Unified Design of Steel Structures, 3rd Edition, Errata **last updated 11/6/17**

p. 78, Section 3.8, Problem 2. "the 2010 AISC *Specification*" should be "the 2016 AISC *Specification*"

p. 121, Section 4.13, Problem 28. The end of the WT (perpendicular to the load) is also welded.

p. 184, Section 5.12, Problem 32. "A300 Gr. C" should be "A500 Gr. C"

p. 215, Section 6.4.2, Example 6.7

Example 6.7a

Step 6: Select a shape with $\phi M_p \geq 282$ ft-kips from *Manual* Table 3-2. Thus , select

$$\text{W18×40}, \ \phi M_p = 294 \text{ ft-kips}$$

Step 7: Confirm in *Manual* Table 3-10 that the line, either solid or dashed, for the W18×40 is above and to the right of the intersection of $\phi M_n = 169$ ft-kips and L_b = 15 ft. Since this is not the case, ~~Thus, select~~ the W18×40 is not adequate.

Step 8: By trial and error, checking the shapes that are up and to the right of this point in Table 3-10, select

W16×45

with $\phi M_p = 309 \geq 282$ ft-kips

Example 6.7b

Step 6: Select a shape with $M_p/\Omega \geq 188$ ft-kips from *Manual* Table 3-2. Thus, select a

$$\text{W18×40 with } M_p/\Omega = 196 \text{ ft-kips}$$

Step 7: Confirm in *Manual* Table 3-10 that the line, either solid or dashed, for the W18×40 is above and to the right of the intersection of $M_n/\Omega = 113$ ft-kips and L_b = 15 ft. Since this is not the case, ~~Thus, select~~ the W18×40 is not adequate.

Step 8: By trial and error, checking the shapes that are up and to the right of this point in Table 3-10, select

W16×45

with $M_p/\Omega = 205 \geq 188$ ft-kips

p. 262, Section 6.17, Problem 48. "limit deflection" should be "limit live load deflection"

p. 262, Section 6.17, Problem 55. Use 30 ft spans.

p. 272, Section 7.2.2, Flange Local Buckling. "...same as those used in ~~Chapter 6 and~~ Section 7.2.1."

p. 275, Section 7.2.2, Example 7.1. In Step 2, insert

$$\lambda_w = \frac{h_c}{t_w} = \frac{48}{0.375} = 128 > \lambda_{pw} = 3.76\sqrt{\frac{E}{F_y}} = 3.76\sqrt{\frac{29000}{36}} = 107$$

$$128 < \lambda_{rw} = 5.70\sqrt{\frac{E}{F_y}} = 5.70\sqrt{\frac{29000}{36}} = 162$$

before "Thus, this is a noncompact web girder, and the provisions of Section F4 must be followed. The web plastification factor must be determined."

p. 343, Example 8.6a, Step 7 – for the sway amplification, "P_u" should be replaced with "P_{story}"

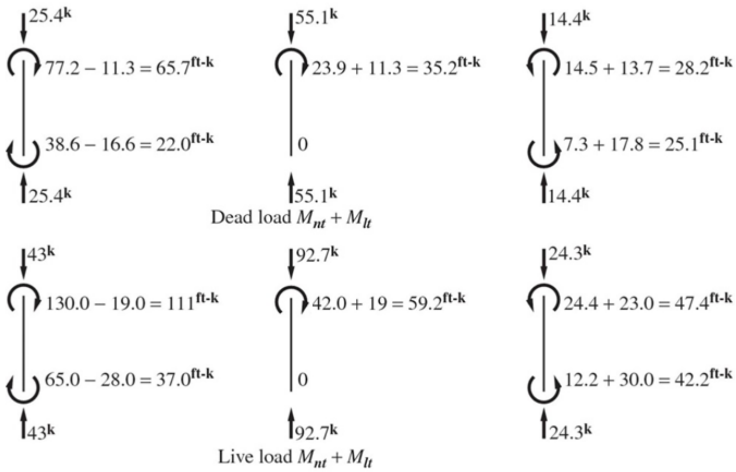
p. 367, Section 8.14, Problem 14. The total story load, P_{story}, is 15 times the individual column load; "an moment frame" should be "a moment frame"

p. 367, Section 8.14, Problem 16. Determine by (a) LRFD and (b) ASD.

p. 368, Section 8.14, Problem 18. “0.5 in.” should be “0.1 in.”

p. 368, Section 8.14, Problem 23. “an LRFD second-order direct analysis” should be “an ASD second-order direct analysis”

p. 369, Figure P8.19. Interior column moments are acting in the same direction; see revised figure:



p. 370, Figure P8.28. For the loads given at the top of the figure, w_{LL} is 1.7 k/ft and w_{DL} is 2.8 k/ft.

p. 386, Example 9.3, Step 6. $M_n = T_s\left(\frac{d}{2}\right) + C_c\left(t - \frac{a}{2}\right) - 2A_{s-c}F_y\left(\frac{x}{2}\right)$

p. 415, Example 9.9, Step 3, EI_{eff} equation should show C_1 rather than C_3

p. 426, Section 9.13, Problems. If needed, assume normal-weight concrete.

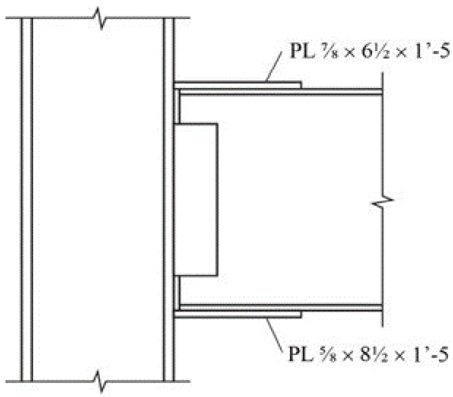
p. 503, Example 11.4a, Step 12. ϕR_n = 55.8 kips

p. 544, Section 11.12, Problem 18. Should have a dead load reaction of 7.5 kips and a live load reaction of 22.5 kips

p. 545, Section 11.12, Problem 41. Assume f'_c = 5 ksi; assume also that the area of the concrete support is the same as the steel bearing plate area.

p. 545, Section 11.12, Problem 42. Assume f'_c = 5 ksi; assume also that the area of the concrete support is 4 times as large as the steel bearing plate area, and assume concentric areas.

p. 556, Figure 12.4(c), below, should be inserted.



(c) Connection geometry

pp. 582, 586, Section 12.4, Examples 12.4a and 12.4b. Step 1, between the two equations, the limit state should be “flange local bending”