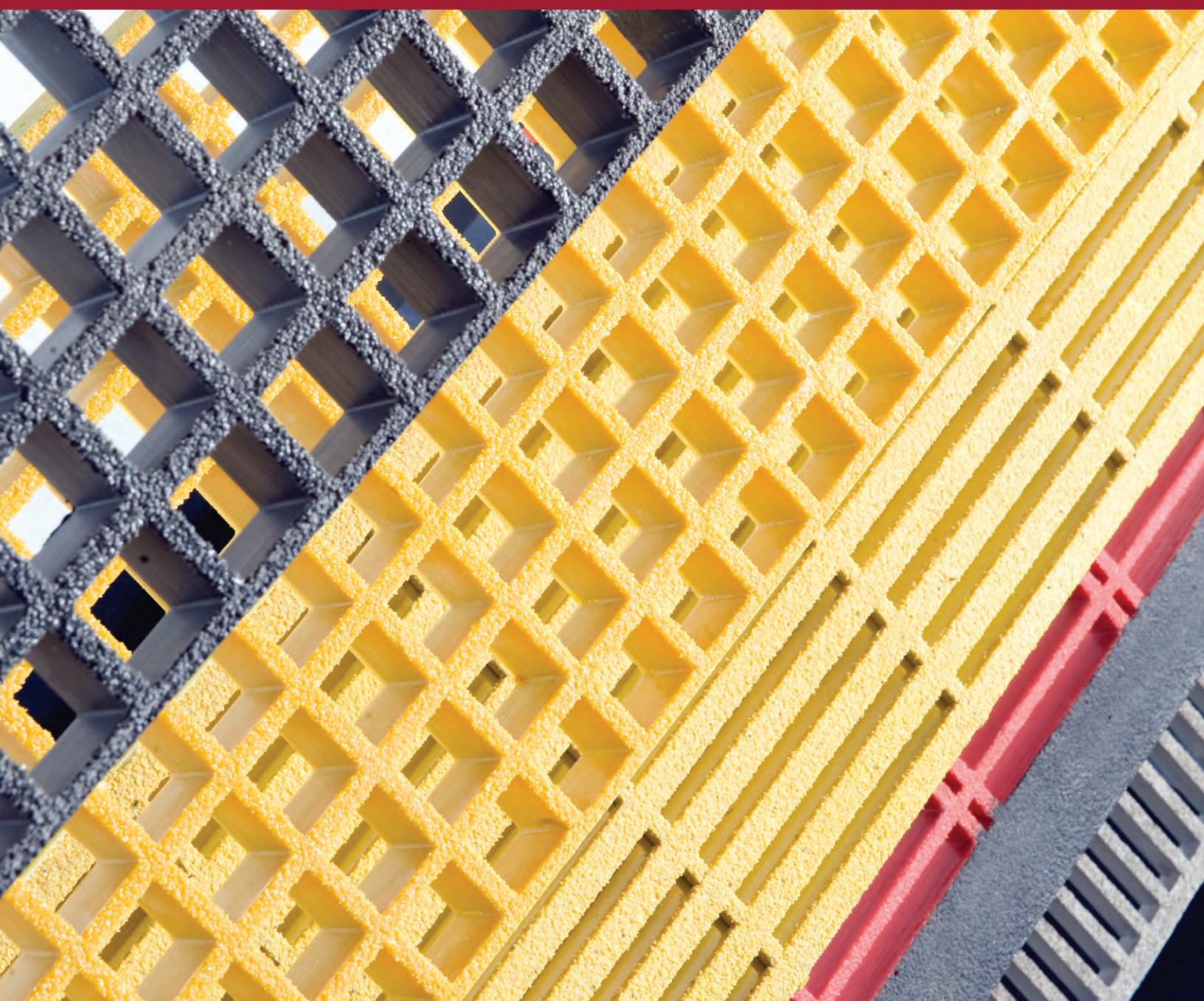


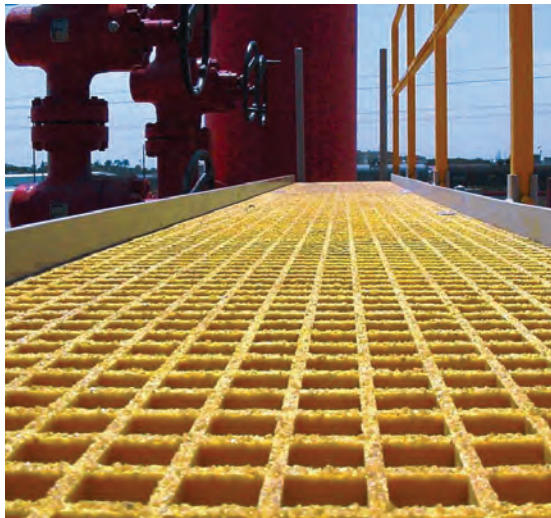
GRATING PRODUCTS

PROGrid® and PROGrate®



DESIGN — ENGINEER — FABRICATE — INSTALL
STRUCTURAL FIBERGLASS





APPLICATIONS

- Floor systems
- Walkways
- Work platforms
- Stairs
- Ramps
- Trench covers
- Catwalks

FEATURES

- Corrosion resistant
- Slip-resistant gritted top surface
- Strong yet lightweight
- Low coefficient of expansion and contraction

BENEFITS

- Reduced maintenance and replacement costs
- Enhanced workplace safety
- Reduced installation costs
- Dimensionally stable in many environments

STRONG, LIGHTWEIGHT AND CORROSION-RESISTANT

Want the strength of steel without the weight? Our fiberglass-reinforced polymer (FRP) grating products have the advantage. Our grating is corrosion-resistant, it's fire-retardant, and it has low conductivity. It's available with anti-slip coating for worker safety. And it's easy to install with standard tools.

Whether you simply need grating panels or a complete FRP system with handrails, stairs and platforms, we have the solution to match. In addition to our products, we offer in-house design, engineering and fabrication capabilities to meet your project needs.



PROGrate® Pultruded Grating

PROGrate® pultruded grating supports heavier loads and longer spans than comparably sized molded grating. It's ideal for demanding applications ranging from ADA-compliant walkways to heavy-duty vehicular traffic.

Strong, Lightweight and Corrosion-Resistant

PROGrate® pultruded grating has the strength of steel, but it won't corrode like steel can.

Safer Walking Surface

A quartz grit anti-slip epoxy coating enhances traction.

Support and Stability

Cross-rods and bearing bars lock mechanically for maximum unidirectional strength.

Easy Fabrication

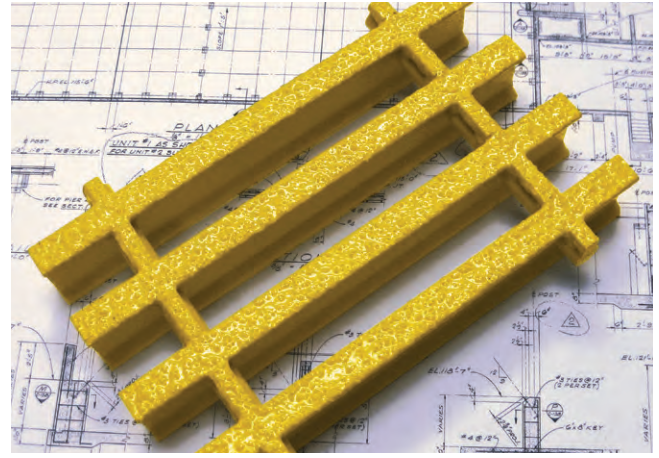
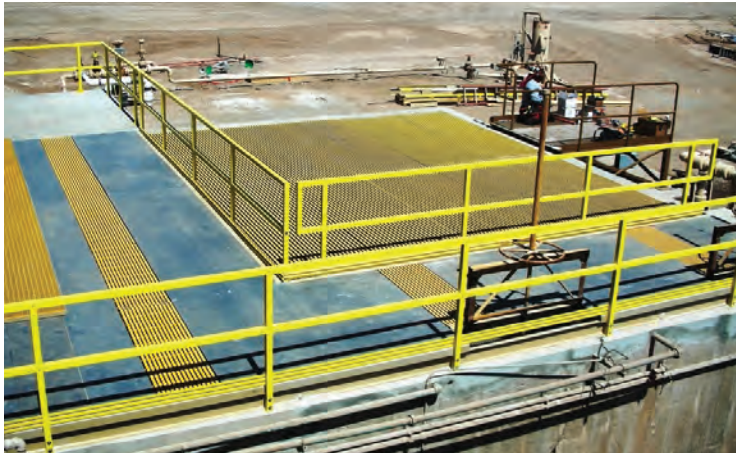
Panels are lightweight, easy to transport, and can be cut and fabricated using standard hand tools.

Extended Life

The coated resin surface increases resistance to chemical corrosion and continuous UV exposure.

Stress Resistance

Continuous glass rovings resist tension, compression and bending while providing longitudinal strength. Continuous glass mat increases transverse strength and resistance to impact.



Available Resin Systems

PROGrate® pultruded grating is available in two resin systems, each providing different levels of corrosion protection. Both resin systems meet Class 1 Flame Spread Rating per ASTM E-84 test standards.

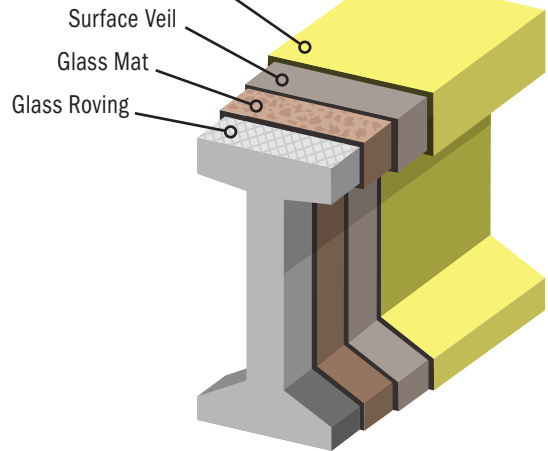
IFR: A premium-grade isophthalic polyester resin system that provides excellent corrosion protection. Standard colors: Yellow and Gray.

VFR: A vinylester resin system that provides the highest level of corrosion protection. Standard colors: Yellow and Gray.

APPLICATIONS

- Floor systems
- Walkways
- Work platforms
- Stairs
- Ramps
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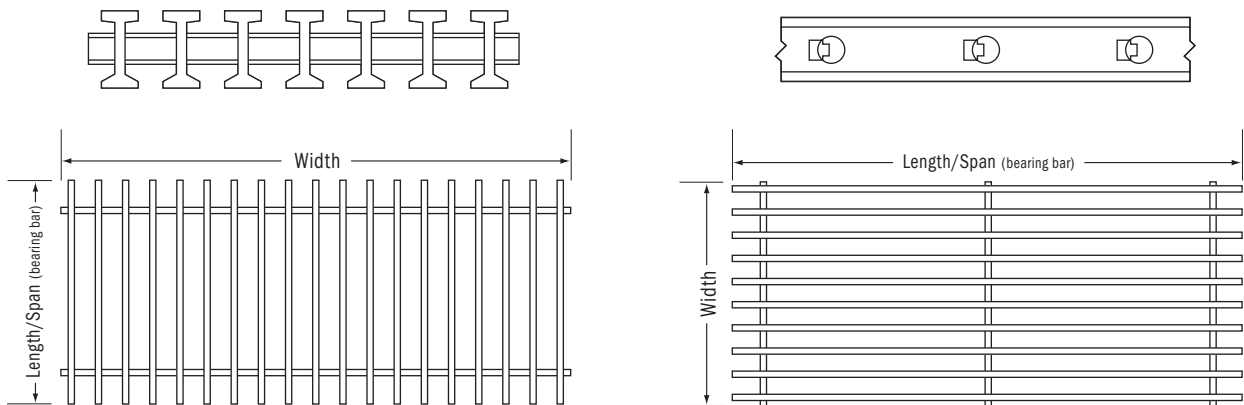
UV Inhibitor Fire Retardant Polyester or Vinylester Resin



PROGrate® Pultruded Grating



Standard Dimensions



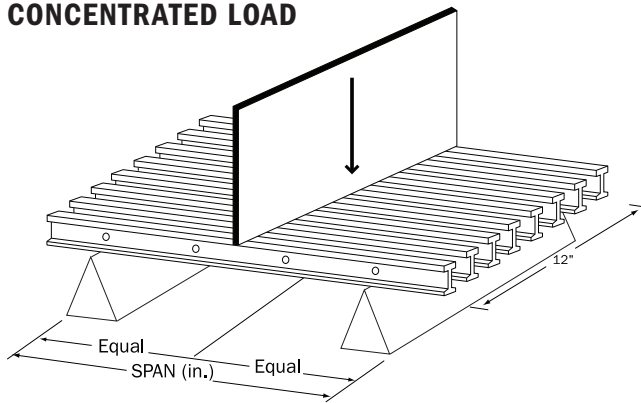
Available Panel Sizes*

3' wide x 20' long	4' wide x 20' long
3' wide x 24' long	4' wide x 24' long

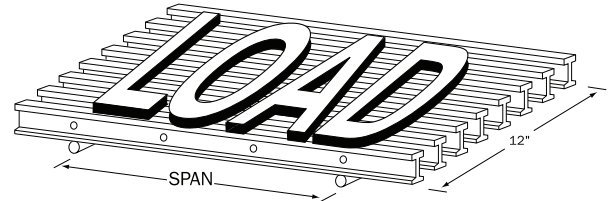
*Note: Not all panel sizes are stocked in every resin series and color. Check website for availability.

PROGrate® Pultruded Grating Load and Deflection Data

CONCENTRATED LOAD

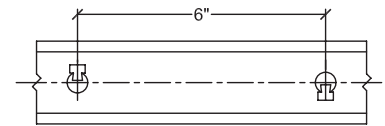
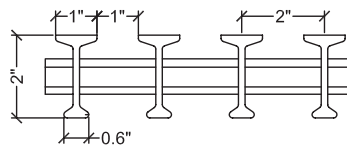


UNIFORM LOAD



1. The following 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. 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" ($\frac{3}{8}$ ") or SPAN divided by 120 under full live load. For a firmer feel under full live load or a line load 250 lb/ft of width, limit deflections to 0.25" ($\frac{1}{4}$ ") 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" ($\frac{1}{2}$ ") as recommended by the Fiberglass Grating Manufacturers Council of the American Composites Manufacturers Association.

T 20-50
T Bearing Bar
2" Thick
50% Open



Span (inches)	CONCENTRATED LOAD in lb/ft of width								Max Load (lb/ft)	Apparent EI x 10 ⁶ (lb-in ²)
	50	100	150	200	250	500	1000	2000		
12	0.001	0.002	0.003	0.004	0.005	0.010	0.020	0.040	13302	1.80
18	0.001	0.003	0.004	0.006	0.007	0.015	0.029	0.059	8868	4.15
24	0.002	0.005	0.007	0.009	0.012	0.023	0.047	0.093	6651	6.17
30	0.004	0.008	0.011	0.015	0.019	0.038	0.077	0.153	5321	7.35
36	0.006	0.012	0.018	0.024	0.031	0.061	0.122	0.245	4434	7.95
42	0.009	0.019	0.028	0.037	0.046	0.093	0.186	0.372	3801	8.31
48	0.013	0.027	0.040	0.054	0.067	0.135	0.269	0.539	3326	8.55
54	0.019	0.038	0.057	0.076	0.095	0.190	0.379		2956	8.65
60	0.026	0.051	0.077	0.103	0.129	0.257	0.514		2660	8.75
66	0.034	0.068	0.102	0.136	0.171	0.341	0.682		2419	8.78
72	0.044	0.088	0.133	0.177	0.221	0.442			2217	8.80

Span (inches)	UNIFORM LOAD in lb/ft ²								Max Load (lb/ft ²)	Apparent EI x 10 ⁶ (lb-in ²)
	50	100	150	200	250	500	1000	2000		
12	0.001	0.001	0.002	0.002	0.003	0.006	0.012	0.025	23936	1.80
18	0.001	0.003	0.004	0.005	0.007	0.014	0.027	0.055	8624	4.15
24	0.003	0.006	0.009	0.012	0.015	0.029	0.058	0.117	6468	6.17
30	0.006	0.012	0.180	0.024	0.030	0.060	0.120	0.239	4242	7.35
36	0.011	0.023	0.034	0.046	0.057	0.115	0.229	0.458	2946	7.95
42	0.020	0.041	0.061	0.081	0.102	0.203	0.407		2153	8.31
48	0.034	0.067	0.101	0.135	0.168	0.337	0.674		1672	8.55
54	0.053	0.107	0.160	0.213	0.267	0.533			1310	8.65
60	0.080	0.161	0.241	0.321	0.402				1062	8.75
66	0.117	0.234	0.352	0.469	0.586				881	8.78
72	0.166	0.331	0.497	0.663					740	8.80

Properties Per Foot of Width	# of Bars	Load Bar Depth	Bar Centers	Weight/sq ft
A = 3.23 in ² I = 1.58 in ⁴ S _T = 1.98 in ³ S _B = 1.32 in ³	6	2"	2"	3.43