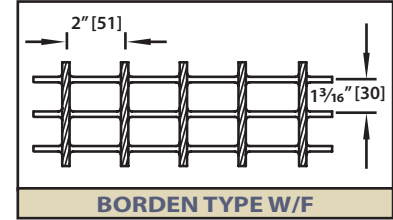
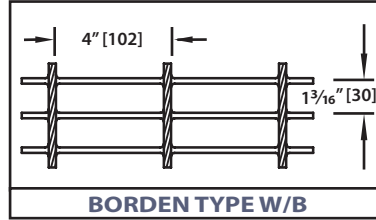


Welded Grating

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																							
					24	30	36	42	48	54	60	66	72	78	84	96	108											
1	3/4" x 1/8"	3.96	0.0444	0.1184	42	U	355	227	158	116	89	70	57	Table in accordance with NAAMM MBG 531-00 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 f.w. = foot width														
		4.60				Du	0.099	0.155	0.223	0.304	0.397	0.503	0.621															
						C	355	284	237	203	178	158	142															
2	3/4" x 3/16"	5.61	0.0666	0.1776	46	Dc	0.079	0.124	0.179	0.243	0.318	0.402	0.497															
		6.25				U	533	341	237	174	133	105	85															
						Du	0.099	0.155	0.223	0.304	0.397	0.503	0.621															
3	1" x 1/8"	5.06	0.1053	0.2105	51	C	533	426	355	305	266	237	213															
		5.70				Dc	0.079	0.124	0.179	0.243	0.318	0.402	0.497															
						U	632	404	281	206	158	125	101											84	70	60		
4	1" x 3/16"	7.27	0.1579	0.3158	57	Dc	0.060	0.093	0.134	0.182	0.238	0.302	0.372											0.451	0.536	0.629		
		7.90				U	947	606	421	309	237	187	152											125	105	90		
						Du	0.074	0.116	0.168	0.228	0.298	0.377	0.466											0.563	0.670	0.787		
5	1 1/4" x 1/8"	6.17	0.2056	0.3289	61	C	632	505	421	361	316	281	253											230	211	194		
		6.81				Dc	0.060	0.093	0.134	0.182	0.238	0.302	0.372											0.451	0.536	0.629		
						U	987	632	439	322	247	195	158											130	110	93	81	62
6	1 1/4" x 3/16"	8.92	0.3084	0.4934	67	Dc	0.060	0.093	0.134	0.182	0.238	0.302	0.372											0.451	0.536	0.629		
		9.56				U	987	789	568	493	439	395	359											329	304	282	247	219
						Du	0.060	0.093	0.134	0.182	0.238	0.302	0.372											0.451	0.536	0.629		
7	1 1/2" x 1/8"	7.28	0.3553	0.4737	70	C	1421	1137	947	812	711	632	568	517	474	437	406	355	316									
		7.92				Dc	0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358	0.420	0.487	0.554	0.636	0.730	0.843							
						U	1421	909	632	464	355	281	227	188	158	135	116	99	89	70								
8	1 1/2" x 3/16"	10.58	0.5329	0.7105	77	Dc	0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358	0.420	0.487	0.554	0.636	0.730	0.843							
		11.22				U	2132	1364	947	696	533	421	341	282	237	202	174	153	133	115	100	87						
						Du	0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447	0.524	0.608	0.704	0.812	0.931	1.063	1.207						
9	1 3/4" x 3/16"	12.24	0.8462	0.9671	87	C	2132	1705	1421	1218	1066	947	853	775	711	656	609	533	474									
		12.87				Dc	0.034	0.053	0.077	0.104	0.136	0.172	0.213	0.257	0.306	0.360	0.417	0.481	0.551	0.631	0.730	0.843						
						U	2901	1857	1289	947	725	573	464	384	322	275	237	202	174	153	133	115	100					
10	2" x 3/16"	13.89	1.2632	1.2632	96	Dc	0.034	0.053	0.077	0.104	0.136	0.172	0.213	0.257	0.306	0.360	0.417	0.481	0.551	0.631	0.730	0.843						
		14.53				U	3789	2425	1684	1237	947	749	606	501	421	359	309	273	237	202	174	153	133	115				
						Du	0.037	0.058	0.084	0.114	0.149	0.189	0.233	0.282	0.335	0.393	0.456	0.526	0.603	0.691	0.791	0.903	1.027	1.163				
11	2 1/4" x 3/16"	15.55	1.7985	1.5987	105	C	3789	3032	2526	2165	1895	1684	1516	1378	1263	1166	1083	947	842									
		16.19				Dc	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.365	0.421	0.481	0.548	0.623	0.707	0.801	0.903				
						U	4796	3069	2132	1566	1199	947	767	634	533	454	392	330	273	227	188	158	135	116	99			
12	2 1/2" x 3/16"	17.21	2.4671	1.9737	113	Dc	0.026	0.041	0.060	0.081	0.106	0.134	0.166	0.200	0.238	0.280	0.324	0.374	0.431	0.494	0.563	0.638	0.720	0.811				
		17.84				U	5921	3789	2632	1933	1406	1170	947	783	658	561	483	417	360	311	266	227	194	166	143			
						Du	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.365	0.421	0.481	0.548	0.623	0.707	0.801	0.903	1.015	1.137		

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
3/16" Bars	1 3/8	2 9/16	3 3/4	4 15/16	6 1/8	7 5/16	8 1/2	9 11/16	10 7/8	12 1/16	13 1/4	14 7/16	15 5/8	16 13/16	18	19 3/16	20 3/8
1/8" Bars	1 5/16	2 1/2	3 11/16	4 7/8	6 1/16	7 1/4	8 7/16	9 5/8	10 13/16	12	13 3/16	14 3/8	15 9/16	16 3/4	17 15/16	19 1/8	20 5/16
# Bars	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
3/16" Bars	21 9/16	22 3/4	23 15/16	25 1/8	26 5/16	27 1/2	28 11/16	29 7/8	31 1/16	32 1/4	33 7/16	34 5/8	35 13/16	37	38 3/16	39 3/8	
1/8" Bars	21 1/2	22 11/16	23 7/8	25 1/16	26 1/4	27 7/16	28 5/8	29 13/16	31	32 3/16	33 3/8	34 9/16	35 3/4	36 15/16	38 1/8	39 5/16	