The following revisions have been into the 4th Printing (2012) of the 10th Edition of the CISC Handbook of Steel Construction.

**Page** | **Revisions**
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1-a | Replace the second sentence of the first paragraph with the following:
     | The reprint includes CSA S16-09 "Design of Steel Structures" (September 2009), along with Update No. 1 (October 2010) and Update No. 2 (February 2012)."
1-38 | In CSA S16-09 Clause 13.6(e)(ii), replace "when M ≤ M_{ry}" with "when M_u ≤ M_{ry}".
1-52 | In Clause 14.10.4, first sentence, replace "Clause 6.2.1" with "Clause 6.3.1.1".
1-81 | In Clause 19.1.17(b), replace the equation:
     | \[ V_t = \frac{0.025 C_t d}{n_a} \]
     | with:
     | \[ M_t = \frac{0.025 C_t d}{2n} \]
1-118 | In Clause 27.11.3(b), replace "I_E F_a S_a(1.0)" with "I_E F_v S_a(1.0)".
3-4 | In the second paragraph, last sentence, replace "Clause 7.2.3" with "Clause 7.2".
3-39 | In Table 3-21, replace the factored resistance for fillet welds with:
     | Weld metal:
     | \[ V_t = 0.67 \phi_w A_w X_u (1.00 + 0.50 \sin^{1.5} \theta) M_w \]
     | but not greater than:
     | \[ V_t = 0.67 \phi_w A_m F_u \]
     | if over-matched electrodes are used.

Replace footnotes (1) and (2) with:

(1) \( M_w \) is the strength reduction factor for multi-orientation fillet welds. See CSA S16-09 Clause 13.13.2.2. The base metal resistance need not be checked for matching electrodes.

(2) For information on matching electrodes, see CSA S16-09 Table 4.
In Table 3-22, add footnote (4) for BASE METAL:

4. The base metal resistance need not be checked when fillet welds are made with matching electrodes. See CSA S16-09 Clause 13.13.12.12 and Table 4.

Delete the last paragraph.

Replace the first paragraph with:

The coefficients $C$ listed in Tables 3-26 to 3-33 are based on an electrode ultimate strength, $X_u = 490$ MPa (E49XX), and a resistance factor for welded connections, $\phi_w = 0.67$. They are applicable to matching electrode applications only. The base metal resistance has not been included; therefore, the tables are not suitable for over-matched applications. For further information, see CSA S16-09 Clause 13.13.2.2 and Table 4.

Delete the reference for Callele et al (2005)

Near the bottom of the page, replace the paragraph starting with "For the multi-orientation weld..." with:

The factored shear resistance of the transverse weld ($\theta = 90^\circ$) is 2.80 kN/mm (Table 3-25). The base metal check is no longer required when matching electrodes are used. For the two longitudinal welds ($\theta_1 = 0^\circ$), the strength reduction factor for multi-orientation welds (Clause 13.13.2.2),

$M_w = (0.85 + 0 / 600) / (0.85 + 90 / 600) = 0.85$

$V_r = 150 \times 2.80 + 2 (130 \times 1.87 \times 0.85) = 833$ kN > 762 kN

Add the following after the last paragraph:

*Block shear around fillet welds*

Failure modes involving block shear in the plate and HSS walls around the fillet welds do not govern for this example (calculations not shown).

In the first paragraph, replace the last sentence with:

For columns carrying vertical gravity loads only, this connection is required only to hold the parts in line. However, for erection safety, four anchor rods should be used (CSA S16-09 Clause 25.2).

Near the top of the flowchart, replace the expression for $V_r$ with:

$V_r = 0.8 \times 0.9 \times A_w \times F_s$

In the nomenclature near the middle of the page, replace the second occurrence of "$I_{xe}$" with "$I_{ye}$".