

TABLE 3.23.1 Distribution of Wheel Loads in Longitudinal Beams

Kind of Floor	Bridge Designed for One Traffic Lane	Bridge Designed for Two or more Traffic Lanes
Timber: <sup>a</sup>		
Plank <sup>b</sup>	S/4.0	S/3.75
Nail laminated <sup>c</sup> 4" thick or multiple layer <sup>d</sup> floors over 5" thick	S/4.5	S/4.0
Nail laminated <sup>c</sup> 6" or more thick	S/5.0 If S exceeds 5' use footnote f.	S/4.25 If S exceeds 6.5' use footnote f.
Glued laminated <sup>e</sup> Panels on glued laminated stringers		
4" thick	S/4.5	S/4.0
6" or more thick	S/6.0 If S exceeds 6' use footnote f.	S/5.0 If S exceeds 7.5' use footnote f.
On steel stringers		
4" thick	S/4.5	S/4.0
6" or more thick	S/5.25 If S exceeds 5.5' use footnote f.	S/4.5 If S exceeds 7' use footnote f.
Concrete:		
On steel I-Beam stringers <sup>g</sup> and prestressed concrete girders	S/7.0 If S exceeds 10' use footnote f.	S/5.5 If S exceeds 14' use footnote f.
On concrete T-Beams	S/6.5 If S exceeds 6' use footnote f.	S/6.0 If S exceeds 10' use footnote f.
On timber stringers	S/6.0 If S exceeds 6' use footnote f.	S/5.0 If S exceeds 10' use footnote f.
Concrete box girders <sup>h</sup>	S/8.0 If S exceeds 12' use footnote f.	S/7.0 If S exceeds 16' use footnote f.
On steel box girders	See Article 10.39.2.	
On prestressed con- crete spread box Beams	See Article 3.28.	
Steel grid:		
(Less than 4" thick)	S/4.5	S/4.0
(4" or more)	S/6.0 If S exceeds 6' use footnote f.	S/5.0 If S exceeds 10.5' use footnote f.
Steel bridge Corrugated plank <sup>i</sup> (2" min. depth)	S/5.5	S/4.5

S = average stringer spacing in feet.

<sup>a</sup>Timber dimensions shown are for nominal thickness.

<sup>b</sup>Plank floors consist of pieces of lumber laid edge to edge with the wide faces bearing on the supports (see Article 16.3.11—Division II).

<sup>c</sup>Nail laminated floors consist of pieces of lumber laid face to face with the narrow edges bearing on the supports, each piece being nailed to the preceding piece (see Article 16.3.12—Division II).

<sup>d</sup>Multiple layer floors consist of two or more layers of planks, each layer being laid at an angle to the other (see Article 16.3.11—Division II).

<sup>e</sup>Glued laminated panel floors consist of vertically glued laminated