

2.10 COMPOST FILTER TUBES



Figure 2.24. Compost filter tube (Source: SUDAS Design Manual)

Overview

Description: A mesh sock filled with a blend of compost materials that is used to slow flow velocity, capture and degrade chemical pollutants, and trap sediment.

Problem identification: Sloping and disturbed areas require multiple devices to divide the length of the slope into short sections and reduce the flow quantity and velocity of the water. Inlets require methods for collecting sediment before sediment reaches the inlet openings.

Design purpose: Multiple purposes, including inlet protection, slope erosion control, perimeter control, and flow diversion.

Installation: The particle size must be selected in light of the soil gradations that are to be retained by the device. These devices should be installed along the contour, as with silt fences. Do not place on slopes in excess of a 10% grade. Spacing should be determined to allow the bottom of the next higher tube to be seen from the one being installed below. Place at least five feet from the toe of a slope to provide for the formation of a sediment basin. The tubes should be staked and additional compost placed in front of each tube to enhance the ability to collect sediment.

Tubes placed on slopes should be spaced in accordance with Table 2.5.

Table 2.5. Maximum compost tube spacing

Slope	Tube diameter (ft)	
	8"	12" or greater
0% - 2%	75'	125'
2% - 5%	50'	75'
5% - 10%	30'	50'

When used for inlet protection, the tube should be placed in front of the inlet opening and staked behind the curb to hold the tube in place. The tube should be use in conjunction with a mat over the surface openings to prevent sediment from entering the intake.

Maintenance/inspection: Tubes should be inspected immediately after rainfall. Sediment should be removed when the height of the sediment reaches one-third of the tube height. The tube must be replaced or expanded if breached or water finds ways around the tube.

Design life: Six months.

Estimated cost: Varies with the availability of the product.