

# Compost Blanket



<u>BENEFITS</u>			
	L	M	H
Flow Control	████	██	██
Erosion Control	████	██	██
Sediment Control	██	██	██
Runoff Reduction	████	██	██
Flow Diversion	██	██	██

**Description:** A 1 to 4 inch surface application of compost/mulch or a blend of both to protect areas with erosive potential.

**Typical Uses:** Used to protect bare soil surfaces from raindrop impact, prevent/reduce sediment loss, reduce surface water runoff, and promote seed growth for establishment of ground cover.

**Advantages:**

- Immediately protects 100% of the ground surface upon application.
- Conforms to any terrain.
- Reduces rill erosion and the volume of stormwater runoff.
- Allows for natural infiltration and percolation of water into underlying soil.
- Can be combined with seed and placed in a one-step process with pneumatic blower truck.
- Can be used when projects have begun too late in the growing season to establish erosion control vegetation.
- Has high water retention properties, thereby reducing watering requirements during dry weather periods.
- Can be used in areas with poor quality soils (low organic matter) that do not support vigorous growth of vegetation.

**Limitations:**

- Not suitable for areas of concentrated water flow unless used in conjunction with other control measures that slow velocities.
- Erosion control benefit of compost is eliminated if material is incorporated (tilled) into soil.
- Susceptible to wind erosion.

**Longevity:** One year; longer if seeding combined

**SUDAS Specifications:** Refer to [Section 9040.2.01](#) and [3.05](#)

## A. Description/Uses

A compost blanket consists of a layer of compost/mulch or a blend of both placed on denuded areas to help prevent initiation of runoff and erosion. Apply compost blanket to a depth of 2 to 4 inches, depending on slope steepness. When a pneumatic blower truck is utilized, a compost blanket can be installed and seeded simultaneously for permanent vegetation establishment.

A compost blanket is both an erosion control and stormwater quality practice. Compost blankets stabilize the soil, prevent splash, sheet, and rill erosion, and remove suspended soil particles and contaminants from water moving offsite and into adjacent waterways or stormwater conveyance systems.

## B. Design Considerations

Compost quality and screen size is important. Coarse compost tends to provide more protection than fine material. The coarser compost includes particles which are large enough to prevent them from being washed away or displaced by the rainfall. Fine compost particles can be dislodged and washed away, eliminating any potential protection.

For full erosion control benefits, compost should not be incorporated (tilled) into underlying soil.

In order to prevent water from sheeting between the compost blanket material and soil surface on a slope, a minimum 3-foot wide band of blanket material should be placed behind the top of the slope. Alternatively, a compost berm or filter sock may be placed at the top of the slope.

Compost can be seeded for temporary and/or permanent vegetation during or immediately after installation. For vegetated compost blankets (pneumatic seeding), a maximum blanket depth of 2 inches is recommended. Deeper compost depths can prevent the roots of the vegetation from growing down into the underlying soil. This process is important in developing long term slope stability.

With turf or sod, compost can replace topsoil requirements; 1 inch of compost is equivalent to 3 inches of topsoil.

## C. Application

Application rates should be between 2 to 3 inches in depth (270 to 405 cubic yards per acre) with greater depths for steeper slopes.

**Table 7E-2.01: Compost Blanket Thickness on Slopes**

Slope	Compost Thickness (inches)
2:1 (see comments below)	4
3:1	3
4:1	2

Compost blankets may be used to stabilize steep slopes (up to 2:1) if additional measures are provided. For these severe applications, the slope length should be reduced through the installation of silt fence, filter berms or filter socks. A maximum spacing of 25 feet between slope reduction practices should be provided. In addition, lightweight mulch control netting should be placed under the compost and anchored into place. These additional practices help stabilize the blanket and prevent the material from sliding down steep grades.

## **D. Maintenance**

The disturbed ground under the blanket should be checked in spots for failure. Common failures, due to concentration of water flows or the improper type of compost used, will result in splash, sheet or rill erosion of the underlying soil. Damage should be repaired immediately to prevent further erosion.

## **E. Time of Year**

Compost blankets are effective on a year-round basis. Unlike other erosion control measures, installation is possible when the ground is wet or frozen, especially if a pneumatic blower truck is utilized for placement.

## **F. Regional Location**

The availability of compost blankets are affected by regional location, due to adequate supplies of compost and composting facilities.