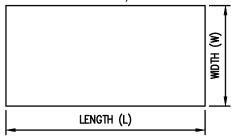
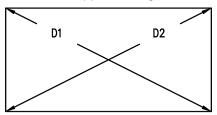


## Bridge Grid Flooring Manufacturers Association Fabrication Tolerances for Grid Decks

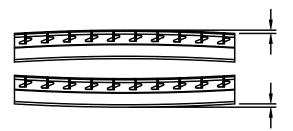
- a. Panel Length =  $\pm 1/4$ " (in direction of grid tee or beam).
- b. Panel Width = +0, -1/8" (in direction of cross bar or distribution bar).



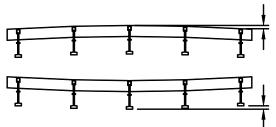
c. <u>Squareness</u> = one diagonal measurement is ±1/2" of opposite diagonal.



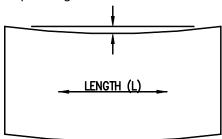
d. <u>Longitudinal Camber</u> = 0.003\*Length (in direction of grid tee or beam).



e. <u>Transverse Camber</u> = 0.004\*Width (in direction of cross bar or distribution bar).

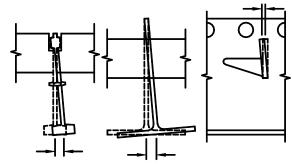


f. Sweep (side bow) = 0.025\*L (in feet) for panels up to 40'-0", inclusive, and 0.00065\*L<sup>2</sup>, for panels greater than 40'-0".



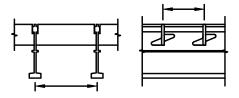
Note: Sweep tolerances applicable for galvanized panels with standard puddle welds connecting components and diagonal grids less than 25' in length. Galvanized diagonal open grid panels not recommended over 25' in length.

g. Bar Verticality = 0.04\*H (full bar height).



Note: No more than 1% of all locations can violate specified tolerance. No tolerance necessary for cross bars when encased in concrete on partial and full-depth grid systems.

h. Bar Spacing =  $\pm 1/8$ " center-to-center.



Note: No more than 1% of all locations can violate specified tolerance.

## Examples:

1. Full-Depth Grid System 4-1/4" Main Bars @ 6" centers 1-1/4" Cross Bars @ 4" centers

Panel Length = 25'-0" Panel Width = 7'-0"

Dimension Tolerance

Panel Length [ $\pm$  1/4"] 24'-11 3/4" to 25'-0 1/4" Panel Width [+0, -1/8"] 6'-11 7/8" to 7'-0" Squareness |D1-D2|  $\leq$  1/2"

Longitudinal Camber [0.003 x 25'-0" x 12 in./ft.] 0.900 in. crown or sag Transverse Camber [0.004 x 7'-0" x 12 in./ft.] 0.336 in. crown or sag

 Sweep (side bow) [0.025 x 25'-0"]
 0.625 in.

 Main Bar Verticality [0.04 x 4.25"]
 0.170 in.

 Cross Bar Verticality [0.04 x 1.25"]
 0.050 in.

Bar Spacing (Main Bar and Cross Bar) ±0.125 in. center-to-center

2. Exodermic<sup>®</sup> Deck System WT6x7 Main Bars @ 12" centers 2" Distribution Bars @ 6" centers

Panel Length = 42'-0" Panel Width = 8'-0"

Dimension Tolerance

 Panel Length [± 1/4"]
 41'-11 3/4" to 42'-0 1/4"

 Panel Width [+0, -1/8"]
 7'-11 7/8" to 8'-0"

 Squareness
 |D1-D2| ≤ 1/2"

Longitudinal Camber [0.003 x 42'-0" x 12 in./ft.]

Transverse Camber [0.004 x 8'-0" x 12 in./ft.]

1.512 in. crown or sag
0.384 in. crown or sag

Sweep (side bow)  $[0.00065 \times (42'-0")^2]$  1.147 in. Main Bar Verticality  $[0.04 \times 6"]$  0.240 in. Cross Bar Verticality  $[0.04 \times 2"]$  0.080 in.

Bar Spacing (Main Bar and Distribution Bar) ±0.125 in. center-to-center

3. Diagonal Open Grid System 5-3/16" Main Bars @ 7-1/2" centers

2-1/2" Cross Bars @ 4" centers

Panel Length = 20'-0" Panel Width = 6'-3"

Dimension Tolerance

Panel Length [ $\pm$  1/4"] 19'-11 3/4" to 20'-0 1/4" Panel Width [+0, -1/8"] 6'-2 7/8" to 6'-3" Squareness |D1-D2|  $\leq$  1/2" 0.720" crown or sag Transverse Camber [0.004 x 6'-3" x 12 in./ft.] 0.300" crown or sag

Sweep (side bow) [0.025 x 20'-0"] 0.500 in.

Main Bar Verticality [0.04 x 5.188"] 0.208 in.

Cross Bar Verticality [0.04 x 2.5"] 0.100 in.

Bar Spacing (Main Bar and Cross Bar) ±0.125 in. center-to-center

NOTE: The information contained herein has been prepared in accordance with generally accepted engineering principles. However, the Bridge Grid Flooring Manufacturers Association is not responsible for any errors that may be contained herein. The user of the information provided herein should check the information supplied and make an independent determination as to its applicability to any particular project or application.