CI-T 4 (Mar. 2008) Optional shear check for primary support members with curved brackets or shallow brackets

Rule Section

4/2.1.5 Effective shear span of primary support members
4/2.5 Geometrical Properties of Primary Support Members

Description

Procedure for the optional shear check for primary support members with curved brackets or shallow brackets.

Common Procedure

1. General

1. In general, shear check is to be carried out at the end of shear span, Section A, with offered shear depth excluding the bracket part in accordance with 4/2.1.5 and Figure 4.2.8.

2. If the shear requirement is satisfied at this section, then no further shear check is necessary. If a curved bracket or a shallow bracket is fitted as shown in the above figure, and the offered shear requirement is NOT satisfied, then the procedure as per item 3 may be applied.

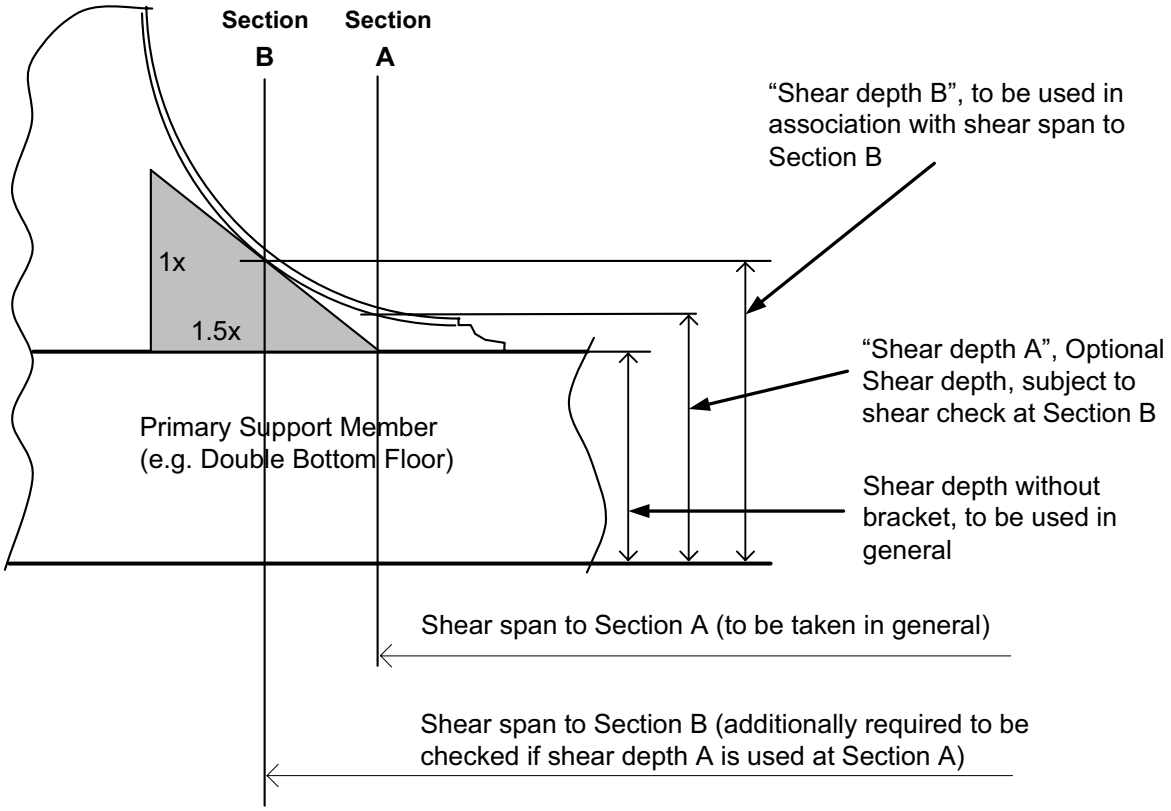
3. The shear requirement is considered to be satisfied if the shear requirement is satisfied by following two additional shear checks concurrently:

(a) Check the shear requirement at Section A with the shear span measured to Section A and the offered shear depth including the bracket part web “shear depth A”.

(b) Check the shear requirement at Section B with the shear span measured to Section B and the offered shear depth including the bracket part “shear depth B”. At this section, the effective shear area may be calculated in accordance with 4/2.5.1.4 with the following formula considering the sloping face plate:

$$A_{w\text{-}net50} = 0.01\, h_n\, t_{w\text{-}net50} + 1.3\, A_{f\text{-}net50} \sin 2\theta \sin\theta$$

Figure
Definition of shear span



Implementation date

This CI is effective from 1 April 2008.