McNICHOLS® BAR GRATING

SWAGE-LOCKED

GIA & GIA-2 SERIES | 19-SI-4 & 19-SI-2 (1-3/16" ON CENTER) SPACING | I-BAR

ALUMINUM LOAD TABLE

SERIES TYPE & NAME	BB HEIGHT & THICKNESS	#/SF			CLEAR SPAN																	
		19-SI-4	19-SI-2	LOAD	12"	18"	24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	102"	108"	114"	120"
GIA-100	1" x 1/4"	1.9	2.1	U	2526	1123	632	404	281	206	158	125	101	84	70	60	52	45	39	35	31	28	25
				D	0.036	0.081	0.144	0.225	0.324	0.440	0.576	0.730	0.900	1.095	1.293	1.526	1.779	2.029	2.276	2.603	2.898	3.250	3.562
				C	1263	842	632	505	421	361	316	281	253	230	211	194	180	168	158	149	140	133	126
				D	0.029	0.065	0.115	0.180	0.259	0.353	0.461	0.584	0.721	0.872	1.039	1.215	1.408	1.616	1.844	2.086	2.327	2.600	2.873
GIA-125	1-1/4" x 1/4"	2.3	2.5	U	3947	1754	987	632	439	322	247	195	158	130	110	93	81	70	62	55	49	44	39
				D	0.029	0.065	0.115	0.180	0.259	0.353	0.461	0.583	0.720	0.868	1.040	1.211	1.419	1.616	1.853	2.095	2.345	2.615	2.845
				C	1974	1316	987	789	658	564	493	439	395	359	329	304	282	263	247	232	219	208	197
				D	0.023	0.052	0.092	0.144	0.207	0.282	0.368	0.467	0.576	0.697	0.830	0.975	1.129	1.295	1.476	1.663	1.864	2.082	2.300
GIA-150	1-1/2" x 1/4"	2.6	2.8	U	5684	2526	1421	909	632	464	355	281	227	188	158	135	116	101	89	79	70	63	57
				D	0.024	0.054	0.096	0.150	0.216	0.294	0.384	0.487	0.599	0.726	0.865	1.017	1.176	1.349	1.539	1.741	1.939	2.167	2.407
				C	2842	1895	1421	1137	947	812	711	632	568	517	474	437	406	379	355	334	316	299	284
				D	0.019	0.043	0.077	0.120	0.173	0.235	0.307	0.389	0.480	0.581	0.692	0.811	0.941	1.080	1.228	1.386	1.556	1.732	1.919
GIA-175	1-3/4" x 1/4"	3.0	3.3	U	7737	3439	1934	1238	860	632	484	382	309	256	215	183	158	138	121	107	96	86	77
				D	0.021	0.046	0.082	0.129	0.185	0.252	0.329	0.417	0.514	0.623	0.741	0.869	1.009	1.161	1.318	1.485	1.675	1.863	2.047
				C	3868	2579	1934	1547	1289	1105	967	860	774	703	645	595	553	516	484	455	430	407	387
				D	0.016	0.037	0.066	0.103	0.148	0.202	0.263	0.333	0.412	0.498	0.593	0.695	0.807	0.926	1.054	1.189	1.334	1.485	1.646
GIA-200	2" x 1/4"	3.4	3.7	U	10106	4491	2526	1617	1123	825	632	499	404	334	281	239	206	180	158	140	125	112	101
				D	0.018	0.040	0.072	0.113	0.162	0.221	0.288	0.364	0.450	0.544	0.649	0.760	0.881	1.014	1.153	1.302	1.461	1.625	1.799
				C	5053	3369	2526	2021	1684	1444	1263	1123	1011	919	842	777	722	674	632	594	561	532	505
				D	0.014	0.032	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.518	0.608	0.706	0.810	0.922	1.040	1.166	1.300	1.439
GIA-225	2-1/4" x 1/4"	3.8	4.0	U	12790	5684	3197	2046	1421	1044	799	632	512	423	355	303	261	227	200	177	158	142	128
				D	0.016	0.036	0.064	0.100	0.144	0.196	0.256	0.324	0.400	0.484	0.576	0.677	0.784	0.899	1.025	1.156	1.297	1.447	1.601
				C	6395	4263	3197	2558	2132	1827	1599	1421	1279	1163	1066	984	914	853	799	752	711	673	639
				D	0.013	0.029	0.051	0.080	0.115	0.157	0.205	0.259	0.320	0.387	0.461	0.541	0.628	0.720	0.819	0.924	1.038	1.155	1.279
GIA-250	2-1/2" x 1/4"	4.0	4.2	U	15790	7018	3947	2526	1754	1289	987	780	632	522	439	374	322	281	247	219	195	175	158
				D	0.014	0.032	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.436	0.519	0.609	0.705	0.811	0.923	1.043	1.167	1.300	1.441
					7895	5263	3947	3158	2632	2256	1974	1754	1579	1435	1316	1215	1128	1053	987	929	877	831	789
				D	0.012	0.026	0.046	0.072	0.104	0.141	0.184	0.233	0.288	0.348	0.415	0.487	0.565	0.648	0.737	0.833	0.933	1.040	1.151

U - Uniform Load - Lbs. per Square Foot

D - Deflection - in Inches

C - Concentrated Load - Lbs. per Square Foot of Width at Mid Span

- Spans and loading values to the left of the bolded black line produce a deflection of 1/4" or less under a uniform load of 100 lbs. per square foot, allowing for safe pedestrian comfort. Span and loading values to the right of the bolded black line are applicable to other types of loads at the discretion of a licensed engineer.
- Load and deflection values are theoretical and based on a maximum allowable fiber stress of 12,000 PSI, E = 10,000,000 PSI.
- Technical information provided is theoretical and for evaluation by technically skilled persons only, with any use thereof to be at their independent discretion and risk. **McNICHOLS** shall have no responsibility or liability for results obtained or damages resulting from improper evaluation or use of Grating.