

English Conversion Factors & Data

From	To	Multiply By
Measurements		
Cubic Feet	Cubic Inches	1728.0
Cubic Inches	Cubic Feet	0.00058
Cubic Feet	Gallons	7.480
Gallons	Cubic Feet	0.1337
Cubic Inches	Gallons	0.00433
Gallons	Cubic Inches	231.0
Barrels	Gallons	42.0
Gallons	Barrels	0.0238
Imperial Gallons	US Gallons	1.2009
US Gallons	Imperial Gallons	0.8326
Feet	Inches	12.0
Inches	Feet	0.0833
Square Feet	Square Inches	144.0
Square Inches	Square Feet	0.00695
Short Tons	Pounds	2000
Liters	US Gallons	0.2642
Pressure (@ 32°F)		
Inches of Water	Pounds per Square Inch	0.03612
Pounds per Square Inch	Inches of Water	27.686
Feet of Water	Pounds per Square Inch	0.4334
Pounds per Square Inch	Feet of Water	2.307
Inches of Mercury	Pounds per Square Inch	0.4912
Pounds per Square Inch	Inches of Mercury	2.036
Atmospheres	Pounds per Square Inch	14.696
Pounds per Square Inch	Atmospheres	0.06804
Power		
Horsepower	Metric Horsepower	1.014
Horsepower	Feet/Pounds per Minute	33000.0
Horsepower	Kilowatts	0.746
Kilowatts	Horsepower	1.3404
British Thermal Units	Foot/Pounds	778.177
Foot/Pounds	British Thermal Units	0.001285
British Thermal Units	Horsepower Hours	0.0003927
Horsepower Hours	British Thermal Units	2544.1
British Thermal Units	Kilowatt Hours	0.0002928
Kilowatt Hours	British Thermal Units	3415
Watt Hours	British Thermal Units	3.415
Volume-Weight Conversions (Wt. Lbs.)		
1 Cubic Foot of Water		62.4*
1 Cubic Inch of Water		0.0361*
1 Gallon of Water		8.33*
1 Cubic Foot of Air		0.75†
1 Cubic Inch of Steel		0.284
1 Cubic Foot of Brick		112-120
1 Cubic Foot of Concrete		120-140
1 Cubic Foot of Earth		70-120

* at 32°F.
† at 70°F – 29.92" Hg

English to Metric Conversion Factors

From	To	Multiply By
Measurements		
Cubic Feet	Cubic Centimeters	28,317.0
Cubic Inches	Cubic Centimeters	16.387
Cubic Feet	Liters	28.32
Gallons	Liters	3.7854
Cubic Inches	Liters	0.0164
Gallons	Cubic Centimeters	3785.4
Barrels	Cubic Meters	1.0551
Imperial Gallons	Cubic Meters	0.0045461
US Gallons	Cubic Meters	0.0037854
Feet	Meters	0.3048
Inches	Meters	0.0254
Square Feet	Square Meters	0.0929
Square Inches	Square Centimeters	6.452
Short Ton	Cubic Meters	907.2
Liters	Cubic Meters	0.001
Pounds	Kilograms	0.45359
Pressure (@ 32°F)		
Inches of Water	Newton/Sq. Meter	249.082
Pounds per Square Inch	Newton/Sq. Meter	6894.8
Feet of Water	Newton/Sq. Meter	2988.98
Pounds per Square Inch	Kilograms/Sq. Cent.	0.07031
Inches of Mercury	Newton/Sq. Meter	3386.4
Pounds per Square Inch	Dyne/Sq. Cent.	68948.0
Atmospheres	Newton/Sq. Meter	101325.0
Pascal	Newton Sq. Meter	1.0
Power		
Horsepower	Watt	745.7
British Thermal Units	Joule	1054.35
Foot/Pounds	Joule	1.3558
British Thermal Units	Calorie	252.0
British Thermal Units	Watt-Second	1054.35
Watt-Second	Joule	1.0
Calorie	Joule	4.184
Watt Hours	Joule	3600.0
Kilocalorie/Minute	Watt	69.73
Ton (Refrigeration)	Watt	3516.8
BTU/Hour	Watt	0.29288
BTU/In./Hr. Ft. ² °F	Watt/Meter °K	0.14413
BTU/Hr. at 10°F TD	Kcal/Hr. at 6 °C TD	0.252
BTU/Hr. at 15°F TD	Kcal/Hr. at 8 °C TD	0.252
Volume-Weight Conversions (Wt. Kilograms)		
1 Cubic Foot of Water		28.3*
1 Cubic Inch of Water		0.0164*
1 Gallon of Water		3.788
1 Cubic Foot of Air		0.034†
1 Cubic Inch of Steel		0.1288
1 Cubic Foot of Brick		51-54
1 Cubic Foot of Concrete		54-64
1 Cubic Foot of Earth		32-54

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