

ERRATA

Torsion of Rectangular Connection Elements

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Vol. 56, No. 2, 2019

In Example 1 on page 79, the nominal torsional strength is corrected to:

$$T_p = \frac{(0.6)(50 \text{ ksi})(0.750 \text{ in.})^2 (15 \text{ in.})}{2} \left[1 + \frac{15 \text{ in.}}{(2.4)(10 \text{ in.})} \right]$$

$$= 206 \text{ kip-in.}$$

And the available torsional strengths are updated to:

LRFD	ASD
$\phi T_p = (0.90)(206 \text{ kip-in.})$ $= 185 \text{ kip-in.}$	$T_p/\Omega = 206 \text{ kip-in.}/1.67$ $= 123 \text{ kips}$

On page 80, the interaction calculations are revised to:

For LRFD, interaction according to Equation 61 is:

$$\left(\frac{30 \text{ kips}}{507 \text{ kips}} \right)^2 + \left(\frac{42.9 \text{ kip-in.}}{185 \text{ kip-in.}} \right)^2 + \left(\frac{60.3 \text{ kips}}{338 \text{ kips}} \right)^4 + \left[\left(\frac{600 \text{ kip-in.}}{1,900 \text{ kip-in.}} \right)^{1.7} + \left(\frac{60.0 \text{ kip-in.}}{94.5 \text{ kip-in.}} \right)^{1.7} \right]^{0.59} \quad (61)$$

$$= 0.800 < 1.0 \quad \mathbf{o.k.}$$

For ASD, interaction according to Equation 61 is:

$$\left(\frac{20 \text{ kips}}{337 \text{ kips}} \right)^2 + \left(\frac{28.6 \text{ kip-in.}}{123 \text{ kip-in.}} \right)^2 + \left(\frac{40.2 \text{ kips}}{225 \text{ kips}} \right)^4 + \left[\left(\frac{400 \text{ kip-in.}}{1,260 \text{ kip-in.}} \right)^{1.7} + \left(\frac{40.0 \text{ kip-in.}}{62.9 \text{ kip-in.}} \right)^{1.7} \right]^{0.59} \quad (61)$$

$$= 0.802 < 1.0 \quad \mathbf{o.k.}$$

