



Wattles for Erosion and Sediment Control

Wattles (logs) are an erosion and sediment control device used to minimize erosion on construction sites. Wattles assist in stabilizing construction disturbances by shortening the slope lengths, reducing water flow velocities and trapping sediment on site. Effective installation of wattles can minimize sheet and rill erosion resulting in improved water quality, downstream, enhanced vegetation growth and compliance with state and local storm water management regulations (Clean Water Act). In urban areas, wattles can be used as a silt fence replacement along sidewalks and/or around construction perimeters to prevent sediment from washing into gutters. In low flow channels, wattles can be used as a straw bale replacement to reduce water velocities and trap sediment. Unlike silt fence that must be removed following vegetation establishment, wattles can be abandoned in place to slowly biodegrade and blend with the existing landscape.

Wattles are made of either weed free certified straw (rice or wheat) or excelsior (shaved wood fibers) and have a longevity of between 1 and 5 years, depending on the geographic proximity they are installed. These tubes of straw or excelsior are encased in either UV degradable plastic netting or 100% biodegradable burlap. The standard size of each wattle is 9 inches in diameter and 25 feet in length and weighs approximately 35 pounds. Wattle diameters and lengths can be modified on a special order basis.

Proper installation of wattles is essential in order to insure the product will function as designed. On slopes, installation should be on the contour with a slight downslope in order to prevent ponding behind the wattle. Wattles should always be installed in shallow trenches constructed on the contour. Anchoring of wattles is necessary and can be accomplished using 1 inch x 1 inch x 18 inch wood stakes penetrating through the center of the wattle and into the soil approximately 6 inches. The frequency of anchoring should be a minimum of 4-5 stakes, equally spaced, per 25 feet of wattle installation.

Environmentally Friendly

Reduce Material and Maintenance Costs

Proposed uses

- **Silt fence and/or straw bale replacement**
- New housing construction
- Fire reclamation
- Stormwater runoff pollution control
- Ski area and golf course maintenance
- Mined land reclamation
- Vegetation enhancement