REFERENCE:
Measurements & Conversions for Gardeners

Bulk Product Conversion

27 Cubic feet = 1 Cubic yard = 1 Ton Avg. Dry Weight

Formula – Sq. ft. x deep divided by 324 = Cubic yards.

Examples:

100 x 2" divided by 324 = .62 Cubic yards

400 x 3" divided by 324 = 3.70 Cubic yards

The price of bulk product is usually half the cost of bagged.

Coverage in Square Feet

1 Cubic Yard Covers:

½" deep covers 648 sq. ft.	4" deep covers 81sq. ft.
1" deep covers 324 sq. ft.	6" deep covers 54 sq. ft
2" deep covers 162 sq. ft.	8" deep covers 40 sq. ft.
3" deep covers 108 sq. ft.	12" deep covers 27 sq. ft.

Bagged Product Conversion

One Cubic Foot = 7.48 Gallons

Example: 20 Gal. Bag divided by 7.48 = 2.7 C.F.

Mulches and Mixes Coverage

3 cubic foot bag			2 cubic foot bag		
Depth of Product	100 Sq. Ft.	1000 Sq. Ft.	Dept of Product	100 Sq. Ft.	1000 Sq. Ft.
2"	6 bags	60 bags	2"	8 bags	80 bags
3"	9 bags	90 bags	3"	12 bags	120 bags
4"	11 bags	110 bags	4"	15 bags	150 bags

NPK Analysis of Typical Organic Fertilizers

N = Nitrogen, P = Phosphorus, K = Potassium.

Alfalfa Meal	(3-1-2)	Fish Emulsion	(5-2-2)	
Bat Guano	(10-3-1)	Cattle Manure*	(.6-.3-.4)	(*Composted)
Blood Meal	(6-7-0)	Horse Manure*	(.6-.6-.4)	(*Composted)
Bone Meal	(0-10-0)	Poultry Manure*	(4-3-1.5)	(*Composted)
Cottonseed Meal	(6-2-1)	Seaweed/Kelp	(.6-.2-2)	
Feather Meal	(12-.5-0)	Worm Castings	(1-.1-.1)	

To lower soil pH one number apply one pound of horticultural sulfur per 1000 sq. ft.

Liquid Measurements

One gallon = 4 Quarts/8 pints	One cup = 1/2 pint/8 ounces/16 tablespoons
One gallon = 16 cups/128 ounces	1/2 Cup = 4 ounces/8 tablespoons/24 teaspoons
One gallon = 256 tablespoons/768 teaspoons	1/4 Cup = 2 ounces/4 tablespoons/12 teaspoons
One quart = 2 pints/4 cups/32 ounces/64 tablespoons	1 Tablespoon = 1/2 ounce/3 teaspoons
One pint = 2 cups/16 ounces/32 tablespoons	

Grass Seed Application Rates

Type of Grass	Rate per 1,000 Sq. Ft.	Rate per Acre
Bermuda (hulled)	2 pounds	88 pounds
Bermuda (unhulled)	3 pounds	132 pounds
Fescue	8-10 pounds	348-440 pounds
Rye (annual/perennial)	6-8 pounds	264-352 pounds

Plant Spacing

Plants per 100 Square Feet
Plants from 4-inch containers

Spacing Inches on center	Plants per 100 Sq. Ft.	Spacing Inches on center	Plants per 100 Sq. Ft.
4	900	18	45
6	400	24	25
8	225	30	18
10	144	36	11
12	100	48	8
16	58	72	3

Plants per 100 Square Feet in a Round Bed
Plants from 4-inch containers

Diameter of Circle	Total Square Feet	Spacing on 4' center	Spacing on 6' center	Spacing on 8' center	Spacing on 10' center
8 ft	50	450	200	100	70
9 ft	64	600	250	125	90
10 ft	79	700	300	150	100
12 ft	113	1000	450	250	150
14 ft	154	1400	600	350	200
16 ft	201	1800	800	450	300
18 ft	254	2300	1000	570	350
20 ft	314	2800	1250	700	450
24 ft	452	4050	1800	1000	850
30 ft	707	6350	2800	1800	1000
36 ft	1017	9150	4050	2250	1450

Spacing

Vines & Groundcovers

Vines - Narrow Twining- 1 to 3 ft apart. Spreading- 4 to 6 ft apart
Groundcovers- up to 1-ft high; slow growers-- 1 to 1 ½ ft apart. Fast growers – 2 to 3 ft apart

Shrubs

Dwarf – 1 to 3 ft tall – 3 feet apart
Small – 3 to 5 ft tall – 4 feet apart
Medium – 6 to 9 ft tall – 6 feet apart
Large – 10 to 25 ft tall – 8 to 12 feet apart

Trees

Full size 30 to 100 ft tall – minimum 25 feet apart.
The tree's drip line should not overhang the roofline.
