

19 SPACE LOAD TABLES

Bar Size, Inches	Ped Span, Inches	Wt.* Lbs. Sq. Ft.	Sec. Prop Sx*, in ³ / lx*, 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"				
1 x 1/8	39	1.71	0.211	U	421	269	187	137											
				D	0.144	0.225	0.324	0.439											
			0.105	C	421	337	281	241											
				D	0.115	0.180	0.259	0.353											
1 x 3/16	44	2.46	0.316	U	632	404	281	206	158										
				D	0.144	0.225	0.324	0.441	0.576										
		I-Bar	1.99	0.158	C	632	505	421	361	316									
					D	0.115	0.180	0.259	0.353	0.461									
1-1/4 x 1/8	47	2.08	0.329	U	658	421	292	215	164										
				D	0.115	0.180	0.259	0.353	0.459										
		0.206	C	658	526	439	376	329											
			D	0.092	0.144	0.208	0.282	0.369											
1-1/4 x 3/16	52	3.01	0.493	U	987	632	439	322	247	195									
				D	0.115	0.180	0.259	0.353	0.461	0.583									
		I-Bar	2.34	0.308	C	987	789	658	564	493	439								
					D	0.092	0.144	0.207	0.282	0.368	0.467								
1-1/2 x 1/8	53	2.46	0.474	U	947	606	421	309	237	187									
				D	0.096	0.150	0.216	0.294	0.384	0.486									
		0.355	C	947	758	632	541	474	421										
			D	0.077	0.120	0.173	0.235	0.307	0.389										
1-1/2 x 3/16	59	3.56	0.711	U	1421	909	632	464	355	281	227								
				D	0.096	0.150	0.216	0.294	0.384	0.487	0.599								
		I-Bar	2.70	0.533	C	1421	1137	947	812	711	632	568							
					D	0.077	0.120	0.173	0.235	0.307	0.389	0.480							
1-3/4 x 3/16	66	4.12	0.967	U	1934	1238	860	632	484	382	309	256	215						
				D	0.082	0.129	0.185	0.252	0.329	0.417	0.514	0.623	0.741						
		I-Bar	3.06	0.846	C	1934	1547	1289	1105	967	860	774	703	645					
					D	0.066	0.103	0.148	0.202	0.263	0.333	0.412	0.498	0.593					
2 x 3/16	73	4.68	1.263	U	2526	1617	1123	825	632	499	404	334	281	239					
				D	0.072	0.113	0.162	0.221	0.288	0.364	0.450	0.544	0.649	0.760					
		I-Bar	3.43	1.263	C	2526	2021	1684	1444	1263	1123	1011	919	842	777				
					D	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608				
2-1/4 x 3/16	80	5.24	1.599	U	3197	2046	1421	1044	799	632	512	423	355	303	261				
				D	0.064	0.100	0.144	0.196	0.256	0.324	0.400	0.484	0.576	0.677	0.784				
		I-Bar	3.75	1.798	C	3197	2558	2132	1827	1599	1421	1279	1163	1066	984	914			
					D	0.051	0.080	0.115	0.157	0.205	0.259	0.320	0.387	0.461	0.541	0.628			
2-1/2 x 3/16	87	5.79	1.974	U	3947	2526	1754	1289	987	780	632	522	439	374	322	247			
				D	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.519	0.609	0.705	0.823			
		I-Bar	4.15	2.467	C	3947	3158	2632	2256	1974	1754	1579	1435	1316	1215	1128	987		
					D	0.046	0.072	0.104	0.141	0.184	0.233	0.288	0.348	0.415	0.487	0.565	0.737		

U - Safe uniform load in pounds/sq. ft.
 C - Safe concentrated load in pounds/ft. grating width
 D - Deflection in inches
 Loads and deflections given in this table are theoretical, and are based on a unit stress of 12,000 psi.

*Based on 10.105 bars/ft. of grating width. Bearing bars 1-3/16" c.c. Add .3 lbs./sq. ft. for 19-SG-2. **Note:** Grating for spans to the left of the heavy line has 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.

Panel Width Chart (in.) - 19-SG-4, 19-SG-2, 19-SGLi-4, 19-SGLi-2, 19-SGF-4, 19-SGF-2, 19-ADT-4 & 19-ADT-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	1-3/8	2-9/16	3-3/4	4-15/16	6-1/8	7-5/16	8-1/2	9-11/16	10-7/8	12-1/16	13-1/4	14-7/16	15-5/8	16-13/16	18
No. of Bars	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
3/16" Bars	19-3/16	20-3/8	21-9/16	22-3/4	23-15/16	25-1/8	26-5/16	27-1/2	28-11/16	29-7/8	31-1/16	32-1/4	33-7/16	34-5/8	35-13/16

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

Panel Width Chart (in.) - 19-SGI-4 & 19-SGI-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
1/4" Flange	1-7/16	2-5/8	3-13/16	5	6-3/16	7-3/8	8-9/16	9-3/4	10-15/16	12-1/8	13-5/16	14-1/2	15-11/16	16-7/8	18-1/16
No. of Bars	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1/4" Flange	19-1/4	20-7/16	21-5/8	22-13/16	24	25-3/16	26-3/8	27-9/16	28-3/4	29-15/16	31-1/8	32-5/16	33-1/2	34-11/16	35-7/8

**Bar thickness is 1/4" at top and bottom. Add 1/4" for extended cross bars. Standard panel widths indicated in teal.