



Concrete Estimating Formulas

CROSS-REFERENCES

Specific Weight

1 pound water = 27.7 cubic inches =
0.1198 gallons

1 cubic foot water = 62.43 pounds

1 gallon water = 8.345 pounds

Length

1 inch = 2.54 centimeters

1 centimeter = 0.39 inches

1 foot = .0305 meter

1 meter = 3.28 feet

1 mile = 1.61 kilometers

1 kilometer = .62 miles

Inches to centimeters – multiply by 2.54

Centimeters to inches – multiply by .039

Feet to meters – multiply 0.305

Meters to feet – multiply by 3.28

Volume

1 fluid ounce = 29.57 milliliters

10 milliliters = 0.34 fluid oz

1 quart = 9.46.35 milliliters

1 liter = 1.06 US quarts

1 gallon = 3.79

Ounces to milliliters – multiply by 29.57

Milliliters to ounces – multiply by 0.034

Quarts to liters – multiply by .095

Liters to quarts – multiply by 1.06

1 cubic inch = 16.39 cubic centimeters

1 cubic foot = 1728 cubic inches = 7.48
gallons

1 cubic yard = 27 cubic feet = 0.7646 cubic
meters

SHAPES

Circle

AREA = Square of Diameter x .7854 or
Radius x 3.1416

CIRCUMFERENCE = Diameter x 3.1416

DIAMETER = Circumference ÷ 3.1416

AREA OF CIRCULAR RING = .7854 x
(Outside Diameter Squared minus
Inside Diameter Squared)

Doubling diameter increases area four
(4) times;

tripling diameter increases area nine
(9) times.

Square / Rectangle

AREA = Length x Width

DIAGONAL = Square Root of Width
Squared + Length Squared.

SIDE (Square Only) = Diagonal x
.7071

Triangle

AREA = Base x ½ of Perpendicular
Height

Cube

AREA OF SURFACE = Square of Side x
6

VOLUME = Cube of Side

DIAGONAL = Side x 1.732

Cylinder

AREA OF CURVED SURFACE =
Diameter x Length x 3.1416

VOLUME = Square of Diameter x .7854
x Length

Cone

AREA OF CURVED SURFACE =
Diameter of Base x Slant Ht x 1.5708

VOLUME = Diameter of Base Squared x
Perpendicular Height x .2618 or Area
of Base x 1/3 Perpendicular Height

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