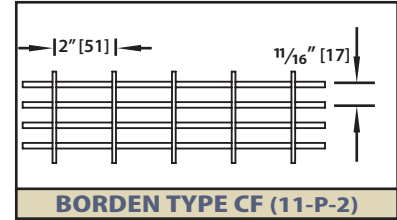
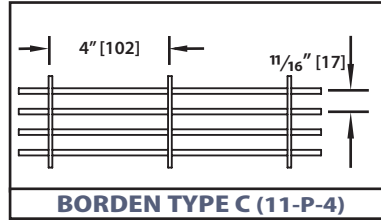


Pressure Locked Grating Aluminum

LOAD TABLE



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"	2.17	0.0767	0.2045	36	U	409	262	182	134	102	81	65	Table in accordance with NAAMM MBG 531-00 F - 12,000 psi E - 10,000,000 psi Alloys 6061 T6 and 6063 T6 U - Safe Uniform Load (lbs./sq.ft.) C - Safe Conc. load (lbs./ft. width) D - Deflection in inches f.w. = foot width																			
		Du				0.192	0.300	0.432	0.588	0.768	0.972	1.200																					
		C				409	327	273	234	205	182	164																					
2	3/4" x 3/16"	3.17	0.1151	0.3068	40	Dc	0.154	0.240	0.346	0.470	0.614	0.778	0.960																				
		U				614	393	273	200	153	121	98																					
		Du				0.192	0.300	0.432	0.588	0.768	0.972	1.200																					
3	1" x 1/8"	2.97	0.1818	0.3636	45	C	614	491	409	351	307	273	245																				
		Dc				0.154	0.240	0.346	0.470	0.614	0.778	0.960																					
		U				727	465	323	237	182	144	116																					
4	1" x 3/16"	4.23	0.2727	0.5455	50	Du	0.144	0.225	0.324	0.441	0.576	0.729	0.900	1.089	1.296	1.521	1.764	2.034	2.333	2.653													
		C				1091	698	485	356	273	215	175	144	121	103	89	78	68	59														
		Dc				0.115	0.180	0.259	0.353	0.461	0.583	0.720	0.871	1.037	1.217	1.411	1.621	1.843	2.086	2.343													
5	1 1/4" x 1/8"	3.60	0.3551	0.5682	53	Du	0.144	0.225	0.324	0.441	0.576	0.729	0.900	1.089	1.296	1.521	1.764	2.034	2.333														
		C				1091	873	727	623	545	485	436	397	364	336	312	294	276	259														
		Dc				0.115	0.180	0.259	0.353	0.461	0.583	0.720	0.871	1.037	1.217	1.411	1.621	1.843	2.086	2.343													
6	1 1/4" x 3/16"	5.18	0.5327	0.8523	59	U	1136	727	505	371	284	224	182	150	126	108	93	81	71	62													
		Du				0.115	0.180	0.259	0.353	0.461	0.583	0.720	0.871	1.037	1.217	1.411	1.621	1.843	2.086	2.343													
		C				1136	909	758	649	568	505	455	413	379	350	325	306	288	271	255													
7	1 1/2" x 1/8"	4.24	0.6136	0.8182	61	Dc	0.092	0.144	0.207	0.282	0.369	0.467	0.576	0.697	0.829	0.973	1.129	1.299	1.475	1.666													
		U				1705	1091	758	557	426	337	273	225	189	161	139	121	107	94	82													
		Du				0.115	0.180	0.259	0.353	0.461	0.583	0.720	0.871	1.037	1.217	1.411	1.621	1.843	2.086	2.343													
8	1 1/2" x 3/16"	6.13	0.9205	1.2273	68	C	1705	1364	1136	974	852	758	682	620	568	524	487	451	416	382	349												
		Dc				0.092	0.144	0.207	0.282	0.369	0.467	0.576	0.697	0.829	0.973	1.129	1.299	1.475	1.666														
		U				1636	1047	727	534	409	323	262	216	182	155	134	117	102	89	78	68												
9	1 3/4" x 1/8"	7.08	1.4616	1.6705	76	Du	0.096	0.150	0.216	0.294	0.384	0.486	0.600	0.726	0.864	1.014	1.176	1.356	1.536	1.744	1.944												
		C				1636	1309	1091	935	818	727	655	595	545	503	468	433	399	366	333	301												
		Dc				0.077	0.120	0.173	0.235	0.307	0.389	0.480	0.581	0.691	0.811	0.941	1.081	1.229	1.386	1.555	1.733												
10	2" x 3/16"	8.03	2.1818	2.1818	84	U	2455	1571	1091	801	614	485	393	325	273	232	200	176	153	132	112												
		Du				0.096	0.150	0.216	0.294	0.384	0.486	0.600	0.726	0.864	1.014	1.176	1.356	1.536	1.744	1.944													
		C				2455	1964	1636	1403	1227	1091	982	893	818	755	701	644	591	538	485	433												
11	2 1/4" x 1/8"	9.94	4.2614	3.4091	100	Dc	0.077	0.120	0.173	0.235	0.307	0.389	0.480	0.581	0.691	0.811	0.941	1.081	1.229	1.386	1.555												
		U				3341	2138	1485	1091	835	660	535	442	371	316	273	232	200	176	153	132												
		Du				0.082	0.129	0.185	0.252	0.329	0.417	0.514	0.622	0.741	0.869	1.008	1.156	1.317	1.494	1.686	1.894												
12	2 1/2" x 3/16"	10.36	4.2614	3.4091	100	C	3341	2673	2227	1909	1670	1485	1336	1215	1114	1028	955	885	817	751	686	622											
		Dc				0.066	0.103	0.148	0.202	0.263	0.333	0.411	0.498	0.592	0.695	0.806	0.923	1.046	1.175	1.309	1.448												
		U				4364	2793	1939	1425	1091	862	698	577	485	413	356	306	265	225	185	145												
13	2 3/4" x 1/8"	11.8	4.2614	3.4091	100	Du	0.072	0.113	0.162	0.221	0.288	0.365	0.450	0.545	0.648	0.761	0.882	1.012	1.152	1.302	1.462	1.632											
		C				4364	3491	2909	2494	2182	1939	1745	1587	1455	1343	1247	1161	1085	1019	953	887												
		Dc				0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.812	0.922	1.036	1.154	1.276												
14	3" x 1/8"	13.2	4.2614	3.4091	100	U	5523	3535	2455	1803	1381	1091	884	730	614	523	451	391	331	271	211												
		Du				0.064	0.100	0.144	0.196	0.256	0.324	0.400	0.484	0.576	0.676	0.784	0.904	1.024	1.144	1.264	1.384												
		C				5523	4418	3682	3156	2761	2455	2209	2008	1841	1699	1578	1461	1349	1241	1137	1033												
15	3" x 3/16"	14.7	4.2614	3.4091	100	Dc	0.051	0.080	0.115	0.157	0.205	0.259	0.320	0.387	0.461	0.541	0.627	0.719	0.815	0.915	1.019	1.127											
		U				6818	4364	3030	2226	1705	1347	1091	902	758	646	557	476	405	345	285	225												
		Du				0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.812	0.922	1.036	1.154	1.276												
16	3 1/2" x 1/8"	16.1	4.2614	3.4091	100	C	6818	5455	4545	3896	3409	3030	2727	2479	2273	2098	1948	1795	1647	1503	1363	1227											
		Dc				0.046	0.072	0.104	0.141	0.184	0.233	0.288	0.348	0.415	0.487	0.564	0.647	0.733	0.823	0.917	1.015												
		U				8182	5368	3750	2766	2100	1614	1266	1000	800	640	512	410	320	240	180	140	110											

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 15/16	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	13/16	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 15/16		
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		