

IF YOU'VE EVER ASKED YOURSELF "WHY?" about something related to structural steel design or construction, *Modern Steel Construction*'s monthly Steel Interchange column is for you! Send your questions or comments to solutions@aisc.org.

Weak Axis Bending

I have an H-shape in bending about the weak axis. Chapter F, Section F2 of the AISC manual notes, "Lateral bracing is not required for members loaded through the shear center about their weak axis, or for members of equal strength about both axes." Do we still need to consider the lateral torsional buckling effect if the beam is bent about the weaker axis? Based on my understanding, lateral bracing prevents torsion and lateral deflection only. What is the exact relation between "lateral bracing to prevent torsion" and "lateral bracing to prevent lateral torsional buckling"?

Lateral bracing to prevent torsion is required for members bent about the weak axis. Lateral bracing to prevent lateral torsional buckling is required for members bent about the strong axis.

eel in erchange

Steel Interchange is a forum to exchange useful and practical professional ideas and information on all phases of steel building and bridge construction. Opinions and suggestions are welcome on any subject covered in this magazine.

The opinions expressed in Steel Interchange do not necessarily represent an official position of the American Institute of Steel Construction, Inc. and have not been reviewed. It is recognized that the design of structures is within the scope and expertise of a competent licensed structural engineer, architect or other licensed professional for the application of principles to a particular structure.

If you have a question or problem that your fellow readers might help you solve, please forward it to us. At the same time, feel free to respond to any of the questions that you have read here. Contact Steel Interchange via AISC's Steel Solutions Center:

One East Wacker Dr., Suite 700
Chicago, IL 60601
tel: 866.ASK.AISC • fax: 312.803.4709
solutions@aisc.org