

9.7.2 EMPIRICAL DESIGN**Recommended Deck Thickness****AASHTO TYPE 2**

Girder Spacing Feet	ITD Slab Depth Inches	Min Overhang to center of girder w/continuous barrier Feet	Min Overhang to center of girder w/o continuous barrier Feet
5.0	8.00	2.00	3.33
5.5	8.00	2.00	3.33
6.0	8.00	2.00	3.33
6.5	8.00	2.00	3.33
7.0	8.00	2.00	3.33
7.5	8.00	2.00	3.33
8.0	8.00	2.00	3.33
8.5	8.00	2.00	3.33
9.0	8.00	2.00	3.33
9.5	8.50	2.13	3.54
10.0	8.50	2.13	3.54
10.5	8.50	2.13	3.54
11.0	9.00	2.25	3.75
11.5	9.00	2.25	3.75
12.0	9.50	2.38	3.96
12.5	9.50	2.38	3.96
13.0	9.50	2.38	3.96
13.5	10.00	2.50	4.17

AASHTO TYPE 3

Girder Spacing Feet	ITD Slab Depth Inches	Min Overhang to center of girder w/continuous barrier Feet	Min Overhang to center of girder w/o continuous barrier Feet
5.0	8.00	2.00	3.33
5.5	8.00	2.00	3.33
6.0	8.00	2.00	3.33
6.5	8.00	2.00	3.33
7.0	8.00	2.00	3.33
7.5	8.00	2.00	3.33
8.0	8.00	2.00	3.33
8.5	8.00	2.00	3.33
9.0	8.00	2.00	3.33
9.5	8.00	2.00	3.33
10.0	8.50	2.13	3.54
10.5	8.50	2.13	3.54
11.0	9.00	2.25	3.75
11.5	9.00	2.25	3.75
12.0	9.00	2.25	3.75
12.5	9.50	2.38	3.96
13.0	9.50	2.38	3.96
13.5	10.00	2.50	4.17

9.7.2 EMPIRICAL DESIGN**Recommended Deck Thickness****AASHTO TYPE 4**

Girder Spacing Feet	ITD Slab Depth Inches	Min Overhang to center of girder w/continuous barrier Feet	Min Overhang to center of girder w/o continuous barrier Feet
5.0	8.00	2.00	3.33
5.5	8.00	2.00	3.33
6.0	8.00	2.00	3.33
6.5	8.00	2.00	3.33
7.0	8.00	2.00	3.33
7.5	8.00	2.00	3.33
8.0	8.00	2.00	3.33
8.5	8.00	2.00	3.33
9.0	8.00	2.00	3.33
9.5	8.00	2.00	3.33
10.0	8.50	2.13	3.54
10.5	8.50	2.13	3.54
11.0	8.50	2.13	3.54
11.5	9.00	2.25	3.75
12.0	9.00	2.25	3.75
12.5	9.50	2.38	3.96
13.0	9.50	2.38	3.96
13.5	9.50	2.38	3.96

MODIFIED BULB TEE

Girder Spacing Feet	ITD Slab Depth Inches	Min Overhang to center of girder w/continuous barrier Feet	Min Overhang to center of girder w/o continuous barrier Feet
5.0	Deck can not be designed by the Empirical Design method		
5.5	Deck can not be designed by the Empirical Design method		
6.0	8.00	2.00	1.74
6.5	8.00	2.00	1.94
7.0	8.00	2.00	2.15
7.5	8.00	2.00	2.36
8.0	8.00	2.00	2.57
8.5	8.00	2.00	2.78
9.0	8.00	2.00	2.99
9.5	8.00	2.00	3.19
10.0	8.00	2.00	3.40
10.5	8.00	2.00	3.61
11.0	8.50	2.13	3.82
11.5	8.50	2.13	4.03
12.0	9.00	2.25	4.24
12.5	9.00	2.25	4.44
13.0	9.00	2.25	4.65
13.5	10.00	2.50	4.86

9.7.2 EMPIRICAL DESIGN**Recommended Deck Thickness****STEEL GIRDER W/12" TOP FLANGE**

Girder Spacing Feet	ITD Slab Depth Inches	Min Overhang to center of girder w/continuous barrier Feet	Min Overhang to center of girder w/o continuous barrier Feet
5.00	8.00	2.00	3.33
5.50	8.00	2.00	3.33
6.00	8.00	2.00	3.33
6.50	8.00	2.00	3.33
7.00	8.00	2.00	3.33
7.50	8.00	2.00	3.33
8.00	8.00	2.00	3.33
8.50	8.00	2.00	3.33
9.00	8.00	2.00	3.33
9.50	8.50	2.13	3.54
10.00	8.50	2.13	3.54
10.50	9.00	2.25	3.75
11.00	9.00	2.25	3.75
11.50	9.00	2.25	3.75
12.00	9.50	2.38	3.96
12.50	9.50	2.38	3.96
13.00	10.00	2.50	4.17
13.50	10.00	2.50	4.17

STEEL GIRDER W/15" TOP FLANGE

Girder Spacing Feet	ITD Slab Depth Inches	Min Overhang to center of girder w/continuous barrier Feet	Min Overhang to center of girder w/o continuous barrier Feet
5.00	8.00	2.00	3.33
5.50	8.00	2.00	3.33
6.00	8.00	2.00	3.33
6.50	8.00	2.00	3.33
7.00	8.00	2.00	3.33
7.50	8.00	2.00	3.33
8.00	8.00	2.00	3.33
8.50	8.00	2.00	3.33
9.00	8.00	2.00	3.33
9.50	8.50	2.13	3.54
10.00	8.50	2.13	3.54
10.50	8.50	2.13	3.54
11.00	9.00	2.25	3.75
11.50	9.00	2.25	3.75
12.00	9.50	2.38	3.96
12.50	9.50	2.38	3.96
13.00	9.50	2.38	3.96
13.50	10.00	2.50	4.17

9.7.2 EMPIRICAL DESIGN**Recommended Deck Thickness****STEEL GIRDER W/18" TOP FLANGE**

Girder Spacing Feet	ITD Slab Depth Inches	Min Overhang to center of girder w/continuous barrier Feet	Min Overhang to center of girder w/o continuous barrier Feet
5.00	8.00	2.00	3.33
5.50	8.00	2.00	3.33
6.00	8.00	2.00	3.33
6.50	8.00	2.00	3.33
7.00	8.00	2.00	3.33
7.50	8.00	2.00	3.33
8.00	8.00	2.00	3.33
8.50	8.00	2.00	3.33
9.00	8.00	2.00	3.33
9.50	8.50	2.13	3.54
10.00	8.50	2.13	3.54
10.50	8.50	2.13	3.54
11.00	9.00	2.25	3.75
11.50	9.00	2.25	3.75
12.00	9.50	2.38	3.96
12.50	9.50	2.38	3.96
13.00	9.50	2.38	3.96
13.50	10.00	2.50	4.17

STEEL GIRDER W/24" TOP FLANGE

Girder Spacing Feet	ITD Slab Depth Inches	Min Overhang to center of girder w/continuous barrier Feet	Min Overhang to center of girder w/o continuous barrier Feet
5.00	8.00	2.00	3.33
5.50	8.00	2.00	3.33
6.00	8.00	2.00	3.33
6.50	8.00	2.00	3.33
7.00	8.00	2.00	3.33
7.50	8.00	2.00	3.33
8.00	8.00	2.00	3.33
8.50	8.00	2.00	3.33
9.00	8.00	2.00	3.33
9.50	8.00	2.00	3.33
10.00	8.50	2.13	3.54
10.50	8.50	2.13	3.54
11.00	9.00	2.25	3.75
11.50	9.00	2.25	3.75
12.00	9.00	2.25	3.75
12.50	9.50	2.38	3.96
13.00	9.50	2.38	3.96
13.50	10.00	2.50	4.17

9.7.2 EMPIRICAL DESIGN

Recommended Deck Thickness

¹ Section 9.7.2.4 Design Condition

The ratio of effective length to design depth shall not exceed 18

² Section 9.7.2.4 Design Condition

The ratio of effective length to design depth shall not be less than 6

³ Section 4.6.2.2.2b Interior Beams with Concrete Decks

Table 4.6.2.2.2b-1 limits the maximum deck thickness to 12 inches

⁴ Deck can not be designed by the Empirical Design method