

# Cartwheel Span Table

Allowable Loads (psf)



| Panel Size | Aluminum |           |       |           |      |           | Stainless Steel |           |       |           |      |           | Weathering Steel |           |       |           |      |           |
|------------|----------|-----------|-------|-----------|------|-----------|-----------------|-----------|-------|-----------|------|-----------|------------------|-----------|-------|-----------|------|-----------|
|            | 1/8"     |           | 3/16" |           | 1/4" |           | 1/8"            |           | 3/16" |           | 1/4" |           | 1/8"             |           | 3/16" |           | 1/4" |           |
|            | Edge     | Perimeter | Edge  | Perimeter | Edge | Perimeter | Edge            | Perimeter | Edge  | Perimeter | Edge | Perimeter | Edge             | Perimeter | Edge  | Perimeter | Edge | Perimeter |
| 30 x 48    | 56       | 59        | 185   | 195       | *233 | *323      | 167             | 194       | *233  | *323      | *233 | *323      | 173              | 201       | *233  | *323      | *233 | *323      |
| 30 x 60    | 53       | 55        | 176   | 188       | *290 | *335      | 167             | 177       | *290  | *335      | *290 | *335      | 173              | 184       | *290  | *335      | *290 | *335      |
| 30 x 72    | 53       | 55        | 175   | 187       | *308 | *317      | 162             | 169       | *308  | *317      | *308 | *317      | 168              | 175       | *308  | *317      | *308 | *317      |
| 30 x 84    | 51       | 53        | 172   | 184       | *290 | *346      | 162             | 170       | *290  | *346      | *290 | *346      | 168              | 176       | *290  | *346      | *290 | *346      |
| 30 x 96    | 50       | 52        | 170   | 180       | *323 | *349      | 168             | 179       | *323  | *349      | *323 | *349      | 174              | 185       | *323  | *349      | *323 | *349      |
| 30 x 108   | 50       | 52        | 169   | 177       | *289 | *332      | 171             | 182       | *289  | *332      | *289 | *332      | 171              | 189       | *289  | *332      | *289 | *332      |
| 30 x 120   | 50       | 52        | 167   | 174       | *295 | *336      | 174             | 183       | *295  | *336      | *295 | *336      | 180              | 190       | *295  | *336      | *295 | *336      |
| 48 x 48    | 12       | 27        | 44    | 70        | 99   | 167       | 36              | 59        | 119   | 187       | *203 | *349      | 37               | 60        | 122   | 190       | *203 | *349      |
| 48 x 60    | 12       | 19        | 42    | 65        | 99   | 147       | 34              | 57        | 117   | 182       | *185 | *303      | 35               | 58        | 120   | 187       | *185 | *303      |
| 48 x 72    | 12       | 15        | 41    | 55        | 99   | 124       | 33              | 42        | 114   | 154       | *194 | *290      | 34               | 43        | 117   | 158       | *194 | *290      |
| 48 x 84    | 12       | 14        | 39    | 50        | 95   | 119       | 33              | 39        | 109   | 140       | *181 | *265      | 34               | 40        | 112   | 144       | *181 | *265      |
| 48 x 96    | 12       | 14        | 37    | 47        | 95   | 112       | 33              | 39        | 109   | 140       | *174 | *248      | 34               | 40        | 112   | 144       | *174 | *248      |
| 48 x 108   | 12       | 14        | 37    | 44        | 94   | 107       | 33              | 39        | 112   | 123       | *168 | *233      | 34               | 40        | 115   | 126       | *168 | *233      |
| 48 x 120   | 12       | 13        | 37    | 44        | 93   | 105       | 33              | 36        | 112   | 123       | *185 | *245      | 34               | 37        | 115   | 126       | *185 | *245      |
| 60 x 60    | 7        | 14        | 22    | 49        | 95   | 147       | 19              | 39        | 61    | 137       | 140  | 192       | 19               | 40        | 62    | 141       | 144  | 197       |
| 60 x 72    | 7        | 10        | 23    | 37        | 52   | 83        | 19              | 28        | 64    | 103       | 145  | 232       | 19               | 29        | 66    | 106       | 149  | 238       |
| 60 x 84    | 6        | 9         | 22    | 30        | 49   | 71        | 16              | 25        | 61    | 84        | 137  | 189       | 16               | 26        | 62    | 86        | 141  | 194       |
| 60 x 96    | 6        | 8         | 23    | 29        | 49   | 68        | 19              | 21        | 69    | 81        | 148  | 190       | 19               | 22        | 71    | 83        | 152  | 195       |
| 60 x 108   | 6        | 7         | 21    | 22        | 49   | 64        | 19              | 20        | 58    | 61        | 137  | 179       | 19               | 20        | 59    | 62        | 141  | 184       |
| 60 x 120   | 6        | 7         | 20    | 21        | 45   | 59        | 19              | 20        | 56    | 59        | 128  | 165       | 19               | 20        | 57    | 61        | 131  | 169       |

## NOTES

- ▶ Load values are limited by deflection equal to L/60. For other deflection limits, multiply the Live Load values by the appropriate factor.
- ▶ Fastener capacity is based on GeoMetal™ standard fastener type into 14ga steel substrate.
- ▶ Results are based on the standard GeoMetal™ fastener spacing of 8" on center.
- ▶ Deflection limits are based on the short panel dimension, and the panel orientations shown in the product documentation.
- ▶ Tabulated values apply to either fasteners applied to long sides of panels only (Edge) or full perimeter fasteners (Perimeter).
- ▶ Tabulated values marked with an \*asterisk indicate load limited by fastener capacity.
- ▶ This table was designed to apply to "standard" GeoMetal™ installation methods. It may be possible to exceed the loads of this table by analyzing a specific application.
- ▶ This table is not intended to replace project-specific engineering calculations performed for your decorative metal project.
- ▶ Red values indicate pressure below 16 psf threshold.