

Mulch for Healthier Soil and Plants



In nature, leaves and twigs fall to the ground, first acting as a protective blanket of mulch and eventually becoming nutrient-rich compost as they decompose. Both stages contribute to healthy soil and plants.

You can establish this healthy process in your own yard by using mulch.

Using Mulch in Your Sustainable Landscape

Mulch can be any material that can be placed on the surface of the soil to conserve moisture and prevent weeds from growing. Table 1 (over) shows a range of mulching material and considerations for their use. The particular area to be mulched also determines how the mulch should be applied:

On Bare-Soil Pathways and Unplanted Areas

Apply four to six inches of mulch on bare-soil pathways and unplanted areas to prevent compaction and erosion.

Under Trees

To prevent grass and weed growth around the base of trees, apply two to four inches

of wood chip mulch at least two feet out from the trunk. Leaving an open space near the trunk will prevent damage from weed-whackers and lawn mowers.

Around Woody Perennials and Shrubs

Apply two to four inches of wood chip mulch to help maintain soil moisture. Adding more — four to six inches deep — will also help prevent weed growth.

Around Vegetables and in Flower Beds

Apply one to two inches of straw or composted manure; this is best for annual plants because it breaks down quickly.

Recycle Green Waste as Mulch

Let falling leaves remain on the soil as mulch. Leaves can be shredded with a lawn mower and collected in a mower bag to be spread under shrubs. This will keep them in place in mulched areas and speed up their decomposition.

Get into a Mulch Routine!

Eventually, mulch will decompose and weed seeds will blow in and grow. Reapplying a one to two inch layer of mulch every six to twelve months (in fall before the rainy season, and in spring) is the key to preventing weeds from establishing. A fresh layer of mulch will keep your garden looking clean and weed free!



Mulch Brings Benefits

Mulching can provide long-term savings on your landscaping investment. Specifically, mulching:

- Reduces weed growth, and weeds that do come up are easier to pull.
- Saves on watering needs by helping soil retain moisture.
- Helps protect plants from soil-borne plant diseases.
- Decomposes over time into compost to feed the soil food web.
- Promotes soil health by moderating temperature, improving drainage, and preventing erosion and compaction.

Mulching Tips

- Keep mulch six inches away from stems and two feet away from trunks to protect against microorganisms that cause plant diseases.
- Keep mulch 12 inches from building foundations to avoid creating a habitat for pests next to buildings.
- Use borders between lawns and mulched beds to prevent grass from creeping into the mulched area. Border material can be concrete, bricks, recycled plastic strips, or stone; the material should be sunk four to six inches and protrude at least one inch.

Check with producer for mulch quality to make sure the mulch is free of invasive weeds or diseased plants.

Table 1 – Mulching Materials and Their Use

Organic Mulches	Considerations
Recycled wood chips	Attractive, sustainable
Bark	Attractive, may be more costly
Straw	Inexpensive but shorter life
Manure (aged)	Enriches soil, good for large areas, not always effective against weeds
Grass clippings from your lawn	Free, enriches soil, may contain weed seeds
Tree leaves from your yard	Free, enriches soil, may blow in the wind
Inorganic Mulches	Considerations
Polypropylene Plastic	Not recommended
Rocks	Very permanent, does not enrich soil, difficult to remove

Table 2 – Calculating a Wood Chip Purchase

Goal	Desired depth of mulch	Amount needed for 100 square feet	Amount needed for 1,000 square feet
Maintain moisture in closely planted perennial beds	2 inches	0.6 cubic yard	6 cubic yards
Control weeds in or between planted and unplanted areas	4-6 inches	1-3 cubic yards	12-19 cubic yards

Additional Resources

In addition to your local garden supply store, you can buy compost and mulch from:

Zanker Road Resource Management Ltd.

705 Los Esteros Road
San José, CA 95134
(408) 263-2385

Z-Best Composting Facility

980 CA Hwy 25
Gilroy, CA 95020
(408) 263-2384

Newby Island Resource Recovery Park

1601 Dixon Landing Road
Milpitas, CA 95035
(408) 432-1234

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Factsheets:

To learn more about compost, plant choices, or other sustainable principles, see the other factsheets in this series at www.sanjoseca.gov/environment.



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