



GRATING PACIFIC

INDUSTRIAL PULTRUDED FIBERGLASS GRATING LOAD TABLE

I-6010 1" Deep "I" Series Load Bars 1-1/2" O.C.

Clear Span (Inches)	Load (psf)							Max. Recom. Load (psf)	Ultimate Capacity (psf)	
	50	100	200	300	500	1000	2000			
12"	ΔU	<.01	<.01	<.01	<.01	0.01	0.02	0.04	7140	14280
	ΔC	<.01	<.01	<.01	<.01	0.01	0.03	0.06	3570	7140
18"	ΔU	<.01	0.01	0.02	0.02	0.04	0.08	0.16	4520	9040
	ΔC	<.01	0.01	0.02	0.03	0.04	0.09	0.17	3390	6780
24"	ΔU	0.01	0.02	0.05	0.07	0.12	0.24	—	2840	5680
	ΔC	0.01	0.02	0.04	0.06	0.09	0.19	0.38	2840	5680
30"	ΔU	0.03	0.05	0.11	0.16	0.27	—	—	1840	3680
	ΔC	0.02	0.03	0.07	0.1	0.17	0.35	—	2300	4600
36"	ΔU	0.05	0.1	0.21	0.31	—	—	—	1310	2620
	ΔC	0.03	0.06	0.11	0.17	0.28	—	—	1970	3940
42"	ΔU	0.09	0.19	0.37	—	—	—	—	950	1900
	ΔC	0.04	0.08	0.17	0.25	0.42	—	—	1670	3340
48"	ΔU	0.14	0.29	—	—	—	—	—	720	1440
	ΔC	0.06	0.11	0.23	0.34	—	—	—	1440	2880
54"	ΔU	0.25	—	—	—	—	—	—	570	1140
	ΔC	0.09	0.18	0.36	—	—	—	—	1280	2560
60"	ΔU	0.42	—	—	—	—	—	—	460	920
	ΔC	0.13	0.27	—	—	—	—	—	1150	2300

I-4010 1" Deep "I" Series Load Bars 1" O.C.

Clear Span (Inches)	Load (psf)							Max. Recom. Load (psf)	Ultimate Capacity (psf)	
	50	100	200	300	500	1000	2000			
12"	ΔU	<.01	<.01	<.01	<.01	<.01	0.01	0.02	10700	21400
	ΔC	<.01	<.01	<.01	<.01	0.01	0.02	0.04	5350	10700
18"	ΔU	<.01	<.01	0.01	0.02	0.03	0.05	0.11	6770	13540
	ΔC	<.01	<.01	0.01	0.02	0.03	0.06	0.12	5080	10160
24"	ΔU	0.01	0.02	0.03	0.05	0.08	0.16	0.31	4260	8520
	ΔC	<.01	0.01	0.03	0.04	0.06	0.13	0.25	4260	8520
30"	ΔU	0.02	0.04	0.07	0.11	0.18	0.36	—	2760	5520
	ΔC	0.01	0.02	0.05	0.07	0.12	0.23	0.47	3450	6900
36"	ΔU	0.03	0.07	0.14	0.21	0.35	—	—	1960	3930
	ΔC	0.02	0.04	0.07	0.11	0.18	0.37	—	2950	5900
42"	ΔU	0.06	0.12	0.25	0.37	—	—	—	1430	2860
	ΔC	0.03	0.06	0.11	0.17	0.28	—	—	2500	5000
48"	ΔU	0.1	0.19	0.38	—	—	—	—	1080	2160
	ΔC	0.04	0.08	0.15	0.23	0.38	—	—	2160	4320
54"	ΔU	0.17	0.34	—	—	—	—	—	850	1700
	ΔC	0.06	0.12	0.24	0.36	—	—	—	1920	3840
60"	ΔU	0.28	—	—	—	—	—	—	690	1380
	ΔC	0.09	0.18	0.36	—	—	—	—	1730	3460

I-6015 1-1/2" Deep "I" Series Load Bars 1-1/2" O.C.

Clear Span (Inches)	Load (psf)							Max. Recom. Load (psf)	Ultimate Capacity (psf)	
	50	100	200	300	500	1000	2000			
12"	ΔU	<.01	<.01	<.01	<.01	<.01	0.01	0.02	15240	30480
	ΔC	<.01	<.01	<.01	<.01	<.01	0.01	0.02	7620	15240
18"	ΔU	<.01	<.01	<.01	0.01	0.02	0.03	0.06	9820	19650
	ΔC	<.01	<.01	<.01	0.01	0.02	0.03	0.06	7370	14740
24"	ΔU	<.01	0.01	0.02	0.03	0.04	0.09	0.17	4880	9760
	ΔC	<.01	<.01	0.01	0.02	0.03	0.07	0.14	4880	9760
30"	ΔU	0.01	0.02	0.04	0.06	0.1	0.2	0.41	3600	7200
	ΔC	<.01	0.01	0.03	0.04	0.06	0.13	0.26	4500	9000
36"	ΔU	0.02	0.04	0.08	0.11	0.19	0.38	—	2500	5000
	ΔC	0.01	0.02	0.04	0.06	0.1	0.2	0.4	3750	7500
42"	ΔU	0.04	0.07	0.14	0.21	0.35	—	—	1840	3680
	ΔC	0.02	0.03	0.06	0.1	0.16	0.32	—	3220	6440
48"	ΔU	0.06	0.11	0.23	0.34	—	—	—	1410	2820
	ΔC	0.02	0.05	0.09	0.14	0.23	0.46	—	2810	5620
54"	ΔU	0.1	0.19	0.39	—	—	—	—	1110	2220
	ΔC	0.03	0.07	0.14	0.21	0.35	—	—	2500	5000
60"	ΔU	0.15	0.31	—	—	—	—	—	900	1800
	ΔC	0.05	0.1	0.2	0.3	0.49	—	—	2250	4500
72"	ΔU	0.34	—	—	—	—	—	—	630	1260
	ΔC	0.09	0.18	0.36	—	—	—	—	1880	3760

I-4015 1-1/2" Deep "I" Series Load Bars 1" O.C.

Clear Span (Inches)	Load (psf)							Max. Recom. Load (psf)	Ultimate Capacity (psf)	
	50	100	200	300	500	1000	2000			
12"	ΔU	<.01	<.01	<.01	<.01	<.01	<.01	0.01	22860	45720
	ΔC	<.01	<.01	<.01	<.01	<.01	0.01	0.02	11430	22860
18"	ΔU	<.01	<.01	<.01	<.01	0.01	0.02	0.04	14740	29490
	ΔC	<.01	<.01	<.01	<.01	0.01	0.02	0.04	11060	22120
24"	ΔU	<.01	<.01	0.01	0.02	0.03	0.06	0.11	7310	14620
	ΔC	<.01	<.01	<.01	0.01	0.02	0.05	0.1	7310	14620
30"	ΔU	<.01	0.01	0.03	0.04	0.07	0.14	0.27	5400	10800
	ΔC	<.01	0.01	0.02	0.03	0.05	0.11	0.22	6750	13500
36"	ΔU	0.01	0.03	0.05	0.08	0.13	0.25	0.5	3750	7500
	ΔC	<.01	0.01	0.03	0.04	0.07	0.13	0.26	5630	11260
42"	ΔU	0.02	0.05	0.09	0.14	0.23	0.47	—	2760	5520
	ΔC	0.01	0.02	0.04	0.06	0.11	0.21	0.42	4820	9640
48"	ΔU	0.04	0.08	0.15	0.23	0.38	—	—	2110	4220
	ΔC	0.02	0.03	0.06	0.09	0.15	0.3	—	4220	8440
54"	ΔU	0.06	0.13	0.26	0.39	—	—	—	1670	3340
	ΔC	0.03	0.05	0.09	0.14	0.23	0.46	—	3750	7500
60"	ΔU	0.1	0.21	0.41	—	—	—	—	1350	2700
	ΔC	0.04	0.07	0.13	0.2	0.33	—	—	3380	6760
72"	ΔU	0.23	0.45	—	—	—	—	—	940	1880
	ΔC	0.06	0.12	0.24	0.36	—	—	—	2810	5620



GRATING PACIFIC

INDUSTRIAL PULTRUDED FIBERGLASS GRATING LOAD TABLE

T-5020 2" Deep "T" Series Load Bars 2" O.C.										
Clear Span (Inches)	Load (psf)							Max. Recom. Load (psf)	Ultimate Capacity (psf)	
	50	100	200	300	500	1000	2000			
12"	ΔU	<.01	<.01	<.01	<.01	<.01	<.01	0.01	15120	30240
	ΔC	<.01	<.01	<.01	<.01	<.01	0.01	0.02	7560	15120
18"	ΔU	<.01	<.01	<.01	<.01	0.01	0.02	0.05	10080	20160
	ΔC	<.01	<.01	<.01	<.01	0.01	0.03	0.05	7560	15120
24"	ΔU	<.01	<.01	<.01	0.02	0.03	0.05	0.11	5940	11880
	ΔC	<.01	<.01	<.01	0.01	0.02	0.04	0.08	5940	11880
30"	ΔU	<.01	0.01	0.02	0.03	0.06	0.13	0.25	4160	8320
	ΔC	<.01	<.01	0.01	0.02	0.04	0.08	0.16	5200	10400
36"	ΔU	0.01	0.02	0.05	0.07	0.12	0.23	0.47	2880	5760
	ΔC	<.01	0.01	0.02	0.04	0.06	0.12	0.25	4320	8640
42"	ΔU	0.02	0.05	0.09	0.14	0.23	0.45	—	2120	4240
	ΔC	0.01	0.02	0.04	0.06	0.1	0.21	0.41	3710	7420
48"	ΔU	0.04	0.07	0.14	0.21	0.36	—	—	1620	3240
	ΔC	0.01	0.03	0.06	0.09	0.15	0.29	—	3250	6500
54"	ΔU	0.06	0.12	0.24	0.36	—	—	—	1280	2560
	ΔC	0.02	0.04	0.08	0.13	0.21	0.42	—	2890	5780
60"	ΔU	0.09	0.18	0.36	—	—	—	—	1040	2080
	ΔC	0.03	0.06	0.12	0.17	0.29	—	—	2600	5200
72"	ΔU	0.18	0.35	—	—	—	—	—	720	1440
	ΔC	0.05	0.09	0.19	0.28	0.47	—	—	2170	4340

T-3320 2" Deep "T" Series Load Bars 1-1/2" O.C.										
Clear Span (Inches)	Load (psf)							Max. Recom. Load (psf)	Ultimate Capacity (psf)	
	50	100	200	300	500	1000	2000			
12"	ΔU	<.01	<.01	<.01	<.01	<.01	<.01	0.01	20160	40320
	ΔC	<.01	<.01	<.01	<.01	<.01	<.01	0.01	10080	20160
18"	ΔU	<.01	<.01	<.01	<.01	0.01	0.02	0.04	13440	26880
	ΔC	<.01	<.01	<.01	<.01	0.01	0.02	0.04	10080	20160
24"	ΔU	<.01	<.01	<.01	0.01	0.02	0.04	0.08	7920	15840
	ΔC	<.01	<.01	<.01	0.01	0.02	0.03	0.06	7920	15840
30"	ΔU	<.01	0.01	0.02	0.03	0.05	0.09	0.19	5540	11080
	ΔC	<.01	<.01	0.01	0.02	0.03	0.06	0.12	6930	13860
36"	ΔU	0.01	0.02	0.04	0.05	0.09	0.18	0.35	3840	7680
	ΔC	<.01	0.01	0.02	0.03	0.05	0.09	0.19	5760	11520
42"	ΔU	0.02	0.03	0.07	0.1	0.17	0.34	—	2820	5650
	ΔC	0.01	0.02	0.03	0.05	0.08	0.16	0.31	4950	9900
48"	ΔU	0.03	0.05	0.11	0.16	0.27	—	—	2160	4320
	ΔC	0.01	0.02	0.04	0.07	0.11	0.22	0.44	4330	8660
54"	ΔU	0.04	0.09	0.18	0.27	0.45	—	—	1680	3360
	ΔC	0.02	0.03	0.06	0.1	0.16	0.32	—	3780	7560
60"	ΔU	0.07	0.14	0.27	0.41	—	—	—	1360	2720
	ΔC	0.02	0.04	0.09	0.13	0.22	0.44	—	3400	6800
72"	ΔU	0.13	0.26	—	—	—	—	—	950	1900
	ΔC	0.04	0.07	0.14	0.21	0.35	—	—	2830	5660

IMPORTANT:

Installation should provide for fully supported abutments of grating panels. Otherwise, higher deflection values may be experienced and tripping hazards may occur. Stub bars should not be less than 1" in clip attachment areas. Safe-T-Span pedestrian grating load bars at platform edges should be full supported.

NOTES:

1. The designer should not exceed the MAX RECOMMENDED LOAD at any given span. MAX RECOMMENDED LOAD represents a 2:1 factor of safety on ULTIMATE CAPACITY.
2. ULTIMATE CAPACITY represents a complete and total failure of the grating. Values are provided to illustrate the reserve strength of the grating at a given span and are NOT to be used for design. Functionality of grating is limited to MAX RECOMMENDED LOAD.
3. Walking loads, typically 50-65 PSF maximum, are recommended for pedestrian traffic. Deflections for worker comfort are typically limited to the lesser of 3/8" or CLEAR SPAN divided by 125; for a firmer feel, limit deflection to the lesser of 1/4" or CLEAR SPAN divided by 200.
4. The allowable loads in this table are for STATIC LOAD CONDITIONS at ambient temperatures only. Allowable loads for impact or dynamic conditions should be a maximum of ONE-HALF the values shown. Long term loads will result in added deflection due to creep in the material and will also require higher safety factors to ensure acceptable performance. For applications at elevated temperatures, consult factory. The designer is further referenced to the ASCE Structural Plastics Design Manual.
5. All gratings were tested in accordance with the ANSI Standard: FRP Composites Grating Manual for Pultruded and Molded Grating and Stair Treads.