APPENDIX

G

SOME CONVERSION FACTORS

For older forms used in the literature current SI forms and forms consistent with SI patterns are indicated in the footnotes.

Table G.1 Stress

		$MN\,m^{-2}$†	ksi‡	$N\,mm^{-2}$	$kp\,mm^{-2}$§
1 $MN\,m^{-2}$†	equals	1	0.1450	1	0.1019
1 ksi‡		6.895	1	6.895	0.7031
1 $N\,mm^{-2}$		1	0.1450	1	0.1019
1 $kp\,mm^{-2}$§		9.807	1.4223	9.807	1

†1 $MN\,m^{-2} \equiv 1$ MPa.

‡Initial-letter abbreviations are gradually being replaced by forms more in line with SI forms; kips in^{-2} is now preferred to ksi.

§The kilopond (kp) was used in Europe as a force unit prior to SI forms; 1 kp is equal to 1 kilogram force.

Table G.2 Stress intensity factor, fracture toughness

		$MN\,m^{-3/2}$†	ksi $\sqrt{in}$‡	$N\,mm^{-3/2}$	$kp\,mm^{-3/2}$§
1 $MN\,m^{-3/2}$†	equals	1	0.910	31.62	3.224
1 ksi $\sqrt{in}$‡		1.099	1	34.75	3.542
1 $N\,mm^{-3/2}$		0.03162	0.02878	1	0.1019
1 $kp\,mm^{-3/2}$§		0.3102	0.2823	9.807	1

†1 $MN\,m^{-3/2} \equiv 1$ MPa $m^{1/2}$.

‡In keeping with the second note to Table G.1, the form kips $in^{-3/2}$ is preferred.

§See the corresponding note to Table G.1.