

Allowable Total Loads for Beams Supporting Floors

Cedar																
Span in Feet	2 x 6				2 x 8				2 x 10				2 x 12			
	$f_b = 1045 \text{ psi}$				$f_b = 965 \text{ psi}$				$f_b = 885 \text{ psi}$				$f_b = 805 \text{ psi}$			
	Number of Members				Number of Members				Number of Members				Number of Members			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
4	1146	2292	3952	5269	1838	3675	6341	8454	2745	5490	9466	12621	3691	7383	12736	16981
5	917	1833	3161	4215	1470	2940	5072	6763	2196	4392	7572	10097	2953	5906	10188	13585
6	764	1528	2634	3513	1225	2450	4227	5636	1830	3660	6310	8414	2461	4922	8490	11320
7	655	1309	2258	3011	1050	2100	3623	4831	1569	3137	5409	7212	2109	4219	7277	9703
8	573	1146	1805	2407	919	1838	3170	4227	1373	2745	4733	6310	1846	3691	6368	8490
9	475	951	1426	1902	817	1633	2818	3757	1220	2440	4207	5609	1641	3281	5660	7547
10	385	770	1156	1541	735	1470	2536	3382	1098	2196	3786	5048	1477	2953	5094	6792
11	318	637	955	1273	668	1336	2187	2916	998	1996	3442	4589	1342	2685	4631	6175
12	267	535	802	1070	613	1225	1838	2450	915	1830	3155	4207	1230	2461	4245	5660
13	228	456	684	912	522	1044	1566	2088	845	1689	2912	3883	1136	2272	3919	5225
14	196	393	589	786	450	900	1350	1800	784	1569	2704	3606	1055	2109	3639	4852
15	171	342	514	685	392	784	1176	1568	732	1464	2443	3257	984	1969	3396	4528
16	150	301	451	602	345	689	1034	1378	686	1373	2147	2863	923	1846	3184	4245
17	133	267	400	533	305	610	916	1221	634	1268	1902	2536	869	1737	2997	3995
18	119	238	357	475	272	545	817	1089	565	1131	1696	2262	820	1641	2830	3773
19	107	213	320	427	244	489	733	977	507	1015	1522	2030	777	1554	2681	3575
20	96	193	289	385	221	441	662	882	458	916	1374	1832	738	1477	2472	3296
21	87	175	262	349	200	400	600	800	415	831	1246	1662	703	1406	2242	2989
22	80	159	239	318	182	365	547	729	379	757	1136	1514	671	1342	2043	2724
23	73	146	218	291	167	334	500	667	346	693	1039	1385	623	1246	1869	2492
24	67	134	201	267	153	306	459	613	318	636	954	1272	592	1144	1717	2289
25	62	123	185	246	141	282	423	565	293	586	879	1173	527	1055	1582	2109

NOTES:

1. The values shown for f_b are for repetitive use members of No. 2 Grade. When only one or two members make up a beam, non-repetitive f_b values are used.
2. Beams are assumed to be simple beams with uniformly distributed load.
3. When plywood flitch plates are used, add 7% to the values indicated.
4. For beams supporting floors, see "Allowable Total Loads for Beams Supporting FLOORS."
5. Deflection is limited to $L/240$.

Allowable Total Loads for Beams Supporting Roofs

Cedar																
Span in Feet	2 x 6				2 x 8				2 x 10				2 x 12			
	$f_b = 1460$ psi				$f_b = 1350$ psi				$f_b = 1235$ psi				$f_b = 1125$ psi			
	Number of Members				Number of Members				Number of Members				Number of Members			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
4	1321	2642	4557	6076	2114	4227	7293	9724	3162	6325	10909	14546	4240	8480	14634	19512
5	1057	2114	3645	4860	1691	3382	5835	7779	2530	5060	8728	11637	3392	6784	11707	15610
6	881	1761	3038	4050	1409	2818	4862	6483	2108	4216	7273	9697	2827	5653	9756	13008
7	755	1510	2604	3472	1208	2415	4168	5557	1807	3614	6234	8312	2423	4846	8362	11150
8	661	1321	2278	3038	1057	2114	3647	4862	1581	3162	5455	7273	2120	4240	7317	9756
9	587	1174	2025	2700	939	1879	3241	4322	1405	2811	4849	6465	1884	3769	6504	8672
10	528	1057	1733	2311	845	1691	2917	3890	1265	2530	4364	5818	1696	3392	5854	7805
11	477	955	1432	1910	769	1537	2652	3536	1150	2300	3967	5289	1542	3084	5321	7095
12	401	802	1203	1605	705	1409	2431	3241	1054	2108	3636	4849	1413	2827	4878	6504
13	342	684	1025	1367	650	1301	2244	2992	973	1946	3357	4476	1305	2609	4503	6004
14	295	589	884	1179	604	1208	2025	2700	904	1807	3117	4156	1211	2423	4181	5575
15	257	513	770	1027	564	1127	1764	2352	843	1687	2909	3879	1131	2261	3902	5203
16	226	451	677	903	517	1034	1551	2067	791	1581	2727	3636	1060	2120	3658	4878
17	200	400	600	800	458	916	1374	1831	744	1488	2567	3423	998	1995	3443	4591
18	178	357	535	713	408	817	1225	1634	703	1405	2424	3232	942	1884	3252	4336
19	160	320	480	640	367	733	1100	1466	666	1331	2284	3045	893	1785	3081	4108
20	144	289	433	578	331	662	992	1323	632	1265	2061	2748	848	1696	2927	3902
21	131	262	393	524	300	600	900	1200	602	1205	1869	2493	808	1615	2787	3717
22	119	239	358	447	273	547	820	1094	568	1136	1703	2271	771	1542	2661	3548
23	109	218	328	437	250	500	750	1000	519	1039	1558	2078	737	1475	2545	3393
24	100	201	301	401	230	459	689	919	477	954	1431	1908	707	1413	2439	3252
25	92	185	277	370	212	423	635	847	440	879	1319	1759	678	1357	2341	3122

NOTES:

1. The values shown for f_b are for repetitive use members of No. 2 Grade. When only one or two members make up a beam, non-repetitive f_b values are used.
2. Beams are assumed to be simple beams with uniformly distributed load.
3. When plywood flitch plates are used, add 7% to the values indicated.
4. For beams supporting roofs, see "Allowable Total Loads for Beams Supporting ROOFS"
5. Deflection is limited to $L/360$.