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Filtrexx Compost Blankets - Overview



Description

Filtrexx Compost Blankets are applications of compost materials applied with a pneumatic blower device that help to reduce or prevent erosion on slopes. Filtrexx Compost Blankets prevent erosion by covering the exposed soil surfaces and keeping the water flowing on top of the compost materials. Filtrexx Compost Blankets also help increase infiltration, which aids in vegetation establishment.

Conditions where practice applies

Filtrexx Compost Blankets are to be used on denuded soil areas either for temporary or long-term protection against erosion. Filtrexx Compost Blankets may be used in place of other traditional blanket technology (i.e., geotextiles) with similar or superior results. Filtrexx Compost Blankets are especially effective on extreme slopes of 3:1 to 2:1 or greater and for situations where many other erosion control tools do not work.

Planning Considerations

Filtrexx Compost Blankets control erosion by preventing soil from rolling downhill. On slopes, compost protects round or angular soil particles from gaining momentum and creating erosion because compost is flat and does not roll like soil. In projects that have already achieved final grade status on the denuded areas, compost blankets should be seeded during the time of installation.

Design Criteria for Filtrexx Compost Blankets:

For most applications, it is important to apply Filtrexx Compost Blankets at about a 1-4” depth; however, this may vary depending on slope and size of the drainage area. Compost meeting or exceeding the specification attached is predictably successful at reducing or eliminating erosion.

Compost Blankets are normally installed using a pneumatic blower device or ‘blower truck’. This equipment must be used to comply with this specification and the vehicles must have a calibrated seeder attachment for ‘living blanket’ applications that require seeding. Alternate seeding mechanisms may be used, including blending seed into the compost evenly prior to application with the blower trucks.

There are no major limitations to the use of Filtrexx Compost Blankets, if installed properly. However, when slopes exceed 2:1, care should be taken to make sure the depth of the blanket is at least 2”. If slopes approach 1:1, an additional 2” should be added to make the blankets a total of 4” deep. The Engineer may also require additional LockDown netting be placed over the blankets and stapled into the soil for further protection against shear strength of underlying soil or movement of compost during severe storm events.

It is imperative at all times that compost blankets be ‘lapped’ over the top of the shoulder of the slope they are applied to. A minimum overlap of 5-10’ is suggested in order to make sure water runs on top of the compost blanket, not under it. If the compost blankets are not installed properly and water is allowed to get under the compost blanket at the top of the slope, rills may form and the slopes will have to be repaired.

Maintenance Requirements:

Filtrexx Compost Blankets should be regularly inspected to make sure they hold and are protecting the soil adequately. In cases where minor rills form, they should be repaired immediately by blowing more product onto the slopes and into the rills and compacting the area with foot traffic.

No disposal is required.

Specifications for Using Filtrexx Compost Blankets

Section ____: Filtrexx Compost Blanket Installation and Maintenance

1.0 Description: This work shall consist of furnishing, installing, maintaining and seeding a water permeable Compost Blanket (Filtrexx Compost Blankets) to reduce soil erosion and sediment by preventing soil particles from water moving off site into adjacent waterways or storm water drainage systems.

2.0 Compost Products

1. Compost: Compost used for Filtrexx Compost Blankets shall be weed free and derived from a well-decomposed source of organic matter. The compost shall be produced using an aerobic composting process meeting CFR 503 regulations, including time and temperature data indicating effective weed seed, pathogen and insect larvae kill. The compost shall be free of any refuse, contaminants or other materials toxic to plant growth. Non-composted products will not be accepted. Test methods for the items below should follow USCC TMECC guidelines for laboratory procedures:

- A. PH – 5.0-8.0 in accordance with TMECC 04.11-A, “Electrometric pH Determinations for Compost”
- B. Non seeded Filtrexx compost blankets: Particle size – 100% passing a 2” sieve, 99% passing a 1” sieve, minimum of 90% passing a ¾” sieve in accordance with TMECC 02.02-B, “Sample Sieving for Aggregate Size Classification”.

For seeded Compost Blankets, seed should be incorporated at the time of application in the entire depth of the compost blanket, at rates per foot, per square yard, or per acre, as acceptable to the engineer. The following particle sizes shall also be followed: 100% passing a 2” sieve, 99% passing a 1” sieve, minimum of 60% passing a ½” sieve. All other testing parameters remain the same. The seeding rates are generally similar or slightly higher than those used when considering application of seed via hydroseeding or other seeding methods.

- C. Moisture content of less than 60% in accordance with standardized test methods for moisture determination.
- D. Material shall be relatively free (<1% by dry weight) of inert or foreign man made materials.
- E. A sample shall be submitted to the engineer for approval prior to being used and must comply with all local, state and federal regulations.

3.0 Construction:

- 1. Filtrexx Compost Blankets will be placed at locations indicated on plans as directed by the Engineer. Unless otherwise specified, Filtrexx Compost Blankets should be installed at a minimum depth of 2”. Depth requirements are indicated on CAD drawings attached.
- 2. Filtrexx Compost Blanket may be seeded at time of installation for establishment of permanent vegetation. The Engineer will specify seed requirements.
- 3. Filtrexx Compost Blankets are not to be used in direct flow situations or in runoff channels.
- 4. See attached schematic for Compost Blanket Installation.
- 5. If required, combining Filtrexx Compost Blankets with Filtrexx FilterSocks or Filter Berms may offer additional protection from slopes that have heavy run-on water. In

- showing this amount of material has been effectively placed (i.e., truck load tickets).
2. Contractor is required to be a certified Filtrexx Installer as determined by Filtrexx International, LLC (440-926-8041 or visit website at Filtrexx.com). Certification shall be considered current if appropriate identification is shown during time of bid or at time of application.

8.0 Available Vendors

Installation of Filtrexx Compost Blankets may be purchased from the following Certified Installers:

Filtrexx International, LLC
35481 Grafton Eastern
Grafton, OH 44044
440-926-8041
440-926-4021 (fax)

Contact website for complete list of installers:

www.filtrexx.com

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