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# Appendix: Conversion Factors

1 in. = 25.40 mm	<i>Length</i>	1 mm = 0.03937 in.
1 in. = 2.540 cm		1 cm = 0.3937 in.
1 ft. = 0.3048 m		1 m = 3.281 ft
1 mile = 1.609 km		1 km = 0.6214 mile
1 in. <sup>2</sup> = 645.2 mm <sup>2</sup>	<i>Area</i>	1 mm <sup>2</sup> = 0.001550 in. <sup>2</sup>
1 in. <sup>2</sup> = 6.452 cm <sup>2</sup>		1 cm <sup>2</sup> = 0.1550 in. <sup>2</sup>
1 ft <sup>2</sup> = 0.09290 m <sup>2</sup>		1 m <sup>2</sup> = 10.76 ft <sup>2</sup>
1 in. <sup>3</sup> = 16,390 mm <sup>3</sup>	<i>Volume</i>	1 mm <sup>3</sup> = 0.00006102 in. <sup>3</sup>
1 in. <sup>3</sup> = 16.39 cm <sup>3</sup>		1 cm <sup>3</sup> = 0.06102 in. <sup>3</sup>
1 ft <sup>3</sup> = 0.02832 m <sup>3</sup>		1 m <sup>3</sup> = 35.31 ft <sup>3</sup>
1 lb = 0.4535 kg	<i>Force</i>	1 kg = 2.205 lb
1 lb = 4.448 N		1 N = 0.2248 lb
1 kip = 4.448 kN		1 kN = 0.2248 kip
1 ton = 8.896 kN		1 kN = 0.1124 ton
1 lb/in. <sup>2</sup> = 0.07029 kg/cm <sup>2</sup>	<i>Pressure or stress</i>	1 kg/cm <sup>2</sup> = 14.23 lb/in. <sup>2</sup>
1 lb/in. <sup>2</sup> = 6.894 kN/m <sup>2</sup>		1 kN/m <sup>2</sup> = 0.1450 lb/in. <sup>2</sup>
1 lb/ft <sup>2</sup> = 0.04788 kN/m <sup>2</sup>		1 kN/m <sup>2</sup> = 20.89 lb/ft <sup>2</sup>
1 kip/ft <sup>2</sup> = 47.88 kN/m <sup>2</sup>		1 kN/m <sup>2</sup> = 0.02089 kip/ft <sup>2</sup>
1 ton/ft <sup>2</sup> = 95.76 kN/m <sup>2</sup>		1 kN/m <sup>2</sup> = 0.01044 ton/ft <sup>2</sup>
1 lb/ft <sup>3</sup> = 0.1571 kN/m <sup>3</sup>	<i>Unit weight</i>	1 kN/m <sup>3</sup> = 6.366 lb/ft <sup>3</sup>
62.4 lb/ft <sup>3</sup> = 9.81 kN/m <sup>3</sup>		

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