

BED PREPARATION

Proper soil preparation is a very big factor in the success or failure of ornamental and vegetable gardening. We may all know someone who got by with “Just stick it in the ground and let it grow,” and certainly some plant varieties are very tolerant. But the most successful gardeners look to the soil first of all for their success.

Our two major soil types both have strong advantages and disadvantages. Clay soils will hold for a long time the moisture and nutrients that plants need, but the clay is so tight in structure that roots, air and water can't penetrate it easily; during long rainy periods, roots may rot for lack of air. Sandy soils by the coast allow easy penetration of roots, air, and water, but can't retain moisture or nutrients for long. Both soils are very low in organic matter and high in alkalinity, which can lead to deficiencies of minerals and other nutrients in plants. Good soil preparation corrects the weak points of your soil to allow you faster, healthier plant growth with less maintenance. Please follow these steps to easier, more productive gardening:

1. Weed and Trash Removal

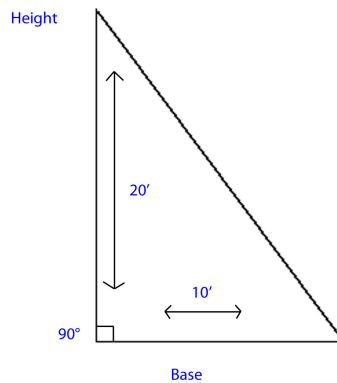
St. Augustine (Carpet) grass and shallow rooted weeds can be removed by scraping with shovel or shallow rototilling. Persistent, deep-rooted weeds like Johnson Grass, Bermuda Grass, and Nut sedge are more easily removed with Ortho GroundClear Vegetation Killer. Construction trash, especially lime, mortar, and concrete chunks, can be detrimental to plants and should be removed.

2. Figure Bed Area

A rough estimate of square footage of bed area is needed to determine the quantity of soil amendments required. The area of a square or rectangle is length x width of any two adjacent sides.
Example: 20ft. x 5ft. = 100 sq. ft. area

The area of a right triangle is .5 x base x height (base and height are the two sides adjacent to the 90 angle.)
Example: .5 x 10ft. x 20ft. = 100 sq. ft. area





Areas of irregular shapes can be adequately approximated for our purposes as either rectangles or a combination of both

3. **Proper Grade**

Finish grade of bed should be at least as high as or preferably higher than adjacent lawn or other surfaces to insure adequate drainage. Addition of soil amendments will add 2" – 3" to the height of existing soil. This additional height can be retained against erosion by mulching and/or use of landscape timbers, etc.

4. **Till, Add Amendments, Rake Out Bed**

Tilling can be done with a spading fork or a shovel, but for medium to large areas, power rototillers are easier and more thorough, and are available at most rental shops. Clay soil will be easiest to work when it is slightly moist. If it is extremely dry, water and wait, if it is wet and extremely sticky, just wait. Till soil to a depth of 8"-12" and break up any clods and remove any trash. Spread a 2" to 3" layer of Back to Nature Compost over bed, at least 1 bag per 12 square feet of bed area.

Thoroughly till bed again, being sure to work deeply; make several passes with spading fork or rototiller during this stage. Rake out bed, removing large clods. Amended soil will be fluffed after tilling, and will settle after numerous waterings, so be sure to account for this settling in raking final grade. Slope bed slightly to drain. You are now ready to plant.