

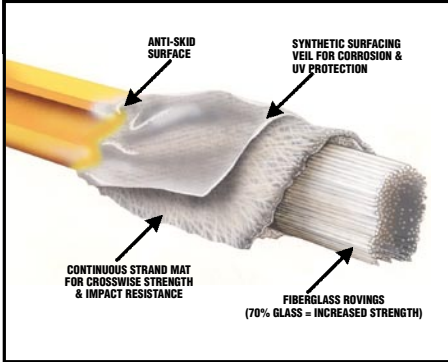
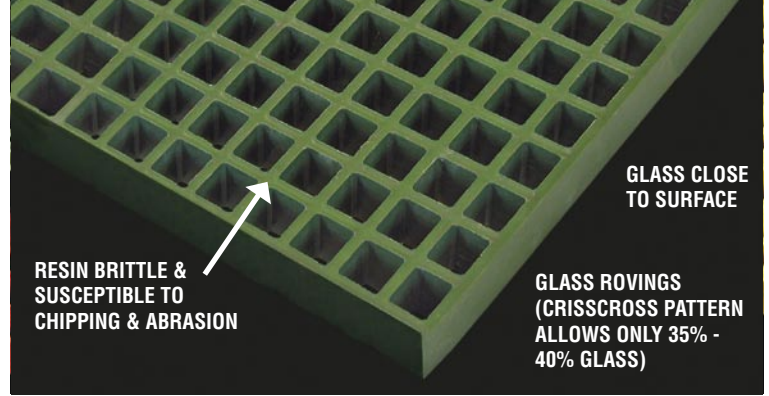
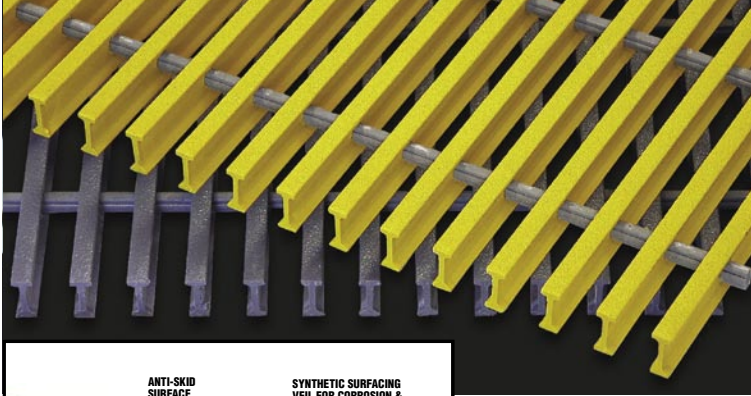
Now the superior strength and performance of pultruded grating
at or below the price of comparably sized molded grating!

COMPARE

DURAGRID® I-6500
1-1/2" Pultruded Grating

vs.

1-1/2" Thick x 1-1/2"
Square Molded Grating



Strongwell's DURAGRID® I-6500 high strength pultruded grating offers something truly special to the customer—the strength and performance of pultruded grating but at or below the price for comparably sized molded grating!

Many customers choose to use molded grating based upon price rather than performance. Now Strongwell offers a product that gives the customer the best of both worlds—high performance and low price!

Because of the differences in the manufacturing processes, DURAGRID® pultruded grating offers distinct advantages over comparably sized molded grating. Compare for yourself the features of both pultruded and molded grating below and on the back of this page.

COMPARE! DURAGRID® I-6500 1-1/2" PULTRUDED GRATING VS. 1-1/2" THICK 1-1/2" SQUARE MOLDED GRATING

COMPARE! DURAGRID® I-6500 1-1/2" PULTRUDED GRATING VS. 1-1/2" THICK 1-1/2" SQUARE MOLDED GRATING		
STRENGTH	DURAGRID® I-6500 pultruded grating is an engineered composite containing 65%-70% glass. Higher glass content increases strength in composites. The "I" bearing bar shape also is more efficient in strength-to-weight ratio. When a 100 pounds per square foot uniform load is placed upon a 54" simple span, it will produce a deflection of 1/4" at midspan.	Because of cross-pattern interference, molded grating contains only 35%-40% glass. When a 100 pounds per square foot uniform load is placed upon a 38" simple span, it will produce a deflection of 1/4" at midspan.
IMPACT RESISTANCE	DURAGRID® I-6500 contains glass mat which distributes impact loads to prevent surface damage and provides good transverse strength.	Molded grating does not contain glass mat and is primarily made of resin, which is more brittle and susceptible to chipping and abrasion.
CORROSION RESISTANCE	DURAGRID® I-6500 is manufactured using a premium grade polyester resin for superior corrosion resistance. The pultrusion process precisely controls the alignment of glass fibers and the surfacing veil pushes the glass rovings away from the surface for a smooth, void-free, 100% resin-rich surface to protect the product from corrosion.	The general purpose orthophthalic polyester resin used in molded grating offers less protection from corrosion. Also, veils and mats are not used in the molded grating process. The molding process does not precisely control placement of glass. Rovings are allowed near the surface, where there is little resin cover. The molding process also results in trapped air which causes voids — exposing grating directly to chemical attack.
FIELD FABRICATION	DURAGRID® I-6500 can be field fabricated with simple carpenter tools and is easy to cut.	Slightly more difficult to cut than pultruded grating.
AVAILABILITY	DURAGRID® I-6500 is made in the USA and is available for immediate shipment from three stocking locations across the country.	Most molded grating is made outside the United States. Availability can be limited and product shipment can be problematic, which often results in long lead times.
COST	DURAGRID® I-6500 is very cost competitive with molded grating. Depending on quantity purchased, pricing can actually be lower than molded grating.	Cost varies greatly with resin series selected.

For pricing call: GEF Incorporated, Winfield WV (304) 755-1600

COMPARE!

DURAGRID® I-6500 1-1/2" PULTRUDED GRATING

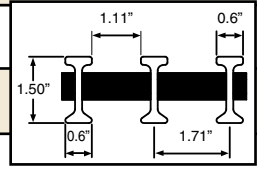
VS.

1-1/2" THICK 1-1/2" SQUARE MOLDED GRATING

DURAGRID® I-6500 1-1/2" Pultruded Grating, Bearing Bars Spaced 1.71" On Center

A = 2.752 IN²/FT OF WIDTH S = 1.088 IN²/FT OF WIDTH I = 0.814 IN⁴/FT OF WIDTH
65% OPEN AREA APPROX. WT. = 2.7 LBS/SQ FT

SPAN INCHES		LOAD													SAFE LOAD 2:1 SAFETY FACTOR	DEFLECTION	E x 10 ⁶ PSI	
		50	100	150	200	250	300	400	500	750	1000	2000	3000	4000				5000
12	Δu		0.001	0.001	0.001	0.002	0.002	0.003	0.004	0.005	0.007	0.015	0.022	0.029	0.036	15439	0.113	3.79
	Δc	0.001	0.001	0.002	0.002	0.003	0.004	0.005	0.006	0.009	0.012	0.023	0.035	0.047	0.058			
18	Δu	0.002	0.003	0.005	0.007	0.009	0.010	0.014	0.017	0.026	0.035	0.069	0.104	0.138	0.173	6862	0.237	4.05
	Δc	0.002	0.004	0.006	0.007	0.009	0.011	0.015	0.018	0.028	0.037	0.074	0.111	0.147	0.184			
24	Δu	0.005	0.010	0.016	0.021	0.026	0.031	0.042	0.052	0.078	0.104	0.209	0.313	0.417	0.522	3860	0.403	4.24
	Δc	0.004	0.008	0.013	0.017	0.021	0.025	0.033	0.042	0.063	0.083	0.167	0.250	0.334	0.417			
30	Δu	0.012	0.025	0.037	0.049	0.061	0.074	0.098	0.123	0.184	0.245	0.491				2433	0.597	4.40
	Δc	0.008	0.016	0.024	0.031	0.039	0.047	0.063	0.079	0.118	0.157	0.314	0.471	0.628				
36	Δu	0.025	0.050	0.075	0.100	0.124	0.149	0.199	0.249	0.373	0.498					1663	0.827	4.50
	Δc	0.013	0.027	0.040	0.053	0.066	0.080	0.106	0.133	0.199	0.265	0.531						
42	Δu	0.045	0.090	0.136	0.181	0.226	0.271	0.361	0.452	0.678						1194	1.079	4.59
	Δc	0.021	0.041	0.062	0.083	0.103	0.124	0.165	0.207	0.310	0.413							
48	Δu	0.076	0.152	0.228	0.304	0.380	0.456	0.607								892	1.354	4.66
	Δc	0.030	0.061	0.091	0.121	0.152	0.182	0.243	0.304	0.456	0.607							
54	Δu	0.120	0.241	0.361	0.481	0.602										681	1.640	4.71
	Δc	0.043	0.086	0.128	0.171	0.214	0.257	0.342	0.428	0.642								
60	Δu	0.182	0.364	0.547												533	1.944	4.74
	Δc	0.058	0.117	0.175	0.233	0.292	0.350	0.467	0.583									
66	Δu	0.266	0.531													425	2.259	4.76
	Δc	0.077	0.155	0.232	0.309	0.386	0.464	0.618										



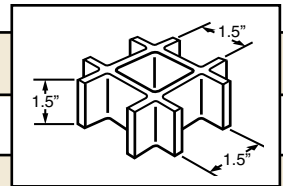
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NOTE: When a 100 pounds per square foot uniform load is placed upon a 54" simple span, it will produce a deflection of 1/4" at midspan.

DURAGRATE® 1-1/2" Thick 1-1/2" Square Mesh Molded Grating

A=2.85 IN²/FT OF WIDTH S=0.65 IN²/FT OF WIDTH I=0.51 IN⁴/FT OF WIDTH
70% OPEN AREA APPROX. WT. = 3.8 LBS/SQ FT

SPAN INCHES		LOAD								SAFE LOAD 5:1 SAFETY FACTOR	DEFLECTION	E x 10 ⁶ PSI
		50	100	150	200	250	300	400	500			
12	Δu	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	0.014	0.018	3120	0.111	1.24
	Δc	<0.010	<0.010	<0.010	0.011	0.014	0.017	0.023	0.028			
18	Δu	<0.010	0.014	0.021	0.028	0.036	0.043	0.057	0.071	1386	0.197	1.57
	Δc	<0.010	0.015	0.023	0.030	0.038	0.046	0.061	0.076			
24	Δu	0.021	0.042	0.063	0.084	0.104	0.125	0.167	0.209	780	0.326	1.69
	Δc	0.017	0.033	0.050	0.067	0.084	0.100	0.134	0.167			
30	Δu	0.047	0.094	0.141	0.188	0.235	0.283	0.377	0.471	496	0.467	1.83
	Δc	0.030	0.060	0.090	0.121	0.151	0.181	0.241	0.301			
36	Δu	0.096	0.192	0.288	0.384	0.480	0.576			347	0.666	1.86
	Δc	0.051	0.102	0.154	0.205	0.256	0.307	0.410	0.512			
42	Δu	0.175	0.350	0.525						251	0.881	1.89
	Δc	0.080	0.160	0.240	0.320	0.400	0.480	0.641	0.801			
48	Δu	0.287	0.573							170	0.975	1.97
	Δc	0.115	0.229	0.344	0.459	0.573	0.688					



X

NOTE: When a 100 pounds per square foot uniform load is placed upon a 38" simple span, it will produce a deflection of 1/4" at midspan.

THE CHOICE! DURAGRID® High Strength, Pultruded Fiberglass Grating!



GEF Incorporated

For pricing call: GEF Incorporated, Winfield WV (304) 755-1600

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