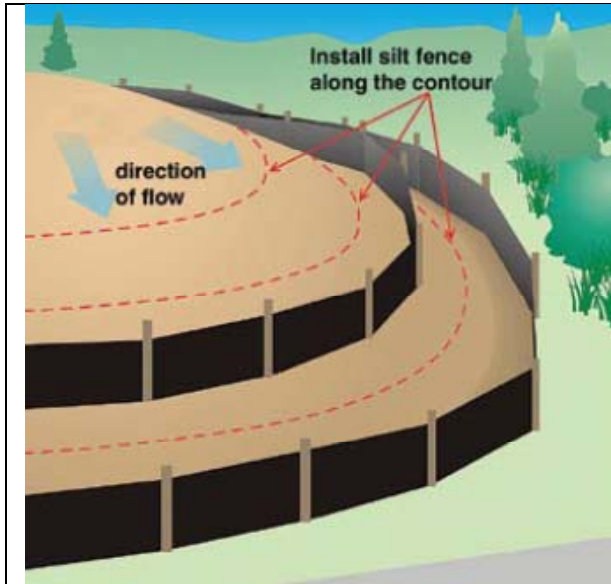
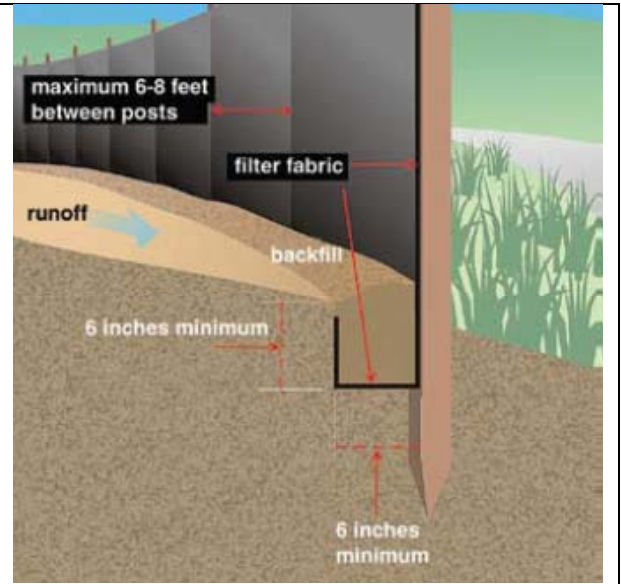


Corinna Township
Silt Fence/Other Sediment Barriers (Perimeter Protection)

A silt fence or sediment filter (such as a fiber roll or wattle) is a down-gradient barrier intended to intercept sheet flow runoff and settle out sediment upslope while allowing runoff to filter through.



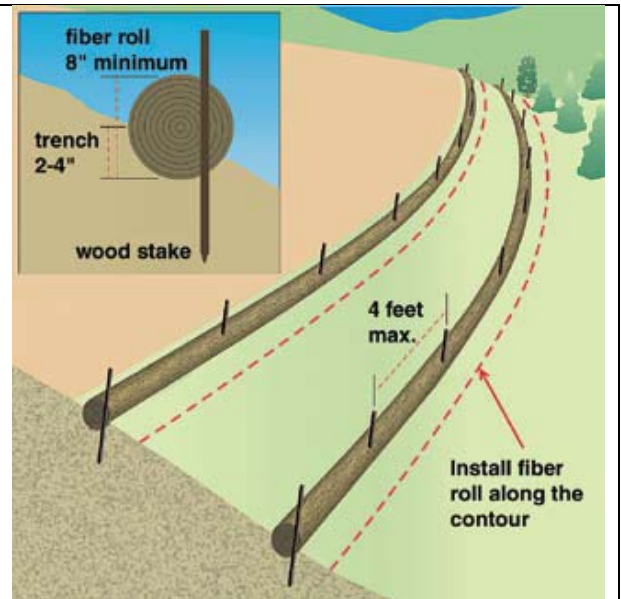
Silt fence installed along the contour of a hill ▲



Detail of proper silt fence installation ▲



"J-hooks" used during silt fence installation ▲



Fiber roll installation and detail ▲

Installation:

- The silt fence must be installed along the contour (on a level horizontal plane).
- When installed one end to another, fencing should be overlapped at least 6 inches.

- The height of the fence posts should be 16-34 inches above the original ground surface with spacing between posts no greater than 6 feet (10 feet if extra-strength fabric).
- Fence posts should be placed at least 12 inches deep into the ground (6 inches below the trench).
- The ends must be turned up (J-hooks) to help pond the water behind the filter.
- The filter must be trenched-in with the stakes on the downhill side (trench must be 6 inches deep by 6 inches wide). Failing to trench in the fence will allow water to run underneath and render it useless.
- Where slopes are especially steep or heavy flow is expected, the fence should be reinforced with wire mesh behind the filter fabric.
- Sediment barriers should not be used as check dams or where concentrated flow is expected.
- Soil should be compacted after trenching.
- The stakes used to hold the silt fence should be wood or metal and must be placed on the down-slope side (so the weight of any retained water will push the fence into the post – not away from it).
- A silt fence is not adequate protection for steep, long slopes. The drainage area must be no greater than ¼ acre per 100 feet of fence; i.e., silt fences must be spaced 60-110 ft. apart on long slopes.
- Cold Weather: Silt fences should be installed prior to winter freeze up. If this is not possible, other methods (compost berms, logs and rolls, fiber rolls, etc...) should be used and extra inspection and maintenance will be necessary.

Maintenance/Inspection

- Silt fences should be inspected after every rainfall, or every few days, to ensure it has not become damaged or filled with sediment.
- Sediment must be removed when it reaches 1/3 the height of the barrier, or when noticeable strain on the fence is occurring.
- Torn or degraded silt fence fabric must be replaced immediately.
- The maximum life expectancy for synthetic fabric silt fences is about 6 months, depending on the amount of rainfall and runoff.

Resources:

- Minnesota Stormwater Manual:
http://stormwater.pca.state.mn.us/index.php/Main_Page
- Training videos for proper use and installation of a variety of erosion and sediment control practices: www.mnerosion.org/videos.
- Fact sheets for various Stormwater Best Management Practices:
www.crowwing.us/index.aspx?NID=708.