

HOW MUCH SOIL DO I NEED?

1 US quart = 0.033420139 cubic foot.

How to calculate the amount of potting soil needed?

1. Convert all dimensions from inches into feet. (3" ÷ 12" = .25 feet)
2. Multiply the three dimensions together (length x width x height) to find the number of cubic feet needed. (...)
3. Divide the cubic feet by the number of cubic feet in a cubic yard (27) to find the number of cubic yards (150 ÷ 27 = 5.56 cubic yards)

How Much Soil Does Your Raised Bed Garden Need?

Most new planters have a tag listing the dimensions of the box, but it takes a bit of math to figure out how much soil is needed to fill it. If the dimensions aren't listed, take a measuring tape and measure the length, width and depth of the box, in inches. Multiply these numbers together to determine the volume of the box in cubic inches. For example, if a planter box measures 20 inches long by 12 inches wide by 6 inches deep, it has a volume of 1,440 cubic inches. But bagged potting soil is sold in cubic feet, so you'll need to know the box's volume in cubic feet. Divide your box measurements by 1,728, which is the number of inches in a cubic foot, to determine the cubic foot volume of your box. In this case, the planter box would be 0.83 cubic feet, or just over three-quarters of a cubic foot.

| Area (Square Feet) | 6" Raised Bed | 12" Raised Bed | 20" Raised Bed |
|--------------------|---------------------|---------------------|---------------------|
| 2 ft x 2 ft | 2 Bags/1 cu ft each | 3 Bags/1 cu ft each | 5 Bags/1 cu ft each |
| 4 ft x 4 ft | 6 | 11 | 18 |
| 4 ft x 8 ft | 11 | 22 | 36 |
| 2 - 4 ft x 8 ft | 22 | 44 | 72 |

If you are not sure how high to make your raised bed, consider what you want to grow. Some plants are deep rooted, while others only require shallow soil to cover their roots. If you plan to grow different kinds of plants as time goes on, choose a bed height that will work for the deepest rooted plants. For example, if you plan to grow herbs this season, but hope to raise some tomatoes next year, you will want to build (or buy) a bed that is 20" high.

Here's a guide to the raised bed height needed to grow some popular vegetables, herbs, and flowers:

What grows well in a 6" high raised bed:

Arugula, leeks, lettuce, onions, radishes, spinach, strawberries, basil, chives, cilantro, dill, mint, oregano, parsley, thyme, marigolds and other annual flowers

What grows well in a 12" high raised bed:

Beans, beets, broccoli, Brussels sprouts, cabbage, cantaloupe, carrots, cauliflower, collards, cucumbers, garlic, kale, summer squash, Swiss chard, turnips, lavender, rosemary, sage, borage, calendula, cosmos, lantana, nasturtiums, snapdragons, sweet alyssum (plus everything in the 6" list)

What grows well in a 20" high raised bed:

Artichokes, asparagus, eggplant, okra, parsnips, peppers, sweet potatoes, tomatoes, watermelon, winter squash, pineapple sage (plus everything in the 6" and 12" lists)

Containers

4 inch pot = 1 pint

5-6 inch pot = 1 quart = 0.03 cu. ft.

8 inch pot = 8 dry quarts = 0.3 cu. ft.

10 inch pot = 3 gallon = 0.46 cu. ft.

12 inch pot = 5 gallon = 16 dry quarts = 0.77 cu. ft.

14 inch pot = 7 gallon = 1 cu. ft.

16 inch pot = 10 gallon = 1 cu. ft.

18 inch pot = 15 gallon = 2.3 cu. ft.

20 inch pot = 18 gallon = 2 cu. ft.

24 inch pot = 25 gallon = 3.8 cu. ft.

30 inch pot = 30 gallon = 4.6 cu. ft.

Hanging Baskets

10 inch = 5.5 dry quarts = 0.21 cu. ft.

12 inch = 7.9 dry quarts = 0.3 cu. ft.

14 inch = 13.9 dry quarts = 0.5 cu. ft.

16 inch = 30 dry quarts = 1 cu. ft.

Bowls

8 inch = 1.9 dry quarts = 0.07 cu. ft.

10 inch = 3.7 dry quarts = 0.14 cu. ft.

12 inch = 5.5 dry quarts = 0.21 cu. ft.

14 inch = 8.4 dry quarts = 0.29 cu. ft.

16 inch = 12.0 dry quarts = 0.46 cu. ft.

18 inch = 18.8 dry quarts = 0.73 cu. ft.

22 inch = 31.2 dry quarts = 1.21 cu. ft.

Oval Planters

12 inch = 3.8 dry quarts = 0.14 cu. ft.

16 inch = 7.3 dry quarts = 0.28 cu. ft.

20 inch = 9.4 dry quarts = 0.36 cu. ft.

Square Planters

12 inch = 11.2 dry quarts = 0.48 cu. ft.

15 inch = 23.0 dry quarts = 0.89 cu. ft.

Window Boxes

24 inch x 6 inch x 6 inch = 11.7 dry quarts = 0.45 cu. ft.

30 inch = 15.6 dry quarts = 0.6 cu. ft.

36 inch x 6 inch x 6 inch = 19.7 dry quarts = 0.76 cu. ft.

Strawberry Pot

5 gallon = 14 dry quarts = 0.54 cu. ft.