

December 10, 2021

Errata to Page 4-28.

Dapped End Connections – Alternative method for design of dapped end connections

Pages 4-27 to 4-28 in the CPCI 5th Edition Design Manual provide a solved example (Example 4.6) of dapped end connections using an alternative method to strut-and-tie as shown in example 4.5. Although example 4.6 provides a simplified approach using statics to determine the reinforcement required for the dapped end, Figure 4.9.7 (Page 4-28) applies only to non-thin stemmed elements more than 200 mm wide and does not provide guidance or requirements on the placement of reinforcement in thin-stemmed elements. Dapped end reinforcement in thin stemmed members requires careful consideration of bar location, bends and anchorage. If multiple bars are used to provide the required area of steel, the resultant location of multiple nested hooked bars in the stem may not coincide with the design assumptions. Recent research on thin stemmed daps by PCI indicates several dapped end reinforcing schemes can be more effective than C-shaped hooked bars. The alternative anchorage detail at the bottom right of Figure 4.9.7 has been removed, and the anchorage of flexure reinforcement, A'_{sh} , to an end steel plate is shown on the revised detail. As such, the Figure 4.9.7 from CPCI 5th Edition (bottom left) is replaced with the one on the right and the new changes are shown in red. A revised example on designing and detailing dapped ends will be issued by CPCI. In the meantime, the users of the CPCI 5th Edition Design Manual are guided to refer to the PCI 8th Edition Manual - Section 5.5.3 *Dapped-End Bearing*.

