

SERIES TYPE & NAME	BB HGT	BB THK	LBS/SF		LOAD/ DEFL	CLEAR SPAN																		
			19-S-4	19-S-2		12"	18"	24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	102"	108"	114"	120"
GSL-75-A & GSL-75-A-2	3/4"	1/8"	NA	NA	U	1421	631	355	227	158	116	89	70	57	47	39	34	29	25	22	20	18	16	14
					D	0.025	0.056	0.099	0.155	0.224	0.304	0.398	0.502	0.623	0.752	0.883	1.061	1.217	1.382	1.575	1.824	2.064	2.277	2.446
					C	710	474	355	284	237	203	178	158	142	129	118	109	101	95	89	84	79	75	71
					D	0.020	0.045	0.079	0.124	0.179	0.243	0.319	0.403	0.496	0.600	0.713	0.837	0.969	1.121	1.274	1.442	1.610	1.798	1.985
GSL-75 & GSL-75-2	3/4"	3/16"	NA	NA	U	2131	947	533	341	237	174	133	105	85	70	59	50	43	38	33	29	26	24	21
					D	0.025	0.056	0.099	0.155	0.224	0.304	0.397	0.502	0.619	0.746	0.891	1.040	1.203	1.401	1.575	1.764	1.987	2.277	2.446
					C	1066	710	533	426	355	304	266	237	213	194	178	164	152	142	133	125	118	112	107
					D	0.020	0.045	0.079	0.124	0.179	0.243	0.317	0.403	0.496	0.602	0.717	0.839	0.972	1.117	1.269	1.431	1.603	1.790	1.994
GSL-100-A & GSL-100-A-2	1"	1/8"	5.2	6.1	U	2526	1123	632	404	281	206	158	125	101	84	70	60	52	45	39	35	31	28	25
					D	0.019	0.042	0.075	0.116	0.168	0.228	0.298	0.378	0.465	0.566	0.668	0.789	0.920	1.049	1.177	1.346	1.499	1.680	1.842
					C	1263	842	632	505	421	361	316	281	253	230	211	194	180	168	158	149	140	133	126
					D	0.015	0.034	0.060	0.093	0.134	0.182	0.238	0.302	0.373	0.451	0.537	0.628	0.728	0.836	0.954	1.079	1.203	1.344	1.485
GSL-100 & GSL-100-2	1"	3/16"	7.2	7.8	U	3790	1684	947	606	421	309	237	187	152	125	105	90	77	67	59	52	47	42	38
					D	0.019	0.042	0.074	0.116	0.168	0.228	0.298	0.377	0.467	0.562	0.669	0.789	0.908	1.042	1.187	1.334	1.515	1.681	1.867
					C	1895	1263	947	758	632	541	474	421	379	345	316	292	271	253	237	223	211	199	189
					D	0.015	0.034	0.060	0.093	0.134	0.182	0.238	0.302	0.372	0.451	0.537	0.630	0.731	0.839	0.954	1.077	1.209	1.341	1.486
GSL-125-A & GSL-125-A-2	1-1/4"	1/8"	6.3	7.2	U	3947	1754	987	631	439	322	247	195	158	130	110	93	81	70	62	55	49	44	39
					D	0.015	0.034	0.060	0.093	0.134	0.182	0.239	0.302	0.373	0.449	0.538	0.626	0.734	0.836	0.958	1.083	1.213	1.352	1.472
					C	1973	1316	987	789	658	564	493	439	395	359	329	304	282	263	247	232	219	208	197
					D	0.012	0.027	0.048	0.074	0.107	0.146	0.191	0.242	0.298	0.361	0.429	0.504	0.584	0.670	0.764	0.860	0.964	1.077	1.189
GSL-125 & GSL-125-2	1-1/4"	3/16"	8.8	9.4	U	5921	2631	1480	947	658	483	370	292	237	196	164	140	121	105	93	82	73	66	59
					D	0.015	0.034	0.060	0.093	0.134	0.182	0.238	0.301	0.373	0.451	0.535	0.629	0.731	0.836	0.958	1.077	1.205	1.352	1.484
					C	2960	1974	1480	1184	987	846	740	658	592	538	493	455	423	395	370	348	329	312	296
					D	0.012	0.027	0.048	0.074	0.107	0.146	0.191	0.241	0.298	0.360	0.429	0.503	0.584	0.671	0.763	0.860	0.965	1.077	1.191
GSL-150-A & GSL-150-A-2	1-1/2"	1/8"	7.4	8.3	U	5684	2526	1421	910	632	464	355	281	227	188	158	135	116	101	89	79	70	63	57
					D	0.012	0.028	0.050	0.078	0.112	0.152	0.198	0.252	0.310	0.376	0.447	0.526	0.608	0.698	0.796	0.901	1.003	1.121	1.245
					C	2842	1895	1421	1137	947	812	711	632	568	517	474	437	406	379	355	334	316	299	284
					D	0.010	0.022	0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.301	0.358	0.419	0.487	0.559	0.635	0.717	0.805	0.896	0.992
GSL-150 & GSL-150-2	1-1/2"	3/16"	10.5	11.1	U	8526	3789	2132	1364	947	696	533	421	341	282	237	202	174	152	133	118	105	94	85
					D	0.012	0.028	0.050	0.078	0.112	0.152	0.199	0.251	0.310	0.376	0.447	0.525	0.608	0.700	0.793	0.897	1.003	1.115	1.238
					C	4263	2842	2132	1705	1421	1218	1066	947	853	775	711	656	609	568	533	502	474	449	426
					D	0.010	0.022	0.040	0.062	0.089	0.122	0.159	0.201	0.248	0.300	0.358	0.420	0.487	0.558	0.636	0.718	0.805	0.897	0.992
GSL-175 & GSL-175-2	1-3/4"	3/16"	11.7	12.3	U	11605	5158	2901	1857	1289	947	725	573	464	384	322	275	237	206	181	161	143	129	116
					D	0.011	0.024	0.043	0.067	0.096	0.130	0.170	0.215	0.266	0.322	0.383	0.450	0.522	0.598	0.680	0.771	0.860	0.963	1.064
					C	5803	3868	2901	2321	1934	1658	1451	1289	1161	1055	967	893	829	774	725	683	645	611	580
					D	0.009	0.019	0.034	0.053	0.077	0.104	0.136	0.172	0.213	0.257	0.306	0.360	0.417	0.479	0.545	0.615	0.690	0.768	0.851
GSL-200 & GSL-200-2	2"	3/16"	13.8	14.4	U	15158	6737	3790	2425	1684	1237	947	749	606	501	421	359	309	269	237	210	187	168	152
					D	0.009	0.021	0.037	0.058	0.084	0.114	0.149	0.189	0.233	0.282	0.335	0.394	0.456	0.523	0.596	0.673	0.754	0.840	0.934
					C	7579	5053	3790	3032	2526	2165	1895	1684	1516	1378	1263	1166	1083	1011	947	892	842	798	758
					D	0.007	0.017	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.365	0.419	0.476	0.538	0.603	0.672	0.745
GSL-225 & GSL-225-2	2-1/4"	3/16"	15.5	16.1	U	19184	8526	4796	3070	2132	1566	1199	947	767	634	533	454	392	341	300	266	237	213	192
					D	0.008	0.019	0.033	0.052	0.074	0.101	0.132	0.168	0.207	0.250	0.298	0.350	0.406	0.465	0.530	0.599	0.671	0.748	0.828
					C	9592	6395	4796	3837	3197	2741	2398	2132	1918	1744	1599	1476	1370	1279	1199	1128	1066	1010	959
					D	0.007	0.015	0.026	0.041	0.060	0.081	0.106	0.134	0.165	0.200	0.238	0.280	0.324	0.372	0.424	0.478	0.536	0.598	0.662
GSL-250 & GSL-250-2	2-1/2"	3/16"	17.1	17.7	U	23684	10526	5921	3790	2632	1933	1480	1170	947	783	658	561	483	421	370	328	292	262	237
					D	0.007	0.017	0.030	0.047	0.067	0.091	0.119	0.151	0.186	0.225	0.268	0.315	0.365	0.419	0.477	0.538	0.602	0.671	0.745
					C	11842	7895	5921	4737	3947	3383	2961	2632	2368	2153	1974	1822	1692	1579	1480	1393	1316	1247	1184
					D	0.006	0.013	0.024	0.037	0.054	0.073	0.095	0.121	0.149	0.180	0.215	0.252	0.292	0.335	0.381	0.430	0.483	0.538	0.596

U - Uniform Load - Lbs. per Square Foot

D - Deflection - in Inches

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

- Span 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.
- For Grating with a serrated surface [1" bearing bar height or taller], subtract 1/4" from the bearing bar height requirement and reference that loading information listed in the table. For example, a 1-1/2" x 3/16" serrated bearing bar height and thickness would have the same strength and loading values as a 1-1/4" x 3/16" smooth (non-serrated) bearing bar height and thickness.
- Loading and deflection values are theoretical and based on a maximum allowable fiber stress [Fs] of 18,000 PSI, E = 29,000,000 PSI.
- Technical information provided is theoretical and for evaluation by technically skilled persons, 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 Bar Grating.

