



Erosion Control Quick Sheet

Mulching/Hydro-Seeding



GOOD: Mulch can be used and is great for slopes and areas where grass maintenance is difficult. This is also good for areas where minimal concentrated flow exists. Mulching needs to be applied to meet coverage specifications so that any bare earth is sufficiently protected. Hydro-seeding has similar protective properties to traditional mulching and can be mixed for specific site conditions. This is good for establishing vegetation to steep slopes where grass maintenance is not needed.



BAD: Hydro-seeding has been inadequately applied to a channel or area with concentrated flow. Other measures such as straw matting should be used in these areas. Hydro-seeding may require more than one initial application to get vegetation established.

NOTE: Once measures are installed the job is not done. Maintenance of the erosion control measures are required until the project is complete.

Rolled Erosion Control Mats



GOOD: This method is good in areas where traditional mulching is not going to work or has failed. Slopes and drainage channels are areas where mats are effective. Rolled mats offer good protection in areas where water flows, allowing vegetation to become established.

NOTE: Often a site will need a combination of different measures to achieve the proper protection a site needs



BAD: It is important to make sure mats are pinned down well, so water does not wash out from under the matting. It is also important to pick out the proper mats for the area being covered. When multiple mats are used they need to overlap to the manufacturer's specifications to prevent erosion between the mats.



ErOsion Control Specifications

Mulching Materials and Application Rates

Material	Rate Per Acre	Quality	Notes
Organic Mulches			
Straw	1-2 tons	Dry, unchopped, unweathered; avoid weeds.	Should come from wheat or oats; spread by hand or machine; must be tacked down.
Wood chips	5-6 tons	Air dry	Treat with 12 lbs nitrogen/ton. Apply with mulch blower, chip handler, or by hand. Not for use in fine turf.
Wood fiber	0.5-1 tons		Also referred to as wood cellulose. May be hydroseeded. Do not use in hot, dry weather.
Bark	35 cubic yards	Air dry, shredded or hammer-milled, or chips.	Apply with mulch blower, chip handler, or by hand. Do not use asphalt tack.
Corn stalks	4-6 tons	Cut or shredded in 4-6 in. lengths.	Apply with mulch blower or by hand. Not for use in fine turf.
Sericea lespedeza seed-bearing stems	1-3 tons	Green or dry; should contain mature seed.	
Nets and Mats¹			
Jute net	Cover area	Heavy, uniform; woven of single jute yarn.	Withstands waterflow. Best when used with organic mulch.
Fiberglass net	Cover area		Withstands waterflow. Best when used with organic mulch.
Excelsior (wood fiber) mat	Cover area		Withstands waterflow.
Fiberglass roving	0.5-1 tons	Continuous fibers of drawn glass bound together with a non-toxic agent.	Apply with a compressed air ejector. Tack with emulsified asphalt at a rate of 25-35 gal/1,000 sq ft.
Chemical Stabilizers²			
Aquatain Aerospray Curasol AK Petroset SB Terra Tack Crust 500 Genaqua 743 M-145	follow manufacturer's specifications		Not beneficial to plant growth.

¹Refer to Practice No. 6.30, *Grass Lined Channels*.

²Use of trade names does not imply endorsement of product.

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Construction Entrance/Exit Design Criteria based on the NC Erosion and Sediment Control Planning and Design Manual 6.06

Rolled Erosion Control Matting Design Criteria can be found in the NC Erosion and Sediment Control Planning and Design Manual 6.17