

Note: Except where specifically noted, any mention of AISC documents applies to both the 2010 and 2016 editions. All AISC documents referenced can be found at www.aisc.org/publications.

Local Buckling of Round HSS

Section F8 of the AISC Specification for Structural Steel Buildings (ANSI/AISC 360) addresses the flexural strength of round hollow structural sections (HSS). In Equations F8-2 and F8-4, the ratio, D/t, is not squared. Should it be?

Also, these equations can result in nominal flexural strengths higher than formula F8-1. How can the nominal strength be greater than the plastic flexural strength of the section?

$(b/t)^2,$
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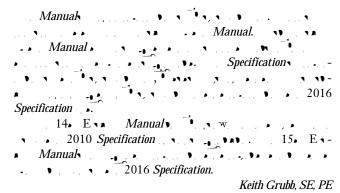
I am an engineer performing connection design for a fabricator. We are having an argument in our office about whether the bolted connections at drag struts must be designed as slip-critical. Can you provide clarification?

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Which Edition of the *Manual*?

How long can engineers continue to use the 14th Edition of the *Manual* now that the 15th Edition is available?



Bonus: Back in April 2012, Keith wrote a SteelWise article describing the AISC Manual Resource Page. This page can now be accessed at www.aisc.org/publications/steel-construction-manual-resources. The Manual Resources for the 15th Edition M ______, are expected to be updated and accessible by the end of 2017.

Keith's original article, which is still relevant half a decade later, can be found in the Archives section at **www.modernsteel.com**.



PJP Groove Weld Symbols

I have several questions about partial joint penetration (PJP) groove welds:

- 1. What is the proper callout for a PJP groove on the contract drawings?
- 2. Must the effective throat be shown in parentheses?
- 3. As the engineer, would I ever specify a value for *S*, the groove depth?
- 4. Should the weld symbols for PJP groove welds look different on engineering drawings and shop drawings?

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3. $(\bullet, \bullet) = W_{\bullet} (\bullet) : G_{\bullet} (\bullet, \bullet)$ for Welding, Brazing, and Nondestructive Examination , , w ------12 -.**-1**. · • 2 · 1.11 . 1-1 AISC Specification. O W., 1 . . 1 . . 1. A 1 8 148. and the second second second 1. 1.1 , . . **)** 11,