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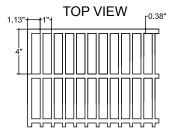
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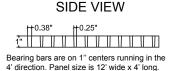
## **Product Group: Molded Fiberglass Grating**

1" x 1" x 4" Rectangular Grid

1" Thick / 68% Open





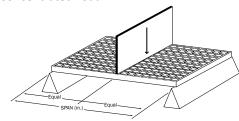


span (inches)	CONCENTRATED LOAD IN lbs/ft of width									Apparent
	50	100	150	200	250	500	1000	2000	Max Load	El x 10^6 (lb-in²)
12	0.004	0.008	0.012	0.016	0.020	0.040	0.079	0.159	1834	0.45
18	0.012	0.024	0.036	0.049	0.061	0.122	0.243	0.486	1419	0.50
24	0.028	0.056	0.083	0.111	0.139	0.278	0.555		961	0.52
30	0.053	0.107	0.160	0.213	0.266	0.533			769	0.53
36	0.090	0.181	0.271	0.362	0.452				641	0.54
42	0.138	0.276	0.413	0.551	0.689				549	0.56
46	0.178	0.355							501	0.57

span (inches)			Max	Apparent						
	50	100	150	200	250	500	1000	2000	Load	El x 10^6 (lb-in²)
12	0.002	0.005	0.007	0.010	0.012	0.025	0.050	0.099	3668	0.45
18	0.011	0.023	0.034	0.046	0.057	0.114	0.228	0.456	1892	0.50
24	0.035	0.069	0.104	0.139	0.174	0.347	0.694		961	0.52
30	0.083	0.167	0.250	0.333	0.416				615	0.53
36	0.170	0.339	0.509	0.679					427	0.54
42	0.301	0.603							314	0.56
46	0.430								287	0.57

Properties Per Foot of Width	# of Bars	Load Bar Width	Bar Centers	Weight/sq ft
$A = 2.69 \text{ in}^2 \text{ I} = 0.22 \text{ in}^4 \text{ S} = 0.45 \text{ in}^3$	12	0.25"	1"	2.61

## Concentrated Load



**Uniform Load** 



- 1. These tables were developed in accordance with the test method developed by the Fiberglass Grating Manufacturers Council (FGMC) of the American Composites Manufacturers Association (ACMA) for the Fiberglass Grating Standard.
- 2. The designer should not exceed MAXIMUM RECOMMENDED load at any time. MAXIMUM LOAD represents a factor of safety of 4:1 for molded grating on ULTIMATE CAPACITY. ULTIMATE CAPACITY represents MAX LOAD observed at initial fracture.
- 3. Walking loads for maintenance traffic are typically a live load of 50 PSF. Deflections for worker comfort are typically limited to 0.375" (3/8") or SPAN divided by 120 under full live load. For a firmer feel under full live load or a line load 250 lbs/ft of width, limit deflections to 0.25" (1/4") or SPAN divided by 200.
- 4. The loads represented are for STATIC LOAD CONDITIONS at ambient temperature. Deflections for impact loads or dynamic loads will MULTIPLY the deflections shown by 2. Long term loads will result in added deflection due to creep in the material and will require higher factors of safety to ensure acceptable performance.
- 5. Deflections are limited to 0.5'' (1/2'') as recommended by the Fiberglass Grating Manufacturers Council of the American Composites Manufacturers Association.