



CITY OF COEUR D'ALENE

Building Services

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WESTERN LUMBER SPAN TABLES

ROOF RAFTERS

40# Snow Load, 15# Dead Load, L/180

Roof pitch greater than 3 in 12. Heavy roof covering. No ceiling finish.

Table RR-23

| Species Of Group | Grade | Span (feet and inches) | | | | | | | | | | | |
|---------------------|-------------|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 2 x 6 | | | 2 x 8 | | | 2 x 10 | | | 2 x 12 | | |
| | | 12" oc | 16" oc | 24" oc | 12" oc | 16" oc | 24" oc | 12" oc | 16" oc | 24" oc | 12" oc | 16" oc | 24" oc |
| Douglas Fir- | Sel. Struc. | 14-4 | 13-0 | 10-8 | 18-10 | 16-7 | 13-6 | 23-5 | 20-3 | 16-6 | 27-1 | 23-6 | 19-2 |
| Larch | No. 1 & Btr | 13-6 | 11-8 | 9-6 | 17-1 | 14-9 | 12-1 | 20-10 | 18-0 | 14-9 | 24-2 | 20-11 | 17-1 |
| | No. 1 | 12-7 | 10-10 | 8-11 | 15-11 | 13-9 | 11-3 | 19-5 | 16-10 | 13-9 | 22-6 | 19-6 | 15-11 |
| | No. 2 | 11-9 | 10-2 | 8-4 | 14-10 | 12-11 | 10-6 | 18-2 | 15-9 | 12-10 | 21-1 | 18-3 | 14-11 |
| | No. 3 | 8-11 | 7-8 | 6-3 | 11-3 | 9-9 | 7-11 | 13-9 | 11-11 | 9-9 | 15-11 | 13-9 | 11-3 |

CEILING JOISTS

10# Live Load, 10# Dead Load, L/360

Use these loading conditions for the following: No attic storage. Ceilings where the roof pitch is not steeper than 3 in 12. Plaster ceilings. Table CJ-3

| Species Of Group | Grade | Span (feet and inches) | | | | | | | | | | | |
|---------------------|-------------|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 2 x 4 | | | 2 x 6 | | | 2 x 8 | | | 2 x 10 | | |
| | | 12" oc | 16" oc | 24" oc | 12" oc | 16" oc | 24" oc | 12" oc | 16" oc | 24" oc | 12" oc | 16" oc | 24" oc |
| Douglas Fir- | Sel. Struc. | 11-6 | 10-5 | 9-1 | 18-0 | 16-4 | 14-4 | 23-9 | 21-7 | 18-10 | 30-4 | 27-6 | 24-1 |
| Larch | No. 1 & Btr | 11-3 | 10-3 | 8-11 | 17-8 | 16-1 | 14-1 | 23-4 | 21-2 | 18-6 | 29-9 | 27-1 | 22-9 |
| | No. 1 | 11-1 | 10-0 | 8-9 | 17-4 | 15-9 | 13-9 | 22-11 | 20-10 | 17-5 | 29-2 | 26-0 | 21-3 |
| | No. 2 | 10-10 | 9-10 | 8-7 | 17-0 | 15-6 | 12-10 | 22-5 | 19-11 | 16-3 | 28-1 | 24-4 | 19-10 |
| | No. 3 | 9-5 | 8-2 | 6-8 | 13-9 | 11-11 | 9-8 | 17-5 | 15-1 | 12-4 | 21-3 | 18-5 | 15-0 |

FLOOR JOISTS

40# Live Load, 10# Dead Load, L/360

Residential occupancies include private dwelling, private apartment and hotel guests rooms. Deck under CABO and Standard Codes.

Table FJ-1

| Species Of Group | Grade | Span (feet and inches) | | | | | | | | | | | |
|---------------------|-------------|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 2 x 6 | | | 2 x 8 | | | 2 x 10 | | | 2 x 12 | | |
| | | 12" oc | 16" oc | 24" oc | 12" oc | 16" oc | 24" oc | 12" oc | 16" oc | 24" oc | 12" oc | 16" oc | 24" oc |
| Douglas Fir- | Sel. Struc. | 11-4 | 10-4 | 9-0 | 15-0 | 13-7 | 11-11 | 19-1 | 17-4 | 15-2 | 23-3 | 21-1 | 18-5 |
| Larch | No. 1 & Btr | 11-2 | 10-2 | 8-10 | 14-8 | 13-4 | 11-8 | 18-9 | 17-0 | 14-5 | 22-10 | 20-5 | 16-8 |
| | No. 1 | 10-11 | 9-11 | 8-8 | 14-5 | 13-1 | 11-0 | 18-5 | 16-5 | 13-5 | 22-0 | 19-1 | 15-7 |
| | No. 2 | 10-9 | 9-9 | 8-1 | 14-2 | 12-7 | 10-3 | 17-9 | 15-5 | 12-7 | 20-7 | 17-10 | 14-7 |
| | No. 3 | 8-8 | 7-6 | 6-2 | 11-0 | 9-6 | 7-9 | 13-5 | 11-8 | 9-6 | 15-7 | 13-6 | 11-0 |

FLOOR JOISTS

60# Live Load, 10# Dead Load, L/360

Residential balconies (exterior) under CABO, BOCA and UBC. Decks under UBC and BOCA.

Table FJ-7

| Species Of Group | Grade | Span (feet and inches) | | | | | | | | | | | |
|---------------------|-------------|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 2 x 8 | | | 2 x 10 | | | 2 x 12 | | | 2 x 14 | | |
| | | 12" oc | 16" oc | 24" oc | 12" oc | 16" oc | 24" oc | 12" oc | 16" oc | 24" oc | 12" oc | 16" oc | 24" oc |
| Douglas Fir- | Sel. Struc. | 13-1 | 11-11 | 10-5 | 16-8 | 15-2 | 13-3 | 20-3 | 18-5 | 15-10 | 23-11 | 21-8 | 17-9 |
| Larch | No. 1 & Btr | 12-10 | 11-8 | 10-0 | 16-5 | 14-11 | 12-2 | 19-11 | 17-3 | 14-1 | 22-4 | 19-4 | 15-9 |
| | No. 1 | 12-7 | 11-5 | 9-4 | 16-1 | 13-11 | 11-4 | 18-7 | 16-1 | 13-2 | 20-10 | 18-0 | 14-8 |
| | No. 2 | 12-4 | 10-8 | 8-8 | 15-0 | 13-0 | 10-7 | 17-5 | 15-1 | 12-4 | 19-5 | 16-10 | 13-9 |
| | No. 3 | 9-4 | 8-1 | 6-7 | 11-4 | 9-10 | 8-0 | 13-2 | 11-5 | 9-4 | 14-8 | 12-9 | 10-5 |