

SURFACE STABILIZATION

Turf Reinforcement Mat



A turf reinforcement mat is a three-dimensional matrix of polypropylene, nylon, or other material typically used in channel applications or on slopes to reinforce plant rooting systems and the underlying soil material.

Purpose

- To provide reinforcement to vegetation in areas of concentrated flow or steep slopes where other types of stabilization, such as riprap, are not feasible or desired.
- To provide surface stabilization.
- To provide reinforcement for plant roots as vegetation is being established.

Specifications

Effective Life

The functional life of turf reinforcement mat is dependent on the materials used.

Anchoring

Staples, pins, or stakes used to prevent movement or displacement of mat. (Follow manufacturer's recommendations for specific applications.)

Materials

- Turf reinforcement mat (typically consists of a three-dimensional matrix of polypropylene, nylon, or other material).
- Six to 12-inch staples, pins, or stakes.

TURF REINFORCEMENT MAT

Installation

1. Select a turf reinforcement mat appropriate for the site conditions (e.g., slope, channel, flow velocity) per the manufacturer's specifications.
2. Grade and prepare the soil foundation for mat installation.
3. Install the mat according to the manufacturer's instructions, including burying the edges in check slots or slit trenches.
4. Anchor the mat in place by driving staples, pins, or stakes through the mat and into the underlying soil. Follow an anchoring pattern appropriate for the site conditions and as recommended by the manufacturer.
5. Backfill the mat with topsoil, filling to the top of the mat.
6. Seed the area after the mat has been installed and backfilled with soil.
7. Install erosion control blankets over the seeded turf reinforcement mat to stabilize the surface.

Note: Some products may not require backfill of topsoil or the application of erosion control blankets. Consult manufacturer's literature for proper installation guidance.

Maintenance

- Inspect within 24 hours of each rain event and at least once every seven calendar days.
- Check for erosion or displacement/exposure of the mat.
- If a specific area shows erosion, add soil and restabilize.