Molded Grating

Style			Uniform Load - lbs/sq. ft; Deflection - inches									Concentrated Load - lbs/ft of width; Deflection - inches								
Style (In)	Height (In)	Load Bar Spacing CC (In)	Load/ Span	18"	24"	30"	36"	42"	48"	54"	60"	Load/ Span	18"	24"	30"	36"	42"	48"	54"	60"
1 x 4 Rectangular Mesh	1	1	50	.01	.04	.08	.16	.33				200	.05	.12	.22	.34	***.60***			
			100	.02	.07	.17	.32	***.66***				300	.07	.18	.32	***.52***	***.90***			
			200	.04	.15	.34	***.65***	***1.32***				500	.12	.30	***.54***	***.86***	***1.51***			
			FL*	1902	1070	685	476	349				FL*	1427	1070	856	713	613			
1-1/2 x 1-1/2 Square Mesh	1	1-1/2	50	.02	.06	.14	.31	***.49***				200	.08	.20	.35	***.66***	***.90***			
			100	.04	.12	.27	***.62***	***.98***				300	.12	.30	***.53***	***.99***	***1.35***			
			200	.08	.25	***.55***	***1.24***	***1.97***				500	.20	***.49***	***.88***	***1.65***	--			
			FL*	1268	713	456	317	233				FL*	951	713	571	476	408			
1-1/2 x 1-1/2 Square Mesh	1-1/2	1-1/2	50	<.01	.02	.05	.10	.17	.28	***.42***		200	.03	.07	.12	.21	.32	***.45***	***.60***	
			100	.01	.04	.09	.20	.34	***.56***	***.84***		300	.05	.10	.18	.32	***.47***	***.68***	***.90***	
			200	.03	.06	.18	***.40***	***.69***	***1.13***	***1.68***		500	.08	.17	.29	***.53***	***.79***	***1.13***	***1.50***	
			FL*	2779	1600	1024	711	522	400	316		FL*	2133	1600	1280	1067	914	800	711	
2 x 2 Square Mesh	2	2	50	<.01	.01	.02	.04	.08	.14	.21	.37	200	.02	.03	.06	.09	.14	.22	.30	***.47***
			100	.01	.02	.05	.09	.16	.28	***.42***	***.73***	300	.03	.05	.09	.14	.22	.33	***.45***	***.70***
			200	.02	.04	.09	.18	.32	***.56***	***.84***	***1.46***	500	.05	.08	.14	.23	.36	***.56***	***.75***	***1.17***
			FL*	2566	1925	1338	929	682	522	413	334	FL*	2787	2090	1672	1393	1194	1045	929	836

*FL: Failure load. Determined by applying a 2.5 Factor of Safety to the Ultimate Capacity of the grating.

- Deflection for uniform loads is limited to L/120 with L representing clear span length in inches. For typical pedestrian traffic, uniform load of 50 PSF is recommended with deflection not to exceed .375"
- Deflections for concentrated loads are shown for the same span conditions as for uniform loads.
- Deflection limits can be higher for fiberglass gratings as they are more resilient than metal materials.
- Italicized, bolded values indicate deflection greater than .375" or L/120. For these conditions, sustained loads or data not shown, please contact Brown-Campbell.