

SERIES TYPE & NAME	BB HGT	BB THK	PED MAX	LBS./SF		LOAD/ DEFL	CLEAR SPAN																							
				15-SI-4	15-SI-2		12"	18"	24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	102"	108"	114"	120"					
SGIA-100 & SGIA-100-2	1"	3/16"	46"	2.3	2.5	U	3200	1422	800	512	356	261	200	158	128	106	89	76	65	57	50	44	40	35	32					
						D	0.036	0.081	0.144	0.225	0.324	0.441	0.576	0.729	0.900	1.091	1.298	1.526	1.756	2.029	2.304	2.584	2.952	3.207	3.600					
						C	1600	1067	800	640	533	457	400	356	320	291	267	246	229	213	200	188	178	168	160					
						D	0.029	0.065	0.115	0.180	0.259	0.353	0.461	0.584	0.720	0.871	1.038	1.216	1.414	1.617	1.843	2.078	2.336	2.593	2.880					
SGIA-125 & SGIA-125-2	1-1/4"	3/16"	55"	2.8	2.9	U	5000	2222	1250	800	556	408	313	247	200	165	139	118	102	89	78	69	62	55	50					
						D	0.029	0.065	0.115	0.180	0.259	0.353	0.462	0.583	0.720	0.870	1.038	1.213	1.411	1.622	1.840	2.075	2.343	2.581	2.880					
						C	2500	1667	1250	1000	833	714	625	556	500	455	417	385	357	333	313	294	278	263	250					
						D	0.023	0.052	0.092	0.144	0.207	0.282	0.369	0.467	0.576	0.698	0.830	0.974	1.129	1.295	1.477	1.664	1.868	2.078	2.304					
SGIA-150 & SGIA-150-2	1-1/2"	3/16"	63"	3.2	3.4	U	7200	3200	1800	1152	800	588	450	356	288	238	200	170	147	128	113	100	89	80	72					
						D	0.024	0.054	0.096	0.150	0.216	0.294	0.384	0.487	0.600	0.726	0.864	1.012	1.176	1.350	1.543	1.740	1.946	2.172	2.400					
						C	3600	2400	1800	1440	1200	1029	900	800	720	655	600	554	514	480	450	424	400	379	360					
						D	0.019	0.043	0.077	0.120	0.173	0.235	0.307	0.389	0.480	0.581	0.691	0.811	0.940	1.080	1.229	1.389	1.555	1.733	1.920					
SGIA-175 & SGIA-175-2	1-3/4"	3/16"	70"	3.7	3.9	U	9800	4356	2450	1568	1089	800	613	484	392	324	272	232	200	174	153	136	121	109	98					
						D	0.021	0.046	0.082	0.129	0.185	0.252	0.329	0.417	0.514	0.622	0.740	0.869	1.008	1.156	1.315	1.490	1.666	1.864	2.057					
						C	4900	3267	2450	1960	1633	1400	1225	1089	980	891	817	754	700	653	613	576	544	516	490					
						D	0.016	0.037	0.066	0.103	0.148	0.202	0.263	0.333	0.411	0.498	0.593	0.695	0.806	0.925	1.054	1.188	1.332	1.486	1.646					
SGIA-200 & SGIA-200-2	2"	3/16"	78"	4.2	4.4	U	12800	5689	3200	2048	1422	1045	800	632	512	423	356	303	261	228	200	177	158	142	128					
						D	0.018	0.041	0.072	0.113	0.162	0.221	0.288	0.364	0.450	0.544	0.649	0.761	0.881	1.014	1.152	1.299	1.458	1.626	1.800					
						C	6400	4267	3200	2560	2133	1829	1600	1422	1280	1164	1067	985	914	853	800	753	711	674	640					
						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	0.810	0.922	1.040	1.166	1.300	1.440					
SGIA-225 & SGIA-225-2	2-1/4"	3/16"	85"	4.6	4.9	U	16200	7200	4050	2592	1800	1322	1013	800	648	536	450	383	331	288	253	224	200	180	162					
						D	0.016	0.036	0.064	0.100	0.144	0.196	0.256	0.324	0.400	0.484	0.576	0.675	0.785	0.900	1.024	1.155	1.296	1.448	1.600					
						C	8100	5400	4050	3240	2700	2314	2025	1800	1620	1473	1350	1246	1157	1080	1013	953	900	853	810					
						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	0.627	0.720	0.820	0.925	1.037	1.156	1.280					
SGIA-250 & SGIA-250-2	2-1/2"	3/16"	92"	4.9	5.1	U	20000	8889	5000	3200	2222	1633	1250	988	800	661	556	473	408	356	313	277	247	222	200					
						D	0.014	0.032	0.058	0.090	0.130	0.176	0.230	0.292	0.360	0.435	0.519	0.608	0.705	0.811	0.923	1.041	1.167	1.302	1.440					
						C	10000	6667	5000	4000	3333	2857	2500	2222	2000	1818	1667	1538	1429	1333	1250	1176	1111	1053	1000					
						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	0.832	0.933	1.040	1.152					

U - Uniform Load - Lbs./Sf. D - Deflection in Inches C - Concentrated Load - Lbs./Ft. of Width at Mid Span | Loading information based on 12.8 bearing bars per foot of Grating width. Loading and deflection values are theoretical and based on a maximum allowable Fiber stress (Fs) of 12,000 PSI. Elastic Modulus (E) is 10,000,000 PSI. Spans listed in table are clear (inside structural supports). 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./Sf., allowing for safe pedestrian comfort. The resulting pedestrian maximum spans under this condition are listed in the PED MAX column. 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. 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.