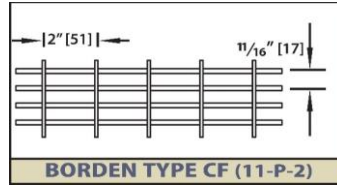
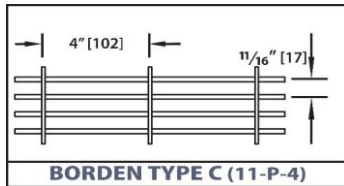




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Pressure Locked Grating Steel

LOAD TABLE



Free air % of 1/8" bars: 79.26%
Free air % of 3/16" bars: 70.45%

Free air % of 1/8" bars: 76.70%
Free air % of 3/16" bars: 68.18%

Size No.	Bearing Bar Size	Weight lbs./sq.ft.	Moment of Inertia	Section Modulus		Maximum span recommended for 1/4" deflection under uniform load of 100 psf. (normal pedestrian traffic)																										
						Span in Inches																										
						24	30	36	42	48	54	60	66	72	78	84	96	108														
1	3/4"x1/8"	6.45	0.0767	0.2045	48	U	614	393	273	200	153	121	98	Table compiled as per ANSI/NAAMM MBG 534-14 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																		
						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"x3/16"	9.43	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"x1/8"	8.82	0.1818	0.3636	59	U	1091	698	485	356	273	215	175														144	121	103			
						Du	0.074	0.116	0.168	0.228	0.298	0.377	0.466														0.563	0.67	0.787			
		C				1091	873	727	623	545	485	436																				
		Dc				0.06	0.093	0.134	0.182	0.238	0.302	0.372																				
4	1"x3/16"	12.57	0.2727	0.5455	65	U	1636	1047	727	534	409	323	262														216	182	155	134	102	81
						Du	0.074	0.116	0.168	0.228	0.298	0.377	0.466														0.563	0.67	0.787	0.912	1.192	1.508
		C				1636	1309	1091	935	818	727	655																				
		Dc				0.06	0.093	0.134	0.182	0.238	0.302	0.372																				
5	1 1/4"x1/8"	10.70	0.3551	0.5682	70	U	1705	1091	758	557	426	337	273	225	189	161	139	107	84													
						Du	0.06	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536	0.629	0.73	0.953	1.207													
		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"x3/16"	15.39	0.5327	0.8523	77	U	2557	1636	1136	835	639	505	409	338	284	242	209	160	126													
						Du	0.06	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536	0.629	0.73	0.953	1.207													
		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"x1/8"	12.59	0.6136	0.8182	80	U	2455	1571	1091	801	614	485	393	325	273	232	200	153	121													
						Du	0.05	0.078	0.112	0.152	0.199	0.251	0.31	0.376	0.447	0.524	0.608	0.794	1.006													
		C				2455	1964	1636	1403	1227	1091	982																				
		Dc				0.04	0.062	0.089	0.122	0.159	0.201	0.248																				
8	1 1/2"x3/16"	18.21	0.9205	1.2273	89	U	3682	2356	1636	1202	920	727	589	487	409	349	301	230	182													
						Du	0.05	0.078	0.112	0.152	0.199	0.251	0.31	0.376	0.447	0.524	0.608	0.794	1.006													
		C				3682	2945	2455	2104	1841	1636	1473																				
		Dc				0.04	0.062	0.089	0.122	0.159	0.201	0.248																				
9	1 3/4"x3/16"	21.04	1.4616	1.6705	99	U	5011	3207	2227	1636	1253	990	802	663	557	474	409	313	247													
						Du	0.043	0.067	0.096	0.13	0.17	0.215	0.266	0.322	0.383	0.45	0.521	0.681	0.862													
		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"x3/16"	23.86	2.1818	2.1818	110	U	6545	4189	2909	2137	1636	1293	1047	866	727	620	534	409	323													
						Du	0.037	0.058	0.084	0.114	0.149	0.189	0.233	0.282	0.335	0.393	0.456	0.596	0.754													
		C				6545	5236	4364	3740	3273	2909	2618																				
		Dc				0.03	0.047	0.067	0.091	0.119	0.151	0.186																				
11	2 1/4"x3/16"	26.68	3.1065	2.7614	120	U	8284	5302	3682	2705	2071	1636	1325	1095	920	784	676	518	409													
						Du	0.033	0.052	0.074	0.101	0.132	0.168	0.207	0.25	0.298	0.35	0.406	0.53	0.67													
		C				8284	6627	5523	4734	4142	3682	3314																				
		Dc				0.026	0.041	0.06	0.081	0.106	0.134	0.166																				
12	2 1/2"x3/16"	29.50	4.2614	3.4091	130	U	10227	6545	4545	3340	2557	2020	1636	1352	1136	968	835	639	505													
						Du	0.03	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.365	0.477	0.603													
		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	
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	
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	
# Bars	15	16	17	18	19	20	21	22	23	24	25	26	27	
3/16" Bars	9 13/16	10 1/2	11 3/16	11 7/8	12 9/16	13 1/4	13 15/16	14 5/8	15 5/16	16	16 11/16	17 3/8	18 1/16	
1/8" Bars	9 3/4	10 7/16	11 1/8	11 13/16	12 1/2	13 3/16	13 7/8	14 9/16	15 1/4	15 15/16	16 5/8	17 5/16	18	
# Bars	28	29	30	31	32	33	34	35	36	37	38	39	40	
3/16" Bars	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	25 5/8	26 5/16	27	
1/8" Bars	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	25 9/16	26 1/4	26 15/16	
# Bars	41	42	43	44	45	46	47	48	49	50	51	52	53	
3/16" Bars	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 3/16	33 7/8	34 9/16	35 1/4	35 15/16	
1/8" Bars	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	