

# FLOOR JOISTS

**125# LIVE LOAD 20# DEAD LOAD L/360**

Table FJ-22

**Design Criteria:** *Strength* - 125 lbs. per sq. ft. live load, plus 20 lbs. per sq. ft. dead load.

*Deflection* - Limited in span in inches divided by 360 for live load only.

Species or Group		Grade		Span (feet and inches)															
				2 x 8				2 x 10				2 x 12				2 x 14			
				spacing on center															
12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"	12"	16"	19.2"	24"				
Douglas Fir-Larch	Sel. Struc.	10-3	9-4	8-9	7-11	13-1	11-10	10-10	9-8	15-10	13-9	12-6	11-2	17-8	15-4	14-0	12-6		
	No.1 & Btr.	10-0	8-8	7-11	7-1	12-3	10-7	9-8	8-8	14-2	12-3	11-2	10-0	15-10	13-9	12-6	11-2		
	No.1	9-2	7-11	7-3	6-5	11-2	9-8	8-10	7-11	12-11	11-2	10-3	9-2	14-5	12-6	11-5	10-3		
	No.2	8-8	7-6	6-10	6-2	10-7	9-2	8-4	7-6	12-3	10-8	9-8	8-8	13-9	11-10	10-10	9-8		
	No.3	6-7	5-9	5-3	4-8	8-1	7-0	6-5	5-9	9-4	8-1	7-5	6-8	10-6	9-1	8-3	7-5		
Douglas Fir-South	Sel. Struc.	9-3	8-5	7-11	7-4	11-10	10-9	10-1	9-2	14-4	13-0	11-11	10-8	16-9	14-7	13-3	<b>11-10</b>		
	No.1	8-9	7-7	6-11	6-3	10-9	9-3	8-6	7-7	12-5	10-9	9-10	8-10	13-11	12-0	11-0	9-10		
	No.2	8-5	7-3	6-8	5-11	10-3	8-11	8-2	7-3	11-11	10-4	9-5	8-5	13-4	11-6	10-6	9-5		
	No.3	6-5	5-7	5-1	4-7	7-11	6-10	6-3	5-7	9-2	7-11	7-3	6-6	10-3	8-10	8-1	7-3		
Hem-Fir	Sel. Struc.	9-8	8-9	8-3	7-8	12-4	11-2	10-5	<b>9-4</b>	15-0	<b>13-3</b>	<b>12-1</b>	<b>10-10</b>	<b>17-1</b>	<b>14-10</b>	<b>13-6</b>	<b>12-1</b>		
	No.1 & Btr.	9-6	8-4	7-7	6-9	11-8	10-2	9-3	8-3	13-7	11-9	<b>10-9</b>	<b>9-7</b>	15-2	<b>13-2</b>	<b>12-0</b>	<b>10-9</b>		
	No.1	9-0	7-10	7-2	6-5	11-0	9-6	8-8	7-9	12-9	11-1	10-1	<b>9-0</b>	14-3	12-4	<b>11-3</b>	<b>10-1</b>		
	No.2	8-5	7-3	6-8	5-11	10-3	8-11	8-2	7-3	11-11	10-4	9-5	<b>8-5</b>	13-4	11-6	<b>10-6</b>	<b>9-5</b>		
	No.3	6-5	5-7	5-1	4-7	7-11	6-10	6-3	5-7	9-2	7-11	7-3	6-6	10-3	8-10	8-1	7-3		
Spruce-Pine-Fir (South)	Sel. Struc.	9-0	8-2	7-9	<b>7-2</b>	11-6	<b>10-5</b>	<b>9-10</b>	<b>9-0</b>	<b>14-0</b>	<b>12-9</b>	<b>11-8</b>	<b>10-5</b>	<b>16-6</b>	<b>14-3</b>	<b>13-0</b>	<b>11-8</b>		
	No.1	8-6	7-5	6-9	6-0	10-5	9-0	8-3	<b>7-5</b>	12-1	<b>10-6</b>	<b>9-7</b>	<b>8-7</b>	13-6	<b>11-8</b>	<b>10-8</b>	<b>9-7</b>		
	No.2	8-0	7-0	6-4	5-8	9-10	8-6	7-9	<b>6-11</b>	11-5	9-10	<b>9-0</b>	<b>8-1</b>	12-9	<b>11-0</b>	<b>10-1</b>	<b>9-0</b>		
	No.3	6-2	5-4	4-10	4-4	7-6	6-6	5-11	5-3	8-8	7-6	6-10	6-2	9-8	8-5	7-8	6-10		
Western Woods	Sel. Struc.	8-8	7-6	6-10	6-2	10-7	9-2	8-4	<b>7-6</b>	12-3	<b>10-8</b>	<b>9-8</b>	<b>8-8</b>	13-9	<b>11-10</b>	<b>10-10</b>	<b>9-8</b>		
	No.1	7-6	6-6	5-11	5-4	9-2	7-11	7-3	6-6	10-8	9-2	8-5	<b>7-6</b>	11-10	10-3	<b>9-5</b>	<b>8-5</b>		
	No.2	7-6	6-6	5-11	5-4	9-2	7-11	7-3	6-6	10-8	9-2	8-5	<b>7-6</b>	11-10	10-3	<b>9-5</b>	<b>8-5</b>		
	No.3	5-7	4-10	4-5	3-11	6-10	5-11	5-5	4-10	7-11	6-10	6-3	5-7	8-10	7-8	7-0	6-3		