



American Institute of Timber Construction

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Errata

Timber Construction Manual, 5th Edition, 1st Printing

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| Page | Revision |
|------|--|
| 29 | Change word “Transverse” in table heading to “Tangential” |
| 62 | First line of 3.4.6 should read, “...not less than 3 in. at <u>from</u> the end...” |
| 64 | 5 th line from bottom should read, “... $F'_c = F_c C_D C_M C_P C_L$ ” |
| 66 | Deflection criteria for “Floor beams, ordinary usage” in Table 3.9 should be $l/360$ for applied load only and $l/240$ for applied load plus dead load. |
| 68 | Revise Equation 3.8a to: $R = \frac{L^2}{8c} + \frac{c}{2}$ |
| 81 | Change definition of F_b^* at bottom of page to: “bending design value multiplied by all applicable adjustment factors except C_{fu} , C_L , and C_V , <u>and</u> C_I .” |
| 83 | Footnote reference should be changed from “Table 3.3.3” to “Table 4.3” |
| 105 | In the last paragraph, change last sentence on page to, “If the end of a beam is beveled (as shown by the dashed line <u>left end of the beam</u> in Figure 4.6), d_e is measured from the inner edge of the support to the bevel.” |
| 108 | Change the reference in the first line of text from “Section 4.2.7” to “Section 4.2.8” |
| 109 | In the equation for moment the length should be squared: $M = \frac{\omega \ell^2}{8} = \frac{(300 \text{ lb/ft} + 240 \text{ lb/ft})(40 \text{ ft})^2}{8}$ |
| 111 | Revise third paragraph to “1. <i>Check shear.</i> From Section 4.2.7 <u>4.2.8</u> , since the distance...” |
| 111 | Revise calculation of shear stress to the following (delete the extra “2” from the denominator): $f_v = \frac{3}{2} \left[\frac{10,800 \text{ lb}}{(5.125 \text{ in.})(17.25 \text{ in.})} \right] = 183 \text{ psi}$ |

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- 132 Equation 4.21 has errors in the third term of the equation (terms in square brackets). The correct equation is as follows:

$$\left(\frac{f_c}{F_c}\right)^2 + \frac{f_{b1} + f_c (6e_1/d_1)[1+0.234(f_c/F_{cE1})]}{F_{b1}[1-(f_c/F_{cE1})]} + \frac{f_{b2} + f_c (6e_2/d_2) \left(1+0.234(f_c/F_{cE2})+0.234 \left[\frac{f_{b1} + f_c (6e_1/d_1)}{F_{bE}}\right]^2\right)}{F_{b2} \left(1-(f_c/F_{cE2}) - \left[\frac{f_{b1} + f_c (6e_1/d_1)}{F_{bE}}\right]^2\right)} \leq 1.0$$

- 132 Add d_1 to the list of terms in the first line of text following Eq. 4.2.1
- 133 Change denominator of second term in Eq. 4.24 to the following (close parentheses): “ $F'_{b1}(1-(f_c/F_{cE1}))$ ”
- 152 6th line from the bottom should read: “ $F_b^* = 2176$ psi (from above)”
- 155 First defined term after “where” should have subscript “s”: P_s
- 159 Change the reference in the first line from “Section 4.2.8” to “Section 4.2.9”
- 159 Change the last term in the denominator to the following (add perpendicular symbol): $(F_b \tan^2 \theta / F_{c\perp})^2$
- 166 Change numerator of equation for f_x from “ $2\omega l^2$ ” to “ $3\omega l^2$ ”
- 183 Equation 4.56 should be:
- $$\Delta_H = \frac{2h\Delta_c}{\ell}$$
- 186 Change 2nd equation at top of page to: $\frac{d_c}{R_m} = \frac{69.2 \text{ in.}}{725.6 \text{ in.}} = 0.0954$
- 217 In definitions of terms, “ m ” should be defined as: “ $m = u - \sqrt{u^2 - 1}$ ”
- 234 Near bottom of page, “ R_e ” should be defined as: “ $R_e = F_{em} / F_{es}$ ”
- 252 Change from “ $k_3 = 10.009$ ” to “ $k_3 = 11.36$ ” near center of page

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252 Change results of yield mode equations as follows:

$$\begin{aligned} Z &= \cancel{5322} \underline{4190} \text{ lb} && \text{mode I}_m \\ &= 7529 \text{ lb} && \text{mode I}_s \\ &= \cancel{3216} \underline{2892} \text{ lb} && \text{mode III}_m \text{ III}_s \\ &= \cancel{4260} \underline{3805} \text{ lb} && \text{mode IV} \end{aligned}$$

Mode III_s governs, giving $Z_{30^\circ} = \cancel{3216} \underline{2892} \text{ lb}$.

252 Change equation, bottom of page to: “ $Z' = Z_{CD} = (\cancel{3216} \underline{2892} \text{ lb})(1.00) = \cancel{3216} \underline{2892} \text{ lb}$ ”

253 Change answer to: “**Answer:** The capacity of the given connection for normal load duration is $\cancel{3216} \underline{2892} \text{ lb}$ (mode III_s; behavior governs).”

255 Font of “p” in Equations 5.14a and 5.14b should be italic, not bold

271 Change 2nd paragraph, last sentence to “The spacing for the minimum reduced design value, ϵR_{min} , will also be obtained from Table 5.15.”

276 Change equation for row tear-out capacity at bottom of the page to:

$$“Z'_{RT} = n \frac{F'_v}{2} A_{\text{crit shear}} = (3)(103.5 \text{ psi})(19.50 \text{ in}^2) = 6055 \text{ lb}”$$

436 For case 12, 2nd term in equation for Δ_x should be “ $-3lx^2$ ”

438 For case 17, denominator in equation for Δ_x should be “ $6EI^3$ ”

451 Equation for deflection should be: “ $\Delta = 13.31 \frac{wL^4}{EI} \text{ in.}$ ”

451 First span on drawing should be labeled “L”

453 Equation for M_y should be “ $M_y = \frac{w}{2}(Ly - y^2 - La)$ ” (“y” should not be subscript in first term in parentheses)