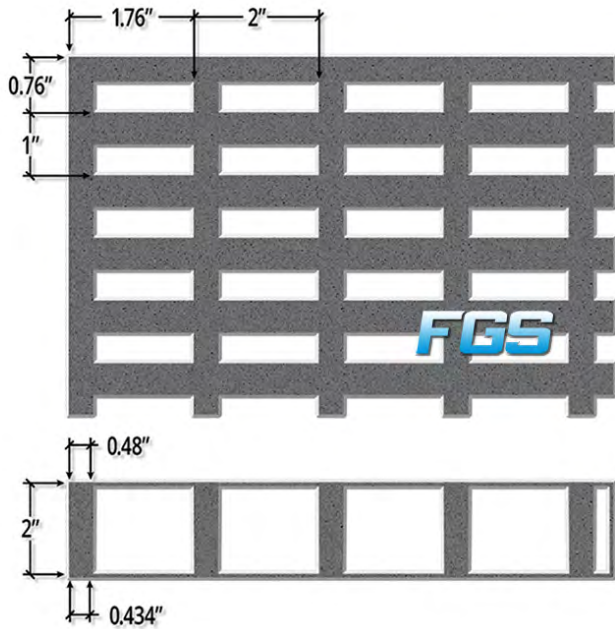


2" DEEP x 1" x 2" HEAVY DUTY MOLDED GRATING



- Bars ▶ 12
- Open Area ▶ 48%
- Load Bar Centers ▶ 1"
- Load Bar Width ▶ 0.48"

Approximate Weight ▶ 12.60 lbs/ft²

Engineering Properties Per Foot of Width

A ▶ 10.26 in² I ▶ 3.40 in⁴ S ▶ 3.27 in³

UNIFORM LOAD DEFLECTION

	50 lbs/ft ²	100 lbs/ft ²	150 lbs/ft ²	200 lbs/ft ²	250 lbs/ft ²	500 lbs/ft ²	1000 lbs/ft ²	2000 lbs/ft ²	Maximum Load	Apparent EI x 10 ⁻⁶ (Lbs/in ⁴)
12" SPAN ▶	---	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	31200	---
18" SPAN ▶	---	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	0.04	14500	---
24" SPAN ▶	---	<0.01	<0.01	0.01	0.02	0.03	0.06	0.12	9000	---
30" SPAN ▶	---	0.01	0.02	0.03	0.04	0.07	0.15	0.29	5800	---
36" SPAN ▶	---	0.03	0.05	0.06	0.08	0.15	0.30	---	4000	---
42" SPAN ▶	---	0.06	0.08	0.11	0.14	0.28	---	---	2900	---
46" SPAN ▶	---	0.08	0.12	0.16	0.20	0.40	---	---	1800	---
48" SPAN ▶	---	0.10	0.14	0.19	0.24	0.48	---	---	1600	---
54" SPAN ▶	---	---	---	---	---	---	---	---	---	---

CONCENTRATED LINE LOAD DEFLECTION

	50 lbs/ft ²	100 lbs/ft ²	150 lbs/ft ²	200 lbs/ft ²	250 lbs/ft ²	500 lbs/ft ²	1000 lbs/ft ²	2000 lbs/ft ²	Maximum Load	Apparent EI x 10 ⁻⁶ (Lbs/in ⁴)
12" SPAN ▶	---	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	15600	---
18" SPAN ▶	---	<0.01	<0.01	<0.01	<0.01	0.01	0.02	0.04	10800	---
24" SPAN ▶	---	<0.01	<0.01	<0.01	0.01	0.02	0.05	0.10	9000	---
30" SPAN ▶	---	<0.01	0.01	0.02	0.02	0.05	0.09	0.19	7200	---
36" SPAN ▶	---	0.02	0.02	0.03	0.04	0.08	0.16	0.32	6000	---
42" SPAN ▶	---	0.03	0.04	0.05	0.06	0.13	0.26	---	5100	---
46" SPAN ▶	---	0.03	0.05	0.07	0.08	0.17	0.34	---	4200	---
48" SPAN ▶	---	0.04	0.06	0.08	0.10	0.19	0.38	---	3900	---
54" SPAN ▶	---	---	---	---	---	---	---	---	---	---

POINT LOAD DEFLECTION

	100 lbs	200 lbs	500 lbs	750 lbs	1000 lbs	1500 lbs	2000 lbs
12" SPAN ▶	---	---	---	---	---	---	---
18" SPAN ▶	---	---	---	---	---	---	---
24" SPAN ▶	---	---	---	---	---	---	---
30" SPAN ▶	---	---	---	---	---	---	---
36" SPAN ▶	---	---	---	---	---	---	---
42" SPAN ▶	---	---	---	---	---	---	---
48" SPAN ▶	---	---	---	---	---	---	---

▶ 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*.

▶ The designer should not exceed **MAXIMUM RECOMMENDED** load at any time. **MAXIMUM LOAD** represents a 5:1 factor of safety on **ULTIMATE CAPACITY**. **ULTIMATE CAPACITY** represents **MAX LOAD** observed at initial fracture.

▶ Walking loads for maintenance traffic are typically a live load of 50 PSF. 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 line load 250 lbs/ft of width, limit deflections to 1/4" or SPAN divided by 200.

▶ The loads represented are for **STATIC LOAD CONDITIONS** at ambient temperature. Deflection 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.

▶ Deflections are limited to 1/2" as recommended by the *Fiberglass Grating Manufacturers Council of the American Composites Manufacturers Association*.

▶ For applications at elevated temperatures, consult *Fiberglass Grating Systems*.