



Straw Bale Dike

Denver Federal Center
 Building 56, Room 2604
 PO Box 25426
 Denver, Co 80225-0426

720-544-2810 - office
www.co.nrcs.usda.gov



What is a straw bale dike?

A temporary sediment barrier constructed of straw bales located down slope of a disturbed area or around a storm drainage outlet to redirect debris flows or trap debris materials.

When is a straw bale dike used?

Usually installed in areas requiring protection from sedimentation expected from predicted rainfall events that will cause erosion and are intended to provide protection for a limited time period (less than 3 months).

How is the straw bale dike installed?

Straw Bale Dikes drainage area limits are as follows:

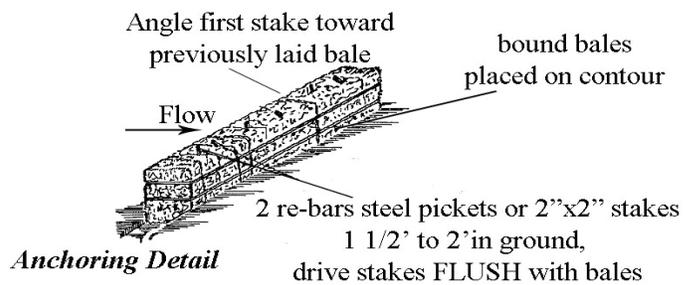
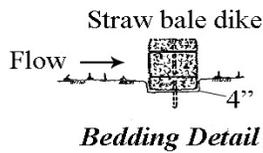
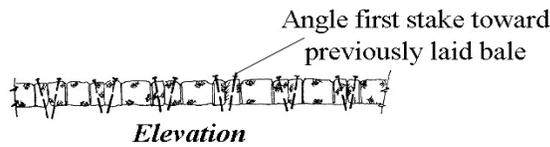
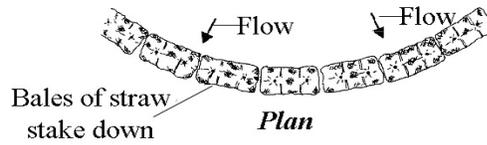
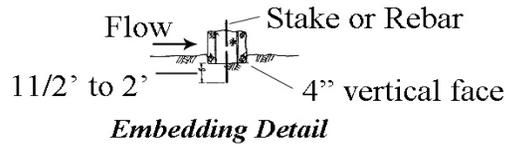
Slope	Maximum Drainage Area	Maximum Slope Length
0 - 15 percent	1 acre	200 feet
> 15	1/2 acre	100 feet

Methods and Materials: Bales should be bound with wire or nylon twine. Twine bound bales are less durable. Bales should be placed in a row with ends tightly abutting the adjacent bales. Do not place bales with wire or twine touching the soil (see illustration). Some loose straw should be compressed between adjacent bales to close voids. The tops of bales should all be level and set at the same elevation.

Anchorage: Each bale should be embedded in the soil a minimum of 4 inches. Drive 2x2 stakes or rebar through the bales and into the ground 1 1/2 to 2 feet for anchorage. The first stake in each bale should be driven toward a previously laid bale to force the bales together. Please refer to the drawings on the back side of this sheet

What maintenance is required?

Inspect the bale dike and provide necessary maintenance following each storm period. It is important to assure that loose straw does not enter storm drain facilities. Remove the bales once permanent drainage and stabilization is reestablished. Used straw can be used as mulch in other areas.



NOTE: After a fire many trees are weakened from burning around the base of the trunk. The trees can fall over or blow down without warning. Shallow rooted trees can also fall. Therefore be extremely alert when around burned trees.