

# ADHESIVE CALCULATION TABLES

## LIQUID OR PASTE ESTIMATES

Bead Size Diameter	Cubic Inches 1000 Lineal Ft	Gal. per 1000 Lineal Ft	Lin. ft per Gal
1/16"	36.8	0.16	6000
3/32"	82.9	0.36	2700
1/8"	147.3	0.64	1500
3/16"	331.7	1.44	675
1/4"	589.1	2.55	375
5/16"	920.4	3.98	240
3/8"	1325.4	5.74	165
1/2"	2356.2	10.20	95
5/8"	3861.6	15.92	50
3/4"	5300.5	22.95	35
1"	9424.8	40.80	19

## HOT MELT CONSUMPTION CHART

Bead Size	Linear Feet Per Pound	Pounds Per Linear Foot
1/32"	6000	0.00017
1/16"	1500	0.00067
3/32"	850	0.00118
1/8"	500	0.00200
5/32"	300	0.00333
3/16"	210	0.00476
1/4"	115	0.00870
3/8"	50	0.02000

## BEAD LENGTH CHART FOR STRUCTURAL ADHESIVES

Ratio Cartridge	1/4" Wide Half Round Bead	3/8" Wide Half Round Bead	1/2" Wide Half Round Bead	5/8" Wide Half Round Bead
10:1 Ratio 380 ml Per Cartridge	945"	420"	236"	151"
1:1 Ratio 400 ml Per Cartridge	995"	442"	248"	159"
1:1 Ratio 50 ml Per Cartridge	124"	55"	31"	20"
Bulk 10:1 or 1:1	9450" Per Cartridge	4200" Per Cartridge	2360" Per Cartridge	1510" Per Cartridge

## AREA CALCULATIONS

c = circumference  
d = diameter  
r = radius  
a = altitude  
b = base

L = length  
a = area  
s = side  
s1 + s2 = Parallel Sides

Circumference of a circle =	d x 3.1416
Area of a circle =	r <sup>2</sup> x 3.1416
Area of a square =	s <sup>2</sup>
Area of a triangle =	1/2 b x a
Area of a rectangle =	b x a
Surface of a cube =	s <sup>2</sup> x 6
Surface of a cylinder =	(2 x r <sup>2</sup> x 3.1416) + (d x L x 3.1416)
Volume of a cube =	s <sup>3</sup>
Volume of a cylinder =	r <sup>2</sup> x 3.1416 x L

## EQUIVALENTS

1 cubic foot =	1728 cubic inches
1 gallon =	128 ounces
1 gallon =	231 cubic inches
1 cubic foot =	7.48 gallons
1 gallon water =	8.33 pounds
1 pound =	454 grams
1 inch =	2.54 centimeters
1000 milliliters =	1 liter
100 centiliters =	1 liter
2 cups =	1 pint
2 pints =	1 quart
4 quarts =	1 gallon

## Fahrenheit to Centigrade

-60 = -51	60 = 15.6	260 = 127
-30 = -46	70 = 21.1	280 = 138
-40 = -40	80 = 26.7	300 = 149
-30 = -34	90 = 32.2	320 = 160
-20 = -29	100 = 37.8	340 = 171
-10 = -23	120 = 48.9	360 = 182
0 = -18	140 = 60	380 = 193
10 = -12	160 = 71.1	400 = 204
20 = -6.7	180 = 82.2	500 = 260
30 = -1.1	200 = 93.3	600 = 316
40 = 4.4	220 = 104	700 = 371
50 = 10	240 = 116	800 = 427

Degrees Celsius = Multiply .56 (after subtracting 32)  
Degees Fahrenheit = Multiply 1.8 (then add 32)