

Soil Stabilization using Erosion Control Blankets

Erosion Control Blankets can be effective in minimizing the erosive effect of rainfall when used to cover bare or newly planted soil. Their use stabilizes the soil to protect new plantings and reduces the potential for introducing sediment into storm water run-off, a win-win situation! Erosion Control Blankets can be specified by designers for protection of newly graded slopes, open areas, or drainage swales to allow germination of seed mixes and plantings. Contractors may also choose to use Erosion Control Blankets for temporary erosion control on highly erodible areas.

What are Erosion Control Blankets?

Erosion Control Blankets are biodegradable materials that can be used to protect disturbed slope and channel areas from wind and water erosion. The blanket materials are natural materials such as straw, wood excelsior, coconut, or are geotextile synthetic woven materials such as polypropylene.

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Erosion Control Blankets are effective for soil stabilization on steep to moderate slopes, new landscaped areas, and drainage swales and ditches that are to be planted or seeded. Additional desirable attributes include:

- They increase water infiltration into the soil.
- When used with a seed mix, they protect the mix from being eroded during heavy rainfall or wind.
- They increase the retention of soil moisture to promote seed germination.
- Most importantly, they reduce soil erosion.

Consult with the **District Landscape Architect** for guidance in the proposed use of specific Erosion Control Blanket products. There are many types of products available for erosion control. Product selection is based on many factors, such as:

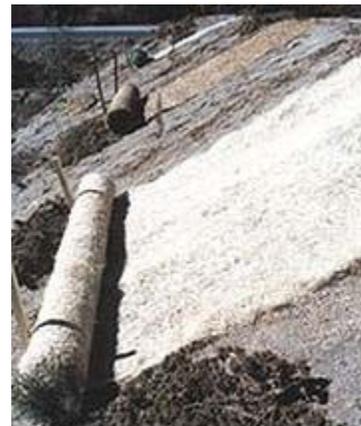
- Duration required (short or long term temporary usage).
- Effectiveness compared to other soil stabilizers.
- Relative cost of purchase, installation and maintenance.
- Visual impact to the public.
- Environmental acceptability. Synthetics may biodegrade more slowly than natural materials.
- *Any changes to specified products should be approved by the **District Landscape Architect**.*

Getting the Most from Erosion Control Blankets

Erosion Control Blankets provide excellent short and long term temporary erosion control - *when properly installed and maintained*. Proper soil surface preparation is critical to the effectiveness of the installation:

- All rocks, clods, debris, and vegetation should be removed to ensure full contact between the blanket and the soil surface.
- Check the special provisions or follow the manufacturer's recommendations for seed application requirements when used with blanket installation.
- The blanket should be anchored to the soil using metal wire staples as specified in the special provisions or recommended by the manufacturer.
- The staples should be driven through the blanket and into the soil, flush with the soil surface.
- Erosion Control Blankets should not be used where final vegetation will be mowed, because material and staples may be caught in the mowers.
- If the area identified for Erosion Control Blankets installation is unusually steep or rocky, consult with the **District Landscape Architect** for guidance.

Inspections and Maintenance



Several types of erosion control blankets are in the process of being installed on a slope to evaluate their effectiveness.

As with any storm water Best Management Practice (BMP), the result depends on the product selected, the installation quality, and the commitment to maintenance. The inspection and maintenance of Erosion Control Blankets should be conducted as follows:

- Inspect the site during installation.
- Inspect the installation before, during and after significant rain events.
- Repair or replace all damaged materials.
- Recompact all soil washout areas.

