Revisions and Errata List AISC Steel Design Guide 32, 1st Printing (Printed and Digital Editions) February 16, 2023

The following list represents corrections to the first printing of AISC Design Guide 32, Modular Steel-Plate Composite Walls for Safety-Related Nuclear Facilities.

Page(s) Item

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In the calculation for accident thermal conditions (Condition B) using Equation A-3 at the bottom of the page, replace GA_{eff} with GA_{cr} :

$$t_{m.acc} = \sqrt{\left(\frac{EI_{eff.acc}}{GA_{cr}}\right) \left[\frac{12}{2(1+\upsilon_m)}\right]}$$

$$= \sqrt{\left(\frac{2.68 \times 10^8 \text{ kip-in.}^2/\text{ft}}{418,000 \text{ kip/ft}}\right) \left[\frac{12}{2(1+0.17)}\right]}$$

$$= 57.3 \text{ in.}$$
(A-3)

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In the first calculation using Equation A-4, replace GA_{eff} with GA_{cr} , update the value of $t_{m.acc}$ in the denominator to 57.3 in., and update the result to 1,420 ksi:

$$E_{m.acc} = \frac{GA_{cr} 2(1 + \upsilon_m)}{t_{m.acc} l}$$

$$= \frac{(418,000 \text{ kip/ft})(2)(1 + 0.17)}{(57.3 \text{ in.})(12 \text{ in./ft})}$$

$$= 1,420 \text{ ksi}$$
(A-4)

In calculation (3)(ii) for accident thermal conditions (Condition B), revise the value of $t_{m.acc}$ in the denominator to 57.3 and revise the result to 148 lb/ft³:

$$\gamma_{m.acc} = \frac{\gamma_s (2t_p) + w_c t_c}{t_{m.acc}}$$

$$= \frac{(490 \text{ lb/ft}^3)(2)(0.500 \text{ in.}) + (145 \text{ lb/ft}^3)(55.0 \text{ in.})}{57.3 \text{ in.}}$$

$$= 148 \text{ lb/ft}^3$$
(A-6)