

| Bar Size | Symbol / Apprx. Wgt*** Lbs/Sq. Ft. | Ped. Span | Sec. Mod. Per Ft. Of Width | | Clear Span | | | | | | | | | | | |
|---------------|--|-----------|----------------------------------|---|------------|-------|-------|-------|-------|-------|-------|---|-------|--|-------|-------|
| | | | | | 2'-0" | 2'-6" | 3'-0" | 3'-6" | 4'-0" | 4'-6" | 5'-0" | 5'-6" | 6'-0" | 6'-6" | 7'-0" | 8'-0" |
| 1" x 1/4" | 7AI4 4.8# 7AI2 5.1# | 59" | .960 | U | 1920 | 1229 | 853 | 627 | 480 | 379 | 307 | U=Safe uniform load, lb/sq ft C=Safe concentrated load, lb/ft of grating width, at mid-span D=Deflection in inches | | | | |
| | | | | D | .135 | .212 | .305 | .415 | .542 | .685 | .846 | | | | | |
| | | | | C | 1920 | 1536 | 1280 | 1097 | 960 | 853 | 768 | | | | | |
| | | | | D | .108 | .169 | .244 | .332 | .434 | .548 | .677 | | | | | |
| 1-1/4" x 1/4" | 7AI4 5.8# 7AI2 6.2# | 69" | 1.462 | U | 2924 | 1871 | 1300 | 955 | 731 | 578 | 468 | 387 | 325 | Data is theoretical and based on 12,000 psi | | |
| | | | | D | .110 | .172 | .248 | .337 | .440 | .557 | .688 | .832 | .990 | | | |
| | | | | C | 2924 | 2339 | 1949 | 1671 | 1462 | 1300 | 1170 | 1063 | 975 | | | |
| | | | | D | .088 | .137 | .198 | .269 | .352 | .446 | .550 | .665 | .792 | | | |
| 1-1/2" x 1/4" | 7AI4 6.7# 7AI2 7.0# | 78" | 2.079 | U | 4158 | 2661 | 1848 | 1358 | 1040 | 821 | 665 | 550 | 462 | 394 | | |
| | | | | D | .092 | .144 | .207 | .282 | .369 | .466 | .576 | .697 | .830 | .975 | | |
| | | | | C | 4158 | 3327 | 2772 | 2376 | 2079 | 1848 | 1663 | 1512 | 1386 | 1279 | | |
| | | | | D | .074 | .115 | .166 | .226 | .295 | .373 | .461 | .558 | .664 | .779 | | |
| 1-3/4" x 1/4" | 7AI4 7.7# 7AI2 8.0# | 87" | 2.792 | U | 5585 | 3574 | 2482 | 1824 | 1396 | 1103 | 894 | 738 | 621 | 529 | 456 | 349 |
| | | | | D | .080 | .124 | .179 | .244 | .318 | .402 | .497 | .601 | .716 | .840 | .974 | 1.272 |
| | | | | C | 5585 | 4468 | 3723 | 3191 | 2792 | 2482 | 2234 | 2031 | 1862 | 1718 | 1596 | 1396 |
| | | | | D | .064 | .099 | .143 | .195 | .254 | .322 | .398 | .481 | .573 | .672 | .779 | 1.017 |
| 2" x 1/4" | 7AI4 8.7# 7AI2 9.0# | 96" | 3.640 | U | 7280 | 4659 | 3235 | 2377 | 1820 | 1438 | 1165 | 963 | 809 | 689 | 594 | 455 |
| | | | | D | .070 | .109 | .157 | .214 | .279 | .354 | .437 | .528 | .629 | .737 | .855 | 1.118 |
| | | | | C | 7280 | 5824 | 4853 | 4160 | 3640 | 3235 | 2912 | 2647 | 2427 | 2240 | 2080 | 1820 |
| | | | | D | .056 | .087 | .126 | .171 | .224 | .283 | .349 | .423 | .503 | .590 | .684 | .894 |
| 2-1/4" x 1/4" | 7AI4 9.6# 7AI2 9.9# | 105" | 4.542 | U | 9084 | 5814 | 4038 | 2966 | 2271 | 1794 | 1454 | 1201 | 1009 | 860 | 742 | 568 |
| | | | | D | .062 | .097 | .140 | .191 | .249 | .315 | .389 | .471 | .560 | .658 | .764 | .997 |
| | | | | C | 9084 | 7268 | 6056 | 5191 | 4542 | 4038 | 3634 | 3303 | 3028 | 2795 | 2596 | 2271 |
| | | | | D | .050 | .078 | .112 | .153 | .199 | .252 | .311 | .377 | .448 | .526 | .611 | .797 |
| 2-1/2" x 1/4" | 7AI4 10.7# 7AI2 11.1# | 113" | 5.615 | U | 11229 | 7187 | 4991 | 3667 | 2807 | 2218 | 1797 | 1485 | 1248 | 1063 | 917 | 702 |
| | | | | D | .056 | .088 | .126 | .172 | .225 | .285 | .351 | .425 | .506 | .594 | .689 | .900 |
| | | | | C | 11229 | 8984 | 7486 | 6417 | 5615 | 4991 | 4492 | 4083 | 3743 | 3455 | 3208 | 2807 |
| | | | | D | .045 | .070 | .101 | .138 | .180 | .228 | .281 | .340 | .405 | .475 | .551 | .719 |

***Note: Weight depends on panel width, cross bar selection, mill tolerance and manufacturing tolerance.

Deflection: To ensure safe pedestrian comfort, maximum deflection (D) should be limited to 1/4" for uniform load of 100 psf (denoted by values to the left of heavy line in table above), however, this can be exceeded for non-pedestrian loading conditions at engineer's discretion.