APPENDIX C—EQUIVALENCE BETWEEN SI-METRIC, MKS-METRIC, AND U.S. CUSTOMARY UNITS OF NONHOMOGENOUS EQUATIONS IN THE CODE

Provision number	SI-metric stress in MPa	mks-metric stress in kgf/cm^2	U.S. Customary units stress in pounds per square inch (psi)
	1 MPa	10 kgf/cm^2	145 psi
	$f_c' = 21$ MPa	$f_c' = 210$ kgf/cm^2	$f_c' = 3000$ psi
	$f_c' = 28$ MPa	$f_c' = 280$ kgf/cm^2	$f_c' = 4000$ psi
	$f_c' = 35$ MPa	$f_c' = 350$ kgf/cm^2	$f_c' = 5000$ psi
	$f_c' = 40$ MPa	$f_c' = 420$ kgf/cm^2	$f_c' = 6000$ psi
	$f_y = 280$ MPa	$f_y = 2800$ kgf/cm^2	$f_y = 40{,}000$ psi
	$f_y = 420$ MPa	$f_y = 4200$ kgf/cm^2	$f_y = 60{,}000$ psi
	$f_y = 550$ MPa	$f_y = 5600$ kgf/cm^2	$f_y = 80{,}000$ psi
	$f_y = 690$ MPa	$f_y = 7000$ kgf/cm^2	$f_y = 100{,}000$ psi
	$f_{pu} = 1725$ MPa	$f_{pu} = 17{,}600$ kgf/cm^2	$f_{pu} = 250{,}000$ psi
	$f_{pu} = 1860$ MPa	$f_{pu} = 19{,}000$ kgf/cm^2	$f_{pu} = 270{,}000$ psi
	$\sqrt{f_c'}$ in MPa	$3.18\sqrt{f_c'}$ in kgf/cm^2	$12\sqrt{f_c'}$ in psi
	$0.313\sqrt{f_c'}$ in MPa	$\sqrt{f_c'}$ in kgf/cm^2	$3.77\sqrt{f_c'}$ in psi
	$0.083\sqrt{f_c'}$ in MPa	$0.27\sqrt{f_c'}$ in kgf/cm^2	$\sqrt{f_c'}$ in psi
	$0.17\sqrt{f_c'}$ in MPa	$0.53\sqrt{f_c'}$ in kgf/cm^2	$2\sqrt{f_c'}$ in psi
6.6.4.5.4	$M_{2,min} = P_u(15 + 0.03h)$	$M_{2,min} = P_u(1.5 + 0.03h)$	$M_{2,min} = P_u(0.6 + 0.03h)$
7.3.1.1.1	$\left(0.4 + \dfrac{f_y}{700}\right)$	$\left(0.4 + \dfrac{f_y}{7000}\right)$	$\left(0.4 + \dfrac{f_y}{100{,}000}\right)$
7.3.1.1.2	$(1.65 - 0.0003w_c)$	$(1.65 - 0.0003w_c)$	$(1.65 - 0.005w_c)$
7.7.3.5(c)	$0.41\dfrac{b_w s}{f_{yt}}$	$4.2\dfrac{b_w s}{f_{yt}}$	$60\dfrac{b_w s}{f_{yt}}$
8.3.1.1	$f_r = 0.41\sqrt{f_c'}$	$f_r = 1.33\sqrt{f_c'}$	$f_r = 5\sqrt{f_c'}$
8.3.1.2(b)	$h = \dfrac{\ell_n\left(0.8 + \dfrac{f_y}{1400}\right)}{36 + 5\beta(\alpha_{fm} - 0.2)} \geq 125$ mm	$h = \dfrac{\ell_n\left(0.8 + \dfrac{f_y}{14{,}000}\right)}{36 + 5\beta(\alpha_{fm} - 0.2)} \geq 12.5$ cm	$h = \dfrac{\ell_n\left(0.8 + \dfrac{f_y}{200{,}000}\right)}{36 + 5\beta(\alpha_{fm} - 0.2)} \geq 5$ in.
8.3.1.2(d)	$h = \dfrac{\ell_n\left(0.8 + \dfrac{f_y}{1400}\right)}{36 + 9\beta} \geq 90$ mm	$h = \dfrac{\ell_n\left(0.8 + \dfrac{f_y}{14{,}000}\right)}{36 + 9\beta} \geq 9$ cm	$h = \dfrac{\ell_n\left(0.8 + \dfrac{f_y}{200{,}000}\right)}{36 + 9\beta} \geq 3.5$ in.
8.3.4.1	$f_t \leq 0.5\sqrt{f_c'}$	$f_t \leq 1.6\sqrt{f_c'}$	$f_t \leq 6\sqrt{f_c'}$
8.6.2.3	$0.17\sqrt{f_c'}$ $0.5\sqrt{f_c'}$	$0.53\sqrt{f_c'}$ $1.6\sqrt{f_c'}$	$2\sqrt{f_c'}$ $6\sqrt{f_c'}$

C Conv. Tables