

Source: Caltrans Construction Site Best Management Practices Manual, 2003.

Description

A sediment barrier composed of permeable geotextile filter fabric attached to supporting posts. Wire fencing may provide additional support. The silt fence intercepts the flow of sediment laden runoff, which filters the water and traps the sediment.

Applications

- Along the site perimeter.
- Around temporary stockpiles.
- Along streams and channels.
- Below the toe of cleared or erodible slopes.
- Downslope of exposed soil areas.

Installation and Implementation Requirements

- Primarily use where sheet flow occurs.
- Install silt fence along or parallel to contours.
- Ends of silt fence shall be turned uphill and the geotextiles should be overlapped.
- Silt fence posts shall be driven 14 inches minimum into the trench (see silt fence detail) and the geotextile filter fabric shall be embedded a minimum of 6 inches vertically into the ground or install according to manufacturer's recommendation.

Limitations

- Avoid installing silt fence on slope. However if silt fence is placed on slope, fence posts may need additional embedment.
- Do not install in streams, channels, or areas of concentrated flow.
- Do not use to divert flow.

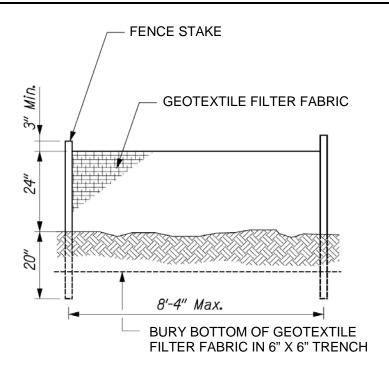
Silt Fence or Filter Fabric Fence

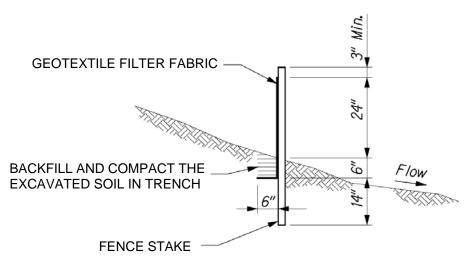
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Inspections and Maintenance

- Inspect weekly during dry periods as well as within 24 hours of any rainfall of 0.5 inch or greater which occurs in a 24-hour period and daily during periods of prolonged rainfall.
- Repair or replace damaged fence or posts.
- Remove accumulated sediment when depth reaches 1/3 the barrier height.

Silt Fence or Filter Fabric Fence





NOTES:

- 1. THE FILTER FABRIC SHALL BE A MINIMUM OF 36 INCHES WIDE.
- 2. IF SILT FENCE IS OBTAINED FROM MANUFACTURER AS A PACKAGE (I.E. FABRIC ATTACHED TO POST) THE MANUFACTURER'S INSTALLATION INSTRUCTION SHALL BE ADHERED TO.
- 3. FENCE STAKES MAY BE WOOD OR METAL, MUST BE CAPABLE OF SUPPORTING ANTICIPATED LOADS.

SILT FENCE NTS

Source: Water Pollution and Erosion Control Details, Fort Weaver Road Widening Vicinity of Aawa Drive to Geiger Road, Depart of Transportation Highways Division, 2007.