Wilcox Nursery & LANDSCAPE

Raised Bed Garden Soil

There is more than one way to build raised bed soil. The combinations suggested here are meant to lay a foundation for many years of planting to come. Investing in your soil will help your plants thrive and get you the best harvest possible. Your soil will become it's own ecosystem, alive with beneficial bacteria and fungi.

Great soil will have a balance of water retention, air flow to roots, and drainage while feeding your plants. Most resources recommend starting with a base of half topsoil then adding amendments including compost, worm castings, pine bark fines, or perlite to create a rich but well-draining soil. Drainage is a major concern during the rainy season while water retention is a worry during the dry season. The goal is to strike a balance so that your soil doesn't get soggy but holds onto water enough to support your plants.



Benefits of a Raised Bed

- Better quality soil that retains water
- Less soil compaction
- Higher yields in smaller spaces
- Water conservation through micro irrigation
- Fewer weeds
- More accessibility



Raised bed size and depth

- Build beds no wider than 4 ft across so you can easily reach to the center (2 feet from each side)
- 12" depth works for herbs, flowers, and lettuces
- 18"-24" depth is needed for root vegetables, cucumbers, zucchini, peppers, and tomatoes

Let's do the math

You can find free volume calculators online. Make sure you select the correct units of measurement.

1. Calculate cubic feet length x width x depth (all in feet)
2. Choose your materials and calculate how many cubic feet of each you need.
    - Hint: multiply total cubic feet by 0.20 for 20%, 0.33 for 33%, 0.50 for 50%
3. Divide the cubic feet needed for the specific material by the volume of the bag (bag size)
4. Example: A 4ft long x 2 ft wide x 1 ft deep = 8 cu. ft. You want 30% compost, 50% top soil, and 20% perlite
    - 30% of 8 cu. ft. = 2.4 cu. ft., 50% of 8 cu. ft. = 4 cu. ft., 20% of 8 cu. ft. is 1.6 cu. ft.
    - 2.4 cu. ft. of compost needed divided by 1.5 cu. ft. sized bags = 1.6 bags
    - 4 cu. ft of topsoil needed divided by 1 cu. ft sized bag = 4 bags
    - 1.6 cu. ft. of perlite needed. Perlite is in 4 cu. ft. bags so 1 bag is required

Recipe for Success

$$$ Creates a rich but well-draining soil that will last with minimal refreshing needed over time

30% COMAND Lawn & Turf
50% Black Kow Top Soil
20% Perlite

$13 per cu. ft.

30% Happy Frog Soil Conditioner
50% Black Kow Top Soil
20% Perlite

$14 per cu. ft.

$$ Balance of value and quality. Some settling and refreshing will be needed over time

50% COMAND Lawn & Turf
50% Black Kow Top Soil

$11.25 per cu. ft.

50% COMAND Lawn & Turf
50% Pine Fines

$9.40 per cu. ft.

$ Best value but will settle and may require more soil in following years

50% Black Kow Top Soil
30% Black Kow or Mushroom Compost
20% Pine Fines

$6.50 per cu. ft

*Cost estimates are based on an 8 cu. ft. bed (4 ft x 2 ft x 1 ft) in fall of 2025. Prices are subject to change.