

**Revisions and Errata List**  
**AISC Steel Design Guide 4, 2<sup>nd</sup> Edition, 1<sup>st</sup> Printing (Printed Copy)**  
**September 15, 2014**

The following list represents corrections to the first printing (dated April 2004) of the second edition of AISC Design Guide 4, *Extended End-Plate Moment Resisting Joints*.

- 10 In Equation 2.3, the  $f$  at the end of the equation should be deleted.
- 20 In the right column, in the list of variables defined following Equation 3.6,  $F_i$  should be changed to  $F_t$ .
- 22 Equation 3.21 should read:

$$M_{cf} = b F_{yc} Y_c t_{fc}^2$$

- 22 In the right column, revise the first sentence to read: “Therefore, the maximum beam flange design force that can be delivered to the unstiffened beam flange is”.
- 22 Equation 3.24 should be changed to:

$$R_n = C_t (6k_c + 2t_p) N F_{yc} t_{wc}$$

$$Y_p \frac{b_p}{2} h_1 \frac{1}{2d_e} h_2 \frac{1}{p_{fo}} h_3 \frac{1}{p_{fi}} h_4 \frac{1}{s}$$

$$\frac{2}{1} e \frac{p_b}{4} 2 fo \frac{3p_b}{4} 3 fi \frac{p_b}{4} 4 \frac{3p_b}{4} \frac{2}{b}$$

$$D \frac{\frac{0.9}{1.5} F_{yb} t_{wb}}{2(1.392)} = \frac{\frac{0.9}{1.5} (50)(0.375)}{2(1.392)}$$

4.04 sixteenths

USE 5/16 in. Fillet Welds

33 In the left column, under the heading “13. Design Welds”, item ii), the words “bending stress in the beam web” should be replaced with “yield stress of the beam web”.

34 In the left column, under the heading “16. Calculate Local Web Yielding Strength”, the equation for  $N$  should read:

$$N = t_{fb} - 2(\text{groove weld reinforcement leg size})$$

$$0.522 \text{ in.} - 2 \left( \frac{5}{16} \text{ in.} \right)$$

$$1.15 \text{ in.}$$

34 In the left column, under the heading “16. Calculate Local Web Yielding Strength”, the equation for  $R_n$  should read:

$$R_n = C_t (6k_c - N - 2t_p) F_{yc} t_{wc}$$

$$1.0(1.0)[6(1.46) - 1.15 - 2(1.25)](50)(0.525)$$

$$326 \text{ kips} \quad F_{fu} = 396 \text{ kips}$$

Column Stiffeners Required

34 In the right column, under the heading “18. Calculate Web Crippling Strength”, the equation for  $R_n$  should read:

$$R_n = 0.80 t_{wc}^2 \left[ 1 - 3 \frac{N}{d_c} \frac{t_{wc}}{t_{fc}} \right]^{1.5} \sqrt{\frac{E F_{yc} t_{fc}}{t_{wc}}} \quad (3.29)$$

$$0.75(0.80)(0.525)^2 \left[ 1 - 3 \frac{1.15}{14.3} \frac{0.525}{0.860} \right]^{1.5} \sqrt{\frac{29000(50)(0.860)}{0.525}}$$

$$284 \text{ kips} \quad F_{fu} = 396 \text{ kips}$$

C



44 In the right column, under the heading “12. Check Compression Bolts Bearing/Tearout”, the value of  $n_i$  should be changed to 4 and the value of  $n_o$  should be changed to 4.

46 In the left column, under the heading “16. Calculate Local Web Yielding Strength”, the Equation for  $N$  should read:

$$N = t_{fb} [2(\text{groove weld reinforcement leg}) + 0.522 \text{ in.} + 2 \frac{5}{16} \text{ in.} + 1.15 \text{ in.}]$$

46 In the left column, under the heading “16. Calculate Local Web Yielding Strength”, the equation for  $R_n$  should read:

$$R_n = 1.0(1.0)[6(1.46) + 1.15 + 2(0.875)](50)(0.525) = 306 \text{ kips} < f_u = 399 \text{ kips}$$

Column Stiffeners Required