Pine, Lodgepole Pine, Balsam Fir, Alpine Fir	-Lightweight -Works easily -Takes paint well -Holds paint well -Small knots	White to pale yellow
Douglas-Fir-Larch	D Fir-L (N)	Douglas Fir Western Larch	-High degree of hardness -Good resistance to decay	Reddish brown to yellowish brown
Hem-Fir (North)	Hem-Fir (N)	Pacific-Hemlock Amabilis Fir	-Works easy -Takes paint well -Holds nails well	Yellow brown to white
Northern Species	North Species	Western Red Cedar	-Exceptional resistance to decay -High appearance qualities -Works easily -Takes fine finishes	Reddish brown heartwood, light sapwood
Northern Species	North Species	Red Pine	-Works easily	Reddish to pale brown heartwood
		Ponderosa Pine	-Takes finish well -Works easily-finishes well-little splitting or splintering	Pale yellow sapwood
		Western White Pine Eastern White Pine	-Softest of Canadian pine - works easily -finish easily-little splitting-holds nails well-take stains, paints well	Almost white sapwood, creamy white to light straw brown heartwood
		Trembling Aspen Largetooth Aspen Balsam Poplar	-Works easily -Finish well -Hold nails well	Almost white to greyish white
		Any other Canadian species graded in accordance with the NLGA rules		

CANADIAN LUMBER SPAN CHARTS

These span charts represent the most commonly available grades of Canadian Dimensional Lumber. Spans are for use in the U.S.A. and for dry service conditions. For other grades and loading conditions and spacing refer to the *Canadian Dimension Lumber Data Book* published by the Canadian Wood Council. www.cwc.ca. Span charts courtesy of the Canadian Wood Council.

FLOOR JOISTS - SLEEPING ROOMS & ATTICS 30 PSF LIVE LOAD, 10 PSF DEAD LOAD

Spruce-Pine-Fir	2x6 Grade			2x8 Grade			2x10 Grade			2x12 Grade		
	O.C.	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3
12"	11-7	11-3	9-8	15-3	14-11	12-4	19-5	19-0	15-0	23-7	23-0	17-5
16"	10-6	10-3	8-5	13-10	13-6	10-8	17-8	17-2	13-0	21-6	19-11	15-1
24"	9-2	8-11	6-10	12-1	11-6	8-8	15-5	14-1	10-7	18-9	16-3	12-4

Doug Fir-Larch North	2x6 Grade			2x8 Grade			2x10 Grade			2x12 Grade		
	O.C.	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3
12"	12-6	11-10	9-6	16-6	15-7	12-0	21-0	19-3	14-8	25-7	22-4	17-0
16"	11-4	10-9	8-2	15-0	13-8	10-5	19-1	16-8	12-8	23-3	19-4	14-8
24"	9-11	8-10	6-8	13-1	11-2	8-6	16-8	13-8	10-4	19-10	15-10	12-0

Canadian Species Continued

FLOOR JOISTS - SLEEPING ROOMS & ATTICS 30 PSF LIVE LOAD, 10 PSF DEAD LOAD

Hem-Fir North	2x6 Grade			2x8 Grade			2x10 Grade			2x12 Grade		
	O.C.	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3
12"	12-0	11-10	10-5	15-10	15-7	13-2	20-3	19-10	16-1	24-8	24-2	18-8
16"	10-11	10-9	9-0	14-5	14-2	11-5	18-5	18-0	13-11	22-5	21-4	16-2
24"	9-7	9-4	7-4	12-7	12-4	9-4	16-1	15-0	11-5	19-7	17-5	13-2

North Species	2x6 Grade			2x8 Grade			2x10 Grade			2x12 Grade		
	O.C.	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3
12"	10-5	10-5	8-1	13-9	13-2	10-3	17-6	16-1	12-7	21-4	18-8	14-7
16"	9-6	9-0	7-0	12-6	11-5	8-11	15-11	13-11	10-11	19-4	16-2	12-7
24"	8-3	7-4	5-9	10-11	9-4	7-3	13-11	11-5	8-11	16-11	13-2	10-4

FLOOR JOISTS - SLEEPING ROOMS & ATTICS 40 PSF LIVE LOAD, 10 PSF DEAD LOAD

Spruce-Pine-Fir	2x6 Grade			2x8 Grade			2x10 Grade			2x12 Grade		
	O.C.	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3
12"	10-6	10-3	8-8	13-10	13-6	11-0	17-8	17-3	13-5	21-6	20-7	15-7
16"	9-6	9-4	7-6	12-7	12-3	9-6	16-0	15-5	11-8	19-6	17-10	13-6
24"	8-4	8-1	6-2	11-0	10-3	7-9	14-0	12-7	9-6	17-0	14-7	11-0

Doug Fir-Larch North	2x6 Grade			2x8 Grade			2x10 Grade			2x12 Grade		
	O.C.	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3
12"	11-4	10-9	8-6	15-0	14-1	10-9	19-1	17-3	13-1	23-3	20-0	15-2
16"	10-4	9-8	7-4	13-7	12-3	9-3	17-4	14-11	11-4	21-1	17-4	13-2
24"	9-0	7-11	6-0	11-11	10-0	7-7	15-2	12-2	9-3	17-9	14-2	10-9

Hem-Fir North	2x6 Grade			2x8 Grade			2x10 Grade			2x12 Grade		
	O.C.	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3
12"	10-11	10-9	9-4	14-5	14-2	11-9	18-5	18-0	14-5	22-5	21-11	16-8
16"	9-11	9-9	8-1	13-1	12-10	10-3	16-9	16-5	12-6	20-4	19-1	14-6
24"	8-8	8-6	6-7	11-5	11-0	8-4	14-7	13-5	10-2	17-9	15-7	11-10

North Species	2x6 Grade			2x8 Grade			2x10 Grade			2x12 Grade		
	O.C.	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3	Sel. Str.	No. 1 No. 2 No. 3	No. 3
12"	9-6	9-4	7-3	12-6	11-9	9-2	15-11	14-5	11-3	19-4	16-8	13-0
16"	8-7	8-1	6-3	11-4	10-3	8-0	14-6	12-6	9-9	17-7	14-6	11-3
24"	7-6	6-7	5-2	9-11	8-4	6-6	12-8	10-2	7-11	15-2	11-10	9-3

WOOD SPECIES USED IN CONSTRUCTION

Canadian Species Continued

CEILING JOISTS - DRYWALL CEILING, NO SLEEPING ROOMS, NO ATTIC STORAGE, 10 PSF LIVE, 5 PSF DEAD LOAD

Spruce-Pine-Fir	2x4 Grade			2x6 Grade			2x8 Grade			2x10 Grade		
	O.C.	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	
12"	12-2	11-10	10-10	19-1	18-8	15-10	25-2	24-7	20-1	32-1	31-4	24-6
16"	11-0	10-9	9-5	17-4	16-11	13-9	22-10	22-4	17-5	29-2	28-1	21-3
24"	9-8	9-5	7-8	15-2	14-9	11-2	19-11	18-9	14-2	25-5	22-11	17-4

Doug Fir-Larch North	2x4 Grade			2x6 Grade			2x8 Grade			2x10 Grade		
	O.C.	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	
12"	13-2	12-5	10-7	20-8	19-6	15-5	27-2	25-8	19-7	34-8	31-6	23-11
16"	11-11	11-3	9-2	18-9	17-8	13-5	24-8	22-4	16-11	31-6	27-3	20-8
24"	10-5	9-10	7-6	16-4	14-5	10-11	21-7	18-3	13-10	27-6	22-3	16-11

Hem-Fir North	2x4 Grade			2x6 Grade			2x8 Grade			2x10 Grade		
	O.C.	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	
12"	12-8	12-5	11-7	19-11	19-6	17-0	26-2	25-8	21-6	33-5	32-9	26-4
16"	11-6	11-3	10-1	18-1	17-8	14-9	23-10	23-4	18-8	30-5	29-9	22-9
24"	10-0	9-10	8-3	15-9	15-6	12-0	20-10	20-1	15-3	26-6	24-6	18-7

North Species	2x4 Grade			2x6 Grade			2x8 Grade			2x10 Grade		
	O.C.	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	
12"	10-11	10-11	9-1	17-2	17-0	13-3	22-8	21-6	16-10	28-11	26-4	20-6
16"	9-11	9-11	7-10	15-7	14-9	11-6	20-7	18-8	14-7	26-3	22-9	17-9
24"	8-8	8-3	6-5	13-8	12-0	9-5	18-0	15-3	11-11	22-11	18-7	14-6

RAFTERS - ANY SLOPE, DRYWALL FINISH, NO ATTIC SPACE, 20 PSF LIVE, 10 PSF DEAD LOAD

Spruce-Pine-Fir	2x6 Grade			2x8 Grade			2x10 Grade			2x12 Grade		
	O.C.	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	
12"	15-2	14-9	11-2	19-11	18-8	14-1	25-5	22-9	17-3	30-11	26-5	20-0
16"	13-9	12-9	9-8	18-2	16-2	12-2	23-2	19-9	14-11	27-4	22-10	17-3
24"	12-0	10-5	7-10	15-9	13-2	10-0	19-3	16-1	12-2	22-4	18-8	14-1

Doug Fir-Larch North	2x6 Grade			2x8 Grade			2x10 Grade			2x12 Grade		
	O.C.	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	Sel. Str.	No. 1 No. 2 No. 3	
12"	16-4	14-4	10-10	21-7	18-1	13-9	27-6	22-1	16-9	32-2	25-8	19-5
16"	14-11	12-5	9-5	19-7	15-8	11-11	24-0	19-2	14-6	27-11	22-2	16-10
24"	12-8	10-1	7-8	16-1	12-10	9-9	19-8	15-8	11-10	22-9	18-2	13-9

WOOD SPECIES USED IN CONSTRUCTION

Canadian Species Continued

RAFTERS - ANY SLOPE, DRYWALL FINISH, NO ATTIC SPACE, 20 PSF LIVE, 10 PSF DEAD LOAD

Hem-Fir North	2x6 Grade			2x8 Grade			2x10 Grade			2x12 Grade		
	O.C.	Sel. Str.	No. 1 No. 2	No. 3	Sel. Str.	No. 1 No. 2	No. 3	Sel. Str.	No. 1 No. 2	No. 3	Sel. Str.	No. 1 No. 2
12"	15-9	15-6	11-11	20-10	19-11	15-1	26-6	24-4	18-6	32-2	28-3	21-5
16"	14-4	13-8	10-4	18-11	17-3	13-1	24-0	21-1	16-0	27-11	24-5	18-6
24"	12-6	11-2	8-5	16-1	14-1	10-8	19-8	17-3	13-1	22-9	20-0	15-2

North Species	2x6 Grade			2x8 Grade			2x10 Grade			2x12 Grade		
	O.C.	Sel. Str.	No. 1 No. 2	No. 3	Sel. Str.	No. 1 No. 2	No. 3	Sel. Str.	No. 1 No. 2	No. 3	Sel. Str.	No. 1 No. 2
12"	13-8	11-11	9-4	18-0	15-1	11-9	22-11	18-6	14-5	27-6	21-5	16-8
16"	12-5	10-4	8-1	16-4	13-1	10-3	20-7	16-0	12-6	23-10	18-6	14-6
24"	10-10	8-5	6-7	13-9	10-8	8-4	16-9	13-1	10-2	19-5	15-2	11-10

RAFTERS - ANY SLOPE, DRYWALL FINISH, NO ATTIC SPACE, 30 PSF LIVE, 10 PSF DEAD LOAD

Spruce- Pine- Fir	2x6 Grade			2x8 Grade			2x10 Grade			2x12 Grade		
	O.C.	Sel. Str.	No. 1 No. 2	No. 3	Sel. Str.	No. 1 No. 2	No. 3	Sel. Str.	No. 1 No. 2	No. 3	Sel. Str.	No. 1 No. 2
12"	13-3	12-11	9-10	17-5	16-5	12-5	22-3	20-1	15-2	27-1	23-3	17-7
16"	12-0	11-3	8-6	15-10	14-3	10-9	20-2	17-5	13-2	24-1	20-2	15-3
24"	10-6	9-2	6-11	13-10	11-8	8-9	17-0	14-2	10-9	19-8	16-6	12-5

Doug Fir- Larch	2x6 Grade			2x8 Grade			2x10 Grade			2x12 Grade		
	O.C.	Sel. Str.	No. 1 No. 2	No. 3	Sel. Str.	No. 1 No. 2	No. 3	Sel. Str.	No. 1 No. 2	No. 3	Sel. Str.	No. 1 No. 2
12"	14-4	12-7	9-7	18-10	16-0	12-1	24-1	19-6	14-10	28-5	22-7	17-2
16"	13-0	10-11	8-3	17-2	13-10	10-6	21-2	16-11	12-10	24-7	19-7	14-10
24"	11-2	8-11	6-9	14-2	11-3	8-7	17-4	13-9	10-6	20-1	16-0	12-2

Hem-Fir North	2x6 Grade			2x8 Grade			2x10 Grade			2x12 Grade		
	O.C.	Sel. Str.	No. 1 No. 2	No. 3	Sel. Str.	No. 1 No. 2	No. 3	Sel. Str.	No. 1 No. 2	No. 3	Sel. Str.	No. 1 No. 2
12"	13-9	13-6	10-6	18-2	17-7	13-4	23-2	21-6	16-3	28-2	24-11	18-11
16"	12-6	12-0	9-1	16-6	15-3	11-7	21-1	18-7	14-1	24-7	21-7	16-4
24"	10-11	9-10	7-5	14-2	12-5	9-5	17-4	15-2	11-6	20-1	17-7	13-4

North Species	2x6 Grade			2x8 Grade			2x10 Grade			2x12 Grade		
	O.C.	Sel. Str.	No. 1 No. 2	No. 3	Sel. Str.	No. 1 No. 2	No. 3	Sel. Str.	No. 1 No. 2	No. 3	Sel. Str.	No. 1 No. 2
12"	11-11	10-6	8-3	15-9	13-4	10-5	20-1	16-3	12-8	24-3	18-11	14-9
16"	10-10	9-1	7-1	14-3	11-7	9-0	18-1	14-1	11-0	21-0	16-4	12-9
24"	9-6	7-5	5-10	12-1	9-5	7-4	14-10	11-6	9-0	17-2	13-4	10-5