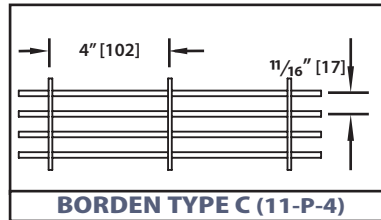


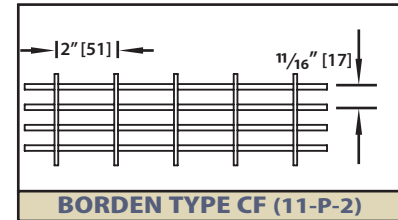
Pressure Locked Grating Steel

LOAD TABLE



Free air % for 1/8" bars: 79.26%

Free air % for 3/16" bars: 70.45%



Free air % for 1/8" bars: 76.70%

Free air % for 3/16" bars: 68.18%

Size No.	Bearing Bar Size	Weight (#/ft. ²)	Moment of Inertia (in. ⁴ /f.w.)	Section Modulus (in. ³ /f.w.)	Maximum span recommended for 1/4" deflection under uniform load of 100 psf. (normal pedestrian traffic) in inches																
					Span in Inches																
					24	30	36	42	48	54	60	66	72	78	84	96	108				
1	3/4" x 1/8"	6.45 7.25	0.0767	0.2045	48	U	614	393	273	200	153	121	98	Table in accordance with NAAMM MBG 531-09 F - 18,000 psi E - 29,000,000 psi U - Safe Uniform Load (lbs./sq.ft.) C - Safe Conc. Load (lbs./ft. width) D - Deflection in inches f.w. = foot width							
						Du	0.099	0.155	0.223	0.304	0.397	0.503	0.621								
						C	614	491	409	351	307	273	245								
						Dc	0.079	0.124	0.179	0.243	0.318	0.402	0.497								
2	3/4" x 3/16"	9.43 10.38	0.1151	0.3068	53	U	920	589	409	301	230	182	147								
						Du	0.099	0.155	0.223	0.304	0.397	0.503	0.621								
						C	920	736	614	526	460	409	368								
						Dc	0.079	0.124	0.179	0.243	0.318	0.402	0.497								
3	1" x 1/8"	8.82 10.09	0.1818	0.3636	59	U	1091	698	485	356	273	215	175								
						Du	0.074	0.116	0.168	0.228	0.298	0.377	0.466								
						C	1091	873	727	623	545	485	436								
						Dc	0.060	0.093	0.134	0.182	0.238	0.302	0.372								
4	1" x 3/16"	12.57 13.84	0.2727	0.5455	65	U	1636	1047	727	534	409	323	262								
						Du	0.074	0.116	0.168	0.228	0.298	0.377	0.466								
						C	1636	1309	1091	935	818	727	655								
						Dc	0.060	0.093	0.134	0.182	0.238	0.302	0.372								
5	1 1/4" x 1/8"	10.70 11.98	0.3551	0.5682	70	U	1705	1091	758	557	426	337	273								
						Du	0.060	0.093	0.134	0.182	0.238	0.302	0.372								
						C	1705	1364	1136	974	852	758	682								
						Dc	0.048	0.074	0.107	0.146	0.191	0.241	0.298								
6	1 1/4" x 3/16"	15.39 16.67	0.5327	0.8523	77	U	2557	1636	1136	835	639	505	409								
						Du	0.060	0.093	0.134	0.182	0.238	0.302	0.372								
						C	2557	2045	1705	1461	1278	1136	1023								
						Dc	0.048	0.074	0.107	0.146	0.191	0.241	0.298								
7	1 1/2" x 1/8"	12.59 13.86	0.6136	0.8182	80	U	2455	1571	1091	801	614	485	393								
						Du	0.050	0.078	0.112	0.152	0.199	0.251	0.310								
						C	2455	1964	1636	1403	1227	1091	982								
						Dc	0.040	0.062	0.089	0.122	0.159	0.201	0.248								
8	1 1/2" x 3/16"	18.21 19.49	0.9205	1.2273	89	U	3682	2356	1636	1202	920	727	589								
						Du	0.050	0.078	0.112	0.152	0.199	0.251	0.310								
						C	3682	2945	2455	2104	1841	1636	1473								
						Dc	0.040	0.062	0.089	0.122	0.159	0.201	0.248								
9	1 3/4" x 3/16"	21.04 22.31	1.4616	1.6705	99	U	5011	3207	2227	1636	1253	990	802								
						Du	0.043	0.067	0.096	0.130	0.170	0.215	0.266								
						C	5011	4009	3341	2864	2506	2227	2005								
						Dc	0.034	0.053	0.077	0.104	0.136	0.172	0.213								
10	2" x 3/16"	23.86 25.13	2.1818	2.1818	110	U	6545	4189	2909	2137	1636	1293	1047								
						Du	0.037	0.058	0.084	0.114	0.149	0.189	0.233								
						C	6545	5236	4364	3740	3273	2909	2618								
						Dc	0.030	0.047	0.067	0.091	0.119	0.151	0.186								
11	2 1/4" x 3/16"	26.68 27.96	3.1065	2.7614	120	U	8284	5302	3682	2705	2071	1636	1325								
						Du	0.033	0.052	0.074	0.101	0.132	0.168	0.207								
						C	8284	6627	5523	4734	4142	3682	3314								
						Dc	0.026	0.041	0.060	0.081	0.106	0.134	0.166								
12	2 1/2" x 3/16"	29.50 30.78	4.2614	3.4091	130	U	10227	6545	4545	3340	2557	2020	1636								
						Du	0.030	0.047	0.067	0.091	0.119	0.151	0.186								
						C	10227	8182	6818	5844	5114	4545	4091								
						Dc	0.024	0.037	0.054	0.073	0.095	0.121	0.149								

All loads and deflections are based on gross sections and nominal sizes of bearing bars. The values listed are for design selection only and are not intended to be "absolute".

Actual load capacity will be affected slightly by variations which can be expected due to material and manufacturing tolerances.

1/4" is considered the maximum deflection which is consistent with pedestrian comfort, but may be exceeded for other application at the discretion of the Engineer.

When serrated gratings are specified, increase the depth of the grating selected from the table by 1/4" to allow for the serrations.

PANEL WIDTHS (inches)																		
# Bars	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
3/16" Bars	7/8	1 9/16	2 1/4	2 5/16	3 5/8	4 5/16	5	5 11/16	6 3/8	7 1/16	7 3/4	8 7/16	9 1/8	9 13/16	10 1/2	11 3/16	11 7/8	12 9/16
1/8" Bars	1 1/16	1 1/2	2 3/16	2 7/8	3 9/16	4 1/4	4 15/16	5 5/8	6 5/16	7	7 11/16	8 3/8	9 1/16	9 3/4	10 7/16	11 1/8	11 13/16	12 1/2
# Bars	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
3/16" Bars	13 1/4	13 15/16	14 5/8	15 5/16	16	16 11/16	17 3/8	18 1/16	18 3/4	19 7/16	20 1/8	20 13/16	21 1/2	22 3/16	22 7/8	23 9/16	24 1/4	24 15/16
1/8" Bars	13 3/16	13 7/8	14 9/16	15 1/4	15 15/16	16 5/8	17 5/16	18	18 11/16	19 3/8	20 1/16	20 3/4	21 7/16	22 1/8	22 13/16	23 1/2	24 3/16	24 7/8
# Bars	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53		
3/16" Bars	25 5/8	26 5/16	27	27 11/16	28 3/8	29 1/16	29 3/4	30 7/16	31 1/8	31 13/16	32 1/2	33 13/16	33 7/8	34 9/16	35 1/4	35 5/16		
1/8" Bars	25 9/16	26 1/4	26 15/16	27 5/8	28 5/16	29	29 11/16	30 3/8	31 1/16	31 3/4	32 7/16	33 1/8	33 13/16	34 1/2	35 3/16	35 7/8		