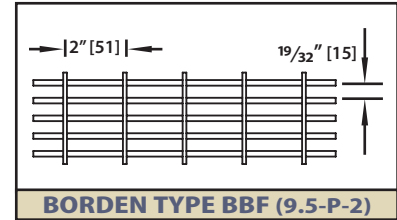
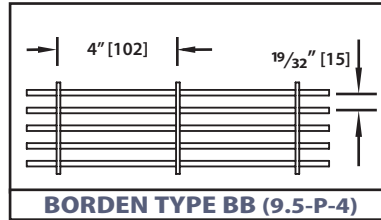


## Pressure Locked Grating Steel



## 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"	7.33	0.0888	0.2368	49	U	711	455	316	232	178	140	114	<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				711	568	474	406	355	316	284								
2	3/4" x 3/16"	10.74	0.1332	0.3553	55	Dc	0.079	0.124	0.179	0.243	0.318	0.402	0.497	388	355	328	U - Safe Uniform Load (lbs./sq.ft.) C - Safe Conc. load (lbs./ft. width) D - Deflection in inches f.w. = foot width			
		U				1066	682	474	348	266	211	171	660	715	839					
		Du				0.099	0.155	0.223	0.304	0.397	0.503	0.621	660	715	839					
3	1" x 1/8"	9.99	0.2105	0.4211	61	Dc	1066	853	711	609	533	474	426	563	670	787	U - Safe Uniform Load (lbs./sq.ft.) C - Safe Conc. load (lbs./ft. width) D - Deflection in inches f.w. = foot width			
		U				1263	808	561	412	316	250	202	167	140	120					
		Du				0.074	0.116	0.168	0.228	0.298	0.377	0.466	563	670	787					
4	1" x 3/16"	14.32	0.3158	0.6316	68	Dc	1263	1011	842	722	632	561	505	459	421	389	U - Safe Uniform Load (lbs./sq.ft.) C - Safe Conc. load (lbs./ft. width) D - Deflection in inches f.w. = foot width			
		U				1895	1213	842	619	474	374	303	251	211	179					
		Du				0.074	0.116	0.168	0.228	0.298	0.377	0.466	563	670	787					
5	1 1/4" x 1/8"	12.16	0.4112	0.6579	72	Dc	1895	1516	1263	1083	947	842	758	689	632	583	U - Safe Uniform Load (lbs./sq.ft.) C - Safe Conc. load (lbs./ft. width) D - Deflection in inches f.w. = foot width			
		U				1974	1263	877	644	493	390	316	261	219	187					
		Du				0.060	0.093	0.134	0.182	0.238	0.302	0.372	451	0.536	0.629					
6	1 1/4" x 3/16"	17.58	0.6168	0.9868	80	Dc	1974	1579	1316	1128	987	877	789	718	658	607	U - Safe Uniform Load (lbs./sq.ft.) C - Safe Conc. load (lbs./ft. width) D - Deflection in inches f.w. = foot width			
		U				2961	1895	1316	967	740	585	474	391	329	280					
		Du				0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429	0.504					
7	1 1/2" x 1/8"	14.34	0.7105	0.9474	83	Dc	2961	2368	1974	1692	1480	1316	1184	1077	987	911	U - Safe Uniform Load (lbs./sq.ft.) C - Safe Conc. load (lbs./ft. width) D - Deflection in inches f.w. = foot width			
		U				2842	1819	1263	928	711	561	455	376	316	269					
		Du				0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447	0.524					
8	1 1/2" x 3/16"	20.84	1.0658	1.4211	92	Dc	2842	2274	1895	1624	1421	1263	1137	1033	947	874	U - Safe Uniform Load (lbs./sq.ft.) C - Safe Conc. load (lbs./ft. width) D - Deflection in inches f.w. = foot width			
		U				4263	2728	1895	1392	1066	842	682	564	474	404					
		Du				0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358	0.420					
9	1 3/4" x 3/16"	24.10	1.6924	1.9342	103	Dc	4263	3411	2842	2436	2132	1895	1705	1550	1421	1312	U - Safe Uniform Load (lbs./sq.ft.) C - Safe Conc. load (lbs./ft. width) D - Deflection in inches f.w. = foot width			
		U				5803	3714	2579	1895	1451	1146	928	767	645	549					
		Du				0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447	0.524					
10	2" x 3/16"	27.36	2.5263	2.5263	114	Dc	5803	4642	3868	3316	2901	2579	2321	2110	1934	1785	U - Safe Uniform Load (lbs./sq.ft.) C - Safe Conc. load (lbs./ft. width) D - Deflection in inches f.w. = foot width			
		U				5803	4642	3868	3316	2901	2579	2321	2110	1934	1785					
		Du				0.034	0.053	0.077	0.104	0.136	0.172	0.213	0.257	0.306	0.360					
11	2 1/4" x 3/16"	30.62	3.5970	3.1974	125	Dc	5803	4642	3868	3316	2901	2579	2321	2110	1934	1785	U - Safe Uniform Load (lbs./sq.ft.) C - Safe Conc. load (lbs./ft. width) D - Deflection in inches f.w. = foot width			
		U				5803	4642	3868	3316	2901	2579	2321	2110	1934	1785					
		Du				0.034	0.053	0.077	0.104	0.136	0.172	0.213	0.257	0.306	0.360					
12	2 1/2" x 3/16"	33.88	4.9342	3.9474	135	Dc	5803	4642	3868	3316	2901	2579	2321	2110	1934	1785	U - Safe Uniform Load (lbs./sq.ft.) C - Safe Conc. load (lbs./ft. width) D - Deflection in inches f.w. = foot width			
		U				5803	4642	3868	3316	2901	2579	2321	2110	1934	1785					
		Du				0.034	0.053	0.077	0.104	0.136	0.172	0.213	0.257	0.306	0.360					

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.

$\frac{1}{4}''$  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	21
$\frac{3}{16}$ " Bars	$\frac{25}{32}$	$1\frac{3}{8}$	$1\frac{31}{32}$	$2\frac{9}{16}$	$3\frac{5}{32}$	$3\frac{3}{4}$	$4\frac{11}{32}$	$4\frac{15}{16}$	$5\frac{17}{32}$	$6\frac{1}{8}$	$6\frac{23}{32}$	$7\frac{5}{16}$	$7\frac{29}{32}$	$8\frac{1}{2}$	$9\frac{3}{32}$	$9\frac{11}{16}$	$10\frac{9}{32}$	$10\frac{7}{8}$	$11\frac{15}{32}$	$12\frac{1}{16}$
$\frac{1}{8}$ " Bars	$\frac{23}{32}$	$1\frac{5}{16}$	$1\frac{29}{32}$	$2\frac{1}{2}$	$3\frac{3}{32}$	$3\frac{11}{16}$	$4\frac{9}{32}$	$4\frac{7}{8}$	$5\frac{15}{32}$	$6\frac{1}{16}$	$6\frac{21}{32}$	$7\frac{1}{4}$	$7\frac{27}{32}$	$8\frac{7}{16}$	$9\frac{1}{32}$	$9\frac{5}{8}$	$10\frac{7}{32}$	$10\frac{13}{16}$	$11\frac{13}{32}$	12
# Bars	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
$\frac{3}{16}$ " Bars	$12\frac{21}{32}$	$13\frac{1}{4}$	$13\frac{27}{32}$	$14\frac{7}{16}$	$15\frac{1}{32}$	$15\frac{5}{8}$	$16\frac{7}{32}$	$16\frac{13}{16}$	$17\frac{13}{32}$	18	$18\frac{19}{32}$	$19\frac{3}{16}$	$19\frac{25}{32}$	$20\frac{3}{8}$	$20\frac{31}{32}$	$21\frac{9}{16}$	$22\frac{5}{32}$	$22\frac{3}{4}$	$23\frac{11}{32}$	$23\frac{15}{16}$
$\frac{1}{8}$ " Bars	$12\frac{19}{32}$	$13\frac{3}{16}$	$13\frac{25}{32}$	$14\frac{3}{8}$	$14\frac{31}{32}$	$15\frac{9}{16}$	$16\frac{5}{32}$	$16\frac{3}{4}$	$17\frac{11}{32}$	$17\frac{15}{16}$	$18\frac{17}{32}$	$19\frac{1}{8}$	$19\frac{23}{32}$	$20\frac{5}{16}$	$20\frac{29}{32}$	$21\frac{1}{2}$	$22\frac{3}{32}$	$22\frac{11}{16}$	$23\frac{9}{32}$	$23\frac{7}{8}$
# Bars	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61
$\frac{3}{16}$ " Bars	$24\frac{17}{32}$	$25\frac{1}{8}$	$25\frac{23}{32}$	$26\frac{5}{16}$	$26\frac{29}{32}$	$27\frac{1}{2}$	$28\frac{3}{32}$	$28\frac{11}{16}$	$29\frac{9}{32}$	$29\frac{7}{8}$	$30\frac{15}{32}$	$31\frac{1}{16}$	$31\frac{21}{32}$	$32\frac{1}{4}$	$32\frac{27}{32}$	$33\frac{7}{16}$	$34\frac{1}{32}$	$34\frac{5}{8}$	$35\frac{7}{32}$	$35\frac{13}{16}$
$\frac{1}{8}$ " Bars	$24\frac{15}{32}$	$25\frac{1}{16}$	$25\frac{21}{32}$	$26\frac{1}{4}$	$26\frac{27}{32}$	$27\frac{1}{16}$	$28\frac{1}{32}$	$28\frac{5}{8}$	$29\frac{7}{32}$	$29\frac{13}{16}$	$30\frac{13}{32}$	31	$31\frac{19}{32}$	$32\frac{3}{16}$	$32\frac{25}{32}$	$33\frac{3}{8}$	$33\frac{31}{32}$	$34\frac{9}{16}$	$35\frac{5}{32}$	$35\frac{3}{4}$