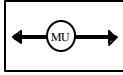


## STD & SPEC 3.35 MULCHING



### Practice Description

Application of plant residues or other suitable materials to the soil surface, to prevent erosion by protecting the soil surface from raindrop impact and reducing the velocity of overland flow and to foster the growth of vegetation by increasing available moisture and providing insulation against extreme heat and cold.

### Conditions Where Practice Applies

1. Areas which have been permanently seeded (see Std. & Spec. 3.32, PERMANENT SEEDING) should be mulched immediately following seeding.
2. Areas which cannot be seeded because of the season should be mulched to provide some protection to the soil surface. An organic mulch should be used, and the area then seeded as soon weather or seasonal conditions permit. It is not recommended that fiber mulch be used alone for this practice; at normal application rates it just simply does not provide the protection that is achieved using other types of mulch.
3. Mulch may be used together with plantings of trees, shrubs, or certain ground covers which do not provide adequate soil stabilization by themselves.
4. Mulch shall be used in conjunction with temporary seeding operations as specified in TEMPORARY SEEDING, Std. & Spec. 3.31.

### Specifications

#### Organic Mulches

Organic mulches may be used in any area where mulch is required, subject to the restrictions noted in Table 3.35-A.

Materials: Select mulch material based on site requirements, availability of materials, and availability of labor and equipment. Table 3.35-A lists the commonly used organic mulches. Materials, such as peanut hulls and cotton burs, may be used with the permission of the local Plan-Approving Authority.

Prior to mulching: Complete the required grading and install needed sediment control practices.

Lime and fertilizer should be incorporated and surface roughening accomplished as needed. Seed should be applied prior to mulching except in the following cases:

- a. Where seed is to be applied as part of hydroseeder slurry containing fiber mulch.
- b. Where seed is to be applied following a straw mulch spread during winter months.

**TABLE 3.35-A  
ORGANIC MULCH MATERIALS AND APPLICATION RATES**

MULCHES:	RATES:		NOTES:
	Per Acre	Per 1000/SQ. FT.	
Straw or Hay	1 1/2 -2 tons (Min. 2 tons for winter cover)	70-90 lbs.	Free from weeds and coarse matter. Must be anchored. Spread with mulch blower or by hand.
Fiber Mulch	Minimum 1500 lbs.	35 lbs.	Do not use as mulch for winter cover or during hot, dry periods* Apply as slurry.
Corn Stalks	4-6 tons	185-275 lbs.	Cut or Shredded in 4-6" lengths. Air- dried. Do not use in fine turf areas. Apply with mulch blower or by hand.
Wood Chips	4-6 tons	185-275 lbs.	Free of coarse matter. Air-dried. Treat with 12 lbs. nitrogen per ton. Do not use in fine turf areas. Apply with mulch blower or by hand.
Bark Chips or Shredded Bark	50-70 cu. yds.	1-2 cu. yds	Free of coarse matter. Air-dried. Treat with 12 lbs. nitrogen per ton. Do not use in fine turf areas. Apply with mulch blower,chip handler or by hand.

\* When fiber mulch is the only available mulch during periods when straw should be used, apply at a minimum rate of 2000 lbs./ac. or 45 lbs./1000 sq. ft.

Application: Mulch materials shall be spread uniformly, by hand or machine.

When spreading straw mulch by hand, divide the area to be mulched into approximately 1,000 sq. ft. sections and place 70-90 lbs. (1~~½~~ 2 bales) of straw in each section to facilitate uniform distribution.

Mulch Anchoring: Straw mulch must be anchored immediately after spreading to prevent displacement. Other organic mulches listed in Table 3.35-A do not require anchoring. The following methods of anchoring straw may be used:

1. Mulch anchoring tool (often referred to as a Krimper or Krimper Tool): This is a tractor-drawn implement designed to punch mulch into the soil surface. This method provides good erosion control with straw. It is limited to use on slopes no steeper than 3:1, where equipment can operate safely. Machinery shall be operated on the contour.
2. Fiber Mulch: A very common practice with widespread use today. Apply fiber mulch by means of a hydroseeder at a rate of 500-750 lbs./acre over top of straw mulch or hay. It has an added benefit of providing additional mulch to the newly seeded area.
3. Liquid mulch binders: Application of liquid mulch binders and tackifiers should be heaviest at edges of areas and at crests of ridges and banks, to prevent displacement. The remainder of the area should have binder applied uniformly. Binders may be applied after mulch is spread or may be sprayed into the mulch as it is being blown onto the soil.

The following types of binders may be used:

- a. Synthetic binders - Formulated binders or organically formulated products may be used as recommended by the manufacturer to anchor mulch.
4. Mulch nettings: Lightweight plastic, cotton, or paper nets may be stapled over the mulch according to manufacturer's recommendations.

#### Chemical Mulches

Chemical mulches may be used in accordance with the manufacturers recommendations.

### **Maintenance**

All mulches and soil coverings should be inspected periodically (particularly after rainstorms) to check for erosion. Where erosion is observed in mulched areas, additional mulch should be applied. Nets and mats should be inspected after rainstorms for dislocation or failure. If washouts or breakage occur, re-install netting or matting as necessary after repairing damage to the slope or ditch. Inspections should take place up until grasses are firmly established. Where mulch is used in conjunction with ornamental plantings, inspect periodically throughout the year to determine if mulch is maintaining coverage of the soil surface; repair as needed.