



GRATING PACIFIC

PEDESTRIAN PULTRUDED GRATING LOAD TABLES

T-3810 1" Deep "T" Series

| 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 | 0.03 | 0.06 | 2730 | 5460 |
| | ΔC | <.01 | <.01 | <.01 | 0.01 | 0.02 | 0.05 | 0.09 | 2730 | 5460 |
| 18" | ΔU | <.01 | 0.01 | 0.02 | 0.04 | 0.06 | 0.12 | — | 1820 | 3640 |
| | ΔC | <.01 | 0.01 | 0.03 | 0.04 | 0.07 | 0.13 | 0.26 | 2590 | 5180 |
| 24" | ΔU | 0.02 | 0.03 | 0.07 | 0.1 | 0.17 | .34 | — | 1370 | 2740 |
| | ΔC | 0.01 | 0.03 | 0.05 | 0.08 | 0.13 | 0.27 | — | 1940 | 3880 |
| 30" | ΔU | 0.04 | 0.08 | 0.16 | 0.24 | 0.4 | — | — | 1090 | 2180 |
| | ΔC | 0.03 | 0.05 | 0.1 | 0.15 | 0.26 | — | — | 1550 | 3100 |
| 36" | ΔU | 0.08 | 0.16 | 0.32 | 0.49 | — | — | — | 860 | 1720 |
| | ΔC | 0.04 | 0.09 | 0.17 | 0.26 | 0.43 | — | — | 1290 | 2580 |
| 42" | ΔU | 0.15 | 0.3 | — | — | — | — | — | 630 | 1260 |
| | ΔC | 0.07 | 0.14 | 0.27 | 0.41 | — | — | — | 1110 | 2220 |
| 48" | ΔU | 0.25 | 0.5 | — | — | — | — | — | 490 | 980 |
| | ΔC | 0.1 | 0.2 | 0.4 | — | — | — | — | 970 | 1940 |

T-2510 1" Deep "T" Series

| 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 | 0.05 | 3280 | 6560 |
| | ΔC | <.01 | <.01 | <.01 | 0.01 | 0.02 | 0.04 | 0.08 | 3280 | 6560 |
| 18" | ΔU | <.01 | .01 | 0.02 | 0.03 | 0.05 | 0.11 | 0.22 | 3100 | 6200 |
| | ΔC | <.01 | 0.01 | 0.02 | 0.03 | 0.05 | 0.11 | 0.22 | 3100 | 6200 |
| 24" | ΔU | 0.01 | 0.03 | 0.06 | 0.08 | 0.14 | 0.28 | — | 1640 | 3280 |
| | ΔC | 0.01 | 0.02 | 0.04 | 0.07 | 0.11 | 0.22 | 0.45 | 2330 | 4660 |
| 30" | ΔU | 0.03 | 0.07 | 0.13 | 0.2 | 0.33 | — | — | 1310 | 2620 |
| | ΔC | 0.02 | 0.04 | 0.09 | 0.13 | 0.21 | 0.43 | — | 1860 | 3720 |
| 36" | ΔU | 0.07 | 0.14 | 0.27 | 0.41 | — | — | — | 1040 | 2080 |
| | ΔC | 0.04 | 0.07 | 0.14 | 0.22 | 0.36 | — | — | 1550 | 3100 |
| 42" | ΔU | 0.12 | 0.25 | 0.5 | — | — | — | — | 760 | 1520 |
| | ΔC | 0.06 | 0.11 | 0.23 | 0.34 | — | — | — | 1330 | 2660 |
| 48" | ΔU | 0.21 | 0.42 | — | — | — | — | — | 580 | 1160 |
| | ΔC | 0.08 | 0.17 | 0.33 | 0.5 | — | — | — | 1160 | 2320 |

T-3815 1-1/2" Deep "T" Series

| 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 | 0.03 | 4220 | 8440 |
| | ΔC | <.01 | <.01 | <.01 | 0.01 | 0.01 | 0.02 | 0.04 | 4220 | 8440 |
| 18" | ΔU | <.01 | <.01 | 0.01 | 0.01 | 0.02 | 0.05 | 0.1 | 2810 | 5620 |
| | ΔC | <.01 | 0.01 | 0.01 | 0.02 | 0.03 | 0.05 | 0.1 | 4220 | 8440 |
| 24" | ΔU | 0.01 | 0.01 | 0.02 | 0.04 | 0.06 | 0.12 | 0.24 | 2110 | 4220 |
| | ΔC | <.01 | 0.01 | 0.02 | 0.03 | 0.05 | 0.09 | 0.19 | 3370 | 6740 |
| 30" | ΔU | 0.01 | 0.03 | 0.06 | 0.08 | 0.14 | 0.28 | — | 1690 | 3380 |
| | ΔC | 0.01 | 0.03 | 0.04 | 0.05 | 0.09 | 0.18 | 0.36 | 2700 | 5400 |
| 36" | ΔU | 0.03 | 0.06 | 0.11 | 0.17 | 0.28 | — | — | 1410 | 2820 |
| | ΔC | 0.01 | 0.03 | 0.06 | 0.09 | 0.15 | 0.3 | — | 2250 | 4500 |
| 42" | ΔU | 0.05 | 0.1 | 0.2 | 0.3 | — | — | — | 1100 | 2200 |
| | ΔC | 0.02 | 0.09 | 0.12 | 0.14 | 0.23 | 0.45 | — | 1930 | 3860 |
| 48" | ΔU | 0.08 | 0.17 | 0.33 | — | — | — | — | 840 | 1680 |
| | ΔC | 0.03 | 0.07 | 0.13 | 0.2 | 0.33 | — | — | 1680 | 3360 |
| 54" | ΔU | 0.13 | 0.26 | — | — | — | — | — | 670 | 1340 |
| | ΔC | 0.05 | 0.09 | 0.19 | 0.28 | 0.47 | — | — | 1500 | 3000 |
| 60" | ΔU | 0.2 | 0.4 | — | — | — | — | — | 540 | 1080 |
| | ΔC | 0.06 | 0.13 | 0.25 | 0.38 | — | — | — | 1350 | 2700 |
| 72" | ΔU | 0.41 | — | — | — | — | — | — | 370 | 740 |
| | ΔC | 0.11 | 0.22 | 0.43 | — | — | — | — | 1120 | 2240 |

T-2515 1-1/2" Deep "T" Series

| 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 | 0.01 | 0.01 | 0.02 | 0.04 | 5060 | 10120 |
| 18" | ΔU | <.01 | <.01 | 0.01 | 0.01 | 0.02 | 0.04 | 0.08 | 3380 | 6760 |
| | ΔC | <.01 | <.01 | 0.01 | 0.01 | 0.02 | 0.04 | 0.09 | 5060 | 10120 |
| 24" | ΔU | <.01 | 0.01 | 0.02 | 0.03 | 0.05 | 0.1 | 0.2 | 2530 | 5060 |
| | ΔC | <.01 | 0.01 | 0.02 | 0.02 | 0.04 | 0.08 | 0.16 | 4040 | 8080 |
| 30" | ΔU | 0.01 | 0.02 | 0.05 | 0.07 | 0.12 | 0.23 | 0.47 | 2030 | 4060 |
| | ΔC | 0.01 | 0.01 | 0.03 | 0.04 | 0.07 | 0.15 | 0.3 | 3230 | 6460 |
| 36" | ΔU | 0.02 | 0.05 | 0.09 | 0.14 | 0.23 | .46 | — | 1690 | 3380 |
| | ΔC | 0.01 | 0.02 | 0.05 | 0.07 | 0.12 | 0.25 | 0.49 | 2700 | 5400 |
| 42" | ΔU | 0.04 | 0.08 | 0.17 | 0.25 | 0.41 | — | — | 1320 | 2640 |
| | ΔC | 0.02 | 0.04 | 0.08 | 0.11 | 0.19 | 0.38 | — | 2310 | 4620 |
| 48" | ΔU | 0.07 | 0.14 | 0.28 | 0.42 | — | — | — | 1010 | 2020 |
| | ΔC | 0.03 | 0.06 | 0.11 | 0.17 | 0.28 | — | — | 2020 | 4040 |
| 54" | ΔU | 0.11 | 0.22 | 0.44 | — | — | — | — | 800 | 1600 |
| | ΔC | 0.04 | 0.08 | 0.16 | 0.23 | 0.39 | — | — | 1800 | 3600 |
| 60" | ΔU | 0.16 | 0.33 | — | — | — | — | — | 650 | 1300 |
| | ΔC | 0.05 | 0.1 | 0.21 | 0.31 | — | — | — | 1620 | 3240 |
| 72" | ΔU | 0.34 | — | — | — | — | — | — | 450 | 900 |
| | ΔC | 0.09 | 0.18 | 0.36 | — | — | — | — | 1350 | 2700 |

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:

- 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.
- 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.
- 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.
- 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.
- All gratings were tested in accordance with the ANSI Standard: FRP Composites Grating Manual for Pultruded and Molded Grating and Stair Treads.