

Use of Inflection Points as Braces

I was told that the use of an inflection point to brace the compression flange of a beam is no longer allowed. Is this true?

Yes. The 1999 AISC LRFD *Specification* was the first edition to introduce strength and stiffness provisions, in Section C3, for beam and column braces. The language prohibiting the use of inflection points as brace points for beams is in Section C3.4 in that *Specification*. These requirements were moved to Appendix 6 in the 2005 and 2010 AISC *Specification*. The language on inflection points can be found in Appendix 6 Section 6.3 (page 16.1-193 of the 13th Edition *Manual*, and similarly on page 16.2-201 in the 14th Edition, *AISC*

equations for the calculation of C_b

C_b in the Commentary to Chapter F to assist in this exact case. One is applicable to beams bent in reverse curvature. There are also citations to references that contain C_b equations for other loading and support conditions not covered in the

