

after the fire

The Use of Erosion Control Blankets or Jute Netting on Fire Damage Slopes

An erosion control blanket (ECB) is a protective soil stabilization measure usually constructed of coconut fiber, straw or wood fiber mulch incased in netting or is in the form of a multi-layer geosynthetic matting. The ECB is anchored on a well prepared (smooth and uniform) slope to limit erosion from rainfall and/or surface runoff, and to enhance revegetation. In some cases, an additional thin layer of straw or other mulching material is included under the blanket.

Jute and sometimes plastic netting are also used to hold straw and other types of mulches in place on steep slopes instead of using a more expensive ECB. Netting should always be used in conjunction with mulch. In other words, the purpose of netting is to help hold mulch in place on very steep slopes preventing it from sliding down the slope or blowing away. Netting in particular should NEVER be used without underlying mulch, although jute netting is often installed without mulch because people believe, including many contractors, that it provides excellent soil stabilization by itself. The truth is, it doesn't. In fact, there are circumstances where property owners or their landscape contractors have actually placed mulch on top of the netting, which is certainly better than no mulch at all, but completely defeats the true purpose of the netting. *Note: ECBs & plastic netting may present a hazard for snakes and other wildlife.*

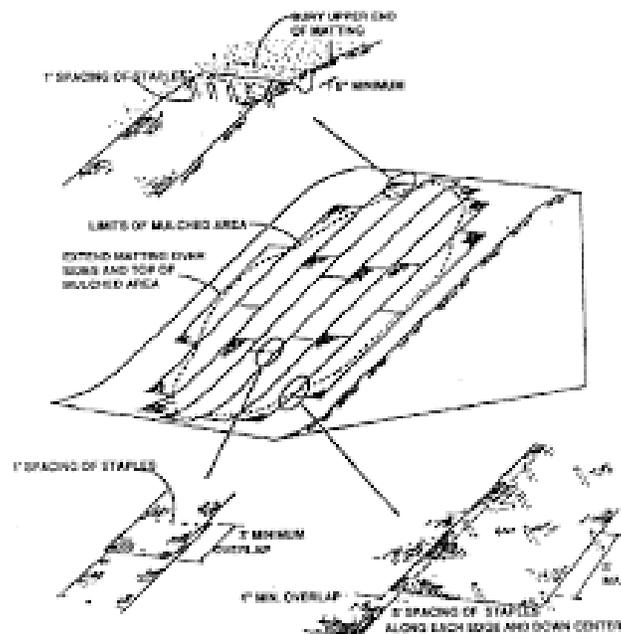
ECBs and jute netting with underlying mulch are typically used on severely disturbed slopes that have lost protective vegetative cover such as following wildfire. These products are always used in conjunction with revegetation such as appropriate grass species, or erosion control groundcovers and shrubs. ECBs are more expensive so their use is generally limited to small areas to prevent erosion that would otherwise cause significant damage to high value property improvements. ECBs are not appropriate in all situations. One reason being they usually require extensive slope and soil disturbance in order to create a smooth and uniform surface. They are not recommended for steep slopes with sandy soils, or uneven slopes with many rocks on the surface, or with a significant amount of fire burned or other damaged vegetation remaining.

ECB and Jute Netting Installation Guidelines

- The soil surface should be reasonably smooth. Rocks and other obstructions such as vegetation remains which rise above the level of the soil must be removed so that the ECB or netting with underlying mulch have good and uniform contact with the soil. *Note: If the area is not completely smooth and uniform and/or if too much disturbance would occur from preparing a smooth site then an ECB or jute netting should NOT be used. In these cases, either hydro-mulching or applying loose straw may be an option.*
- The ECBs and jute netting should be applied up and down the slope - never across the slope or on the contour.
- The upper end of the ECB or Jute roll at the top of the treated area should be buried in a trench at least 8 inches deep.
- ECB and jute netting rolls should be laid out so that edges overlap each other by at least 6 inches across the slope.

- When more than one ECB or jute netting roll is required going down the slope, the ends going down the slope should overlap by at least 3 feet. This is extremely important!
- Anchor pins or staples are used to anchor the ECB or netting to the soil surface. Anchor pins are made of rigid 0.12-inch diameter or heavier galvanized wire with a minimum length of 10 inches for hook or “J” type pins. Staples should be of wire .09 inches in diameter or greater and should have ‘U’ shaped legs that are at least 6 inches in length. Longer staples are needed for sandier soils. Staples or anchor pins need to be driven perpendicularly into the slope face and should be spaced about 5 feet apart down the sides and center of the roll. Spacing between staples at the upper end of a roll, and at the end overlap of two rolls should not be greater than 1 foot apart.
- It is advisable to work with a licensed landscape contractor experienced in the installation of ECBs and jute netting to ensure the work is done properly.

Caution: This fact sheet and drawing is for information purposes only. It should not be used in place of an actual site-specific design or more detailed installation specifications.



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