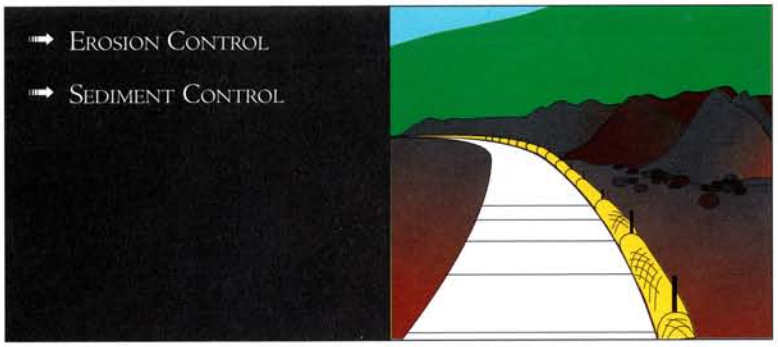
Fiber Rolls



Purpose:

Fiber rolls (sediment logs or wattles), composed of bio-degradable fibers stuffed in a photo-degradable open weave netting, are designed to reduce sediment runoff from disturbed soils into the storm drain system or watercourses. Fiber rolls are porous and allow water to filter through fibers and trap sediment, increase filtration rates, slow runoff and reduce sheet and rill erosion. Wattles also create a favorable environment for plant establishment.

Application:

- Along the face of exposed and erodible slopes to shorten slope length
- At grade breaks where slopes transition to a steeper slope
- In drainage swales to slow flows
- Along streambanks to assist stabilization and revegetation

Inspection and Maintenance:

Follow manufacturer's recommendations for installation. In general, these will be as follows:

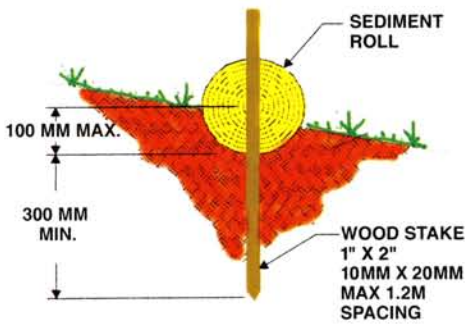
- Fine grade the subgrade by hand dressing where necessary to remove local deviations and to remove larger stones or debris that will inhibit intimate contact of the fiber roll with the subgrade.
- Prior to roll installation, contour a concave key trench 50 to 100 mm (2 to 4 inches) deep along the proposed installation route.
- Soil excavated in trenching should be placed on the uphill or flow side of the roll to prevent water from undercutting the roll.
- Place fiber rolls into the key trench and stake on both sides of the roll within 6 feet of each end and then 3–5 feet with 1" x 2" stakes or as suggested by manufacturer.
- Stakes are typically driven in on alternating sides of the roll. When more than one fiber roll is placed in a row, the rolls should be abutted securely to one another to provide a tight joint, not overlapped.

Limitations:

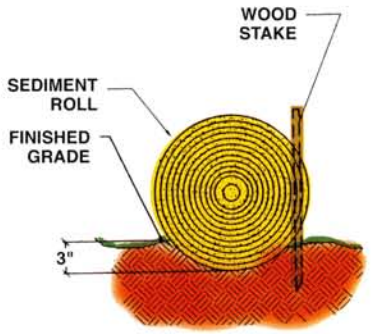
- Designed for low surface flows not to exceed 1 cfs for small areas.
- Designed for short slopes or slopes flatter than 3:1.
- Primary purpose is not sediment control, although do provide some sediment removal.

Inspection and Maintenance:

- Repair or replace split, torn, unraveling or slumping fiber rolls.
- Inspect fiber rolls when rain is forecast, following rain events and at least daily during prolonged rainfall. Perform required maintenance.
- In most cases, fiber rolls do not require removal and can be abandoned in place. If not excessively soiled, rolls may be removed, replaced and reused.



ENTRENCHMENT DETAIL IN SLOPE AREA



ENTRENCHMENT DETAIL IN FLAT AREA