

1-05

Filtrexx LockDown™ Netting installation for Compost Blankets



Description

Geotextile ‘Blanket’ technologies are commonly used to aid in establishment of vegetation on slopes and to help prevent soil loss and erosion. ‘Compost’ blankets are commonly used as a replacement alternative for rolled geotextile products. However, on steep slopes, concerns for shear stress increase with any loose compost layer of material added to slopes. Therefore, in order to increase shear stress and assist in giving the loose compost a better foothold, the use of LockDown™ Netting is employed. Filtrexx LockDown™ Netting is installed prior to the installation of a compost blanket. The netting allows good contact with soil and provides an improved shear stress compared to loose compost. The netting is pinned into the substrate using sod staples or similar tacking devices.

During installation of the compost blankets, the netting material becomes sandwiched between the ground and the compost. As roots begin to penetrate the compost and netting layer, and sink into the substrate, they stabilize the entire system. Once fully rooted into the substrate, the netting provides long term extra stability.

Conditions where practice applies

For slopes that are greater than a 3:1 with loose, highly erodable soil. Soils that are solid clay cut slopes, sandy, rocky, or low in organic matter are particularly prone to erosion and would be excellent candidates for this product.

The practice also applies where concern for slope stability is high and where shear strength is a concern. The LockDown™ Netting allows the roots to help hold the slope and keeps the turf from sliding off the slope, once vegetated. LockDown™ Netting is not recommended without a compost blanket as a final cover.

In areas where a soil lift has already been added, concerns about the soil lift shearing create concern for products placed on top. These areas also warrant consideration for LockDown™ Netting.

Planning considerations

The plastic green LockDown™ Netting is a blanket fold style product with a 20' stretch width and 275' long. The Cotton LockDown™ Netting is in roll 3300' long form, in widths of 40", 8' and 12'. For areas where long term reinforcement is required due to high flow rates, use the plastic lockdown netting. For areas that simply need reinforcement but are not as severe, and may want biodegradable products, use the cotton lockdown. In addition, there may be areas where rolling out a netting material is not possible, and in these situations, the plastic product will be easier to unfold. Likewise, in areas where the plastic product is harder to unfold due to existing vegetation or other items, the rolled product may be easier to install.

Specifications for Using Filtrexx LockDown™ Netting

Section ____: Filtrexx LockDown™ Netting installation

1.0 Description:

This work shall consist of furnishing, installing, & maintaining Filtrexx LockDown™ Netting prior to installation of a Filtrexx Compost Blanket.

2.0 Products used for Filtrexx LockDown™ Netting

Material used for LockDown™ Netting may be either cotton or HDPE netting materials. For more permanent applications, use of the HDPE is recommended. For stabilization that is not required beyond the vegetation establishment phase, the cotton product is recommended.

3.0 Netting material specs:

1. Cotton material and netting specs:

- The 96" cotton LockDown™ Netting is made up of 143 chain stitches of 20/2 cotton yarn across the width of the fabric.
- Approximately 9/16" wide by 1" long holes.
- The fabric is reinforced at both edges. Each edge consists of 5 interlocking chain stitches made with 20/2 cotton to form a 3/4" wide edge.
- The roll is 1000 meters long and 96" wide.
- The roll weighs 110 lbs.

2. HDPE material and netting specs:

- Material: HDPE Plastic

30 Ft. wide lay flat netting

5 mil PLASTIC – with Kelly Green UV colorant

- Thermal Properties: Melts at 207 degrees Fahrenheit
- UV Life: UV inhibitor is added to the colorant to extend the life of the product in direct exposure to sunlight. The UV level provides a 3-5 year life, however actual testing has not been performed.
- Mesh Pattern: HEXAGON ~ 1” mesh opening
- Stretch Width: 30 ft.
- Roll Length: 375 ft.

4.0 Construction and installation of LockDown™ Netting:

1. Filtrexx LockDown™ Netting shall be installed to cover the slope completely. Staking must be done prior to compost applications and a minimum of 4 stakes (sod staple or equivalent) per square yard must be used.
2. If using the green HDPE material, unfold the netting and stretch to 30 feet. Stretch material across slope until taught, then apply to slope and stake accordingly.
3. For extreme slopes that require installers to use repelling gear, care should be taken to tie off HDPE netting at the top of the slope to a firmly anchored item in the landscape, such as a tree or permanent stake. This ensures the staking system is not the only anchoring device used on such a steep slope.

5.0 Maintenance:

1. The contractor shall maintain the system and repair it if and when it fails for the period of vegetation establishment.
2. Vegetation established on top of LockDown™ Netting shall be rated at over 70% establishment/coverage in order for the project to be considered ‘fully vegetated and protected’.

6.0 Method of measurement:

Bid items shall show measurement as ‘Filtrexx LockDown™ Netting’, per square yard, installed. Where bid items require separation, LockDown™ Netting and compost blankets will be bid as separate items. Where bid items do not require separation, LockDown™ Netting will be bid as an alternate part of Compost Blanket installation.

7.0 Performance:

1. Contractor is responsible for establishing a working erosion control system and may, with approval of the engineer, work outside the minimum construction requirements as needed.

2. Where the LockDown™ Netting deteriorates or fails, it will be repaired or replaced with a more effective alternative.
3. 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 Application guidelines:

1. Filtrexx LockDown™ Netting shall be installed on site as detailed above. For approval of netting material, contact Filtrexx International, LLC (440-926-8041 or visit website at Filtrexx.com).
2. Filtrexx LockDown™ Netting materials are available only from Filtrexx International, LLC and are the only Certified mesh materials accepted in creating Filtrexx products on site or as delivered to the job site.

8.0 Available Vendors

Filtrexx LockDown™ Netting may be purchased from the following Certified Filtrexx Installers:

(see website for current listing)

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