Table 9. Conversion Factors

Acceleration	1 m/s^2	= 4.252 x 10^7 ft/h^2
Area	1 m^2	= 1550.0 in^2
		= 10.764 ft^2
Degree (angle)	1 radian	= 57.471 degree
Energy	1 J	= 9.4787 x 10^{-4} Btu
	1 kcal	= 3.968 Btu
Force	1 N	= .22481 lbf
Heat Flux	1 W/m^2	= .3171 Btu/h•ft^2
Heat Transfer Coefficient	1 W/m^2•K	= 0.17612 Btu/h•ft^2•°F
Heat Transfer Rate	1 W	= 3.4123 Btu/h
Length	1 m	= 39.370 in
		= 3.2808 ft
Mass	1 kg	= 2.2046 lbm
	1 lbm	= 16 oz
Mass Density	1 kg/m^3	= .062428 lbm/ft^3
Pressure and Stress	1 N/m^2	= .020886 lbf/ft^2
		= 1.4504 x 10^{-4} lbf/in^2
		= 4.015 x 10^{-3} inH_2O
		= 2.953 x 10^{-4} inHg
	1.1033 x 10^5 N/m^2	= 1 standard atmosphere
	1 x 10^5 N/m^2	= 1 bar
Temperature	1 K	= (5/9) °R
		= (5/9)(°F + 459.67)
		= °C + 273.15
Temperature Difference	1 K	= 1 °C
		= (9/5) °R = (9/5)°F
Thermal Conductivity	1 W/m•K	= .57782 Btu/h•ft•°F
Thermal Resistance	1 K/W	= .52750 °F/h•Btu
Volume	1 m^3	= 6.1023 x 10^4 in^3
		= 35.314 ft^3
		= 264.17 gal
Volume Flow Rate	1 m^3/s	= 1.2713 x 10^5 ft^3/h
		= 2.1189 x 10^3 ft^3/min
		= 1.5850 x 10^4 gal/min