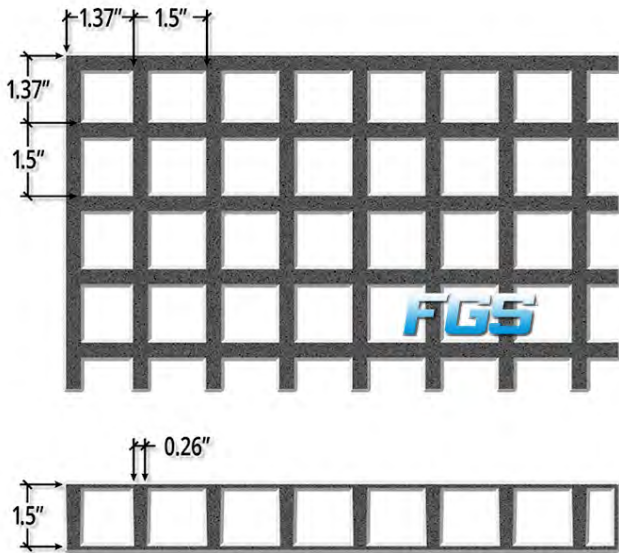


1 1/2" DEEP x 1 1/2" SQUARE MESH GRATING



Bars ▶ 8
Bar Width ▶ 1/4"
Open Area ▶ 68%
Load Bar Centers ▶ 1 1/2"

Approximate Weight ▶ 3.94 lbs/ft²

Engineering Properties Per Foot of Width
A ▶ 2.73 in² I ▶ 0.49 in⁴ S ▶ 0.65 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	0.03	0.06	▶ 4082	0.80
18" SPAN ▶	<0.01	0.01	0.02	0.02	0.03	0.05	0.10	0.21	▶ 1813	1.11
24" SPAN ▶	0.01	0.03	0.04	0.06	0.07	0.14	0.29	0.58	▶ 1021	1.25
30" SPAN ▶	0.07	0.13	0.20	0.27	0.34	0.67	---	---	▶ 653	1.31
36" SPAN ▶	0.04	0.07	0.11	0.14	0.18	0.36	---	---	▶ 453	1.35
42" SPAN ▶	0.12	0.25	0.37	0.49	0.62	---	---	---	▶ 333	1.37
48" SPAN ▶	0.21	0.42	0.63	---	---	---	---	---	▶ 255	1.38
54" SPAN ▶	0.33	0.67	---	---	---	---	---	---	▶ 201	1.38

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	0.02	0.05	0.09	▶ 2041	0.80
18" SPAN ▶	<0.01	0.01	0.02	0.02	0.03	0.05	0.11	0.22	▶ 1360	1.11
24" SPAN ▶	0.01	0.02	0.03	0.05	0.06	0.12	0.23	0.46	▶ 1021	1.25
30" SPAN ▶	0.02	0.04	0.06	0.09	0.11	0.21	0.43	---	▶ 816	1.31
36" SPAN ▶	0.04	0.07	0.11	0.14	0.18	0.36	---	---	▶ 680	1.35
42" SPAN ▶	0.06	0.11	0.17	0.23	0.28	0.56	---	---	▶ 583	1.37
48" SPAN ▶	0.08	0.17	0.25	0.33	0.42	---	---	---	▶ 510	1.38
54" SPAN ▶	0.12	0.24	0.36	0.48	0.59	---	---	---	▶ 453	1.38

POINT LOAD DEFLECTION

	100 lbs	200 lbs	500 lbs	750 lbs	1000 lbs	1500 lbs	2000 lbs
18" SPAN ▶	<0.01	<0.01	0.01	0.02	0.03	0.04	0.06
24" SPAN ▶	<0.01	0.02	0.04	0.06	0.08	0.12	0.15
30" SPAN ▶	0.01	0.03	0.07	0.10	0.13	0.20	0.26
36" SPAN ▶	0.02	0.04	0.10	0.15	0.21	0.31	0.41
42" SPAN ▶	0.03	0.06	0.15	0.23	0.31	0.46	0.61
46" SPAN ▶	0.04	0.08	0.20	0.29	0.39	0.59	---

▶ 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*.