

15 SPACE LOAD TABLES

Light Duty Welded, Light Duty Dove Tail & Light Duty Swaged Carbon Steel

Bar Size, Inches	Ped Span, Inches	Wt. Lbs. Sq. Ft.	Sec. Prop Sx*, in ³ Ix*, in ⁴	Clear Span												
				2'- 0"	2'- 6"	3'- 0"	3'- 6"	4'- 0"	4'- 6"	5'- 0"	5'- 6"	6'- 0"	6'- 6"	7'- 0"	8'- 0"	
3/4 x 3/16	49	7.11	0.225	U	675	432	300	220	169	133	U - Safe uniform load in pounds/sq. ft. C - Safe concentrated load in pounds/ft. grating width D - Deflection in inches					
				D	0.099	0.155	0.223	0.304	0.398	0.502						
			0.084	C	675	540	450	386	338	300						
				D	0.079	0.124	0.179	0.243	0.318	0.402						
1 x 3/16	60	9.27	0.400	U	1200	768	533	392	300	237	192	159	Loads and deflections given in this table are theoretical, and are based on a unit stress of 18,000 psi.			
				D	0.074	0.116	0.167	0.228	0.298	0.377	0.466	0.564				
			0.200	C	1200	960	800	686	600	533	480	436				
				D	0.060	0.093	0.134	0.183	0.238	0.301	0.372	0.450				
1-1/4 x 3/16	71	11.43	0.625	U	1875	1200	833	612	469	370	300	248	208			
				D	0.060	0.093	0.134	0.182	0.238	0.301	0.372	0.451	0.535			
			0.391	C	1875	1500	1250	1071	938	833	750	682	625			
				D	0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.361	0.429			
1-1/2 x 3/16	82	13.82	0.900	U	2700	1728	1200	882	675	533	432	357	300	256	220	
				D	0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.375	0.447	0.525	0.607	
			0.675	C	2700	2160	1800	1543	1350	1200	1080	982	900	831	771	
				D	0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358	0.420	0.486	
1-3/4 x 3/16	92	15.98	1.225	U	3675	2352	1633	1200	919	726	588	486	408	348	300	230
				D	0.043	0.067	0.096	0.130	0.170	0.215	0.266	0.322	0.383	0.450	0.521	0.682
			1.072	C	3675	2940	2450	2100	1838	1633	1470	1336	1225	1131	1050	919
				D	0.034	0.053	0.077	0.104	0.136	0.172	0.213	0.257	0.306	0.360	0.417	0.545
2 x 3/16	102	18.14	1.600	U	4800	3072	2133	1567	1200	948	768	635	533	454	392	300
				D	0.037	0.058	0.084	0.114	0.149	0.189	0.233	0.282	0.335	0.393	0.456	0.596
			1.600	C	4800	3840	3200	2743	2400	2133	1920	1745	1600	1477	1371	1200
				D	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.365	0.477
2-1/4 x 3/16	111	20.16	2.025	U	6075	3888	2700	1984	1519	1200	972	803	675	575	496	380
				D	0.033	0.052	0.074	0.101	0.132	0.168	0.207	0.250	0.298	0.350	0.406	0.530
			2.278	C	6075	4860	4050	3471	3038	2700	2430	2209	2025	1869	1736	1519
				D	0.026	0.041	0.060	0.081	0.106	0.134	0.166	0.200	0.238	0.280	0.324	0.424
2-1/2 x 3/16	120	22.32	2.500	U	7500	4800	3333	2449	1875	1481	1200	992	833	710	612	469
				D	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.365	0.477
			3.125	C	7500	6000	5000	4286	3750	3333	3000	2727	2500	2308	2143	1875
				D	0.024	0.037	0.054	0.073	0.095	0.121	0.149	0.180	0.215	0.252	0.292	0.381

*Based on 12.8 bars/ft. of grating width. Bearing bars 15/16" c.c. Add .8 lbs./sq. ft. for 15-W-2, 1/8" bearing bars available by inquiry. **Note:** Grating for spans to the left of the heavy line have a deflection less than 1/4" for uniform loads of 100 lbs./sq. ft. This is the maximum deflection to afford pedestrian comfort and can be exceeded for other types of load at the discretion of the engineer. The actual Ped (pedestrian) Span under this condition is shown above for each size of grating. When serrated grating is specified, the depth of grating required for a specific load will be 1/4" greater than that shown in these tables. 3/4" x 3/16" serrated grating is not available.

Panel Width Chart (in.) - 15-W-4, 15-W-2, 15-DT-4, 15-DT-2, 15-SGCS-4 & 15-SGCS-2 Dimensions Are Out-to-Out of Bearing Bars**

No. of Bars	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
3/16" Bars	1-1/8	2-1/16	3	3-15/16	4-7/8	5-13/16	6-3/4	7-11/16	8-5/8	9-9/16	10-1/2	11-7/16	12-3/8	13-5/16	14-1/4
No. of Bars	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
3/16" Bars	15-3/16	16-1/8	17-1/16	18	18-15/16	19-7/8	20-13/16	21-3/4	22-11/16	23-5/8	24-9/16	25-1/2	26-7/16	27-3/8	28-5/16
No. of Bars	32	33	34	35	36	37	38	39							
3/16" Bars	29-1/4	30-3/16	31-1/8	32-1/16	33	33-15/16	34-7/8	35-13/16							

**Add 1/4" for extended cross bars. Deduct 1/16" for 1/8" bearing bars. Standard panel widths indicated in blue.