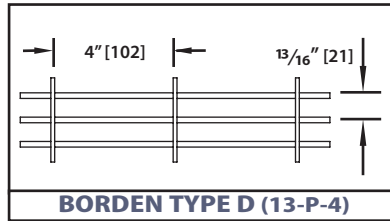
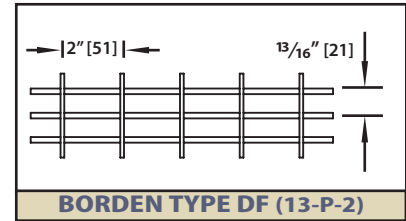


## Pressure Locked Grating Steel



Free air % for 1/8" bars: 81.97%  
Free air % for 3/16" bars: 74.52%



Free air % for 1/8" bars: 79.33%  
Free air % for 3/16" bars: 72.12%

### LOAD TABLE

Size No.	Bearing Bar Size	Weight (#/ft. <sup>2</sup> )	Moment of Inertia (in. <sup>4</sup> /f.w.)	Section Modulus (in. <sup>3</sup> /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"	5.60 6.40	0.0649	0.1731	46	U	519	332	231	170	130	103	83	<b>Table in accordance with NAAMM MBG 531-00</b> <b>F - 18,000 psi</b> <b>E - 29,000,000 psi</b> <b>U - Safe Uniform Load (lbs./sq.ft.)</b> <b>C - Safe Conc. load (lbs./ft. width)</b> <b>D - Deflection in inches</b> <b>f.w. = foot width</b>								
						Du	0.099	0.155	0.223	0.304	0.397	0.503	0.621									
						C	519	415	346	297	260	231	208									
Dc	0.079	0.124	0.179	0.243	0.318	0.402	0.497															
2	3/4" x 3/16"	8.15 9.10	0.0974	0.2596	51	U	779	498	346	254	195	154	125									
						Du	0.099	0.155	0.223	0.304	0.397	0.503	0.621									
						C	779	623	519	445	389	346	312									
Dc	0.079	0.124	0.179	0.243	0.318	0.402	0.497															
3	1" x 1/8"	7.68 8.95	0.1538	0.3077	57	U	923	591	410	301	231	182	148									
						Du	0.074	0.116	0.168	0.228	0.298	0.377	0.466									
						C	923	738	615	527	462	410	369									
Dc	0.060	0.093	0.134	0.182	0.238	0.302	0.372															
4	1" x 3/16"	10.86 12.14	0.2308	0.4615	63	U	1385	886	615	452	346	274	222									
						Du	0.074	0.116	0.168	0.228	0.298	0.377	0.466									
						C	1385	1108	923	791	692	615	554									
Dc	0.060	0.093	0.134	0.182	0.238	0.302	0.372															
5	1 1/4" x 1/8"	9.28 10.56	0.3005	0.4808	67	U	1442	923	641	471	361	285	231									
						Du	0.060	0.093	0.134	0.182	0.238	0.302	0.372									
						C	1442	1154	962	824	721	641	577									
Dc	0.048	0.074	0.107	0.146	0.191	0.241	0.298															
6	1 1/4" x 3/16"	13.26 14.54	0.4507	0.7212	74	U	2163	1385	962	706	541	427	346									
						Du	0.060	0.093	0.134	0.182	0.238	0.302	0.372									
						C	2163	1731	1442	1236	1082	962	865									
Dc	0.048	0.074	0.107	0.146	0.191	0.241	0.298															
7	1 1/2" x 1/8"	10.88 12.16	0.5192	0.6923	77	U	2077	1329	923	678	519	410	332									
						Du	0.050	0.078	0.112	0.152	0.199	0.251	0.310									
						C	2077	1662	1385	1187	1038	923	831									
Dc	0.040	0.062	0.089	0.122	0.159	0.201	0.248															
8	1 1/2" x 3/16"	15.66 16.93	0.7788	1.0385	85	U	3115	1994	1385	1017	779	615	498									
						Du	0.050	0.078	0.112	0.152	0.199	0.251	0.310									
						C	3115	2492	2077	1780	1558	1385	1246									
Dc	0.040	0.062	0.089	0.122	0.159	0.201	0.248															
9	1 3/4" x 3/16"	18.05 19.33	1.2368	1.4135	95	U	4240	2714	1885	1385	1060	838	678									
						Du	0.043	0.067	0.096	0.130	0.170	0.215	0.266									
						C	4240	3392	2827	2423	2120	1885	1696									
Dc	0.034	0.053	0.077	0.104	0.136	0.172	0.213															
10	2" x 3/16"	20.45 21.73	1.8462	1.8462	105	U	5538	3545	2462	1808	1385	1094	886									
						Du	0.037	0.058	0.084	0.114	0.149	0.189	0.233									
						C	5538	4431	3692	3165	2769	2462	2215									
Dc	0.030	0.047	0.067	0.091	0.119	0.151	0.186															
11	2 1/4" x 3/16"	22.85 24.12	2.6286	2.3365	115	U	7010	4486	3115	2289	1752	1385	1122									
						Du	0.033	0.052	0.074	0.101	0.132	0.168	0.207									
						C	7010	5608	4673	4005	3505	3115	2804									
Dc	0.026	0.041	0.060	0.081	0.106	0.134	0.166															
12	2 1/2" x 3/16"	25.24 26.52	3.6058	2.8846	125	U	8654	5538	3846	2826	2163	1709	1385									
						Du	0.030	0.047	0.067	0.091	0.119	0.151	0.186									
						C	8654	6923	5769	4945	4327	3846	3462									
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	20
3/16" Bars	1	1 13/16	2 5/8	3 7/16	4 1/4	5 1/16	5 7/8	6 11/16	7 1/2	8 5/16	9 1/8	9 15/16	10 3/4	11 9/16	12 3/8	13 3/16	14	14 13/16	15 5/8
1/8" Bars	1 5/16	1 3/4	2 9/16	3 3/8	4 3/16	5	5 13/16	6 5/8	7 7/16	8 1/4	9 1/16	9 7/8	10 11/16	11 1/2	12 5/16	13 1/8	13 15/16	14 3/4	15 9/16
# Bars	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
3/16" Bars	16 7/16	17 1/4	18 1/16	18 7/8	19 11/16	20 1/2	21 5/16	22 1/8	22 15/16	23 3/4	24 9/16	25 3/8	26 3/16	27	27 13/16	28 5/8	29 7/16	30 1/4	31 1/16
1/8" Bars	16 3/8	17 3/16	18	18 13/16	19 5/8	20 7/16	21 1/4	22 1/16	22 7/8	23 11/16	24 1/2	25 5/16	26 1/8	26 5/16	27 3/4	28 9/16	29 3/8	30 3/16	31
# Bars	40	41	42	43	44	45													
3/16" Bars	31 7/8	32 11/16	33 1/2	34 5/16	35 1/8	35 15/16													
1/8" Bars	31 13/16	32 5/8	33 7/16	34 1/4	35 1/16	35 7/8													