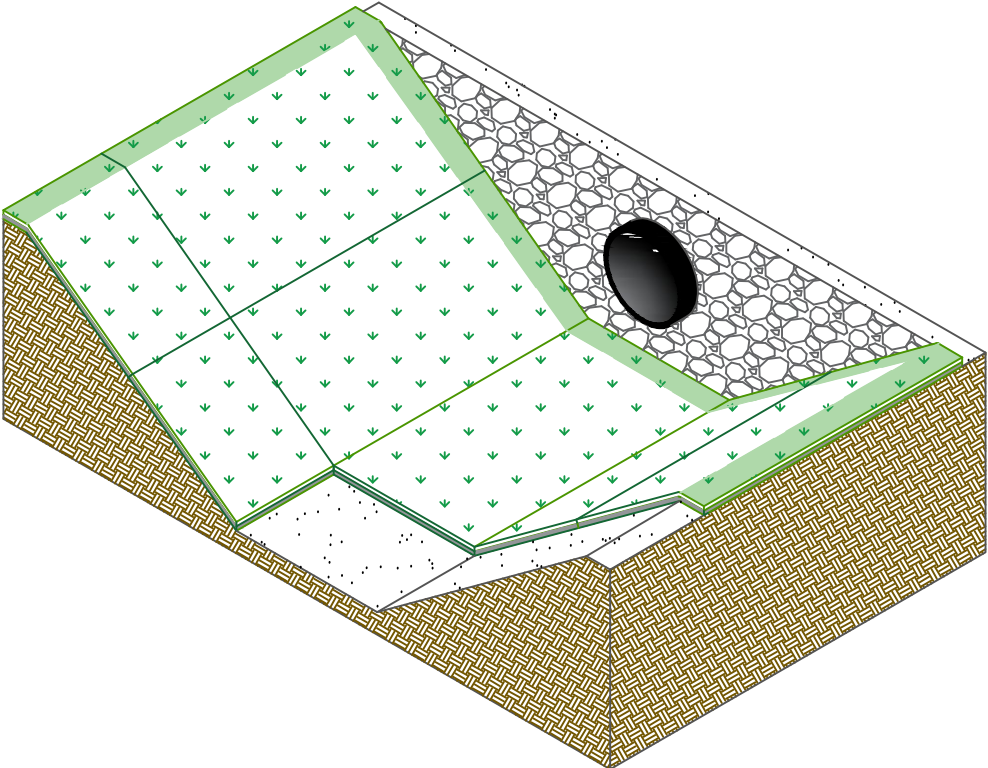


ShearForce12 Hybrid-Turf Instant Armor Scour Mat Installation Guide for Channels, Downchutes, and Spillways (Not To Scale)



Installation Guidelines

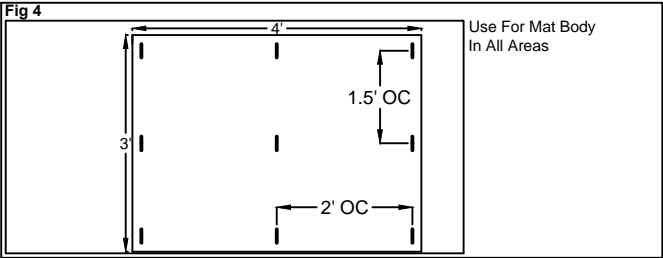
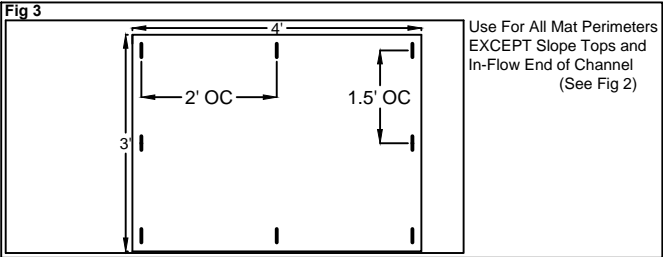
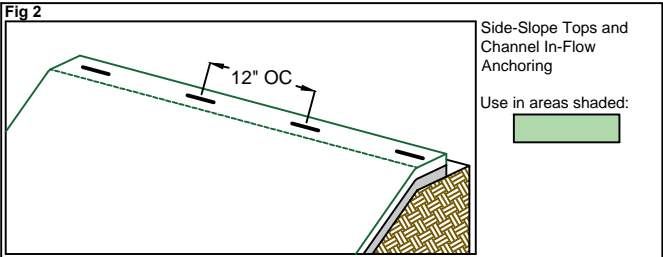
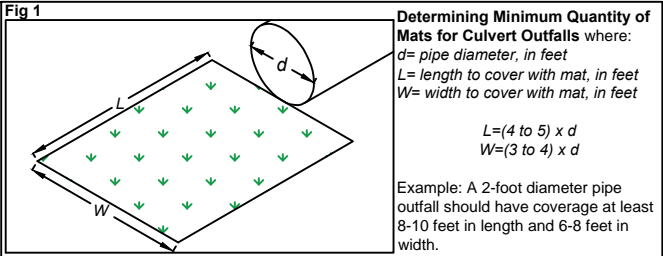
1. Select appropriate anchors for matting based on soil type and consistency (See Recommended Anchors Table).
2. For culvert outfall areas, determine required number of mats and mat orientation according to Figure 1, or as specified by the engineer.
3. Prepare seedbed, create a smooth soil surface and eliminate any existing rills, soil clods, sticks or rocks larger than 1-inch in diameter.
4. Apply seed, fertilizer, and other amendments at the specified rates, either by broadcasting, drilling, or hydro-seeding.
5. Position and anchor leading edges of mats at culvert outfall and/or in-flow end of channel (Figure 2) and secure with a single row of anchors spaced 1-foot apart.
6. Seam adjacent mats. (Figure 3). Butt mat edges together and anchor on 1.5-foot centers along 3-foot mat edges (Fig 3) or 2.0-foot centers along 4-foot mat edges (Fig 3).
7. Anchor mat edges at top of side-slopes (Figure 2) with a single row of anchors spaced 1-foot apart.
8. Secure mat body (Figure 4) with anchors installed according to Fig 4. Use additional anchors as necessary to ensure that fabric on bottom of mat is in intimate contact with underlying soil surface.

Additional Tips for Fast & Effective Installation

- Install mat with simulated turf on top and fabric backing against soil surface.
- For best vegetative results, do not install on top of any additional erosion control blanket, TRM, or fabric.
- Continuous fabric contact with the underlying soil surface is very important for effective product performance. If there are noticeable void areas under the mat, additional anchors may be used to ensure good fabric-to-soil contact.
- In channel bends or reaches that are not straight, miter cut joints. DO NOT OVERLAP MAT EDGES.
- Use a heavy-duty utility knife or saw to cut material as necessary.
- When seaming cut ends or edges, DO NOT OVERLAP. Simply butt together cut ends or edges and seam together with a single row of anchors, spaced 1.5-feet to 2.0-feet apart.

ShearForce12 Recommended Anchors		
Soil Type	*Minimum Anchor	Alternate Anchors
Cohesive, well compacted or undisturbed	12"x2"x12", 3/8" Rebar U-staple	12" Plastic Stake
Cohesive, loose	18"x2"x18", 3/8" Rebar U-staple	18" Percussion Earth Anchor
Non-Cohesive, well compacted or undisturbed	18"x2"x18", 3/8" Rebar U-staple	24" Percussion Earth Anchor
Non-Cohesive, loose	24"x2"x24", 3/8" Rebar U-staple	36" Percussion Earth Anchor

*U-shaped anchors are recommended as they can be shared between adjacent mats when seaming, reducing total anchors needed during installation.





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SEDIMENT CONTROL

Inlet Protection

- Grated Inlet, Curb Inlet, Area Inlet Protection

Ditch Checks

- Triangle Silt Dike
- GeoRidge

Perimeter Protection

- High and Low-Porosity Silt Fence, Straw Wattles, Silt Socks
- Safety Fence

Flocculants & Water Treatment

- Polymer-Based & Natural Flocculants

Sediment Basin Skimmers

Dewatering Bags

Trackout Control

- FODS
- Rumble Grates

Turbidity Curtains

EROSION CONTROL

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- Wood
- Paper
- Blends
- Straw

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Applied Products

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- FGM
- Additives & Tackifiers

Temporary Erosion Control Blankets

- Coir & Jute Mat/Nettings
- Short-Term ECBs
- Extended-Term ECBs

Permanent Erosion Control Blankets

- Turf Reinforcement Mats
- HP-TRMs
- Anchor Reinforced Vegetation System

Structural BMPs

- Transition Mats
- Geoweb Cellular Confinement
- Composite Vegetated Armor System
- Flex MSE Vegetated Wall System
- Articulated Concrete Block
- Gabions
- Grout-Filled Geotextile Mats

Vegetation Establishment

- Native Seed & Turf Seed
- Fertilizers
- Organic Soil Additives
- Stratavault Soil Cells

STORMWATER MANAGEMENT

Water Quality

- Inlet Filter Boxes
- Pre-Treatment Chamber
- Nutrient Separating Baffle Boxes
- High-Flow Biofiltration Media
- Hydrodynamic Separators
- Stratavault

Water Quantity

- Modular Underground Storage Systems
- Chamber Detention Systems

Drainage

- HDPE Swale Liner
- Pipe & Fittings
- Drainage Composites
- Strip Drain

Inlet Structures

- PVC
- Drain Basins, In-Line Drains
- Landscape

Permeable Pavers

- Permeable Articulating Concrete Block
- Grass Pavers
- Gravel Pavers
- Concrete Pavers

SPECIALTY

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Vegetated Reinforced Soil Slopes

Soil Anchors

Root Barrier System

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