

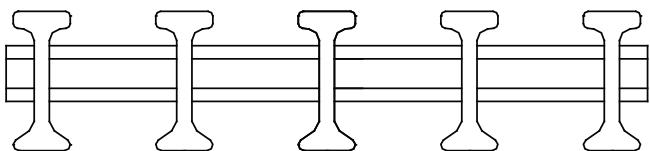


**U.S. COAST GUARD
APPROVED
to ASTM F3059-15**



DURAGRID[®] PHENOLIC

FIRE INTEGRITY COMPOSITE GRATING



FIRE INTEGRITY COMPOSITE GRATING



DURAGRID® Phenolic Grating has been used to reduce weight and maintenance on offshore oil production platforms since 1994.



DURAGRID® Phenolic Grating's unique construction allows for many penetrations to be cut without adding additional supports.



Above: *DURAGRID® Phenolic Grating's 3-piece cross-rod system has been time tested for durability.*

Left: *DURAGRID® Phenolic Grating is very lightweight. The initial installation or removal of panels for area access can be performed quickly.*

DURAGRID® Phenolic Grating continues to set the world offshore standard for Fire Integrity composite grating. Strongwell's use of the highest quality raw materials, state-of-the-art manufacturing processes and superior engineering have produced a product of unmatched quality and performance. The fourth generation of DURAGRID® Phenolic exhibits improved mechanical properties, fire integrity, and impact resistance for greater durability. Strongwell's pultrusion facilities are ISO-9001 certified to further ensure that DURAGRID® Phenolic is manufactured following the highest quality standards. DURAGRID® Phenolic was the first commercially successful phenolic grating and has been exclusively produced in the USA since 1994.

Features

DURAGRID® Phenolic Grating is a dramatic innovation for markets where fire safety is a major concern; offering superior corrosion resistance, resistance to high temperatures, low smoke and low toxic fume emissions¹. The nonflammable nature of phenolics enable this grating to withstand higher temperatures than traditional FRP products for extended periods of time. Combined with very low thermal conductivity, DURAGRID® Phenolic Grating offers the best strength-to-weight ratio for projects that require maximum weight optimization with fire protection not available from alternative materials.

DURAGRID® Phenolic Grating is the first composite grating to receive U.S. Coast Guard approval. It is accepted for use in locations and applications as allowed in the ASTM F3059 Matrix guide for fiberglass grating meeting Structural Fire Integrity Level 2 (L2). The ASTM F3059 enhances and will replace the USCG PFM 2-98 matrix.

In addition, DURAGRID® Phenolic Grating has these features:

- **Strength of Steel** — Compared to new standard steel grating, DURAGRID® Phenolic I-6000 38mm (1-½") can carry 2.53 times the load of equivalent steel grating. Unlike metal gratings, DURAGRID® Phenolic has memory, returning to its original shape if design loads are exceeded.
- **Ease of Fabrication** — DURAGRID® Phenolic Grating requires no hot-work or heavy equipment to install or make field modifications. The unique three piece cross-bar construction enables DURAGRID® to be cut like a solid sheet with simple hand tools — no need for banding as with metal grating.
- **Lightweight, Easy to Install** — DURAGRID® Phenolic is approximately one-third the weight of steel bar grating. It is also much lighter than molded FRP grating, yet many times the strength.
- **Dependable Non-Skid Surface For Safety and Comfort** — DURAGRID® Phenolic Grating has a non-skid surface for superior slip and impact resistance. The product complies with the rigorous requirements for non-skid capability and demanding durability within ASTM F3059. The wide bearing bar is less fatiguing and friendlier to work on than serrated steel grating and is not dangerously sharp like some molded gratings.
- **High Impact and Fire Resistance** — DURAGRID® Phenolic's proprietary (exclusive) construction exceeds the impact requirements (dropped object and high trolley loading) of ASTM F3059. The improved durability provides the highest return on investment when it comes to the product's life cycle costs while meeting the higher fire requirements of the same ASTM requirement.

¹ Toxicity levels comply with IMO

Typical Applications

- Offshore production platforms
- Aircraft
- FLNG/LNG vessels
- Mobile offshore drilling units (MODU's)
- Mining
- Docks/jetties/load-out areas
- Extreme cold (Arctic) areas
- Shipboard applications
- Industrial/processing plants
- Tunnels/mass transit
- Refineries

TECHNICAL DATA

Fire Safety

DURAGRID® Phenolic Grating, compared to typical polyester, vinyl ester and epoxy FRP products, offers major improvements in reduced smoke density, reduced smoke toxicity and structural fire integrity when exposed to fire. DURAGRID® Phenolic Grating complies with Annex 1 (Resolution MSC.307(88) , Part 2, 2.41 and 2.4.2 (smoke and toxicity testing) of the FTP Code (International Code for Application of Fire Test Procedures) - (MSC 88/26/ Add.2) issued by the International Maritime Organization. Further information on smoke and toxicity tests is available from Strongwell upon request.

ASTM D635	UL-94
Flammability Rate cm/min. <1	VO

Approvals

USCG: 164.040/16/0 - DURAGRID® Phenolic 38mm and 45mm (1-1/2" - 1-3/4")

IMO: Meets requirements for Safe Access to Tanker Bows (Resolution MSC.62(67)) (SC 253 Dec 2011 Rev 1 May 2016)

Standard Panel Sizes

1m x 6m, 3 ft x 20 ft, 4 ft x 20 ft

Fabricated and custom size panels are also available. Contact Strongwell with your requirements.

Load Deflection Tables [Based on a qualified span of 1120mm (44")]

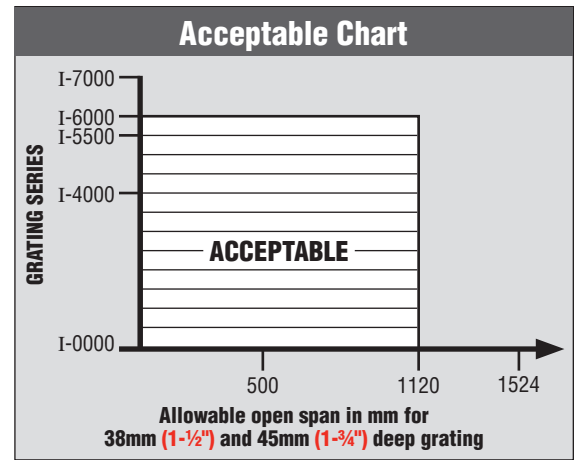
SERIES	BEARING BAR THICKNESS	OPEN AREA	APPROX. WEIGHT KG/M ² (LB/FT ²)	A (PER M (FT) OF WIDTH)	I (PER M (FT) OF WIDTH)	S (PER M (FT) OF WIDTH)	UNIFORM LOAD* KN/M ² (LB/FT ²)	CONCENTRATED LOAD** KN/M (LB/FT)
I-6000	38mm (1-1/2")	60%	16.8 (3.4)	6.59 x 10 ³ mm ² (3.11 in ²)	1.20 x 10 ⁶ mm ⁴ (0.88 in ⁴)	6.32 x 10 ⁴ mm ³ (1.18 in ³)	16.8 (350)	11.7 (800)
I-5500	38mm (1-1/2")	55%	18.9 (3.9)	7.41 x 10 ³ mm ² (3.51 in ²)	1.35 x 10 ⁶ mm ⁴ (0.99 in ⁴)	7.11 x 10 ⁴ mm ³ (1.32 in ³)	18.8 (390)	13.2 (900)
I-4800	38mm (1-1/2")	48%	21.7 (4.4)	8.51 x 10 ³ mm ² (4.02 in ²)	1.55 x 10 ⁶ mm ⁴ (1.14 in ⁴)	8.16 x 10 ⁴ mm ³ (1.52 in ³)	21.5 (450)	15.1 (1030)
I-4000	38mm (1-1/2")	40%	25.2(5.2)	9.89 x 10 ³ mm ² (4.67 in ²)	1.81 x 10 ⁶ mm ⁴ (1.32 in ⁴)	9.48 x 10 ⁴ mm ³ (1.76 in ³)	25.0 (525)	17.5 (1200)
I-6000	45mm (1-3/4")	60%	19.0 (3.9)	7.99 x 10 ³ mm ² (3.78 in ²)	2.02 x 10 ⁶ mm ⁴ (1.48 in ⁴)	8.45 x 10 ⁴ mm ³ (1.57 in ³)	27.9 (585)	19.6 (1340)
I-5500	45mm (1-3/4")	55%	21.4 (4.4)	8.99 x 10 ³ mm ² (4.25 in ²)	2.27 x 10 ⁶ mm ⁴ (1.67 in ⁴)	9.51 x 10 ⁴ mm ³ (1.77 in ³)	31.5 (660)	22.0 (1510)
I-4800	45mm (1-3/4")	48%	24.6 (5.0)	10.82 x 10 ³ mm ² (4.88 in ²)	2.61 x 10 ⁶ mm ⁴ (1.91 in ⁴)	10.92 x 10 ⁴ mm ³ (2.03 in ³)	36.1 (755)	25.3 (1730)
I-4000	45mm (1-3/4")	40%	28.8 (5.9)	11.99 x 10 ³ mm ² (5.66 in ²)	3.03 x 10 ⁶ mm ⁴ (2.22 in ⁴)	12.68 x 10 ⁴ mm ³ (2.36 in ³)	41.9 (875)	29.3 (2010)

* Uniform load to produce a deflection of 6.35mm (0.25") at midspan. ** Concentrated load to produce a deflection of 6.35mm (0.25") at midspan.

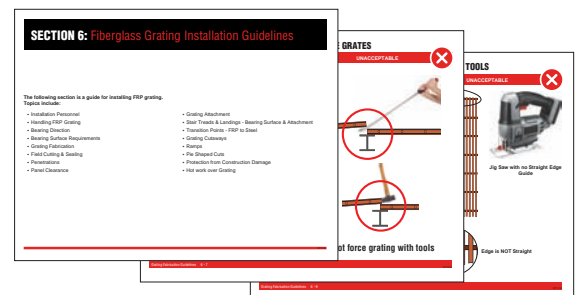
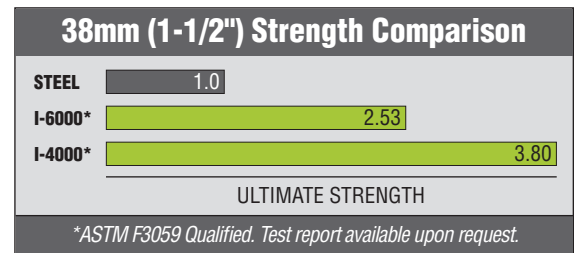
Fiberglass Grating Installation Guidelines

Be sure to check out Strongwell's Installation Guidelines for fiberglass grating.* This is the ultimate guide to ensure proper handling, installation and use of fiberglass grating. A few of the topics covered include: bearing direction, proper cutting of penetrations and protection from construction damage.

* Contact your Strongwell Representative for more information.



DURAGRID® Phenolic has continued to improve since its introduction to the market. Refinements in materials and pultrusion processing have produced the current fourth generation product with a nearly 45% increase in strength over the original.

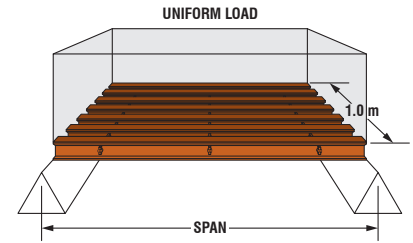


DURAGRID® Phenolic Pultruded Grating

Uniform Load (Deflection in Millimeters)

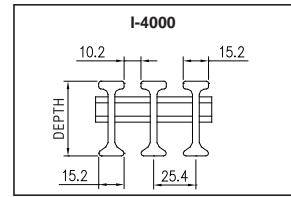
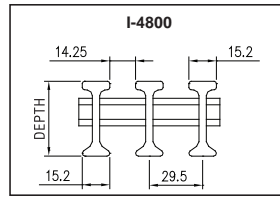
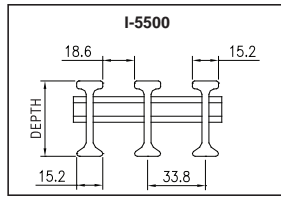
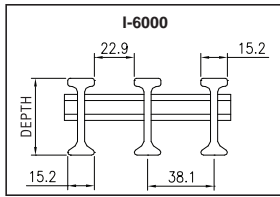
NOTE: Bearing bar spacing on center: I-6000 = 38.1mm I-5500 = 33.8mm
I-4800 = 29.5mm I-4000 = 25.4mm

NOTE: The red area () indicates at what point the load weight has ≤ 6.35mm deflection.



LOAD in kN / SQUARE METER

SPAN M	STYLE		3	5	7.5	10	13	15	20	25	39	50	100	150	200	250	SAFE LOAD, 2:1 SAFETY FACTOR	DEFLEC- TION	E X 10 ¹⁰ N/m ²
	SERIES	DEPTH																	
0.6	I-6000	38mm	0.11	0.19	0.29	0.38	0.50	0.57	0.77	0.96	1.49	1.91	3.83	5.74	7.66	9.57	258	9.9	3.66
	I-5500	38mm	0.10	0.17	0.26	0.34	0.44	0.51	0.68	0.85	1.33	1.70	3.41	5.11	6.81	8.51	291	9.9	3.66
	I-4800	38mm	0.09	0.15	0.22	0.30	0.39	0.45	0.59	0.74	1.16	1.48	2.97	4.45	5.93	7.42	333	9.9	3.66
	I-4000	38mm	0.08	0.13	0.19	0.26	0.33	0.38	0.51	0.64	1.00	1.28	2.55	3.83	5.11	6.39	387	9.9	3.66
	I-6000	45mm	0.07	0.11	0.17	0.23	0.30	0.34	0.46	0.57	0.89	1.14	2.28	3.42	4.57	5.71	345	7.9	3.66
	I-5500	45mm	0.06	0.10	0.15	0.20	0.26	0.30	0.41	0.51	0.79	1.01	2.03	3.04	4.06	5.07	389	7.9	3.66
	I-4800	45mm	0.05	0.09	0.13	0.18	0.23	0.27	0.35	0.44	0.69	0.88	1.77	2.65	3.53	4.42	446	7.9	3.66
	I-4000	45mm	0.05	0.08	0.11	0.15	0.20	0.23	0.30	0.38	0.59	0.76	1.52	2.28	3.04	3.81	518	7.9	3.66
0.8	I-6000	38mm	0.34	0.57	0.85	1.14	1.48	1.70	2.27	2.84	4.43	5.68	11.36				180	20.4	3.90
	I-5500	38mm	0.30	0.50	0.76	1.01	1.31	1.51	2.02	2.52	3.94	5.05	10.10	15.15			203	20.5	3.90
	I-4800	38mm	0.26	0.44	0.66	0.88	1.14	1.32	1.76	2.20	3.43	4.40	8.80	13.20			233	20.5	3.90
	I-4000	38mm	0.23	0.38	0.57	0.76	0.98	1.14	1.52	1.89	2.95	3.79	7.58	11.36	15.15		270	20.5	3.90
	I-6000	45mm	0.20	0.34	0.51	0.68	0.88	1.02	1.35	1.69	2.64	3.38	6.77	10.15			218	14.8	3.90
	I-5500	45mm	0.18	0.30	0.45	0.60	0.78	0.90	1.20	1.50	2.35	3.01	6.02	9.03	12.04		246	14.8	3.90
	I-4800	45mm	0.16	0.26	0.39	0.52	0.68	0.79	1.05	1.31	2.04	2.62	5.24	7.86	10.48		282	14.8	3.90
	I-4000	45mm	0.14	0.23	0.34	0.45	0.59	0.68	0.90	1.13	1.76	2.26	4.51	6.77	9.03	11.29	327	14.8	3.90
1.0	I-6000	38mm	0.77	1.28	1.93	2.57	3.34	3.85	5.14	6.42	10.02	12.84					163	41.9	4.21
	I-5500	38mm	0.69	1.14	1.71	2.28	2.97	3.43	4.57	5.71	8.91	11.42					184	42.0	4.21
	I-4800	38mm	0.60	1.00	1.49	1.99	2.59	2.99	3.98	4.98	7.76	9.95					211	41.9	4.21
	I-4000	38mm	0.51	0.86	1.29	1.71	2.23	2.57	3.43	4.28	6.68	8.57					245	41.9	4.21
	I-6000	45mm	0.46	0.77	1.15	1.53	1.99	2.30	3.06	3.83	5.97	7.66					140	21.4	4.21
	I-5500	45mm	0.41	0.68	1.02	1.36	1.77	2.04	2.72	3.40	5.31	6.81	13.61				158	21.5	4.21
	I-4800	45mm	0.36	0.59	0.89	1.19	1.54	1.78	2.37	2.96	4.62	5.93	11.85	17.78			181	21.4	4.21
	I-4000	45mm	0.31	0.51	0.77	1.02	1.33	1.53	2.04	2.55	3.98	5.11	10.21	15.32			210	21.4	4.21
1.12	I-6000	38mm	1.15	1.92	2.88	3.84	4.99	5.76	7.68	9.60							84	32.3	4.43
	I-5500	38mm	1.02	1.71	2.56	3.42	4.44	5.12	6.83	8.54	13.32						95	32.4	4.43
	I-4800	38mm	0.89	1.49	2.23	2.98	3.87	4.46	5.95	7.44	11.61	14.88					109	32.3	4.43
	I-4000	38mm	0.77	1.28	1.92	2.56	3.33	3.84	5.12	6.41	9.99	12.81					126	32.3	4.43
	I-6000	45mm	0.69	1.14	1.72	2.29	2.98	3.43	4.58	5.72	8.93	11.45					111	25.4	4.43
	I-5500	45mm	0.61	1.02	1.53	2.04	2.65	3.05	4.07	5.09	7.94	10.18	20.36				125	25.5	4.43
	I-4800	45mm	0.53	0.89	1.33	1.77	2.30	2.66	3.55	4.43	6.91	8.86	17.73				143	25.4	4.43
	I-4000	45mm	0.46	0.76	1.15	1.53	1.98	2.29	3.05	3.82	5.95	7.63	15.27				167	25.4	4.43
1.2	I-6000	38mm	1.48	2.46	3.70	4.93	6.41	7.39	9.86	12.32							70	34.5	4.55
	I-5500	38mm	1.31	2.19	3.29	4.38	5.70	6.57	8.77	10.96							79	34.6	4.55
	I-4800	38mm	1.15	1.91	2.86	3.82	4.96	5.73	7.64	9.55	14.89						90	34.5	4.55
	I-4000	38mm	0.99	1.64	2.47	3.29	4.27	4.93	6.58	8.22	12.82						105	34.5	4.55
	I-6000	45mm	0.88	1.47	2.20	2.94	3.82	4.41	5.88	7.34	11.46						97	28.5	4.55
	I-5500	45mm	0.78	1.31	1.96	2.61	3.40	3.92	5.22	6.53	10.19	13.06					109	28.6	4.55
	I-4800	45mm	0.68	1.14	1.71	2.27	2.96	3.41	4.55	5.69	8.87	11.37					125	28.5	4.55
	I-4000	45mm	0.59	0.98	1.47	1.96	2.55	2.94	3.92	4.90	7.64	9.80					146	28.5	4.55



LOAD in kN / SQUARE METER

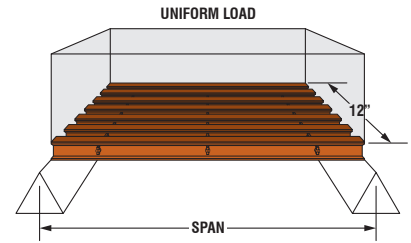
SPAN M	STYLE		LOAD in kN / SQUARE METER													SAFE LOAD, 2:1 SAFETY FACTOR	DEFLEC- TION	E X 10 ¹⁰ N/m ²	
	SERIES	DEPTH	3	5	7.5	10	13	15	20	25	39	50	100	150	200				250
1.4	I-6000	38mm	2.70	4.50	6.74	8.99	11.69	13.49									56	50.4	4.62
	I-5500	38mm	2.40	4.00	6.00	8.00	10.40	11.99									63	50.5	4.62
	I-4800	38mm	2.09	3.48	5.23	6.97	9.06	10.45	13.93								72	50.4	4.62
	I-4000	38mm	1.80	3.00	4.50	6.00	7.80	9.00	12.00	15.00							84	50.4	4.62
	I-6000	45mm	1.61	2.68	4.02	5.36	6.97	8.04	10.72	13.40							71	38.1	4.62
	I-5500	45mm	1.43	2.38	3.57	4.77	6.20	7.15	9.53	11.91							80	38.2	4.62
	I-4800	45mm	1.24	2.07	3.11	4.15	5.39	6.22	8.30	10.37	16.18						92	38.1	4.62
	I-4000	45mm	1.07	1.79	2.68	3.57	4.65	5.36	7.15	8.94	13.94						107	38.1	4.62
1.6	I-6000	38mm	4.53	7.56	11.33												40	60.4	4.69
	I-5500	38mm	4.03	6.72	10.08	13.44											45	60.6	4.69
	I-4800	38mm	3.51	5.85	8.78	11.71	15.22										52	60.5	4.69
	I-4000	38mm	3.02	5.04	7.56	10.08	13.10										60	60.5	4.69
	I-6000	45mm	2.70	4.50	6.76	9.01	11.71	13.51									55	49.5	4.69
	I-5500	45mm	2.40	4.00	6.01	8.01	10.41	12.01									62	49.7	4.69
	I-4800	45mm	2.09	3.49	5.23	6.97	9.07	10.46	13.95								71	49.5	4.69
	I-4000	45mm	1.80	3.00	4.51	6.01	7.81	9.01	12.01								83	49.6	4.69
1.8	I-6000	38mm	7.26	12.10													32	77.5	4.69
	I-5500	38mm	6.46	10.76													36	77.7	4.69
	I-4800	38mm	5.63	9.38	14.07												41	77.6	4.69
	I-4000	38mm	4.84	8.07	12.11												48	77.5	4.69
	I-6000	45mm	4.33	7.21	10.82												43	62.0	4.69
	I-5500	45mm	3.85	6.41	9.62	12.83											48	62.2	4.69
	I-4800	45mm	3.35	5.59	8.38	11.17	14.52										56	62.0	4.69
	I-4000	45mm	2.89	4.81	7.22	9.62	12.51	14.43									65	62.1	4.69
2.0	I-6000	45mm	6.60	11.00													35	77.0	4.69
	I-5500	45mm	5.87	9.78													39	77.2	4.69
	I-4800	45mm	5.11	8.51	12.77												45	77.0	4.69
	I-4000	45mm	4.40	7.33	11.00	14.67											53	77.0	4.69

DURAGRID® Phenolic Pultruded Grating

Uniform Load (Deflection in Inches)

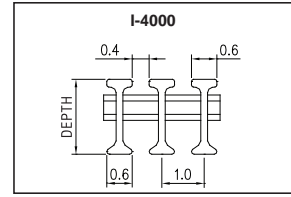
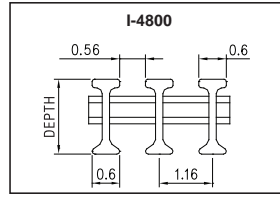
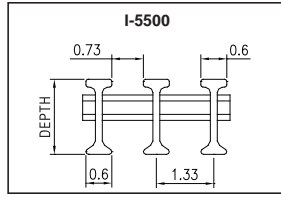
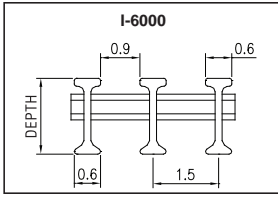
NOTE: Bearing bar spacing on center: I-6000 = 1.5" I-5500 = 1.33"
I-4800 = 1.16" I-4000 = 1.00"

NOTE: The red area () indicates at what point the load weight has ≤ 0.25" deflection.



LOAD in LB / SQUARE FOOT (PSF)

SPAN INCHES	STYLE		LOAD in LB / SQUARE FOOT (PSF)														SAFE LOAD, 2:1 SAFETY FACTOR	DEFLECTION	E X 10 ⁶ PSI	
	SERIES	DEPTH	50	100	150	200	250	300	400	500	750	1000	2000	3000	4000	5000				6000
24	I-6000	1-1/2"	<0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.04	0.06	0.08	0.15	0.23	0.31	0.38		5388	0.41	5.31
	I-5500	1-1/2"	<0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.05	0.07	0.14	0.21	0.27	0.34	0.41	6062	0.41	5.31
	I-4800	1-1/2"	<0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.06	0.12	0.18	0.24	0.30	0.36	6964	0.41	5.31
	I-4000	1-1/2"	<0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.10	0.15	0.21	0.26	0.31	8082	0.41	5.31
	I-6000	1-3/4"	<0.01	<0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.05	0.09	0.14	0.18	0.23	0.27	7206	0.33	5.31
	I-5500	1-3/4"	<0.01	<0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.08	0.12	0.16	0.20	0.24	8107	0.33	5.31
	I-4800	1-3/4"	<0.01	<0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.04	0.07	0.11	0.14	0.18	0.21	9314	0.33	5.31
	I-4000	1-3/4"	<0.01	<0.01	<0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.06	0.09	0.12	0.15	0.18	10809	0.33	5.31
30	I-6000	1-1/2"	0.01	0.02	0.03	0.04	0.04	0.05	0.07	0.09	0.13	0.18	0.36	0.53			3761	0.67	5.60	
	I-5500	1-1/2"	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.08	0.12	0.16	0.32	0.47	0.63		4231	0.67	5.60	
	I-4800	1-1/2"	0.01	0.01	0.02	0.03	0.03	0.04	0.06	0.07	0.10	0.14	0.28	0.41	0.55		4861	0.67	5.60	
	I-4000	1-1/2"	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.09	0.12	0.24	0.36	0.47	0.59	5642	0.67	5.60	
	I-6000	1-3/4"	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.05	0.08	0.11	0.21	0.32	0.42	0.53	5031	0.53	5.60	
	I-5500	1-3/4"	<0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.07	0.09	0.19	0.28	0.38	0.47	5660	0.53	5.60	
	I-4800	1-3/4"	<0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.04	0.06	0.08	0.16	0.25	0.33	0.41	0.49	6503	0.53	5.60
	I-4000	1-3/4"	<0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.07	0.14	0.21	0.28	0.35	0.42	7547	0.53	5.60
36	I-6000	1-1/2"	0.02	0.03	0.05	0.07	0.09	0.10	0.14	0.17	0.26	0.34					2612	0.90	6.00	
	I-5500	1-1/2"	0.02	0.03	0.05	0.06	0.08	0.09	0.12	0.15	0.23	0.31	0.61				2939	0.90	6.00	
	I-4800	1-1/2"	0.01	0.03	0.04	0.05	0.07	0.08	0.11	0.13	0.20	0.27	0.53				3376	0.90	6.00	
	I-4000	1-1/2"	0.01	0.02	0.03	0.05	0.06	0.07	0.09	0.11	0.17	0.23	0.46				3918	0.90	6.00	
	I-6000	1-3/4"	0.01	0.02	0.03	0.04	0.05	0.06	0.08	0.10	0.15	0.21	0.41	0.62			3494	0.72	6.00	
	I-5500	1-3/4"	0.01	0.02	0.03	0.04	0.05	0.05	0.07	0.09	0.14	0.18	0.36	0.55			3931	0.72	6.00	
	I-4800	1-3/4"	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.08	0.12	0.16	0.32	0.48	0.64		4516	0.72	6.00	
	I-4000	1-3/4"	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.07	0.10	0.14	0.27	0.41	0.55		5241	0.72	6.00	
42	I-6000	1-1/2"	0.03	0.06	0.09	0.12	0.15	0.18	0.24	0.30	0.45	0.60					1919	1.16	6.34	
	I-5500	1-1/2"	0.03	0.05	0.08	0.11	0.13	0.16	0.21	0.27	0.40	0.54					2159	1.16	6.34	
	I-4800	1-1/2"	0.02	0.05	0.07	0.09	0.12	0.14	0.19	0.23	0.35	0.47					2480	1.16	6.34	
	I-4000	1-1/2"	0.02	0.04	0.06	0.08	0.10	0.12	0.16	0.20	0.30	0.40					2879	1.16	6.34	
	I-6000	1-3/4"	0.02	0.04	0.05	0.07	0.09	0.11	0.14	0.18	0.27	0.36					2567	0.92	6.34	
	I-5500	1-3/4"	0.02	0.03	0.05	0.06	0.08	0.10	0.13	0.16	0.24	0.32					2888	0.92	6.34	
	I-4800	1-3/4"	0.01	0.03	0.04	0.06	0.07	0.08	0.11	0.14	0.21	0.28	0.56				3318	0.92	6.34	
	I-4000	1-3/4"	0.01	0.02	0.04	0.05	0.06	0.07	0.10	0.12	0.18	0.24	0.48				3851	0.92	6.34	
48	I-6000	1-1/2"	0.05	0.10	0.15	0.20	0.25	0.30	0.40	0.49							1469	1.45	6.60	
	I-5500	1-1/2"	0.04	0.09	0.13	0.18	0.22	0.26	0.35	0.44							1653	1.45	6.60	
	I-4800	1-1/2"	0.04	0.08	0.11	0.15	0.19	0.23	0.31	0.38	0.57						1899	1.45	6.60	
	I-4000	1-1/2"	0.03	0.07	0.10	0.13	0.16	0.20	0.26	0.33	0.49						2204	1.45	6.60	
	I-6000	1-3/4"	0.03	0.06	0.09	0.12	0.15	0.18	0.24	0.29	0.44	0.59					1965	1.16	6.60	
	I-5500	1-3/4"	0.03	0.05	0.08	0.10	0.13	0.16	0.21	0.26	0.39	0.52					2211	1.16	6.60	
	I-4800	1-3/4"	0.02	0.05	0.07	0.09	0.11	0.14	0.18	0.23	0.34	0.46					2540	1.16	6.60	
	I-4000	1-3/4"	0.02	0.04	0.06	0.08	0.10	0.12	0.16	0.20	0.29	0.39					2948	1.16	6.60	



LOAD in LB / SQUARE FOOT (PSF)

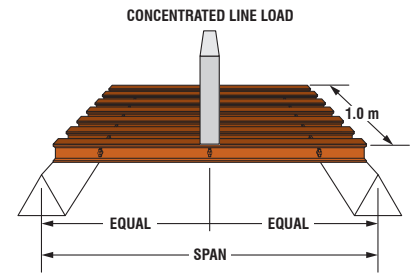
SPAN INCHES	STYLE		LOAD in LB / SQUARE FOOT (PSF)														SAFE LOAD, 2:1 SAFETY FACTOR	DEFLECTION	E X 10 ⁶ PSI	
	SERIES	DEPTH	50	100	150	200	250	300	400	500	750	1000	2000	3000	4000	5000				6000
54	I-6000	1-1/2"	0.08	0.16	0.23	0.31	0.39	0.47	0.62									1161	1.81	6.70
	I-5500	1-1/2"	0.07	0.14	0.21	0.28	0.35	0.42	0.56									1306	1.81	6.70
	I-4800	1-1/2"	0.06	0.12	0.18	0.24	0.30	0.36	0.48	0.60								1501	1.81	6.70
	I-4000	1-1/2"	0.05	0.10	0.16	0.21	0.26	0.31	0.42	0.52								1742	1.81	6.70
	I-6000	1-3/4"	0.05	0.09	0.14	0.19	0.23	0.28	0.37	0.47								1553	1.45	6.70
	I-5500	1-3/4"	0.04	0.08	0.12	0.17	0.21	0.25	0.33	0.41								1747	1.45	6.70
	I-4800	1-3/4"	0.04	0.07	0.11	0.14	0.18	0.22	0.29	0.36	0.54							2007	1.45	6.70
	I-4000	1-3/4"	0.03	0.06	0.09	0.12	0.16	0.19	0.25	0.31	0.47							2330	1.45	6.70
60	I-6000	1-1/2"	0.12	0.24	0.35	0.47	0.59											940	2.21	6.77
	I-5500	1-1/2"	0.10	0.21	0.31	0.42	0.52	0.63										1058	2.21	6.77
	I-4800	1-1/2"	0.09	0.18	0.27	0.36	0.46	0.55										1215	2.22	6.77
	I-4000	1-1/2"	0.08	0.16	0.24	0.31	0.39	0.47	0.63									1410	2.21	6.77
	I-6000	1-3/4"	0.07	0.14	0.21	0.28	0.35	0.42	0.56									1258	1.77	6.77
	I-5500	1-3/4"	0.06	0.12	0.19	0.25	0.31	0.37	0.50									1415	1.77	6.77
	I-4800	1-3/4"	0.05	0.11	0.16	0.22	0.27	0.33	0.43	0.54								1626	1.77	6.77
	I-4000	1-3/4"	0.05	0.09	0.14	0.19	0.23	0.28	0.37	0.47								1887	1.77	6.77
66	I-6000	1-1/2"	0.17	0.34	0.52													777	2.67	6.80
	I-5500	1-1/2"	0.15	0.31	0.46	0.61												874	2.67	6.80
	I-4800	1-1/2"	0.13	0.27	0.40	0.53												1004	2.67	6.80
	I-4000	1-1/2"	0.11	0.23	0.34	0.46	0.57											1166	2.67	6.80
	I-6000	1-3/4"	0.10	0.20	0.31	0.41	0.51	0.61										1039	2.13	6.80
	I-5500	1-3/4"	0.09	0.18	0.27	0.36	0.45	0.55										1169	2.13	6.80
	I-4800	1-3/4"	0.08	0.16	0.24	0.32	0.40	0.48										1343	2.13	6.80
	I-4000	1-3/4"	0.07	0.14	0.20	0.27	0.34	0.41	0.55									1559	2.13	6.80
72	I-6000	1-1/2"	0.24	0.49														653	3.18	6.80
	I-5500	1-1/2"	0.22	0.43														735	3.18	6.80
	I-4800	1-1/2"	0.19	0.38	0.56													844	3.18	6.80
	I-4000	1-1/2"	0.16	0.32	0.49													980	3.18	6.80
	I-6000	1-3/4"	0.14	0.29	0.43	0.58												873	2.53	6.80
	I-5500	1-3/4"	0.13	0.26	0.39	0.52												982	2.53	6.80
	I-4800	1-3/4"	0.11	0.22	0.34	0.45	0.56											1128	2.53	6.80
	I-4000	1-3/4"	0.10	0.19	0.29	0.39	0.48	0.58										1310	2.53	6.80
78	I-6000	1-3/4"	0.20	0.40	0.60													744	2.97	6.80
	I-5500	1-3/4"	0.18	0.35	0.53													837	2.97	6.80
	I-4800	1-3/4"	0.15	0.31	0.46													962	2.97	6.80
	I-4000	1-3/4"	0.13	0.27	0.40	0.53												1116	2.97	6.80

DURAGRID® Phenolic Pultruded Grating

Concentrated Line Load (Deflection in Millimeters)

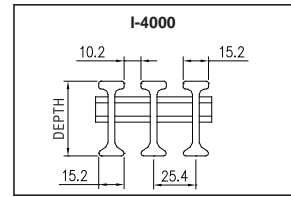
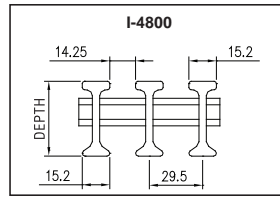
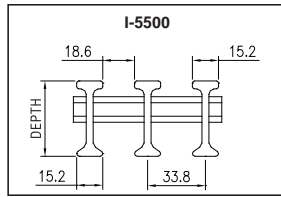
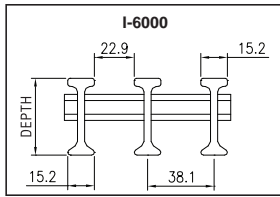
NOTE: Bearing bar spacing on center: I-6000 = 38.1mm I-5500 = 33.8mm
I-4800 = 29.5mm I-4000 = 25.4mm

NOTE: The red area () indicates at what point the load weight has ≤ 6.35mm deflection.



LOAD in kN / METER of WIDTH

SPAN M	STYLE		3	5	7.5	10	13	15	20	25	39	50	100	150	200	250	SAFE LOAD, 2:1 SAFETY FACTOR	DEFLEC- TION	E X 10 ¹⁰ N/m ²
	SERIES	DEPTH																	
0.6	I-6000	38mm	0.31	0.51	0.77	1.02	1.33	1.53	2.04	2.55	3.98	5.11					79	8.1	3.66
	I-5500	38mm	0.27	0.45	0.68	0.91	1.18	1.36	1.82	2.27	3.54	4.54					89	8.1	3.66
	I-4800	38mm	0.24	0.40	0.59	0.79	1.03	1.19	1.58	1.98	3.09	3.96	7.91				102	8.1	3.66
	I-4000	38mm	0.20	0.34	0.51	0.68	0.89	1.02	1.36	1.70	2.66	3.41	6.81				119	8.1	3.66
	I-6000	45mm	0.18	0.30	0.46	0.61	0.79	0.91	1.22	1.52	2.37	3.04	6.09				105	6.4	3.66
	I-5500	45mm	0.16	0.27	0.41	0.54	0.70	0.81	1.08	1.35	2.11	2.71	5.41				118	6.4	3.66
	I-4800	45mm	0.14	0.24	0.35	0.47	0.61	0.71	0.94	1.18	1.84	2.36	4.71				136	6.4	3.66
	I-4000	45mm	0.12	0.20	0.30	0.41	0.53	0.61	0.81	1.01	1.58	2.03	4.06	6.09			158	6.4	3.66
0.8	I-6000	38mm	0.68	1.14	1.70	2.27	2.95	3.41	4.54	5.68	8.86	11.36					69	15.7	3.90
	I-5500	38mm	0.61	1.01	1.51	2.02	2.63	3.03	4.04	5.05	7.88	10.10					78	15.7	3.90
	I-4800	38mm	0.53	0.88	1.32	1.76	2.29	2.64	3.52	4.40	6.86	8.80					89	15.7	3.90
	I-4000	38mm	0.45	0.76	1.14	1.52	1.97	2.27	3.03	3.79	5.91	7.58					104	15.7	3.90
	I-6000	45mm	0.41	0.68	1.02	1.35	1.76	2.03	2.71	3.38	5.28	6.77					87	11.8	3.90
	I-5500	45mm	0.36	0.60	0.90	1.20	1.56	1.81	2.41	3.01	4.69	6.02					98	11.8	3.90
	I-4800	45mm	0.31	0.52	0.79	1.05	1.36	1.57	2.10	2.62	4.09	5.24	10.48				112	11.8	3.90
	I-4000	45mm	0.27	0.45	0.68	0.90	1.17	1.35	1.81	2.26	3.52	4.51	9.03				131	11.8	3.90
1.0	I-6000	38mm	1.23	2.06	3.08	4.11	5.34	6.17	8.22	10.28							65	26.7	4.21
	I-5500	38mm	1.10	1.83	2.74	3.65	4.75	5.48	7.31	9.14	14.25						73	26.8	4.21
	I-4800	38mm	0.96	1.59	2.39	3.18	4.14	4.78	6.37	7.96	12.42	15.92					84	26.8	4.21
	I-4000	38mm	0.82	1.37	2.06	2.74	3.56	4.11	5.48	6.85	10.69	13.71					98	26.7	4.21
	I-6000	45mm	0.73	1.22	1.84	2.45	3.18	3.67	4.90	6.12	9.55	12.25					70	17.1	4.21
	I-5500	45mm	0.65	1.09	1.63	2.18	2.83	3.27	4.36	5.45	8.49	10.89					79	17.2	4.21
	I-4800	45mm	0.57	0.95	1.42	1.90	2.47	2.85	3.79	4.74	7.40	9.48					90	17.1	4.21
	I-4000	45mm	0.49	0.82	1.23	1.63	2.12	2.45	3.27	4.08	6.37	8.17					105	17.2	4.21
1.12	I-6000	38mm	1.65	2.74	4.12	5.49	7.13	8.23	10.98								47	25.8	4.43
	I-5500	38mm	1.46	2.44	3.66	4.88	6.34	7.32	9.76	12.20							53	25.9	4.43
	I-4800	38mm	1.28	2.13	3.19	4.25	5.53	6.38	8.50	10.63	16.58						61	25.8	4.43
	I-4000	38mm	1.10	1.83	2.75	3.66	4.76	5.49	7.32	9.15	14.28						71	25.8	4.43
	I-6000	45mm	0.98	1.64	2.45	3.27	4.25	4.91	6.54	8.18	12.76						62	20.3	4.43
	I-5500	45mm	0.87	1.45	2.18	2.91	3.78	4.36	5.82	7.27	11.34	14.54					70	20.3	4.43
	I-4800	45mm	0.76	1.27	1.90	2.53	3.29	3.80	5.06	6.33	9.88	12.66					80	20.3	4.43
	I-4000	45mm	0.65	1.09	1.64	2.18	2.84	3.27	4.36	5.45	8.51	10.91					93	20.3	4.43
1.2	I-6000	38mm	1.97	3.29	4.93	6.57	8.54	9.86	13.14								43	28.3	4.55
	I-5500	38mm	1.75	2.92	4.38	5.84	7.60	8.77	11.69								48	28.3	4.55
	I-4800	38mm	1.53	2.55	3.82	5.09	6.62	7.64	10.18	12.73							56	28.3	4.55
	I-4000	38mm	1.32	2.19	3.29	4.38	5.70	6.58	8.77	10.96							65	28.3	4.55
	I-6000	45mm	1.18	1.96	2.94	3.92	5.09	5.88	7.83	9.79							58	22.7	4.55
	I-5500	45mm	1.04	1.74	2.61	3.48	4.53	5.22	6.96	8.71	13.58						65	22.8	4.55
	I-4800	45mm	0.91	1.52	2.27	3.03	3.94	4.55	6.07	7.58	11.83	15.16					75	22.7	4.55
	I-4000	45mm	0.78	1.31	1.96	2.61	3.40	3.92	5.22	6.53	10.19	13.06					87	22.7	4.55



LOAD in kN / METER of WIDTH

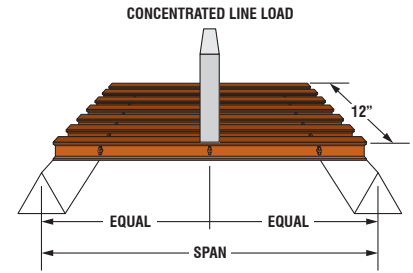
SPAN M	STYLE		3	5	7.5	10	13	15	20	25	39	50	100	150	200	250	SAFE LOAD, 2:1 SAFETY FACTOR	DEFLEC- TION	E X 10 ¹⁰ N/m ²
	SERIES	DEPTH																	
1.4	I-6000	38mm	3.08	5.14	7.71	10.28	13.36										38	39.1	4.62
	I-5500	38mm	2.74	4.57	6.85	9.14	11.88	13.71									43	39.2	4.62
	I-4800	38mm	2.39	3.98	5.97	7.96	10.35	11.94	15.93								49	39.1	4.62
	I-4000	38mm	2.06	3.43	5.14	6.86	8.91	10.28	13.71								57	39.1	4.62
	I-6000	45mm	1.84	3.06	4.59	6.13	7.96	9.19	12.25								50	30.6	4.62
	I-5500	45mm	1.63	2.72	4.08	5.45	7.08	8.17	10.89	13.62							56	30.7	4.62
	I-4800	45mm	1.42	2.37	3.56	4.74	6.17	7.11	9.49	11.86							65	30.6	4.62
	I-4000	45mm	1.23	2.04	3.06	4.09	5.31	6.13	8.17	10.21							75	30.6	4.62
1.6	I-6000	38mm	4.53	7.56	11.33												32	48.4	4.69
	I-5500	38mm	4.03	6.72	10.08	13.44											36	48.5	4.69
	I-4800	38mm	3.51	5.85	8.78	11.71	15.22										41	48.4	4.69
	I-4000	38mm	3.02	5.04	7.56	10.08	13.10										48	48.4	4.69
	I-6000	45mm	2.70	4.50	6.76	9.01	11.71	13.51									44	39.6	4.69
	I-5500	45mm	2.40	4.00	6.01	8.01	10.41	12.01									50	39.7	4.69
	I-4800	45mm	2.09	3.49	5.23	6.97	9.07	10.46	13.95								57	39.6	4.69
	I-4000	45mm	1.80	3.00	4.51	6.01	7.81	9.01	12.01								66	39.6	4.69
1.8	I-6000	38mm	6.46	10.76													29	62.4	4.69
	I-5500	38mm	5.74	9.57	14.35												33	62.6	4.69
	I-4800	38mm	5.00	8.34	12.50												37	62.5	4.69
	I-4000	38mm	4.31	7.18	10.76												44	62.4	4.69
	I-6000	45mm	3.85	6.41	9.62	12.82											39	50.0	4.69
	I-5500	45mm	3.42	5.70	8.55	11.40											44	50.2	4.69
	I-4800	45mm	2.98	4.96	7.45	9.93	12.91	14.89									50	50.0	4.69
	I-4000	45mm	2.57	4.28	6.41	8.55	11.12	12.83									59	50.0	4.69
2.0	I-6000	45mm	5.28	8.80	13.19												35	61.6	4.69
	I-5500	45mm	4.69	7.82	11.73												39	61.7	4.69
	I-4800	45mm	4.09	6.81	10.22	13.62											45	61.6	4.69
	I-4000	45mm	3.52	5.87	8.80	11.73											53	61.6	4.69

DURAGRID® Phenolic Pultruded Grating

Concentrated Line Load (Deflection in Inches)

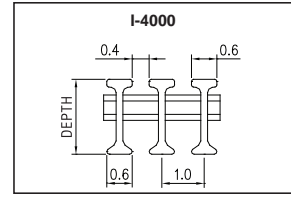
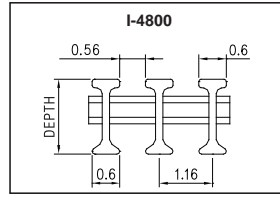
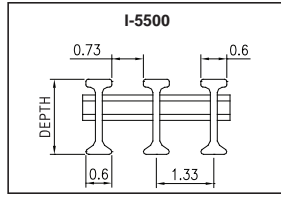
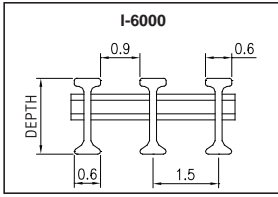
NOTE: Bearing bar spacing on center: I-6000 = 1.5" I-5500 = 1.33"
I-4800 = 1.16" I-4000 = 1.00"

NOTE: The red area () indicates at what point the load weight has ≤ 0.25" deflection.



LOAD in LB / FOOT of WIDTH

SPAN INCHES	STYLE		50	100	150	200	250	300	400	500	750	1000	2000	3000	4000	5000	6000	SAFE LOAD, 2:1 SAFETY FACTOR	DEFLECTION	E X 10 ⁶ PSI	
	SERIES	DEPTH																			
24	I-6000	1-1/2"	<0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.05	0.06	0.12	0.18	0.25	0.31		5388	0.33	5.31	
	I-5500	1-1/2"	<0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.11	0.16	0.22	0.27	0.33	6,062	0.33	5.31	
	I-4800	1-1/2"	<0.01	<0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.04	0.05	0.10	0.14	0.19	0.24	0.29		6964	0.33	5.31
	I-4000	1-1/2"	<0.01	<0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.08	0.12	0.16	0.21	0.25		8082	0.33	5.31
	I-6000	1-3/4"	<0.01	<0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.04	0.07	0.11	0.15	0.18	0.22		7206	0.26	5.31
	I-5500	1-3/4"	<0.01	<0.01	<0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.07	0.10	0.13	0.16	0.20		8107	0.26	5.31
	I-4800	1-3/4"	<0.01	<0.01	<0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.06	0.09	0.11	0.14	0.17			9314	0.26	5.31
	I-4000	1-3/4"	<0.01	<0.01	<0.01	<0.01	0.01	0.01	0.01	0.02	0.02	0.05	0.07	0.10	0.12	0.15			10809	0.26	5.31
30	I-6000	1-1/2"	0.01	0.01	0.02	0.02	0.03	0.03	0.05	0.06	0.09	0.11	0.23	0.34	0.46			4702	0.54	5.60	
	I-5500	1-1/2"	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.05	0.08	0.10	0.20	0.30	0.41	0.51		5,290	0.54	5.60	
	I-4800	1-1/2"	<0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.04	0.07	0.09	0.18	0.26	0.35	0.44	0.53	6077	0.54	5.60	
	I-4000	1-1/2"	<0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.04	0.06	0.08	0.15	0.23	0.30	0.38	0.46	7053	0.54	5.60	
	I-6000	1-3/4"	<0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.05	0.07	0.14	0.20	0.27	0.34	0.41	6288	0.43	5.60	
	I-5500	1-3/4"	<0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.05	0.06	0.12	0.18	0.24	0.30	0.36	7074	0.43	5.60	
	I-4800	1-3/4"	<0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.11	0.16	0.21	0.26	0.32		8127	0.43	5.60	
	I-4000	1-3/4"	<0.01	<0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.05	0.09	0.14	0.18	0.23	0.27		9432	0.43	5.60
36	I-6000	1-1/2"	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.09	0.14	0.18	0.37	0.55				3918	0.72	6.00	
	I-5500	1-1/2"	0.01	0.02	0.02	0.03	0.04	0.05	0.07	0.08	0.12	0.16	0.33	0.49	0.65			4,408	0.72	6.00	
	I-4800	1-1/2"	0.01	0.01	0.02	0.03	0.04	0.04	0.06	0.07	0.11	0.14	0.28	0.43	0.57			5064	0.72	6.00	
	I-4000	1-1/2"	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.09	0.12	0.25	0.37	0.49	0.61		5877	0.72	6.00	
	I-6000	1-3/4"	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.05	0.08	0.11	0.22	0.33	0.44	0.55		5240	0.57	6.00	
	I-5500	1-3/4"	<0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.07	0.10	0.19	0.29	0.39	0.49		5895	0.57	6.00	
	I-4800	1-3/4"	<0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.06	0.08	0.17	0.25	0.34	0.42	0.51	6773	0.57	6.00	
	I-4000	1-3/4"	<0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.07	0.15	0.22	0.29	0.37	0.44	7860	0.57	6.00	
42	I-6000	1-1/2"	0.01	0.03	0.04	0.06	0.07	0.08	0.11	0.14	0.21	0.28	0.55					3358	0.93	6.34	
	I-5500	1-1/2"	0.01	0.02	0.04	0.05	0.06	0.07	0.10	0.12	0.18	0.25	0.49				3,778	0.93	6.34		
	I-4800	1-1/2"	0.01	0.02	0.03	0.04	0.05	0.06	0.09	0.11	0.16	0.21	0.43	0.64			4340	0.93	6.34		
	I-4000	1-1/2"	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.09	0.14	0.18	0.37	0.55			5037	0.93	6.34		
	I-6000	1-3/4"	0.01	0.02	0.02	0.03	0.04	0.05	0.07	0.08	0.12	0.16	0.33	0.49			4492	0.74	6.34		
	I-5500	1-3/4"	0.01	0.01	0.02	0.03	0.04	0.04	0.06	0.07	0.11	0.15	0.29	0.44	0.59		5054	0.74	6.34		
	I-4800	1-3/4"	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.06	0.10	0.13	0.25	0.38	0.51		5806	0.74	6.34		
	I-4000	1-3/4"	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.05	0.08	0.11	0.22	0.33	0.44	0.55	6738	0.74	6.34		
48	I-6000	1-1/2"	0.02	0.04	0.06	0.08	0.10	0.12	0.16	0.20	0.30	0.40						2939	1.16	6.60	
	I-5500	1-1/2"	0.02	0.04	0.05	0.07	0.09	0.11	0.14	0.18	0.26	0.35					3,306	1.16	6.60		
	I-4800	1-1/2"	0.02	0.03	0.05	0.06	0.08	0.09	0.12	0.15	0.23	0.31	0.61				3799	1.16	6.60		
	I-4000	1-1/2"	0.01	0.03	0.04	0.05	0.07	0.08	0.11	0.13	0.20	0.26	0.53				4409	1.16	6.60		
	I-6000	1-3/4"	0.01	0.02	0.04	0.05	0.06	0.07	0.09	0.12	0.18	0.24	0.47				3930	0.93	6.60		
	I-5500	1-3/4"	0.01	0.02	0.03	0.04	0.05	0.06	0.08	0.10	0.16	0.21	0.42				4421	0.93	6.60		
	I-4800	1-3/4"	0.01	0.02	0.03	0.04	0.05	0.05	0.07	0.09	0.14	0.18	0.37	0.55			5080	0.93	6.60		
	I-4000	1-3/4"	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.08	0.12	0.16	0.31	0.47			5895	0.93	6.60		



LOAD in LB / FOOT of WIDTH

SPAN INCHES	STYLE		LOAD in LB / FOOT of WIDTH														SAFE LOAD, 2:1 SAFETY FACTOR	DEFLECTION	EX 10 ⁶ PSI	
	SERIES	DEPTH	50	100	150	200	250	300	400	500	750	1000	2000	3000	4000	5000				6000
54	I-6000	1-1/2"	0.03	0.06	0.08	0.11	0.14	0.17	0.22	0.28	0.42	0.56						2612	1.45	6.70
	I-5500	1-1/2"	0.02	0.05	0.07	0.10	0.12	0.15	0.20	0.25	0.37	0.49						2,939	1.45	6.70
	I-4800	1-1/2"	0.02	0.04	0.06	0.09	0.11	0.13	0.17	0.21	0.32	0.43						3376	1.45	6.70
	I-4000	1-1/2"	0.02	0.04	0.06	0.07	0.09	0.11	0.15	0.19	0.28	0.37						3918	1.45	6.70
	I-6000	1-3/4"	0.02	0.03	0.05	0.07	0.08	0.10	0.13	0.17	0.25	0.33						3494	1.16	6.70
	I-5500	1-3/4"	0.01	0.03	0.04	0.06	0.07	0.09	0.12	0.15	0.22	0.29	0.59					3931	1.16	6.70
	I-4800	1-3/4"	0.01	0.03	0.04	0.05	0.06	0.08	0.10	0.13	0.19	0.26	0.51					4516	1.16	6.70
	I-4000	1-3/4"	0.01	0.02	0.03	0.04	0.06	0.07	0.09	0.11	0.17	0.22	0.44					5241	1.16	6.70
60	I-6000	1-1/2"	0.04	0.08	0.11	0.15	0.19	0.23	0.30	0.38	0.57							2351	1.77	6.77
	I-5500	1-1/2"	0.03	0.07	0.10	0.13	0.17	0.20	0.27	0.34	0.50							2,645	1.77	6.77
	I-4800	1-1/2"	0.03	0.06	0.09	0.12	0.15	0.18	0.23	0.29	0.44	0.58						3039	1.77	6.77
	I-4000	1-1/2"	0.03	0.05	0.08	0.10	0.13	0.15	0.20	0.25	0.38	0.50						3527	1.77	6.77
	I-6000	1-3/4"	0.02	0.04	0.07	0.09	0.11	0.13	0.18	0.22	0.34	0.45						3144	1.41	6.77
	I-5500	1-3/4"	0.02	0.04	0.06	0.08	0.10	0.12	0.16	0.20	0.30	0.40						3537	1.41	6.77
	I-4800	1-3/4"	0.02	0.03	0.05	0.07	0.09	0.10	0.14	0.17	0.26	0.35						4064	1.41	6.77
	I-4000	1-3/4"	0.01	0.03	0.04	0.06	0.07	0.09	0.12	0.15	0.22	0.30	0.60					4716	1.41	6.77
66	I-6000	1-1/2"	0.05	0.10	0.15	0.20	0.25	0.30	0.40	0.50								2137	2.14	6.80
	I-5500	1-1/2"	0.04	0.09	0.13	0.18	0.22	0.27	0.36	0.44								2,404	2.13	6.80
	I-4800	1-1/2"	0.04	0.08	0.12	0.15	0.19	0.23	0.31	0.39	0.58							2762	2.14	6.80
	I-4000	1-1/2"	0.03	0.07	0.10	0.13	0.17	0.20	0.27	0.33	0.50							3206	2.14	6.80
	I-6000	1-3/4"	0.03	0.06	0.09	0.12	0.15	0.18	0.24	0.30	0.45	0.60						2858	1.70	6.80
	I-5500	1-3/4"	0.03	0.05	0.08	0.11	0.13	0.16	0.21	0.26	0.40	0.53						3215	1.70	6.80
	I-4800	1-3/4"	0.02	0.05	0.07	0.09	0.12	0.14	0.18	0.23	0.35	0.46						3694	1.70	6.80
	I-4000	1-3/4"	0.02	0.04	0.06	0.08	0.10	0.12	0.16	0.20	0.30	0.40						4287	1.70	6.80
72	I-6000	1-1/2"	0.06	0.13	0.19	0.26	0.32	0.39	0.52									1959	2.54	6.80
	I-5500	1-1/2"	0.06	0.12	0.17	0.23	0.29	0.35	0.46	0.58								2,204	2.54	6.80
	I-4800	1-1/2"	0.05	0.10	0.15	0.20	0.25	0.30	0.40	0.50								2532	2.54	6.80
	I-4000	1-1/2"	0.04	0.09	0.13	0.17	0.22	0.26	0.35	0.43								2939	2.54	6.80
	I-6000	1-3/4"	0.04	0.08	0.12	0.15	0.19	0.23	0.31	0.39	0.58							2620	2.03	6.80
	I-5500	1-3/4"	0.03	0.07	0.10	0.14	0.17	0.21	0.27	0.34	0.52							2948	2.02	6.80
	I-4800	1-3/4"	0.03	0.06	0.09	0.12	0.15	0.18	0.24	0.30	0.45	0.60						3386	2.03	6.80
	I-4000	1-3/4"	0.03	0.05	0.08	0.10	0.13	0.15	0.21	0.26	0.39	0.52						3930	2.03	6.80
78	I-6000	1-3/4"	0.05	0.10	0.15	0.20	0.25	0.29	0.39	0.49								2419	2.38	6.80
	I-5500	1-3/4"	0.04	0.09	0.13	0.17	0.22	0.26	0.35	0.44								2721	2.38	6.80
	I-4800	1-3/4"	0.04	0.08	0.11	0.15	0.19	0.23	0.30	0.38	0.57							3127	2.38	6.80
	I-4000	1-3/4"	0.03	0.07	0.10	0.13	0.16	0.20	0.26	0.33	0.49							3629	2.38	6.80

How to Specify DURAGRID® Phenolic

Fiberglass grating shall be DURAGRID® Phenolic Series (_____) as manufactured by Strongwell. Grating shall be pultruded using phenolic resin and assembled in the U.S.A. The grating shall have a current Level 2 USCG Type Approval to ASTM F3059-15¹ and meet the smoke and toxicity requirements of Annex 1 (resolution MSC.307 (88)), Part 2, 2.41 and 2.42 of the FTP Code as issued by the International Maritime Organization (IMO).

Panels shall be assembled into the sizes ordered using a 3-piece pultruded cross-rod system.

The cross-roads shall consist of a center core wedge and two spacer bars that are notched at each bearing bar so that each bearing bar is both mechanically locked and chemically bonded to the web of each bearing bar. The spacer bars shall be continually bonded to the center core wedge. The cross-roads shall be spaced a maximum of 6" in the panel. The top of the panels (shall) (shall not) be covered with a bonded grit anti-skid surface. Color shall be earthenware brown (RAL 8023) signifying Fire Integrity.

NOTE: If special options are required that are not stated in the above specification, fill in your special requirement in the appropriate section.

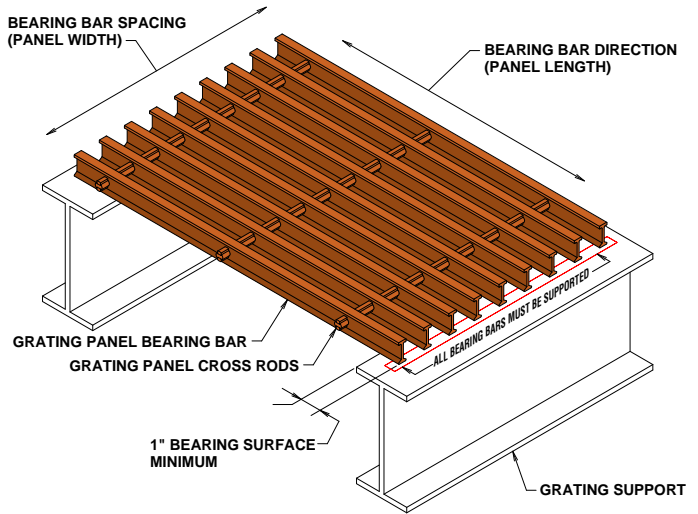
¹ASTM F3059 includes requirements for structural fire integrity, durability, (impact and wheel loads) and ASTM tests: B117, D2047, D4060, D4329, E84, E119, E695.

How to Order

When ordering DURAGRID® Phenolic, ensure the bearing bars for installation will be oriented in the correct direction for the application. Bearing bars shall traverse from support to support. Cross-roads are not intended to be applied in the span direction. The adjacent drawing will help specify the width and length of panels.

NOTE: Width is the measurement from end to end of the cross-roads. Length is always the bearing bar length.

Panel Sizes Are Specified: Width x Length



ACCESSORIES

Panel Hold Downs — Strongwell offers numerous grating hold down fasteners.

- **Saddle Clips:** SS316 may be welded, bolted or screwed into place. Recommended for use on stair treads.
- **G-Clips:** Specially designed for offshore installations, a SS316 clip eliminates field drilling for attaching grating. G-Clips are not recommended for use on stair treads.
- **Hilti System Fastener:** A shot stud system. Fastener top and threaded stud are available from Strongwell.
- **Splash zone** hold down applications. Please contact Strongwell.

Panel Connectors — Saddle clips with a SS bar that connects panels.

Stair Treads and Landings — Standard 279mm (11") deep with closed nosing (yellow optional). Contact Strongwell for additional sizes.



ISO-9001 Quality Certified Manufacturing Plants



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