



MOLDED GRATING (Inch-Pounds units)
CONCENTRATED LINE LOAD TABLES - DEFLECTION IN INCHES

SPAN IN INCHES	STYLE	LOAD IN LBS. / FOOT OF WIDTH								MAXIMUM RECOMMENDED	APPARENT $EI \times 10^6$ (LB-IN ²)
		50	100	150	200	250	500	1000	2000		
12	1" x 1" x 4" RM	<0.01	0.01	0.02	0.02	0.03	0.06	0.12		940	0.31
	1" X 1 1/2" SM	0.01	0.01	0.02	0.03	0.04	0.07		860	0.26	
	1 1/2" x 1 1/2" SM	<0.01	<0.01	0.01	0.01	0.01	0.03	0.05	0.11	1870	0.67
	2" x 2" SM	<0.01	<0.01	<0.01	0.01	0.01	0.02	0.04	0.07	2310	1.02
18	1" x 1" x 4" RM	0.02	0.03	0.05	0.06	0.08	0.16			580	0.37
	1" X 1 1/2" SM	0.02	0.04	0.07	0.09	0.11				570	0.28
	1 1/2" x 1 1/2" SM	0.01	0.01	0.02	0.03	0.04	0.07	0.15		1210	0.82
	2" x 2" SM	<0.01	0.01	0.01	0.02	0.02	0.04	0.09	0.18	1850	1.38
24	1" x 1" x 4" RM	0.04	0.07	0.11	0.15	0.19				430	0.39
	1" X 1 1/2" SM	0.05	0.10	0.15	0.20	0.24				410	0.30
	1 1/2" x 1 1/2" SM	0.02	0.03	0.05	0.06	0.08	0.16			920	0.92
	2" x 2" SM	0.01	0.02	0.03	0.04	0.05	0.09	0.18		1480	1.60
30	1" x 1" x 4" RM	0.07	0.14	0.21	0.28					320	0.40
	1" X 1 1/2" SM	0.09	0.19	0.28						310	0.30
	1 1/2" x 1 1/2" SM	0.03	0.06	0.09	0.12	0.15	0.29			720	0.96
	2" x 2" SM	0.02	0.03	0.05	0.06	0.08	0.16			1150	1.74
36	1" x 1" x 4" RM	0.12	0.24							250	0.40
	1" X 1 1/2" SM	0.16	0.32							210	0.30
	1 1/2" x 1 1/2" SM	0.05	0.10	0.15	0.20	0.25				620	0.97
	2" x 2" SM	0.03	0.05	0.08	0.11	0.14	0.27			860	1.80
42	1" x 1" x 4" RM	0.19	0.39							190	0.40
	1" X 1 1/2" SM	0.26								180	0.30
	1 1/2" x 1 1/2" SM	0.08	0.16	0.24	0.32	0.40				490	0.97
	2" x 2" SM	0.04	0.08	0.13	0.17	0.21				680	1.82
48	1 1/2" x 1 1/2" SM	0.12	0.24	0.36	0.47					360	0.97
	2" x 2" SM	0.06	0.13	0.19	0.25	0.31				570	1.84
54	1 1/2" x 1 1/2" SM	0.17	0.34							300	0.97
	2" x 2" SM	0.09	0.18	0.26	0.35	0.44				460	1.86
60	2" x 2" SM	0.12	0.24	0.36	0.48					350	1.87

NOTES

1. The designer should not exceed MAXIMUM RECOMMENDED load at any time. MAXIMUM LOAD represents a 5:1 factor of safety on ULTIMATE CAPACITY.
2. ULTIMATE CAPACITY represents a complete and total failure of the grating.
3. Walking loads, typically 50 PSF, is recommended for pedestrian traffic. Deflections for worker comfort are typically limited to 3/8" or SPAN divided by 120 under full live load. For a firmer feel under full live load or a 250 lb/ft load, limit deflection to 1/4" or SPAN divided by 200.
4. The allowable loads are for STATIC LOAD CONDITIONS at ambient temperatures. Allowable loads for impact or dynamic loads should be a maximum of ONE-HALF the value shown. Long term loads will result in added deflection due to creep in the material and will also require higher safety factors to ensure acceptable performance.
5. For applications at elevated temperatures, consult your manufacturer.