Commonly Used Sediment Controls

Sediment Fence

RECOMMENDED PURPOSE:
Slows sheet flows from a site and catches large sediment particles.
Use for light flows.

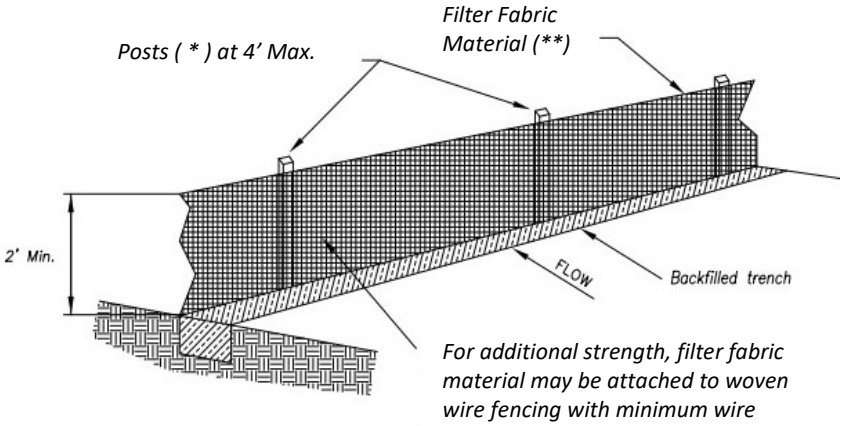
INSTALLATION STEPS:

1. Excavate a trench two (2) inches in width and six (6) inches in depth parallel to the slope contour and perpendicular to flow.

2. Stake the sediment fence on the downhill side of the trench and extend a minimum of six (6) inches of fabric below grade.

3. To join two sections of fence, overlap the stakes and twist in two full rotations to create a solid joint.

4. Backfill the trench on the uphill side of the fence and compact the trenched area.

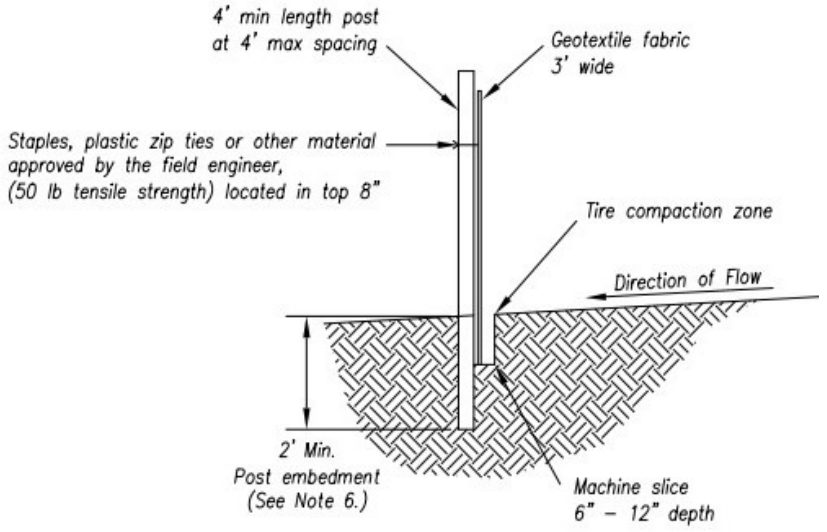


For additional strength, filter fabric material may be attached to woven wire fencing with minimum wire gauge between 9 and 14 and maximum mesh spacing of 6" which has been fastened to the post.

*(*) POSTS*

- *MIN LENGTH 4'*
- *HARDWOOD 1 3/16" x 1 3/16"*
- *PINE 2 5/8" x 2 5/8"*
- *STEEL 1.33 LB/FT*

(**) – Geotextile Fabric shall meet the requirements of AASHTO M288.



For More Information

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Land &Drainage Alteration Program ~Fact Sheet 2.3.2~

Commonly Used Sediment Controls

Compost Berm

RECOMMENDED PURPOSE:
Slows sheet flows from a site and catches large sediment particles. Use for light flows. Offers low maintenance alternative to sediment fence.

INSTALLATION STEPS:

1. Compost Berms may be placed around the perimeter of an affected area if the area is flat or the perimeter is on contour. Berms and socks should be placed using 'smiles' and j-hooks. Do not place berms and socks where they cannot pond water.

2. No trenching is required for installation; therefore, berms may be installed on frozen or rocky ground.

3. Do not use compost berms and socks in areas of concentrated flow, as they are intended to control and filter sheet flow only.

4. Proprietary installation may be available from the product provider. Berm may be left in place to incorporate into the natural landscape at the conclusion of a project.

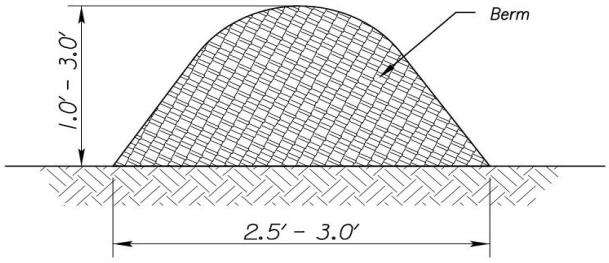


Figure 1
Perimeter Control Installation

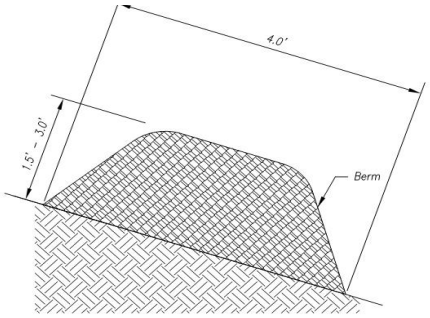
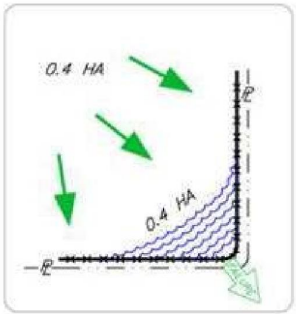
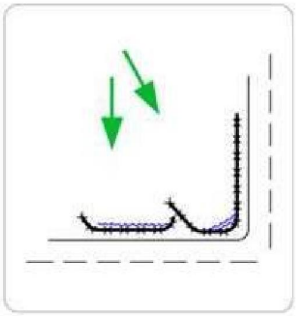


Figure 2
Steep Slope Installation



Incorrect – So not layout "perimeter control" compost berms along property lines. All sediment laden runoff will concentrate and overwhelm the system.



Correct – Install J-hooks

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Land &Drainage Alteration Program ~Fact Sheet 2.3.3~

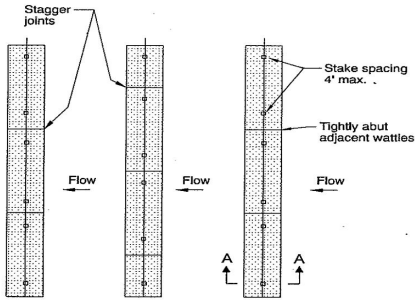
Commonly Used Sediment Controls

Straw Wattle

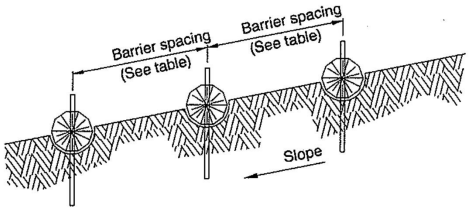
RECOMMENDED PURPOSE:

Temporary slope stabilization that reduces soil creep, sheet flow, and rill erosion on exposed slopes until permanent stabilization is established. Not intended for concentrated flow.

- Prepare the slope before the installation procedure is started.
- Shallow gullies should be smoothed as work progresses.
- Dig small trenches across the slope on contour. The trench should be deep enough to accommodate half the thickness of the roll. When the soil is loose and un-compacted, the trench should be deep enough to bury the roll 1/3 of its thickness to account for ground settlement.
- It is critical that rolls are installed perpendicular to water movement, and parallel to the slope contour.
- Start building trenches and installing rolls from the bottom of the slope, working uphill.
- Construct trenches at contour intervals 25-30 feet (8-10 m) apart depending on slope steepness. Steeper slopes require closer spacing of trenches.
- Lay the roll along the trenches fitting it snugly against the soil. Make sure no gaps exist between the soil and the straw wattle.
- Use a straight bar to drive holes through the roll and into the soil for the willow or wooden stakes.
- Drive the stake through the prepared hole, and into the soil. Leave only 1 or 2 inches (25 or 51 mm) of the stake exposed above roll.
- Install stakes at least every 4 feet (1.2 m) apart along the length of the wattle. Additional stakes may be driven on the downslope side of the trenches on highly erosive or very steep slopes.

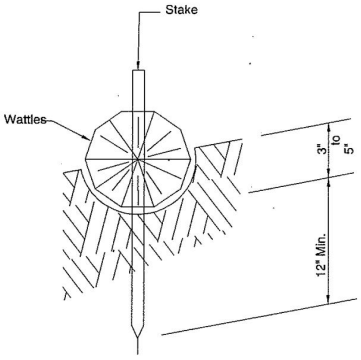


PLAN VIEW



PROFILE VIEW

PLACE WATTLES ALONG SLOPE CONTOUR



SECTION A-A'

BARRIER SPACING FOR GENERAL APPLICATION

INSTALL PARALLEL ALONG CONTOURS AS FOLLOWS		
% SLOPE	% SLOPE	MAXIMUM SPACING ON SLOPE
10% Flatter	1:10 or Flatter	300'
10 > % ≥ 15	10 > X ≥ 7.5	150'
15 > % ≥ 20	7.5 > X ≥ 5	100'
20 > % ≥ 30	5 > X ≥ 3	50'
Steeper than 30%	Steeper than 1:3	25'

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