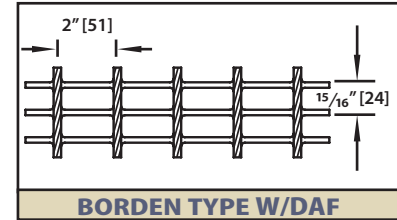
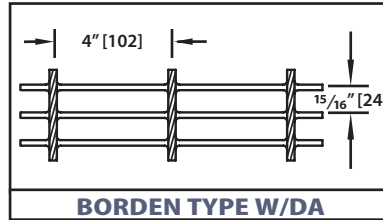


Welded Grating

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													Table in accordance with NAAMM MBG 531-00 F - 18,000 psi E - 29,000,000 psi		
					24	30	36	42	48	54	60	66	72	78	84	96	108			
1	3/4" x 1/8"	4.81	0.0563	0.1500	44	U	450	288	200	147	113	89	72	U - Safe Uniform Load (lbs./sq.ft.) C - Safe Conc. load (lbs./ft. width) D - Deflection in inches f.w. = foot width						
		Du				0.099	0.155	0.223	0.304	0.397	0.503	0.621								
		C				450	360	300	257	225	200	180								
		Dc				0.079	0.124	0.179	0.243	0.318	0.402	0.497								
2	3/4" x 3/16"	6.89	0.0844	0.2250	49	U	675	432	300	220	169	133	108	U - Safe Uniform Load (lbs./sq.ft.) C - Safe Conc. load (lbs./ft. width) D - Deflection in inches f.w. = foot width						
		Du				0.099	0.155	0.223	0.304	0.397	0.503	0.621								
		C				675	540	450	386	338	300	270								
		Dc				0.079	0.124	0.179	0.243	0.318	0.402	0.497								
3	1" x 1/8"	6.21	0.1333	0.2667	55	U	800	512	356	261	200	158	128	245	225	208	U - Safe Uniform Load (lbs./sq.ft.) C - Safe Conc. load (lbs./ft. width) D - Deflection in inches f.w. = foot width			
		Du				0.074	0.116	0.168	0.228	0.298	0.377	0.466	0.563	0.670	0.787					
		C				800	640	533	457	400	356	320	291	267	246					
		Dc				0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536	0.629					
4	1" x 3/16"	8.98	0.2000	0.4000	60	U	1200	768	533	392	300	237	192	159	133	114	98	75	59	
		Du				0.074	0.116	0.168	0.228	0.298	0.377	0.466	0.563	0.670	0.787	0.912	1.192	1.508		
		C				1200	960	800	686	600	533	480	436	400	369	343	300	267		
		Dc				0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536	0.629	0.730	0.953	1.207		
5	1 1/4" x 1/8"	7.60	0.2604	0.4167	65	U	1250	800	556	408	313	247	200	165	139	118	102	78	62	
		Du				0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536	0.629	0.730	0.953	1.207		
		C				1250	1000	833	714	625	556	500	455	417	385	357	313	278		
		Dc				0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429	0.504	0.584	0.763	0.965		
6	1 1/4" x 3/16"	11.06	0.3906	0.6250	71	U	1875	1200	833	612	469	370	300	248	208	178	153	117	93	
		Du				0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.536	0.629	0.730	0.953	1.207		
		C				1875	1500	1250	1071	938	833	750	682	625	577	536	469	417		
		Dc				0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429	0.504	0.584	0.763	0.965		
7	1 1/2" x 1/8"	8.99	0.4500	0.6000	74	U	1800	1152	800	588	450	356	288	238	200	170	147	113	89	
		Du				0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447	0.524	0.608	0.794	1.006		
		C				1800	1440	1200	1029	900	800	720	655	600	554	514	450	400		
		Dc				0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358	0.420	0.487	0.636	0.804		
8	1 1/2" x 3/16"	13.14	0.6750	0.9000	82	U	2700	1728	1200	882	675	533	432	357	300	256	220	169	133	
		Du				0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447	0.524	0.608	0.794	1.006		
		C				2700	2160	1800	1543	1350	1200	1080	982	900	831	771	675	600		
		Dc				0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358	0.420	0.487	0.636	0.804		
9	1 3/4" x 3/16"	15.23	1.0719	1.2250	92	U	3675	2352	1633	1200	919	726	588	486	408	348	300	230	181	
		Du				0.043	0.067	0.096	0.130	0.170	0.215	0.266	0.322	0.383	0.450	0.521	0.681	0.862		
		C				3675	2940	2450	2100	1838	1633	1470	1336	1225	1131	1050	919	817		
		Dc				0.034	0.053	0.077	0.104	0.136	0.172	0.213	0.257	0.306	0.360	0.417	0.545	0.689		
10	2" x 3/16"	17.31	1.6000	1.6000	102	U	4800	3072	2133	1567	1200	948	768	635	533	454	392	300	237	
		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				4800	3840	3200	2743	2400	2133	1920	1745	1600	1477	1371	1200	1067		
		Dc				0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.365	0.477	0.603		
11	2 1/4" x 3/16"	19.40	2.2781	2.0250	111	U	6075	3888	2700	1984	1519	1200	972	803	675	575	496	380	300	
		Du				0.033	0.052	0.074	0.101	0.132	0.168	0.207	0.250	0.298	0.350	0.406	0.530	0.670		
		C				6075	4860	4050	3471	3038	2700	2430	2209	2025	1869	1736	1519	1350		
		Dc				0.026	0.041	0.060	0.081	0.106	0.134	0.166	0.200	0.238	0.280	0.324	0.424	0.536		
12	2 1/2" x 3/16"	21.48	3.1250	2.5000	120	U	7500	4800	3333	2449	1875	1481	1200	992	833	710	612	469	370	
		Du				0.030	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				7500	6000	5000	4286	3750	3333	3000	2727	2500	2308	2143	1875	1667		
		Dc				0.024	0.037	0.054	0.073	0.095	0.121	0.149	0.180	0.215	0.252	0.292	0.381	0.483		

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