



## ORGANIC MULCHES ARE SUSTAINABLE.

Organic mulches contribute to a healthy environment by enhancing the overall appearance of our landscapes, enriching our soils and aiding plant growth. Here are some of the specific benefits that organic mulches provide:

- Enhance the color and texture of surface areas in the landscape.
- Can be used on walking surfaces or other activity areas.
- Add to the ease of landscape maintenance by minimizing weed seed germination.
- Improve soil structure, prevent soil compaction, improve aeration and increase water absorption.
- Prevent soil erosion from wind and rain.
- Conserve soil moisture by minimizing evaporation from the soil surface.
- Protect the soil and root development by regulating temperature fluctuations.
- Contribute to healthy productive soils, which in turn contribute to healthy productive plants.
- Soil organisms break down organic mulches providing nutrients in forms that are readily available for plants and other organisms.

Organic mulches typically found at garden centers, landscape supply centers or from landscape contractors include: bark mulches; ground wood products; pine straw; composted leaves; and composted manure. Organic mulches decompose with time and should be selected with this characteristic in mind.

**Shredded Bark:** Shredded bark comes from hardwood or coniferous trees such as: mixed hardwood trees; red oak; red pine; and cedar. Each has its own color or can be enhanced through staining. Shredded barks may be single, double or triple ground to provide finer textured surfaces. They are long lasting, not easily blown or moved by rain and tend to compact nicely forming a uniform surface.

**Ground Wood Products:** Pallets and other wood products are ground into chips and stained with various colors to provide decorative mulch from recycled materials. Ground wood mulches decompose slowly due to the composition of wood and the size of the particles.

**Hardwood Chips:** Hardwood chip mulch is processed from virgin timber. Textures and colors are not always uniform due to the mix of species harvested. Chips are typically light colored and have a tendency to grey with age. Hardwood chips are relatively long lasting, do not compact and will not be blown away.

**Brush Chips:** Brush chips are a product of tree removal or land clearing. Depending on the season, they may contain leaves, stems and chips of various sizes. Chipper blades have an influence on the size and texture of the brush chips. They are typically used in utility areas in the landscape due to their lack of uniformity and unattractive appearance. However, brush chips may be an economical mulch.

**Pine Straw (pine needles):** Pine straw is collected from pine plantations and is popular mulch in southern states. It is harvested from long needled pines and is a good mulch for acid loving plants. Its light brown color and soft appearance provide uniformity on the ground surface. Pine straw does not compact and is not easily carried away by wind or water. Pine straw may not be readily available in all areas.

**Composted Leaves:** Composted leaves are readily available and provide the added benefits of nutrient cycling. This mulch doubles as a soil amended at a very reasonable price (and often times free) and is especially beneficial when incorporated into the soil profile at the end of a growing season. There is a tendency for the leaves to become matted and may not provide an aesthetically pleasing surface.

**Composted Manure:** Composted manures are rich in nitrogen and other nutrients. Manures will have different nutrient values depending on the animal source. They may have an unpleasant odor and contain weed seeds if not matured long enough or under the right conditions. Temperatures achieved during the composing process help breakdown organic compounds and kill weed seeds. Composted manures are best used as a soil amendment and may not be suitable as surface mulch.

## HOW DO YOU APPLY ORGANIC MULCHES?

Applying organic mulches may vary, but a general rule of thumb is to apply 3-4 inches to the landscape surface. It is important to remember to keep mulch about 6 inches from the trunks of woody trees and shrubs. Trunks that are in direct contact with mulch will stay too moist and may cause damage to the plant. This also discourages rodents living in the soil from chewing the bark of the plants.

When determining the amount of mulch you will need, calculate the area of the space receiving the mulch. Measure the length and width of the space and multiply these dimensions to find the square footage.

$$\text{Area (sq. ft.)} = \text{Length (ft)} \times \text{Width (ft)}$$

Now, multiply the area by the desired mulch depth (ft) to get the volume in cubic feet.  
(2 inches = 0.167 ft; 3 inches = 0.25 ft; 4 inches = 0.33 ft)

$$\begin{aligned} \text{Volume (cubic ft)} &= \text{Area (sq. ft)} \times \text{Depth (ft)} \\ \text{Volume (cubic ft)} &= \text{Length (ft)} \times \text{Width (ft)} \times \text{Depth (ft)} \end{aligned}$$

Be sure to pay attention to the units when using this formula! Bagged mulches are usually sold by the cubic feet; bulk mulches are sold by the cubic yard. To convert cubic feet into cubic yards divide by 27 (the number of cubic feet in one cubic yard).

Example, you are mulching a landscape area that is 15 ft by 10 ft, and you want to apply 3 inches of mulch. (3 inches = 0.25 ft). If you are purchasing bagged mulch, the desired answer should be in cubic feet. If you are purchasing bulk mulch, the desired answer should be in cubic yards.

Volume (cubic ft) = 15 ft x 10 ft x 0.25 ft  
27 cubic ft in a cubic yard

Volume = 37.5 cubic ft  
Volume = 37.5 cubic ft / 27 cubic ft = 1.4 cubic yards