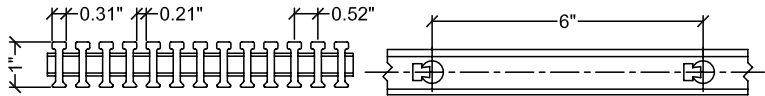


## Product Group: Pultruded Fiberglass Grating

### 1" Deep I-Bearing Bar (I 10-40-ADA)

### 1" Thick / 40% Open



Span (inches)	CONCENTRATED LOAD in lbs/ft of width								Max Load	Apparent EI x 10 <sup>6</sup> (lb-in <sup>2</sup> )
	50	100	150	200	250	500	1000	2000		
12	0.001	0.002	0.003	0.004	0.005	0.009	0.018	0.036	9005	1.99
18	0.003	0.006	0.009	0.011	0.014	0.029	0.057	0.115	6003	2.12
24	0.006	0.013	0.019	0.026	0.032	0.064	0.129	0.257	4503	2.24
30	0.012	0.024	0.036	0.048	0.060	0.120	0.239	0.479	3602	2.35
36	0.020	0.040	0.060	0.080	0.100	0.201	0.402		3002	2.42
42	0.032	0.063	0.095	0.126	0.158	0.315			2573	2.45
48	0.047	0.093	0.140	0.187	0.233	0.466			2251	2.47
54	0.066	0.132	0.198	0.265	0.331	0.661			2001	2.48
60	0.090	0.181	0.271	0.361	0.452				1800	2.49
66	0.120	0.240	0.359	0.479	0.599				1637	2.50
72	0.155	0.310	0.465	0.620					1500	2.51

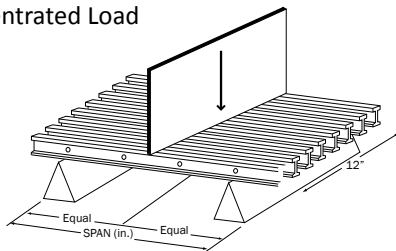
  

Span (inches)	UNIFORM LOAD in lbs/ft <sup>2</sup>								Max Load	Apparent EI x 10 <sup>6</sup> (lb-in <sup>2</sup> )
	50	100	150	200	250	500	1000	2000		
12	0.001	0.001	0.002	0.002	0.003	0.006	0.011	0.023	11526	1.99
18	0.003	0.005	0.008	0.011	0.013	0.027	0.054	0.107	5123	2.12
24	0.008	0.016	0.024	0.032	0.040	0.080	0.161	0.321	2882	2.24
30	0.019	0.037	0.056	0.075	0.094	0.187	0.374		1844	2.35
36	0.038	0.075	0.113	0.151	0.188	0.377			1281	2.42
42	0.069	0.138	0.207	0.276	0.345				941	2.45
48	0.117	0.233	0.350	0.466					720	2.47
54	0.186	0.372	0.558						569	2.48
60	0.282	0.565							461	2.49
66	0.412								381	2.5
72	0.581								320	2.51

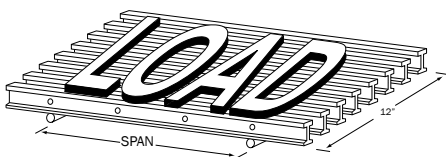
  

Properties Per Foot of Width									# of Bars	Load Bar Depth	Bar Centers	Weight/sq ft
A = 4.44 in <sup>2</sup> I = 0.49 in <sup>4</sup> S = 0.98 in <sup>3</sup>									23	1"	.52"	4.08

#### 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 2:1 for pultruded 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.