American
Iron and Steel
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AISI STANDARD

Errata to North American Specification for the Design of Cold-Formed Steel Structural Members 2016 Edition (Reaffirmed 2020) With Supplement 3, 2022 Edition

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Specification: On page 50, revise Eq. F3.2-1, as follows:

F3.2 Direct Strength Method

For the *Direct Strength Method*, the *nominal flexural strength* [*resistance*], $M_{n\ell}$, for *local buckling* shall be determined as follows:

For $\lambda_\ell \le 0.776$

$$M_{n\ell} = \overline{M}_{ne} \sout{M_{ne}} \qquad \text{(Eq. F3.2-1)}$$

For $\lambda_\ell > 0.776$

$$M_{n\ell} = \left[1 - 0.15\left(\frac{M_{cr\ell}}{\overline{M}_{ne}}\right)^{0.4}\right]\left(\frac{M_{cr\ell}}{\overline{M}_{ne}}\right)^{0.4} \overline{M}_{ne} \qquad \text{(Eq. F3.2-2)}$$

where

$$\lambda_\ell = \sqrt{\overline{M}_{ne}/M_{cr\ell}} \qquad \text{(Eq. F3.2-3)}$$

$\overline{M}_{ne}$ = Lesser of M_{ne} and M_y

M_{ne} = Nominal flexural strength [resistance] for *lateral-torsional buckling* as defined in Section F2

M_y = Member *yield moment* in accordance with Section F2.1

$M_{cr\ell}$ = Critical elastic *local buckling* moment, determined in accordance with Appendix 2, including the influence of holes if applicable

For members with holes, $M_{cr\ell}$ shall be determined including the influence of holes and:

$$M_{n\ell} \le M_{ynet} \qquad \text{(Eq. F3.2-4)}$$

where

M_{ynet} = Member *yield moment* of net cross-section

$$= S_{fnet}F_y \qquad \text{(Eq. F3.2-5)}$$

where

S_{fnet} = Net section modulus referenced to the extreme fiber at first yield

F_y = *Yield stress*