

# DRIP-LINE PROTECTION

## ► USES: UNDER ROOF EAVES, DECKS, STAIRS



Stable vegetation under your roof's eaves will prevent erosion at your home's foundation.

A drip-line is the area below any elevated surface that receives runoff. For roofs, it is the ground below eaves with no gutters. For decks and stairs, it is the area underneath where water drips through the deck boards or stair treads. The drip-line techniques described in this section will help you create a barrier to protect exposed soil and reduce erosion. The protective cover also **SLOWS** runoff and allows it to **SINK** back into the soil. This is critical in areas where runoff-induced erosion could undermine your foundation, support structures and footings or where runoff could flood your crawlspace. Drip-line protection is also a great addition where you have gutters that frequently overflow due to large amounts of debris.

## VEGETATION PROTECTION FOR DRIP-LINES

### Roof Drip-Lines

You can plant and maintain mature vegetation below your roof drip-lines. If there is existing vegetation (such as lawn or a bordered planter bed), simply maintain these areas. Some examples of adequate drip-line vegetation include:

- Healthy grass or lawn that has been established directly up to the foundation of your home
- Plants, shrubs or flower beds that are completely bordered by wood, rock or turf with mulch between the plants to cover bare soils

Choose plants well-suited to your site. See [www.RainScaping.info/resources](http://www.RainScaping.info/resources) for native plant ideas and a list of local native plant nurseries.

### Deck/Stair Drip-Lines

Where adequate sunlight is available, plant hardy ground cover, grasses, or other low growing vegetation to prevent soil erosion. Use drought tolerant plants that do not require supplemental watering once established to prevent additional runoff or water near your structure. If you have structures on your property that are low to the ground and are inaccessible underneath, try planting around the perimeter.

### DO

- Use Western Washington natives or plants adapted to your particular soil and rainfall conditions.
- Keep soil a minimum of 6 inches below siding.
- Prune plants to be 6 inches from your structures.
- Minimize fertilizer use to prevent water pollution.
- Add mulch to bare soils between plantings.

### DON'T

- Plant invasive species such as ivy.
- Allow soil or plants to trap moisture directly against your siding or foundation.
- Leave bare soils uncovered and more vulnerable to weeds and erosion.

## MULCH AND ROCK PROTECTION FOR DRIP-LINES

### Roof Drip-Lines

Wood chip mulch or drain rock can be used to protect soil from erosion and promote infiltration into permeable soils. Install drain rock or mulch under the drip-line at a minimum depth of 3 inches. This treatment must extend 6 inches inside the eave and a minimum of 12 inches beyond the eaves of a single-story roof, 18 inches beyond the eaves of a two-story roof and 24 inches beyond the eaves of a three-story roof. This treatment prevents erosion and allows runoff to infiltrate.

You can use any size of rock you like to achieve the desired aesthetic effect. Consider larger rock (at least 3/4 inch) if you have higher volumes of water such as a roof valley. Be sure to choose washed rock so water can infiltrate better. Installing non-woven geotextile fabric beneath the rock and then bordering the rock with wood or other material is a helpful way to reduce maintenance and increase effectiveness. You also need to ensure that the ground slopes slightly (5 percent) away from the structure for a minimum of 10 feet.

If you have a wet basement/crawl space or mold, place a minimum 3-inch clay layer that extends 10 feet out from your foundation. Slope the surface away from your foundation and cover with mulch and plants. Severe dampness may require a drainage contractor and repairs.

### Deck/Stair Drip-Lines

To protect the soil under elevated decks, stairs and walkways from erosion, install a 3-inch layer of drain rock under the entire footprint of the structure and extend 1 foot past its edge. If you have structures on your property that are low to the ground and are inaccessible underneath, install a 3-inch layer of rock or other mulch approximately 1 foot wide around the outside perimeter of the structures. This treatment will **SLOW** runoff and reduce erosion potential. It is only necessary to install drain rock under and around these structures if there is not adequate vegetation established. Installing non-woven geotextile fabric beneath the rock and then bordering the rock with wood or other material will reduce maintenance, help control weeds and increase effectiveness. You also want to ensure that the ground slopes slightly (1-2 percent) away from the structure for a minimum of 5 feet.

### ✓ Maintenance

Regularly prune plants to keep them 6 inches from your structures. Periodic replacement of plants, drain rock or mulch may be needed. Weeds should be pulled when small and before they go to seed. Inspect your home frequently to ensure that water is not saturating or eroding either the structure or the foundation.

#### DO

- Use existing rock or mulch from your property or rock from a local quarry.
- Make sure rock is washed.

#### DON'T

- Allow runoff to flow toward the house or other structure.



Added wood chip mulch at this roof's drip-line helps prevent erosion and allows runoff to infiltrate.



Added drain rock under this deck's drip-line will **SLOW** runoff and reduce erosion.