



GRATING PACIFIC

AQUA GRATE® PULTRUDED GRATING LOAD TABLE

Aqua Grate® T-1210										
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	4590	9180
	ΔC	<.01	<.01	<.01	<.01	0.01	0.04	0.06	4590	9180
18"	ΔU	<.01	<.01	0.01	0.03	0.04	0.09	0.18	3060	6120
	ΔC	<.01	0.01	0.02	0.03	0.05	0.09	0.19	4350	8700
24"	ΔU	0.01	0.02	0.05	0.07	0.12	0.24	0.48	2290	4580
	ΔC	0.01	0.02	0.04	0.06	0.09	0.19	0.38	3260	6520
30"	ΔU	0.03	0.06	0.11	0.17	0.29	—	—	1840	3680
	ΔC	0.02	0.04	0.07	0.11	0.19	0.36	—	2610	5220
36"	ΔU	0.06	0.11	0.23	0.35	—	—	—	1450	2900
	ΔC	0.03	0.06	0.12	0.19	0.31	—	—	2170	4340
42"	ΔU	0.11	0.21	0.43	—	—	—	—	1060	2120
	ΔC	0.05	0.1	0.19	0.29	0.49	—	—	1860	3720
48"	ΔU	0.18	0.36	—	—	—	—	—	820	1640
	ΔC	0.07	0.14	0.29	0.43	—	—	—	1630	3260

Aqua Grate® T-1215										
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	0.01	0.02	5060	10120
	ΔC	<.01	<.01	<.01	<.01	0.01	0.02	0.03	5900	11800
18"	ΔU	<.01	<.01	0.01	0.01	0.02	0.04	0.07	3940	7880
	ΔC	<.01	<.01	0.01	0.01	0.02	0.04	0.07	5900	11800
24"	ΔU	<.01	0.01	0.02	0.03	0.04	0.09	0.17	2950	5900
	ΔC	<.01	<.01	0.01	0.02	0.03	0.07	0.14	4720	9440
30"	ΔU	0.01	0.02	0.04	0.06	0.1	0.2	0.4	2360	4720
	ΔC	0.01	0.01	0.03	0.04	0.06	0.13	0.25	3770	7540
36"	ΔU	0.02	0.04	0.08	0.12	0.2	0.4	—	1970	3940
	ΔC	0.01	0.02	0.04	0.06	0.11	0.21	0.42	31470	6280
42"	ΔU	0.04	0.07	0.14	0.21	0.36	—	—	1540	3080
	ΔC	0.02	0.03	0.06	0.1	0.16	0.32	—	2700	5400
48"	ΔU	0.06	0.12	0.24	0.36	—	—	—	1180	2360
	ΔC	0.02	0.05	0.1	0.14	0.24	0.48	—	2360	4720
54"	ΔU	0.09	0.19	0.38	—	—	—	—	930	1860
	ΔC	0.03	0.07	0.13	0.2	0.33	—	—	2100	4200
60"	ΔU	0.14	0.28	—	—	—	—	—	760	1520
	ΔC	0.04	0.09	0.18	0.45	—	—	—	1890	3780
72"	ΔU	0.29	—	—	—	—	—	—	520	1040
	ΔC	0.08	0.15	0.31	0.46	—	—	—	1500	3140

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.