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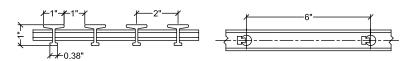
www.marcofiberglass.com

Product Group: Pultruded Fiberglass Grating

1" Deep T-Bearing Bar (T10-50)

1" Thick / 50% Open

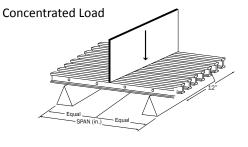




Span (inches)	CONCENTRATED LOAD in lbs/ft of width									Apparent El x 10^6
	50	100	150	200	250	500	1000	2000	Load	(lb-in²)
12	0.003	0.007	0.010	0.014	0.017	0.034	0.068	0.136	1476	0.53
18	0.009	0.018	0.028	0.037	0.046	0.092	0.184	0.368	984	0.66
24	0.019	0.39	0.058	0.078	0.097	0.195	0.389		738	0.74
30	0.036	0.072	0.108	0.144	0.180	0.361			590	0.78
36	0.062	0.123	0.185	0.246	0.308	0.615			492	0.79
42	0.096	0.193	0.289	0.386	0.482				422	0.80
48	0.142	0.284	0.427	0.569					369	0.81

Span (inches)	UNIFORM LOAD in lbs/ft2									Apparent El x 10^6
	50	100	150	200	250	500	1000	2000	Load	(lb-in²)
12	0.002	0.004	0.006	0.008	0.011	0.021	0.042	0.085	5735	0.53
18	0.009	0.017	0.026	0.035	0.043	0.086	0.173	0.345	2952	0.66
24	0.024	0.048	0.073	0.097	0.122	0.243	0.486		1473	0.74
30	0.056	0.113	0.169	0.225	0.282	0.563			939	0.78
36	0.115	0.231	0.346	0.461	0.577				661	0.79
42	0.211	0.422	0.633						492	0.80
48	0.356								376	0.81

Properties Per Foot of Width	# of Bars	Load Bar Depth	Bar Centers	Weight/sq ft
A = 1.76 in ² I = 0.21 in ⁴ S _T = 0.59 in ³ S _B = 0.31 in ³	6	1"	2"	1.81



Uniform Load



- 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.