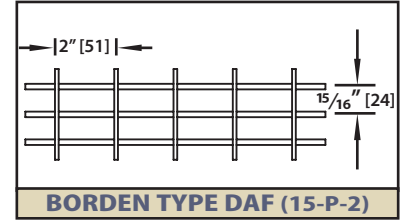
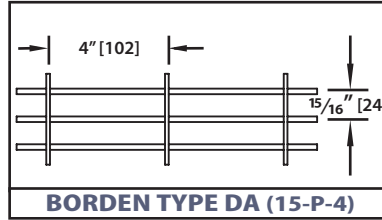




www.bordengratings.com

## Pressure Locked Grating Aluminum



### 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"	1.64	0.0563	0.1500	34	U	300	192	133	98	75	59	48	<b>Table in accordance with NAAMM MBG 531-00</b> <b>F - 12,000 psi</b> <b>E - 10,000,000 psi</b> <b>Alloys 6061 T6 and 6063 T6</b>  <b>U - Safe Uniform Load (lbs./sq.ft.)</b> <b>C - Safe Conc. load (lbs./ft. width)</b> <b>D - Deflection in inches f.w. = foot width</b>								
		Du				0.192	0.300	0.432	0.588	0.768	0.972	1.200										
		C				300	240	200	171	150	133	120										
2	3/4" x 3/16"	2.38	0.0844	0.2250	37	U	450	288	200	147	113	89	72									
		Du				0.192	0.300	0.432	0.588	0.768	0.972	1.200										
		C				450	360	300	257	225	200	180										
3	1" x 1/8"	2.26	0.1333	0.2667	42	U	533	341	237	174	133	105	85	71	59	50						
		Du				0.144	0.225	0.324	0.441	0.576	0.729	0.900	1.089	1.296	1.521							
		C				533	427	356	305	267	237	213	194	178	164							
4	1" x 3/16"	3.18	0.2000	0.4000	46	U	800	512	356	261	200	158	128	106	89	76	65	50	40			
		Du				0.144	0.225	0.324	0.441	0.576	0.729	0.900	1.089	1.296	1.521	1.764	2.304	2.916				
		C				800	640	533	457	400	356	320	291	267	246	229	200	178				
5	1 1/4" x 1/8"	2.72	0.2604	0.4167	49	U	833	533	370	272	208	165	133	110	93	79	68	52	41			
		Du				0.115	0.180	0.259	0.353	0.461	0.583	0.720	0.871	1.037	1.217	1.411	1.843	2.333				
		C				833	667	556	476	417	370	333	303	278	256	238	208	185				
6	1 1/4" x 3/16"	3.87	0.3906	0.6250	55	U	1250	800	556	408	313	247	200	165	139	118	102	78	62			
		Du				0.115	0.180	0.259	0.353	0.461	0.583	0.720	0.871	1.037	1.217	1.411	1.843	2.333				
		C				1250	1000	833	714	625	556	500	455	417	385	357	313	278				
7	1 1/2" x 1/8"	3.18	0.4500	0.6000	57	U	1200	768	533	392	300	237	192	159	133	114	98	75	59			
		Du				0.096	0.150	0.216	0.294	0.384	0.486	0.600	0.726	0.864	1.014	1.176	1.536	1.944				
		C				1200	960	800	686	600	533	480	436	400	369	343	300	267				
8	1 1/2" x 3/16"	4.55	0.6750	0.9000	63	U	1800	1152	800	588	450	356	288	238	200	170	147	113	89			
		Du				0.096	0.150	0.216	0.294	0.384	0.486	0.600	0.726	0.864	1.014	1.176	1.536	1.944				
		C				1800	1440	1200	1029	900	800	720	655	600	554	514	450	400				
9	1 3/4" x 3/16"	5.24	1.0719	1.2250	70	U	2450	1568	1089	800	613	484	392	324	272	232	200	153	121			
		Du				0.082	0.129	0.185	0.252	0.329	0.417	0.514	0.622	0.741	0.869	1.008	1.317	1.666				
		C				2450	1960	1633	1400	1225	1089	980	891	817	754	700	613	544				
10	2" x 3/16"	5.93	1.6000	1.6000	78	U	3200	2048	1422	1045	800	632	512	423	356	303	261	200	158			
		Du				0.072	0.113	0.162	0.221	0.288	0.365	0.450	0.545	0.648	0.761	0.882	1.152	1.458				
		C				3200	2560	2133	1829	1600	1422	1280	1164	1067	985	914	800	711				
11	2 1/4" x 3/16"	6.62	2.2781	2.0250	85	U	4050	2592	1800	1322	1013	800	648	536	450	383	331	253	200			
		Du				0.064	0.100	0.144	0.196	0.256	0.324	0.400	0.484	0.576	0.676	0.784	1.024	1.296				
		C				4050	3240	2700	2314	2025	1800	1620	1473	1350	1246	1157	1013	900				
12	2 1/2" x 3/16"	7.30	3.1250	2.5000	92	U	5000	3200	2222	1633	1250	988	800	661	556	473	408	313	247			
		Du				0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.922	1.166				
		C				5000	4000	3333	2857	2500	2222	2000	1818	1667	1538	1429	1250	1111				

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 1/8	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
1/8" Bars	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
# Bars	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
3/16" Bars	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 13/16
1/8" Bars	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