

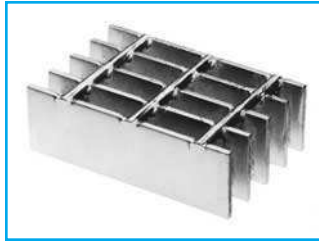
Steel Bar Grating

WELDED

15/16" Center to Center of Bearing Bars



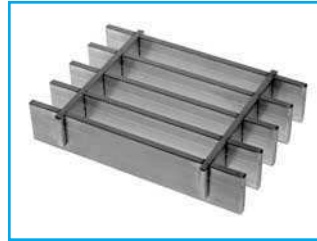
15-W-4
Cross Rods 4" C/C



15-W-2
Cross Rods 2" C/C

PRESS-LOCKED

15/16" Center to Center of Bearing Bars



15-P-4
Cross Bars 4" C/C



15-P-2
Cross Bars 2" C/C

LOAD & DEFLECTION TABLE

Bar Size	Symbol	Approx. Weight psf	Sec. Mod Per Ft. Of Width	SPAN (Length of Bearing Bar)															
				2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	8'-0"	9'-0"			
3/4" x 1/8"	15-4-32	W 4.7	0.150	U	450	288	200	147	113	89									
				D	0.099	0.155	0.223	0.304	0.397	0.503									
				C	450	360	300	257	225	200									
3/4" x 3/16"	15-2-32	W 6.1	0.225	D	0.079	0.124	0.179	0.243	0.318	0.402									
				U	675	432	300	220	169	133	108								
				D	0.099	0.155	0.223	0.304	0.397	0.503	0.621								
1" x 1/8"	15-4-42	W 6.9	0.267	C	675	540	450	386	338	300									
				U	800	512	356	261	200	158	128	106	89						
				D	0.079	0.124	0.179	0.243	0.318	0.402	0.497	0.561	0.670						
1" x 3/16"	15-2-42	W 7.7	0.400	C	800	640	533	457	400	356									
				U	1200	768	533	392	300	237	192	159	133						
				D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536						
1-1/4" x 1/8"	15-4-43	W 8.9	0.417	C	800	640	533	457	400	356									
				U	1200	768	533	392	300	237	192	159	133						
				D	0.074	0.116	0.168	0.228	0.298	0.377	0.466	0.563	0.670						
1-1/4" x 3/16"	15-2-43	W 9.6	0.625	C	1200	960	800	686	600	533									
				U	1250	800	556	408	313	247	200	165	139						
				D	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536						
1-1/2" x 1/8"	15-4-52	W 8.1	0.600	C	1250	1000	833	714	625	556									
				U	1800	1152	800	588	450	356	288	238	200						
				D	0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429						
1-1/2" x 3/16"	15-2-52	W 9.5	0.900	C	1250	1000	833	714	625	556									
				U	1875	1200	833	612	469	370	300	248	208						
				D	0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429						
1-3/4" x 1/8"	15-4-53	W 11.0	1.225	C	1875	1500	1250	1071	938	833									
				U	1800	1152	800	588	450	356	288	238	200						
				D	0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447						
2" x 3/16"	15-2-53	W 14.2	1.600	C	1875	1500	1250	1071	938	833									
				U	2700	1728	1200	882	675	533	432	357	300						
				D	0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429						
2-1/4" x 1/8"	15-4-62	W 9.6	2.025	C	1800	1440	1200	1029	900	800									
				U	2700	1728	1200	882	675	533	432	357	300						
				D	0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358						
2-1/4" x 3/16"	15-2-62	W 9.4	2.500	C	1800	1440	1200	1029	900	800									
				U	2700	1728	1200	882	675	533	432	357	300						
				D	0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358						
2-1/2" x 1/8"	15-4-63	W 13.1	1.225	C	2700	2160	1800	1543	1350	1200									
				U	3675	2352	1633	1200	919	726	588	486	408						
				D	0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358						
2-1/2" x 3/16"	15-2-63	W 14.4	1.600	C	2700	2160	1800	1543	1350	1200									
				U	3675	2352	1633	1200	919	726	588	486	408						
				D	0.034	0.053	0.077	0.104	0.136	0.172	0.213	0.257	0.306						
2-1/2" x 3/16"	15-4-73	W 18.4	2.025	C	4800	3840	3200	2743	2400	2133									
				U	4800	3072	2133	1567	1200	948	768	635	533						
				D	0.037	0.058	0.084	0.114	0.149	0.189	0.233	0.282	0.335						
2-1/2" x 3/16"	15-2-83	W 17.9	2.500	C	4800	3840	3200	2743	2400	2133									
				U	6075	3888	2700	1984	1519	1200	972	803	675						
				D	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268						
2-1/2" x 3/16"	15-4-93	W 20.5	2.025	C	6075	4860	4050	3471	3038	2700									
				U	6075	4860	4050	3471	3038	2700	2430	2209	2025						
				D	0.026	0.041	0.060	0.081	0.106	0.134	0.166	0.200	0.238						
2-1/2" x 3/16"	15-2-103	W 21.4	2.500	C	7500	4800	3333	2449	1875	1481									
				U	7500	4800	3333	2449	1875	1481	1200	992	833						
				D	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268						
2-1/2" x 3/16"	15-4-103	W 22.7	2.500	C	7500	6000	5000	4286	3750	3333									
				U	7500	6000	5000	4286	3750	3333	3000	2727	2500						
				D	0.024	0.037	0.054	0.073	0.095	0.121	0.149	0.180	0.215						

U = safe uniform load, psf
 C = safe concentrated load, plw
 D = deflection, inches
 E = modulus of elasticity, 29,000,000 psi
 F = fiber stress, 18,000 psi
Material: ASTM A-569 standard
Deflection: Spans and loads to the right of the bold line exceed 1/4" deflection for uniform load of 100 psf which provides safe pedestrian comfort. These can be exceeded for other types of loads with engineer's approval.
Serrated Bars: For serrated grating, the depth of grating required for a specified load is 1/4" deeper than that shown in the table.
General: Loads and deflections are theoretical and based on static loading.

W/P-15 PANEL WIDTH (inches)

Note: P-Press Locked cross bars typically extend 1/8" each side. W-Welded cross rods may extend 1/8" each side. Panel widths do not include these extensions.

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

