

Errata:

Note: The errata for the 1st edition of this book have been discontinued.

2nd edition errata:

Corrections made to the 1st printing, incorporated into the 2nd printing:

- Problem #29 Solution – Step 1 – Calculation for minimum area of spiral reinforcement should be $A_s = \rho_s D_c / 4 = (.008) * (4) * (38) / 4 = .304 \text{ in}^2$ or #5 spirals.

Corrections made to the 2nd printing, incorporated into the 3rd printing:

Credit is given to Mary Lou Kutska for finding the errors in Problems #29 & #30. She also had AASHTO look at these problems and verify that the strength reduction factors should be corrected as follows.

The error that was corrected for this printing was the strength reduction factors for Problems #29 & #30. Per AASHTO Section 1.3.2.1, the Extreme Event Limit State strength reduction factors (ϕ) should be 1.0 for all cases except for steel bolts (See AASHTO Section 6.5.5) and concrete column flexure (See AASHTO Section 5.10.11.3 & 5.10.11.4.1b). The strength reduction factor used for these problems was $\phi = 0.9$ for concrete shear per AASHTO Section 5.5.4.2, which is incorrect because the loads are Extreme Event Seismic loads.

- Problem #29 Solution – Step 2 – Calculation for V_s was changed to $[(490/1.0)] - 159 \text{ kips} = 331 \text{ kips}$.
- Problem #29 Solution – Step 2 – Calculation for A_v was changed to $(331 \text{ kips}) * (4") / (2) * (60 \text{ ksi}) * (30") = .367 \text{ in}^2$
- The correct answer for Problem #29 stayed the same even with these corrections.

- Problem #30 Design Data - $V_{ULAT} = 2300 \text{ kips}$ was changed to 2500 kips so the solution would be valid for $\phi = 1.0$ instead of $\phi = 0.9$.
- Problem #30 Answers – Answer (D) was changed to #6 @ 10 vertical, #6 @ 10" horizontal.
- Problem #30 Solution – Step 2 - $\phi = 1.0$ was used instead of $\phi = 0.9$.
- Problem #30 Solution – Step 2 – Calculation of V_r for #5 @ 10" was changed to the following $V_r = (1.0) * [(0.063) * [(\sqrt{3.5}) + (.00258) * (60 \text{ ksi})] * (24") * (356") = 2330 \text{ kips} < 2500 \text{ kips NG}$
- Problem #30 Solution – Step 2 - Calculation of V_r for #6 @ 12" was changed to the following $V_r = (1.0) * [(0.063) * [(\sqrt{3.5}) + (.00306) * (60 \text{ ksi})] * (24") * (356") = 2576 \text{ kips} < 2500 \text{ kips OK}$
- Problem #30 Incorrect Answers – (D) changed to #6 @ 10" vertical, #6 @ 10" horizontal – This answer would be determined if the shear strength reduction ϕ factor = 0.9 was used, instead of the Extreme Event ϕ factor = 1.0.