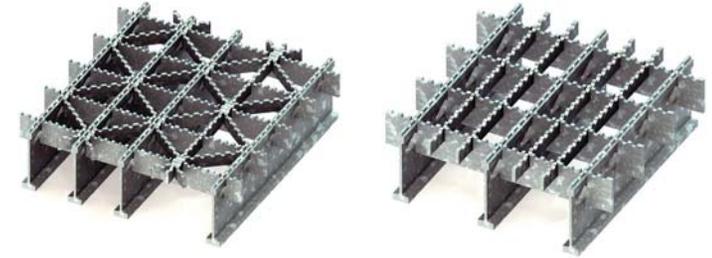


Grid Deck Properties - Design and Specification Data

Open Grid Deck Systems

- Lightest Weight Bridge Decks
- Quick Installation
- Minimum Traffic Disruption



Rectangular Open Grid Deck	Main Bars	Supplemental Bars	Section Modulus (in ³ /ft)		Total Height (in.)	Approximate Weight (psf)	* Maximum Continuous Clear Span (ft)
	Spacing (in.)	Number of bars evenly spaced between Main Bars	Top of Steel	Bottom of Steel			
Standard "Ribbed" Main Bar	2	0	7.9	13.2	5.188	36.5	7.3
	3	0	5.3	8.8	5.188	26.0	6.2
	4	1	4.9	7.0	5.188	22.9	5.9
	4	2	5.8	7.3	5.188	25.1	6.3
	6	2	3.9	4.9	5.188	18.4	5.4
	8	2	2.9	3.6	5.188	15.0	4.9
	8	3	3.4	3.8	5.188	16.1	5.1

Standard "Ribless" Main Bar	2	0	7.3	13.5	5.188	35.8	7.2
	3	0	5.2	8.8	5.188	25.9	6.1
	4	1	4.6	7.2	5.188	23.2	5.9
	4	2	5.8	7.4	5.188	25.4	6.3
	6	2	3.7	5.0	5.188	19.0	5.4
	8	2	2.9	3.7	5.188	15.8	4.9
	8	3	3.3	3.8	5.188	16.9	5.1

Design Notes:

Main Bars: 5.188" rolled shape; 5.6 pounds per lineal foot (Ribbed), 5.4 pounds per lineal foot (Ribless).

Cross Bars (for Ribbed Main Bar): 1/4" x 2" @ 4" spacing.

Cross Bars (for Ribless Main Bar): 1/4" x 2-1/2" @ 4" spacing.

Supplemental Bars: 1/4" x 1" (5/16" x 1" Supplemental Bars are also available with Rectangular Grid).

* Based on HS25 truck loading, L/800 maximum deflection & 50 ksi steel per AASHTO 17th Edition Standard Specifications.

50% of supplemental and diagonal bars assumed to be active in withstanding load for open grid.

All punched holes or slots in steel members are deducted when computing section properties.

Fatigue not considered for above published limits.

Sectional properties and weights are within 5% (+/-) of an individual fabricator's calculated values.

Consult with fabricators for actual values.

Span limits shown are independent of main rail orientation for AASHTO ASD methods of analysis, and are dependent on the steel stress strength limits.

Other configurations are available. Contact individual BGFMA fabricators for more information.

Diagonal Open Grid Deck	Main Bars	Supplemental Bars	Diagonal Bars	Section Modulus (in ³ /ft)		Total Height (in.)	Approximate Weight (psf)	* Maximum Continuous Clear Span (ft)
	Spacing (in.)	Number of bars evenly spaced between Main Bars	Number of bars evenly spaced between Main Bars	Top of Steel	Bottom of Steel			
Standard "Ribbed" Main Bar	3.75	0	1	5.2	7.5	5.188	25.3	6.1
	7.5	1	2	3.6	4.0	5.188	18.1	5.1

Standard "Ribless" Main Bar	3.75	0	1	4.9	7.6	5.188	25.5	6.1
	7.5	1	2	3.5	4.1	5.188	18.9	5.1