

Length

1 mile	1.60934 km
1 yard	0.9144 m
1 foot	0.3048 m
1 inch	25.4 mm
1 milli-inch(thou)	25.4 μm
1 pinch	0.0254 μm

Area

1 mile ²	2.58999 km ²
1 yard ²	0.8361274 m ²
1 foot ²	0.092904 m ²
1 inch ²	645.16 mm ²
1 acre	0.4046873 ha (hectare)

Volume/Capacity

1 quart	32 oz
1 pint	16 oz
1 yard ³	0.7645549 m ³
1 inch ³	16.38706 cm ³
1 foot ³	28.31685 dm ³
1 US gallon	3.7855412 dm ³
1 US pint	0.4731765 dm ³
1 US fluid oz.	29.57353 cm ³
1 acre-foot	1233.489 m ³
1 US gallon	3.785412 L (litre)

Mass

1 ton	(short 2000 lb)	907.185 kg
	0.907 tonne (metric)	
1 cwt (lb)		45.3592 kg
		100 lb
1 pound(avdp)		0.4535924 kg
1 ounce(avdp)		28.34952 g

Density

1 ton/yard ³	1328.94 kg/m ³
1 lb/yard ³	0.593 kg/m ³
1 lb/ft ³	16.01846 kg/m ³
1 lb/in ³	27.6799 g/cm ³

Force

1 kgf(kilopond)	9.80665 N
	2.204620 lbf
1 lbf	4.44822 N
	0.45359 kgf
1 tonf	9.96402 kN
	1016.05 kgf

Power

1 hp(electric)	746.000 W (J/s)
1 hp(metric)	735.499 W (J/s)
1 hp(UK)	745.700 W (J/s)

Pressure/Stress

1 kg/cm ²	98.0665 kPa
	14.223 lbf/in ²
1 bar	100 kPa
	14.5038 lbf/in ² (psi)
1 mbar	100 Pa
	2.0885 lbf/ft ²
1 mm Hg	133.322 Pa
	0.019434
1mm H ₂ O	9.80665 Pa
	0.001422 lbf/in ² (psi)
1 lbf/in ² (psi)	6.894757 kPa
	0.07031 kgf/cm ²
	68.9476 mbar
1 lbf/ft ²	47.8803 Pa
	0.4788 mbar
1 ton/ft ²	0.9765 kgf/cm ²
1 in Hg	2.98907 kPa
	0.030 kgf/cm ²
	22.3997 mm Hg
	0.48939 psi

Energy

1 kgf·m	9.80665 J
	7.23301 ft lbf
1 therm	105.506 MJ
1 kWh	3.6 MJ
1 Btu	1.05506 kJ

Velocity

1 ft/yr	9.665 x 10 ⁻⁹ m/sec
mi/hr	1.60935 km/hr

Temperature

$$\text{Celsius (C)} = \frac{(F - 32)}{1.8}$$

$$\text{Fahrenheit (F)} = (C \times 1.8) + 32$$

US Standard Measure

1 foot	12 inches
1 yard	3 feet
1 mile	5280 feet
1 foot ²	144 inch ²
1 yard ²	9 feet ²
1 acre	4840 yd ²
1 mile ²	640 acres
1 pint	16 fluid ounces
1 quart	2 pints
1 gallon	4 quarts
1 pound	16 ounces
1 cwt	100 pounds
1 ton	2000 pounds

US Main SI Units & Symbols

Length:	m = meter
Area:	m ² = square meter
Volume:	m ³ = cubic meter
Mass:	kg = kilogram
Density:	kg/m ³ = kilograms per cubic meter
Force:	N = newton
Pressure, stress:	Pa(N/m ²) = pascal
Viscosity:	
Dynamic:	Pas = pascal second
Kinematic:	m ² /s = square meter per second
Energy:	J = joule
Power:	W (J/s) = watt

SI (metric) prefixes

M	= mega, 10 ⁶
k	= kilo, 10 ³
d	= deci, 10 ⁻¹
c	= centi, 10 ⁻²
m	= milli, 10 ⁻³
μ	= micro, 10 ⁻⁶

Mass

wt	= weight
advp	= avoirdupois
lb	= pound
cwt	= hundredweight
oz	= ounce
g or gm	= gram

Volume • Capacity

cu	= cubic
cc	= cubic centimeter
L	= liter
gal	= gallon
pt	= pint
qt	= quart
oz	= ounce
fl.oz	= fluid ounce

Electricity

AC	= alternating current
DC	= direct current
Amp or A	= ampere
Hz	= Hertz (cycle)
∅	= phase
v or V	= volt
H	= henry
w or W	= watt

Dimensions

l	= length
w	= width
h or ht	= height
d	= depth
dia	= diameter
I.D.	= inside diameter
O.D.	= outside diameter

Length

in (")	= inch
ft (')	= foot
yd	= yard
m	= meter

Area

sq	= square
ha	= hectare