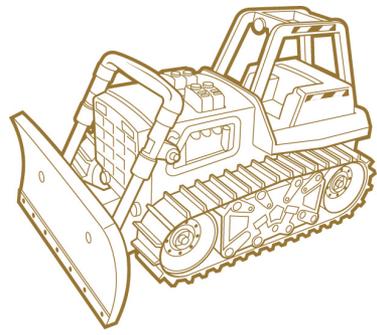


Silt Fences



Where are they used?

Silt fences can be an effective tool **when used properly**. They remove sediment partially by filtering the runoff and partially by slowing it down, providing an opportunity for settling. Silt fences are a “perimeter control”, or a device used to prevent eroded sediment from leaving the construction site. Their efficiency for sediment removal ranges from 35% to 86% depending on site conditions.

Techniques

Silt fences can be used on most construction sites, but their effectiveness is limited by improper design, installation and maintenance.

Tips for using silt fences effectively:

- 1) Only use silt fences for the following slope and/or length of slopes:

5% to 10%:	no more than 50 feet
10% to 20%:	no more than 25 feet
more than 20%:	no more than 15 feet
- 2) Align the fence parallel to slope contours
- 3) Curve the edges of the silt fence uphill
- 4) Don't use silt fence for contributing areas more than 100 feet away
- 5) Trench in the fabric deeply enough to prevent undercutting
- 6) Spacing the posts no more than eight feet apart
- 7) Use reinforcement if the fence will receive concentrated flow
- 8) Do not install silt fence below an outlet pipe or weir
- 9) Do not install silt fence upslope of the exposed area
- 10) Consider construction traffic when aligning the fence
- 11) Periodically remove sediment deposits behind the silt fence reduce
- 12) Align silt fence to reflect ESC needs, not property lines or work area

Innovations and improvements

The scoop trap, a “mini-sediment trap” used before a silt fence, provides extra settling and protects the silt fence when it is used in an area of concentrated flow.

Fast Facts - Silt Fences

Approximate Cost: \$2.50-\$3.50 / linear foot

Effectiveness	Low	Mod	High
Erosion/Sediment Control		X	
Long-Term Pollutant Reduction	X		
Habitat/Stream Protection	X		
Ease of Application	Difficult	Average	Easy
Installation	X		
Maintenance	X		

Limitations

- Steep slopes or channels
- Construction traffic



Left: Silt fences can be effective when installed properly and maintained.



Find more construction site educational materials at:

cleanwatermn.org/MS4toolkit



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