



Post-Fire

The purpose of a silt fence is to retain the soil on disturbed land until the activities disturbing the land are sufficiently completed to allow revegetation and permanent soil stabilization to begin. A silt fence is a temporary sediment barrier made of porous fabric. It's held up by wooden or metal posts driven into the ground, so it's generally inexpensive and relatively easy to remove.

Site selection

When installing a silt fence, first choose the appropriate place to set up the fence by considering site terrain and slope, water flow, and projected soil disturbance.

Installation

Set the silt fence perpendicular to the slope of the land, curving the fence inward towards slope.

Place the silt fence spaced away from the toe-of-slope, leaving enough room to accumulate sediment and to perform work.

Dig a six to eight-inch trench (either V shaped or flat bottomed) directly up-slope or upstream of the silt fence. On the downstream edge, drive in wood stakes, rebar or steel stakes at least 1 foot down into the sediment. The stakes or rebar should be long enough to accommodate the trench depth and height of the silt fence fabric.

Run a continuous length of fabric along the inside of the stakes and secure with nails, staples or zip ties allowing at least 1 foot to line the trench. Extend termination points uphill one full panel length.

Use continuous fabric piece for the silt fence. If one is unavailable and a joint is necessary, overlap the fabric at least the width of one stake spacing and secure in place using a wooden lath, staples, zip ties or nails.

Cover the trench with backfilled and compacted soil, gravel, or rock.

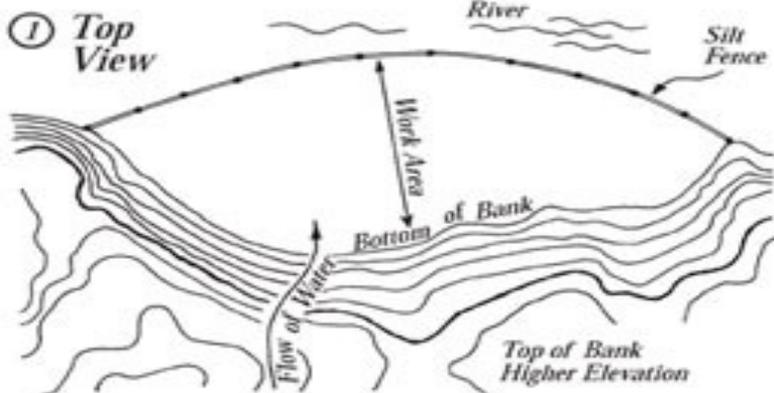
Maintain the fence by checking the fabric for damage, failure of fence to withhold sediment, and damage to posts. Install additional back-up silt fence if necessary.





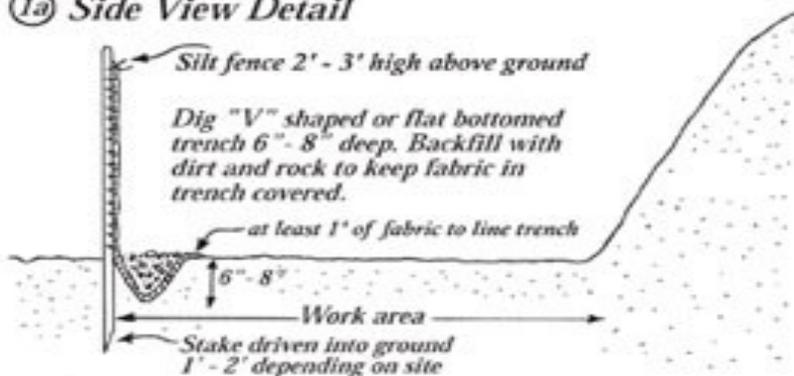
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Silt Fence Installation Step-by-Step



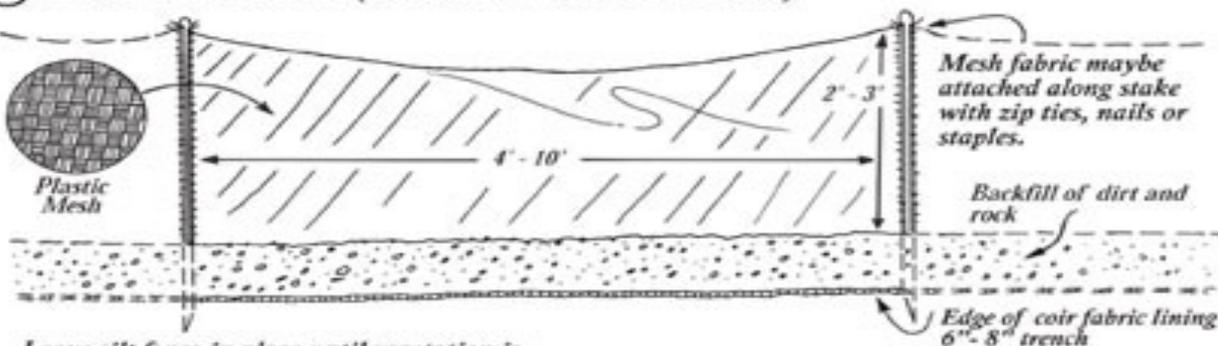
Prepare a stormwater pollution prevention plan. Set up silt fences according to terrain, soil and run-off consideration. Prevent soil migration by decreasing soil exposure, steep unvegetated slopes and construction time. Revegetate as soon as possible in the SAME SEASON.

1a) Side View Detail



Monitor integrity of installed silt fence and remove sediment before it reaches 1/3 the height of the silt fence. It is especially important to monitor during and after rain and break-up events.

1b) Front View Detail (One Section of Silt Fence)



Leave silt fence in place until vegetation is established and sediment is stabilized.



Information courtesy of United States Environmental Protection Agency (USEPA) (<https://www3.epa.gov/npdes/pubs/siltfences.pdf>) and Alaska Department of Fish and Game (<http://www.adfg.alaska.gov>).

Looking for more resources? Visit the Sonoma RCD website at <http://sonomarc.org/resources/fire-recovery/>.