ERRATA

Typing error in bolt flexibility equation in Chapter 4.4
Correct equation is:

$$C = \frac{b}{n} \times \left(\frac{t_1 + t_2}{2d} \right)^a \left(\frac{1}{t_1 E_1} + \frac{1}{nt_2 E_2} + \frac{1}{2t_1 E_b} + \frac{1}{2nt_2 E_b} \right)$$

C = fastener flexibility
d = fastener diameter
E = Young modulus
t = Plate thickness

single shear : n = 1
double shear : n = 2

In case of double shear t_1 is the thickness of the female part and t_2 is the thickness of the male part

bolted metallic joints: a = 2/3   b = 3.0
riveted metallic joints: a = 2/5   b = 2.2
bolted graphite/epoxy joints: a = 2/3   b = 4.2