BEARING STRENGTH

In the 3rd Edition *LRFD Manual*, example 10.11 computes the required supported beam web thickness based on bearing strength without eccentricity. Since the current design criteria developed by Astaneh for single-plate shear connections assigns eccentricity to the bolts for shear, this seems somewhat unconservative. Why is eccentricity not considered for the bolts in the bearing check?

Question sent to AISC's Steel Solutions Center

The AISC design criteria does not use eccentricity in bearing checks because single-plates are designed to deform at the bolt holes, thereby eliminating consideration of eccentricity. You do need to consider eccentricity for shear to ensure the bolts can plow, but not for bearing.

Sergio Zoruba, Ph.D. American Institute of Steel Construction Chicago

ASD AND SEISMIC PROVISIONS

I am designing a steel framed building per the 2000 IBC using ASD for steel design, so I am looking at Part III of the 1997 AISC *Seismic Provisions*