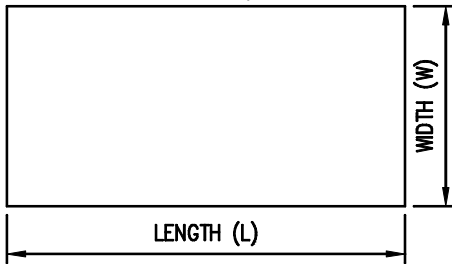


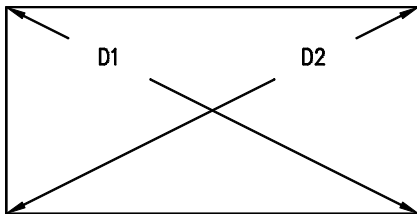


**Bridge Grid Flooring Manufacturers Association  
Fabrication Tolerances for Grid Decks**

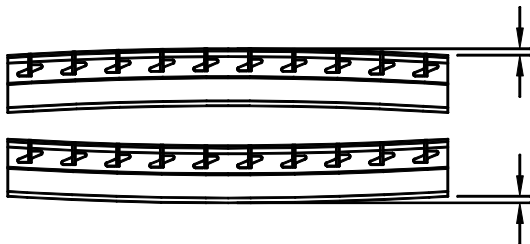
- a. Panel Length =  $\pm 1/4"$  (in direction of grid tee or beam).
- b. Panel Width =  $+0, -1/8"$  (in direction of cross bar or distribution bar).



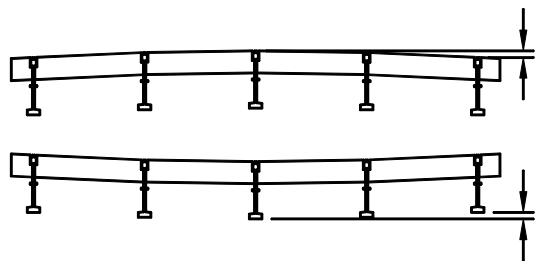
- c. Squareness = one diagonal measurement is  $\pm 1/2"$  of opposite diagonal.



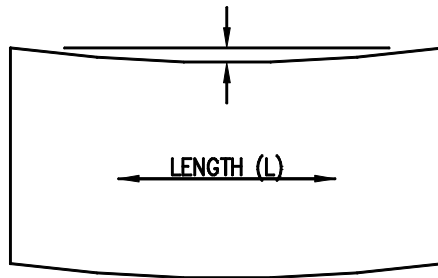
- d. Longitudinal Camber =  $0.003 * \text{Length}$  (in direction of grid tee or beam).



- e. Transverse Camber =  $0.004 * \text{Width}$  (in direction of cross bar or distribution bar).

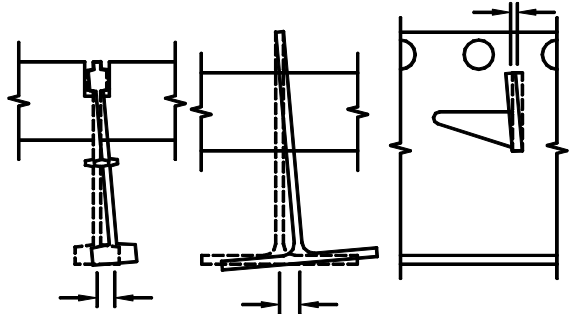


- f. Sweep (side bow) =  $0.025 * L$  (in feet) for panels up to 40'-0", inclusive, and  $0.00065 * L^2$ , for panels greater than 40'-0".



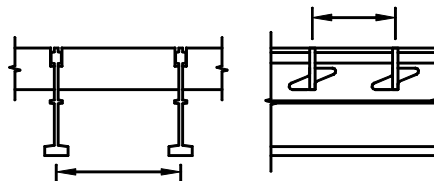
Note: Sweep tolerances applicable for galvanized panels with standard puddle welds connecting components and diagonal grids less than 25' in length. Galvanized diagonal open grid panels not recommended over 25' in length.

- 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

Panel Length [ $\pm 1/4"$ ]  
Panel Width [ $+0, -1/8"$ ]  
Squareness  
Longitudinal Camber [0.003 x 25'-0" x 12 in./ft.]  
Transverse Camber [0.004 x 7'-0" x 12 in./ft.]  
Sweep (side bow) [0.025 x 25'-0"]  
Main Bar Verticality [0.04 x 4.25"]  
Cross Bar Verticality [0.04 x 1.25"]  
Bar Spacing (Main Bar and Cross Bar)

#### Tolerance

24'-11 3/4" to 25'-0 1/4"  
6'-11 7/8" to 7'-0"  
 $|D1-D2| \leq 1/2"$   
0.900 in. crown or sag  
0.336 in. crown or sag  
0.625 in.  
0.170 in.  
None  
 $\pm 0.125$  in. center-to-center

### 2. Exodermic™ Deck System

WT6x7 Main Bars @ 12" centers  
2" Distribution Bars @ 6" centers  
Panel Length = 42'-0"  
Panel Width = 8'-0"

#### Dimension

Panel Length [ $\pm 1/4"$ ]  
Panel Width [ $+0, -1/8"$ ]  
Squareness  
Longitudinal Camber [0.003 x 42'-0" x 12 in./ft.]  
Transverse Camber [0.004 x 8'-0" x 12 in./ft.]  
Sweep (side bow) [0.00065 x (42'-0")<sup>2</sup>]  
Main Bar Verticality [0.04 x 6"]  
Cross Bar Verticality [0.04 x 2"]  
Bar Spacing (Main Bar and Distribution Bar)

#### Tolerance

41'-11 3/4" to 42'-0 1/4"  
7'-11 7/8" to 8'-0"  
 $|D1-D2| \leq 1/2"$   
1.512 in. crown or sag  
0.384 in. crown or sag  
1.147 in.  
0.240 in.  
0.080 in.  
 $\pm 0.125$  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

Panel Length [ $\pm 1/4"$ ]  
Panel Width [ $+0, -1/8"$ ]  
Squareness  
Longitudinal Camber [0.003 x 20'-0" x 12 in./ft.]  
Transverse Camber [0.004 x 6'-3" x 12 in./ft.]  
Sweep (side bow) [0.025 x 20'-0"]  
Main Bar Verticality [0.04 x 5.188"]  
Cross Bar Verticality [0.04 x 2.5"]  
Bar Spacing (Main Bar and Cross Bar)

#### Tolerance

19'-11 3/4" to 20'-0 1/4"  
6'-2 7/8" to 6'-3"  
 $|D1-D2| \leq 1/2"$   
0.720" crown or sag  
0.300" crown or sag  
0.500 in.  
0.208 in.  
0.100 in.  
 $\pm 0.125$  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.