

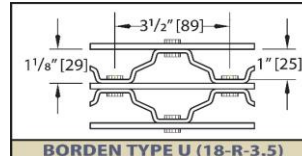
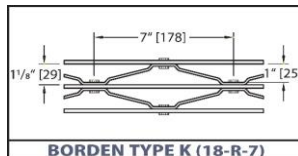
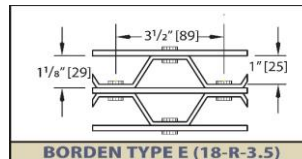
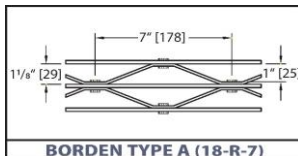


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Riveted Grating

Steel

LOAD TABLE



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"	6.36	0.0422	0.1125	41	U	338	216	150	110	84	67	54	<b>Table compiled as per ANSI/NAAMM MBG 534-14</b> 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	0.1	0.16	0.22	0.3	0.4	0.5	0.62																
						C	338	270	225	193	169	150	135																
						Dc	0.08	0.12	0.18	0.24	0.32	0.4	0.5																
2	3/4"x3/16"	7.18	0.0603	0.1607	45	U	482	309	214	157	121	95	77																
						Du	0.1	0.16	0.22	0.3	0.4	0.5	0.62																
						C	482	386	321	276	241	214	193									175	161	148					
						Dc	0.08	0.12	0.18	0.24	0.32	0.4	0.5									0.6	0.72	0.84					
3	1"x1/8"	7.38	0.1000	0.2000	51	U	600	384	267	196	150	119	96									79	67	57					
						Du	0.07	0.12	0.17	0.23	0.3	0.38	0.47									0.56	0.67	0.79					
						C	600	480	400	343	300	267	240									218	200	185					
						Dc	0.06	0.09	0.13	0.18	0.24	0.3	0.37									0.45	0.54	0.63					
4	1"x3/16"	8.63	0.1429	0.2857	56	U	857	549	381	280	214	169	137	113	95	81	70	54	42										
						Du	0.07	0.12	0.17	0.23	0.3	0.38	0.47	0.56	0.67	0.79	0.91	1.19	1.51										
						C	857	686	571	490	429	381	343	312	286	264	245	214	190										
						Dc	0.06	0.09	0.13	0.18	0.24	0.3	0.37	0.45	0.54	0.63	0.73	0.95	1.21										
5	1 1/4"x1/8"	8.40	0.1953	0.3125	60	U	938	600	417	306	234	185	150	124	104	89	77	59	46										
						Du	0.06	0.09	0.13	0.18	0.24	0.3	0.37	0.45	0.54	0.63	0.73	0.95	1.21										
						C	938	750	625	536	469	417	375	341	313	288	268	234	208										
						Dc	0.05	0.07	0.11	0.15	0.19	0.24	0.3	0.36	0.43	0.5	0.58	0.76	0.97										
6	1 1/4"x3/16"	10.09	0.2790	0.4464	66	U	1339	857	595	437	335	265	214	177	149	127	109	84	66										
						Du	0.06	0.09	0.13	0.18	0.24	0.3	0.37	0.45	0.54	0.63	0.73	0.95	1.21										
						C	1339	1071	893	765	670	595	536	487	446	412	383	335	298										
						Dc	0.05	0.07	0.11	0.15	0.19	0.24	0.3	0.36	0.43	0.5	0.58	0.76	0.97										
7	1 1/2"x1/8"	9.43	0.3375	0.4500	69	U	1350	864	600	441	338	267	216	179	150	128	110	84	67										
						Du	0.05	0.08	0.11	0.15	0.2	0.25	0.31	0.38	0.45	0.52	0.61	0.79	1.01										
						C	1350	1080	900	771	675	600	540	491	450	415	386	338	300										
						Dc	0.04	0.06	0.09	0.12	0.16	0.2	0.25	0.3	0.36	0.42	0.49	0.64	0.8										
8	1 1/2"x3/16"	11.55	0.4821	0.6429	75	U	1929	1234	857	630	482	381	309	255	214	183	157	121	95										
						Du	0.05	0.08	0.11	0.15	0.2	0.25	0.31	0.38	0.45	0.52	0.61	0.79	1.01										
						C	1929	1543	1286	1102	964	857	771	701	643	593	551	482	429										
						Dc	0.04	0.06	0.09	0.12	0.16	0.2	0.25	0.3	0.36	0.42	0.49	0.64	0.8										
9	1 3/4"x3/16"	13.01	0.7656	0.8750	85	U	2625	1680	1167	857	656	519	420	347	292	249	214	164	130										
						Du	0.04	0.07	0.11	0.13	0.17	0.22	0.27	0.32	0.38	0.45	0.52	0.68	0.86										
						C	2625	2100	1750	1500	1313	1167	1050	955	875	808	750	656	583										
						Dc	0.03	0.05	0.08	0.1	0.14	0.17	0.21	0.26	0.31	0.36	0.42	0.54	0.69										
10	2"x3/16"	15.47	1.1429	1.1429	93	U	3429	2194	1524	1120	857	677	549	453	381	325	280	214	169										
						Du	0.04	0.06	0.08	0.11	0.15	0.19	0.23	0.28	0.34	0.39	0.46	0.6	0.75										
						C	3429	2743	2286	1959	1714	1524	1371	1247	1143	1055	980	857	762										
						Dc	0.03	0.05	0.07	0.09	0.12	0.15	0.19	0.23	0.27	0.31	0.36	0.48	0.6										
11	2 1/4"x3/16"	16.93	1.6272	1.4464	102	U	4339	2777	1929	1417	1085	857	694	574	482	411	354	271	214										
						Du	0.03	0.05	0.07	0.1	0.13	0.17	0.21	0.25	0.3	0.35	0.41	0.53	0.67										
						C	4339	3471	2893	2480	2170	1929	1736	1578	1446	1335	1240	1085	964										
						Dc	0.03	0.04	0.06	0.08	0.11	0.13	0.17	0.2	0.24	0.28	0.32	0.42	0.54										
12	2 1/2"x3/16"	18.38	2.2321	1.7857	111	U	5357	3429	2381	1749	1339	1058	857	708	595	507	437	335	265										
						Du	0.03	0.05	0.07	0.09	0.12	0.15	0.19	0.23	0.27	0.31	0.36	0.48	0.6										
						C	5357	4286	3571	3061	2679	2381	2143	1948	1786	1648	1531	1339	1190										
						Dc	0.02	0.04	0.05	0.07	0.1	0.12	0.15	0.18	0.21	0.25	0.29	0.38	0.48										

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.

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