Revision and Errata List AISC Steel Construction Manual, 16th Edition (1st Printing)

Date: February 28, 2025

The following list represents corrections to the First Printing of the AISC *Steel Construction Manual*, 16th Edition. The Specifications found in Part 16 of the *Manual* have their own revisions and errata lists.

| Page(s) | Item |
|--------------|--|
| 1-40, 1-42 | Revise "Area" units to in. ² from in. ⁴ |
| 1-134 | In Table 1-21, revise the value under "Web", "h", "Std." from 2-5/64 to 3-5/64 |
| 2-8 | Under Safety Cables, item 2, change "walking surface" to "finished floor." |
| 3-78 | In the S-shape figure on the left-hand side of the top of the page, change W10-S6 to S10-S6 |
| 6-106 | Under Point "D" defining equations: |
| | 1) Revise " M_D " equation as follows (change " Z_{cn} " to " Z_c "): |
| | $M_{D} = F_{y}Z_{s} + F_{yr}Z_{r} + 0.85f_{c}'\left(\frac{Z_{c}}{2}\right)$ |
| | 2) Replace the " Z_{cn} " equation with the following: |
| | $Z_{c} = \frac{h_{1}h_{2}^{2}}{4} - Z_{s} - Z_{r}$ |
| 6-108 | In the lower right box on the page, the moment equation for point B should show " M_B " (not " M_D "). |
| 8-15 | The figure reference in the first sentence of "Elastic Method" should read "Figure 8-5(a)" instead of "Figure 8-6(a)." |
| 8-66 | The title of the table on page 8-66 is changed to: "Prequalified Welded Joints Flare Bevel Flare-V Groove Welds" |
| 9-15 | Add the following limit to Equation 9-42: |
| | $\alpha_r = \frac{1}{\delta} \left[\frac{T_r}{T_c} \left(\frac{t_c}{t} \right)^2 - 1 \right] \underline{\text{with } 0 \le \alpha_r \le 1.0}$ |
| 9-50 to 9-51 | In Table 9-3c, the heading of the first column should be " l_{ev} " (not " l_{eh} "). |
| 10-13 | The second full sentence on the page to be corrected as follows: "Values above the heavy line are governed by the limit state of block shear rupture." |
| 10-36 | In the bottom portion of the second page of Table 10-5, under "Connection Type", it should read: "D (3 bolts)", "E (6 bolts)", and "F (9 bolts)" [instead of "A (2 bolts)", "B (4 bolts)", and "C (6 bolts)"]. |

| Page(s) | Item |
|---------|---|
| 10-49 | In the <i>Dimensional Limitations</i> Section, limitation 4 should reference AISC <i>Specification</i> Table J3.4 (not Table J3.5). |
| 10-98 | The second sentence on the page to be corrected as follows: "Through-plate connections should be used when the HSS wall is classified as a slender element ($b/t \le > 1.40\sqrt{E/F_y}$) |
| | or 33.7 for $F_y = 50$ ksi for rectangular HSS; $D/t > 0.11E/F_y$ or 63.8 for $F_y = 50$ ksi for round HSS) or does not satisfy the punching shear limit state." |
| 10-105 | In the lower right-hand case, the groove weld symbol "S" is changed to "D" and "E" is changed to "S". |
| 12-7 | In the definition for "a" used in Equation 12-4, revise the units from kips to in. |
| 18-24 | "Mill tolerances" should reference page 1-135 rather than 1-127. |
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