

Aluminum Rectangular Bar Grating Load Table



19SG4 & 19SG2 (1-3/16" On Center) Spacing

Series Type & Name	BB HGT	BB THK	PED MAX	LBS./SF		LOAD/ DEFL	Clear Span																							
							19-SG-4	19-SG-2	12"	18"	24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	102"	108"	114"	120"			
							U	D	C	D	U	D	C	D	U	D	C	D	U	D	C	D	U	D	C	D	U	D	C	D
GAL-75-A & GAL-75-A-2	3/4"	1/8"	32"	NA	NA	U	947	421	237	152	105	77	59	47	38	31	26	22	19	17	15	13	12	10	9					
						D	0.048	0.108	0.192	0.301	0.431	0.586	0.765	0.977	1.204	1.438	1.708	1.990	2.312	2.726	3.114	3.439	3.990	4.128	4.561					
						C	474	316	237	189	158	135	118	105	95	86	79	68	63	59	56	53	50	47						
						D	0.038	0.086	0.154	0.239	0.346	0.469	0.612	0.776	0.963	1.160	1.384	1.625	1.891	2.155	2.449	2.788	3.133	3.476	3.811					
GAL-75 & GAL-75-2	3/4"	3/16"	35"	NA	NA	U	1421	631	355	227	158	116	89	70	57	47	39	34	29	25	22	20	18	16	14					
						D	0.048	0.108	0.192	0.300	0.432	0.588	0.770	0.970	1.204	1.453	1.708	2.050	2.352	2.672	3.044	3.527	3.990	4.403	4.730					
						C	710	474	355	284	237	203	178	158	142	129	118	109	101	95	89	84	79	75	71					
						D	0.038	0.086	0.154	0.240	0.346	0.470	0.616	0.778	0.959	1.160	1.378	1.618	1.873	2.166	2.463	2.788	3.113	3.476	3.838					
GAL-100-A & GAL-100-A-2	1"	1/8"	39"	1.9	2.0	U	1684	748	421	269	187	137	105	83	67	56	47	40	34	30	26	23	21	19	17					
						D	0.036	0.081	0.144	0.225	0.324	0.439	0.574	0.727	0.895	1.095	1.302	1.526	1.744	2.028	2.276	2.565	2.944	3.307	3.632					
						C	842	561	421	337	281	241	211	187	168	153	140	130	120	112	105	99	94	89	84					
						D	0.029	0.065	0.115	0.180	0.259	0.353	0.462	0.583	0.718	0.870	1.034	1.221	1.407	1.615	1.838	2.079	2.343	2.609	2.872					
GAL-100 & GAL-100-2	1"	3/16"	44"	2.6	2.8	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					
GAL-125-A & GAL-125-A-2	1-1/4"	1/8"	47"	2.1	2.4	U	2631	1169	658	421	292	215	164	130	105	87	73	62	54	47	41	36	32	29	26					
						D	0.029	0.065	0.115	0.180	0.259	0.353	0.459	0.583	0.718	0.871	1.035	1.211	1.419	1.627	1.838	2.057	2.294	2.585	2.845					
						C	1316	877	658	526	439	376	329	292	263	239	219	202	188	175	164	155	146	138	132					
						D	0.023	0.052	0.092	0.144	0.208	0.282	0.369	0.466	0.576	0.696	0.828	0.971	1.129	1.293	1.470	1.667	1.864	2.072	2.311					
GAL-125 & GAL-125-2	1-1/4"	3/16"	52"	3.2	3.5	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					
GAL-150-A & GAL-150-A-2	1-1/2"	1/8"	53"	2.5	2.8	U	3790	1684	947	606	421	309	237	187	152	125	105	90	77	67	59	52	47	42	38					
						D	0.024	0.054	0.096	0.150	0.216	0.294	0.384	0.486	0.602	0.724	0.862	1.017	1.171	1.342	1.530	1.719	1.953	2.166	2.406					
						C	1895	1263	947	758	632	541	474	421	379	345	316	292	271	253	237	223	211	199	189					
						D	0.019	0.043	0.077	0.120	0.173	0.235	0.307	0.389	0.480	0.582	0.692	0.813	0.942	1.081	1.229	1.388	1.559	1.729	1.915					
GAL-150 & GAL-150-2	1-1/2"	3/16"	59"	3.8	3.9	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					
GAL-175 & GAL-175-2	1-3/4"	3/16"	66"	4.3	4.4	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					
GAL-200 & GAL-200-2	2"	3/16"	73"	4.9	5.0	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					
GAL-225 & GAL-225-2	2-1/4"	3/16"	80"	5.3	5.6	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					
GAL-250 & GAL-250-2	2-1/2"	3/16"	87"	5.8	6.1	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					
						C	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./Sf. D - Deflection in Inches C - Concentrated Load- Lbs./Ft. of Width at Mid Span; Loading data derived from 10.1053 bearing bars per foot of Grating width. The provided loading and deflection values are theoretical and based on a maximum allowable Fiber stress (Fs) of 12,000 PSI. Elastic Modulus (E) is stated as 10,000,000 PSI. Spans listed in the table represent clear spans (inside structural supports).