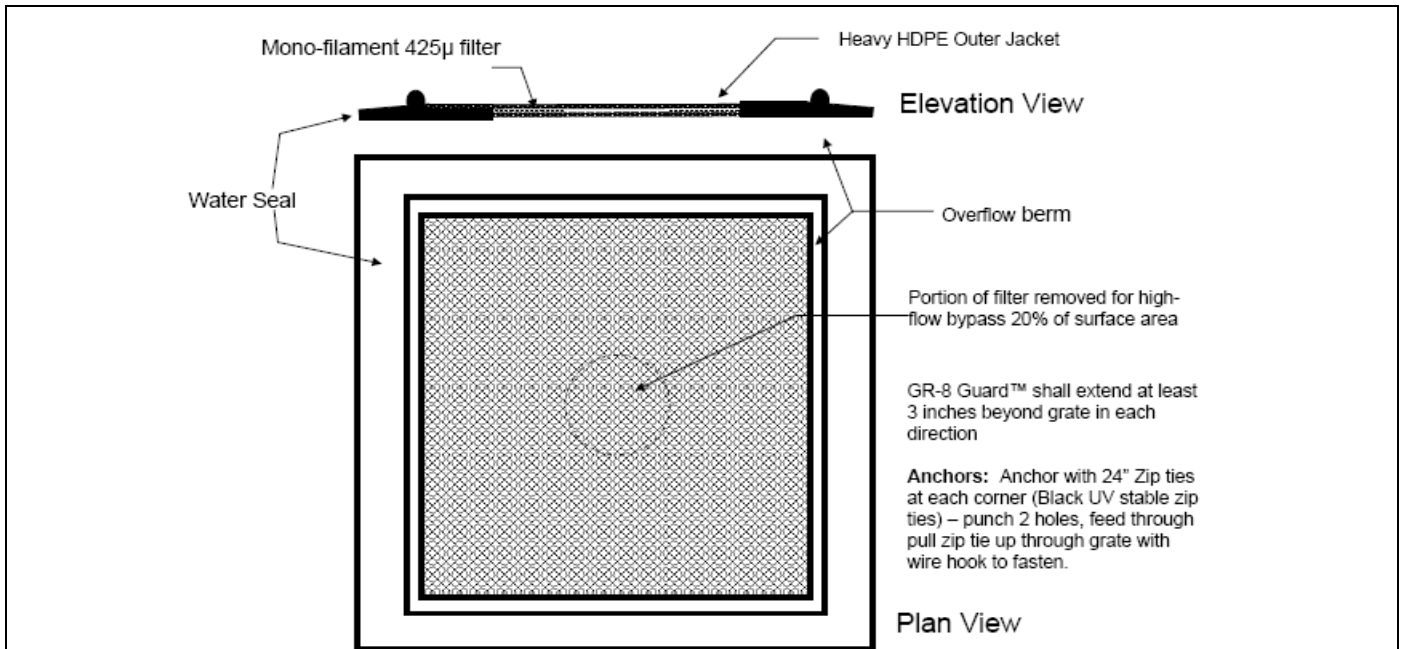


SWPPP Binder Insert - Drain Inlet Protection

ERTEC GR-8 Guard™



Definition – ERTEC GR-8 Guard™

A temporary or semi-permanent sediment and debris filter made of high density polyethylene (HDPE) with a perimeter berm and an integrated filter designed to protect drain inlets which have rectangular or round grates. Place device over the grate near where soil is disturbed.

Purpose

Storm drain inlet protection is used to intercept sediment laden water at the grate opening and prevent sediment and debris and associated pollutants from entering the storm water underground pipe systems. The system reduces water velocity which causes heavier soil particles to fall out above ground. While allowing flow through the module, the barrier filters certain smaller sized particles from suspension and prevents them from flowing through the device and into the pipes. Advantages are that it is effective, durable, re-usable, easily installed and cleaned.

Conditions Where the Practice Applies

It is recommended for use over openings with small drainage areas. Generally, the drainage areas should be less than 1/3 acre and the total for inlets in series should be 1 acre or less with slopes flatter than 5 percent in the contributing drainage area.

Design Criteria

- Filter: Apparent Opening Size (AOS) = 425 micron. Flow rate (ASTM D-4491) = 145 gpm/ft².
- Bypass: GR-8 Guard must provide a filter-free area for bypass of high flows.
- Perimeter Berm: GR-8 Guard must have at minimum a 1" perimeter berm.
- Outer Jacket Material: HDPE. For detailed characteristics contact ERTEC. Module weight = 3 to 8 lbs. Unit height = 1.5". Length and width should be 4 inches longer and wider if rectangular, or 4 inches larger in diameter than grate size. Service temperature (deg F) = -30 to 160.
- Place GR-8 Guard so that edges extend at least 3 inches past each edge of the grate. **Anchor methods: Semi Permanent: 1) Black UV Stable Zip Ties** – use 4 – install as close to grate perimeter as possible. **Temporary 2) Snake Bags** - place small cylindrical gravel bags (snake bags) containing clean, pea-sized graded gravel around the perimeter of the cover (do not use sand or dirty gravel). Allow space between the bags for flow. The bag should be durable enough to last the period of intended use. Fill to ½ full so that bag is flexible and will seal. **3) Traffic Cone:** Place traffic cone in center of filter.

Maintenance

Perform maintenance as required. Inspect following rainfall events and at least daily during prolonged rainfall. Clean periodically to provide an adequate sediment holding capacity. Debris shall be removed daily and sediment shall be removed when the sediment accumulation reaches 1 inch. Unit can be removed, washed and reinstalled. It is only necessary to loosen, but not remove the ERTEC GR-8 Hooks when removing unit for cleaning. Removed sediment and debris shall be incorporated in the project at designated locations or disposed-of outside the project or in conformance with requirements.



GR-8 Guard™
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