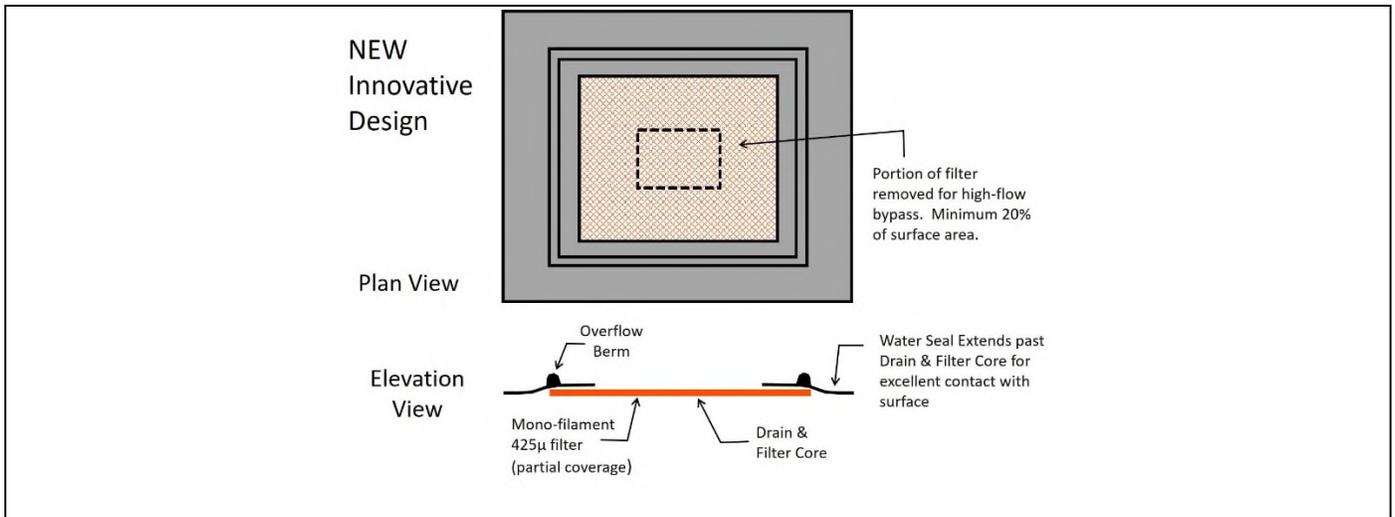


# SWPPP Binder Insert - Drain Inlet Protection

## ERTEC GR8 Guard™



### Definition – ERTEC GR8 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

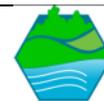
It is recommended for use over openings with small drainage areas. Generally, the drainage areas should be less than 1/3 acre and the total for inlets in series should be 1 acre or less with slopes flatter than 5 percent in the contributing drainage area.

### Design Criteria

- Filter: Apparent Opening Size (AOS) = 425 micron. Flow rate (ASTM D-4491) = 145 gpm/ft<sup>2</sup>.
- Bypass: GR8 Guard must provide a filter-free area for bypass of high flows.
- Perimeter Berm: GR8 Guard must force water to rise at least 1.5" before reaching Drain & Filter Core.
- 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 GR8 Guard so that water seal extends at least 3 inches past each edge of the grate.
- Install: **Placement:** Select correct size as per ERTEC installation guide. DO NOT remove grate. Place GR8 Guard™ on top of grate. GR8 Guard's water seal perimeter shall extend at least 3 inches beyond grate in each direction. **Anchor methods:** A) Attach with 16 gauge tie-wire. Pre-cut wire to 18" lengths. At each corner of GR8 Guard, feed one end of wire down through GR8 Guard, around grate bar, and back up thru GR8 Guard. Above ground, twist wires several times and snip off excess. Check installation guidelines for alternative installation methods. If units will be installed next to high speed traffic or subject to traffic roll overs, it is recommended to fasten outer water seal to ground with easy off adhesive (Loctite Power Grab® All Purpose – when finished, peels-off easily). **Clean:** Accumulation of leaves, debris and sediment can cause backups! Clean after every storm, or as necessary. **Protect:** In stop-and-go traffic areas where exposed to constant tire abuse, it is useful to place traffic cones or delineators on or near GR8 Guard to discourage run-overs. GR8 Guard stands up to run-overs well but does not survive long in constant stop-and-start traffic.

### 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. Removed sediment and debris shall be incorporated in the project at designated locations or disposed-of outside the project or in conformance with requirements.



**ERTEC**®

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