



SWPPP Cut Sheet

Last Updated: 1-1-08

Section 1: Erosion and Sediment Control – Construction Activities

1.7 Filtrexx Compost Vegetated Cover™ (CVC™)

Vegetation & Erosion Control Technology

PURPOSE & DESCRIPTION

Filtrexx Compost Vegetated Cover™ (CVC™) is a **temporary vegetation and erosion control** practice used on hill slopes to stabilize disturbed soils on and around construction activities. Compost Vegetated Covers™ are generally used for rapid vegetation establishment on disturbed or erodable soils, and are not to be used as an erosion control blanket. Compost Vegetated Covers™ consist of a ½ in to ¾ in (12-20mm) deep layer of Filtrexx GrowingMedia™ or 70 to 100 cubic yards/acre (135-193 cubic m/ha) mixed with a specified seed mix and applied to hill slopes with pneumatic blower trucks or similar equipment.

APPLICATION

Filtrexx Compost Vegetated Covers™ are generally used for temporary vegetation for erosion control on disturbed, bare, or highly erodable soils during land disturbing and construction activities. Stabilization using temporary vegetation is generally required for:

- disturbed soils that will undergo future disturbance,
- cut and fill slopes under construction,
- soil storage areas and stockpiles,
- permanent vegetation establishment that requires a nurse crop,
- stabilization of temporary runoff diversion devices, dikes, and sediment containment systems.
- curbside buffers on residential construction lots prior to vertical construction.

Permanent stabilization practices, such as erosion control blankets, anchoring and sod are not typically used for these applications; however, they may be used selectively with temporary vegetation practices. CVCs™ are best utilized on bare soils in excavated or fill areas immediately after temporary or final grading is finished. It should be noted that CVCs™ provide little erosion control until vegetation is established, this should be considered in the planning and design process. Slopes greater than 4:1 should be vertically tracked to aid in catching and stabilizing CVC™ application prior to germination. Slopes greater than 3:1 should apply a tackifier with the CVC™ to increase stability. Slopes greater than 2:1 should utilize erosion control blankets or turf reinforcement mats. Other erosion control practices should be utilized if soil erosion control/slope stabilization is required prior to vegetation establishment.

Although most specification and design manuals include fertilizer recommendations or requirements for vegetation, mineral nutrients from fertilizers may not be preferable where vegetation sustainability and water quality are a concern. CVCs™ provide organic nutrients which are slow release, provide plant micronutrients, and are less likely to be transported in storm runoff to receiving waters – which can lead to pollution and eutrophication of waterways. In site sensitive areas where nutrient runoff is a concern, CVCs™ may release up to 1/10 of the nutrient load compared to conventional hydroseeding and hydromulching. CVCs™ should not be used in areas where concentrated flow exists or where runoff velocities will damage or undermine vegetation. For most grasses a maximum velocity of 4 CFS (0.11 CFS) or a maximum hydraulic shear stress of 2 lbs/ft² (10 kg/m²) is recommended. In regions or seasons prone to high velocity wind conditions (such as arid regions, mountainous regions, and regions with distinct hurricane seasons) it is recommended that LockDown™ Netting is installed on top of the CVC™ to prevent wind erosion and movement of the CVC™.

INSTALLATION

1. CVCs™ used for temporary vegetation establishment/erosion control shall meet Filtrexx CVC™ Specifications & use Filtrexx GrowingMedia™.
2. Contractor is required to be a Filtrexx Certified™ Installer as determined by Filtrexx International, LLC (440-926-2607 or visit website at www.filtrexx.com). Certification shall be considered current if appropriate identification is shown during time of bid or at time of application (current list can be found at www.filtrexx.com). Look for the Filtrexx Certified™ Installer Seal.
3. CVCs™ will be placed at locations indicated on plans as directed by the Engineer.
4. CVCs™ shall be installed on and around unprotected and erodable soils for temporary vegetation and erosion control.
5. CVCs™ shall be applied to 100% of the area where temporary vegetation is required.
6. CVC™ shall be applied at a depth of ½ to ¾ in (12-20mm) or 70 to 100 cubic yards/ac (135-293 cubic m/ha).
7. Seed shall be thoroughly mixed with the GrowingMedia™ prior to application or surface applied with GrowingMedia™ at time of application.
8. CVCs™ shall not be installed in areas of concentrated runoff flow.
9. CVCs™ installed on slopes: greater than 4:1 shall be vertically tracked; greater than 3:1 shall use tackifiers or slope stabilizers; greater than 2:1 shall use erosion control blankets or turf reinforcement mats.

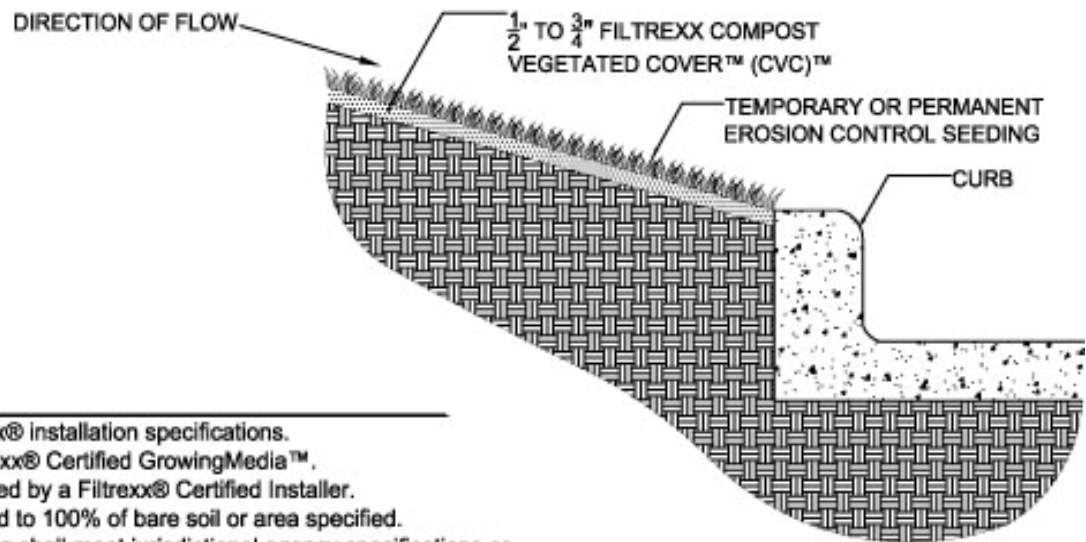
INSPECTION and MAINTENANCE

Routine inspection should be conducted within 24 hrs of a runoff event or as designated by the regulating authority. If rilling occurs or vegetation does not establish, the area of application should be reapplied with a CVC™. If failure continues, the use of runoff diversion devices, compost erosion control blankets, rolled erosion control blankets, or soil stabilizers should be considered. CVCs™ should be inspected until permanent vegetation or other erosion control practices are installed. Temporary vegetation practices should also be inspected for noxious or invasive weeds.

1. The Contractor shall maintain the Compost Vegetated Cover™ in a functional condition at all times and it shall be routinely inspected.
2. CVCs™ shall be maintained until a minimum of 70% uniform cover of the applied area has been vegetated or as required by the jurisdictional agency.
3. CVCs™ may need to be irrigated in hot and dry weather seasons, or arid and semi-arid climates to ensure vegetation establishment.
4. CVCs™ shall be maintained until permanent vegetation is established or erosion control practices are installed.
5. Where a CVC™ fails, rilling occurs, or vegetation does not establish the Contractor will repair or provide an approved and functioning alternative.
6. If a CVC™ is damaged by storm water runoff, runoff diversion devices installed above the CVC™ may be required.
7. Once vegetation is established, final seeding and/or permanent vegetation may not be required.
8. No additional fertilizer or lime is required for vegetation establishment and maintenance.
9. No disposal is required for this product/practice.

Figure 7.1. Engineering Design Drawing for Compost Vegetated Covers™

FILTREXX® COMPOST VEGETATED COVER™ (CVC)™



CVC™ Section View

Notes:

1. CVC™ to meet Filtrex® installation specifications.
2. CVC™ must use Filtrex® Certified GrowingMedia™.
3. CVC™ must be installed by a Filtrex® Certified Installer.
4. CVC™ shall be applied to 100% of bare soil or area specified.
5. Erosion control seeding shall meet jurisdictional agency specifications or will be at the discretion of the engineer.
6. CVC™ shall not be installed in areas of concentrated flow where max. flow exceeds 4 CFS or shear stress exceeds 2lbs./sq. ft.
7. CVC™ installed on slopes greater than 3:1 shall use additional slope stabilization practices.