# Keep adding Compost and Mulch



Compost looks like soil. You cannot tell what it once was. That is because it is food scraps, landscape debris and/or manure from livestock, or biosolids (human manure) and other organic matter that already has been mostly consumed and completely decomposed by microorganisms. Good compost brings the elements of healthy soil - oxygen, water and life - in one package.

**How to Use Compost**. Compost can be store-bought or homemade. When compost looks like soil, it can be worked directly into the soil. The more coarse or visible the bits of the compost are, the more likely it is to be used as mulch on top of the soil rather than as an incorporated amendment.

Compost works its magic in several ways. First, the compost itself contains particles that improve soil structure. Next, as compost decomposes in soil it encourages microbes to start the formation of healthy soil aggregates. These resulting aggregates are composed of existing soil particles and decomposed organic matter, which combine to create a more stable and better functioning soil structure like a sponge.



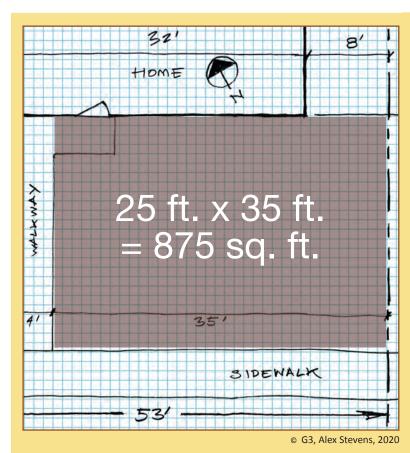
Mulch is organic material that covers soil and looks like the recycled debris that it is. Mulch can be made from organic debris such as not-quite-completely-decomposed compost, grass clippings, leaf litter, and shredded wood trimmings.

Mulch protects soil and plant roots from temperature change, keeps moisture in by slowing evaporation from the surface of the soil and keeps weeds from sprouting by reducing sunlight penetration to the soil surface.

**How to Use Mulch.** Mulch always stays on top of the soil, and is never worked in. Recycled organic debris is the most effective type of mulch, because it builds soil structure over time and provides a durable, protective surface barrier. The smaller the debris and the more mixed leaves with wood chips, the faster it decomposes. When building soil, small and mixed is best. Don't bother with inorganic mulches like rubber, gravel, or decomposed granite in planted areas. These are only applicable in pathways or gathering areas; they don't help grow good soil.



# How much Mulch does your garden Need?



#### **Add Organic Matter**

Add 1-3" of compost to improve the water holding capacity of soil by 30%.

Place 4-6" of mulch on top of the soil to hold in moisture and keep down weeds when planting, and maintain 3" of mulch on beds at all times thereafter.

Keep mulch at least 1-6" away from the stems of plants.

### Calculate the Material Requirement

Start with the Square Footage (SF) of space to be covered and figure out how much you will need for 1 inch of material.

SF x 1 inch ÷ 12" = Cubic Feet (CF) of material needed. (Dividing by 12" turns your inch of amendment into feet of amendment.)

If you need less than 20 CF of material, you can probably make it in a compost pile or purchase it in bags.

If you need more than 25 CF of material, you must convert your materials to Cubic Yards, because you are going to have to have it all delivered in bulk.

 $CF \div 27 = Cubic Yards (CY).$ So,  $25 \text{ CF} \div 27 = \text{ about 1 CY of material needed.}$ 

### **Applied to Our Site Front Yard:**

875 SF x 1"  $\div$  12" = 73 CF for each 1" of mulch.

If you need 3", you multiply the amount needed for one inch by 3 and if you need 6", you multiply the one inch total by 6.

We need 3" of mulch = 73 CF x 3" = 219 CF

For our front yard, that is 219 CF ÷ 27 = about 8 CY of mulch. That sounds like a lot of material! It looks like we will have to buy it in bulk (see p. 62).

#### **Avoid These Mulches Around Plants!**

While these mulches are commercially available, and some are organic materials, they are not recommended. For example, dyed mulches are composed primarily of recycled wood materials such as treated or painted furniture or wood pallets. Shredded redwood or cedar present significant fire hazards. Gravel and rubber are not eligible for the rebate, do not decompose to feed the soil microbes, and raise the temperature of the entire landscape.



"gorilla hair" shredded wood



dyed wood



dyed wood





rubber gravel