



Conversion Factors

Converting U.S. Customary Units or Metrics

Apply the following factors when converting U.S. customary units or metrics:

| To convert... | To... | Multiply by... |
|--|--------------|----------------|
| From U. S. Customary Units to Metrics | | |
| inches | millimeters | 25.4 |
| | centimeters | 2.54 |
| | meters | 0.0254 |
| feet | centimeters | 30.48 |
| | meters | 0.3048 |
| yards | meters | 0.91 |
| cubic feet | cubic meters | 0.028314 |
| pounds | kilograms | 0.4536 |
| short ton | metric ton | 0.9072 |
| long ton | metric ton | 1.016 |
| From Metrics to U.S. Customary Units | | |
| millimeters | inches | 0.04 |
| centimeters | inches | 0.3937 |
| meters | inches | 39.37 |
| | feet | 3.281 |
| cubic meters | cubic feet | 35.3145 |
| kilograms | pounds | 2.2046 |
| metric ton | short ton | 1.10 |
| | long ton | 0.9842 |

U.S. Customary Unit and Metric Equivalents

The following table provides the equivalents of metric units and U.S. customary units:

| This U.S. Customary unit(s)... | Equals these metric units... |
|--------------------------------|--------------------------------------|
| one inch | 2.540 centimeters |
| one foot (12 inches) | 0.30479 meters |
| | 30.48 centimeters |
| one cubic foot | 0.028314 cubic meters |
| 35.31 cubic feet | one cubic meter |
| 1 yard (3 feet) | 0.9144 meter |
| one mile | 1609 meters |
| | 1.609 kilometers |
| one pound | 0.4536 kilograms |
| one ton | 1000 kilograms |
| This metric unit(s)... | Equals these U.S. customary units... |
| one centimeter | 0.3937 inches |
| one meter | 39.370 inches |
| | 3.281 feet |
| one cubic meter | 35.3145 feet |
| one kilometer | 1100 yards |
| one kilogram | 2.2046 pounds |
| 1000 kilograms | 2200 pounds |

Temperature Conversion Between Celsius and Fahrenheit

Apply the following factors when converting temperature between Celsius and Fahrenheit:

| To convert... | To... | Multiply by... |
|----------------|------------|-------------------------|
| Celsius (C) | Fahrenheit | $C \times 9 / 5 + 32$ |
| Fahrenheit (F) | Celsius | $(F - 32) \times 5 / 9$ |

Calculating Volume

To calculate the volume of one cubic foot, use this formula:

$$L \times W \times H = \text{volume of one cubic foot}$$