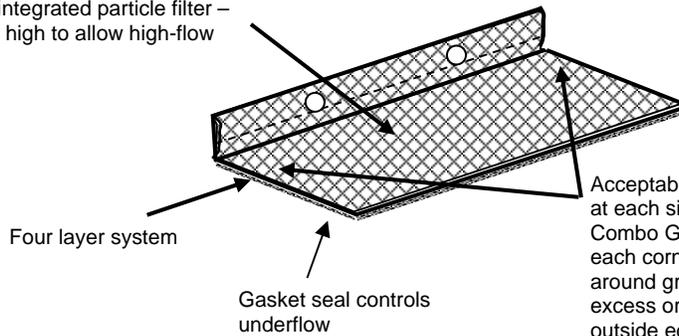


# SWPPP Binder Insert - Curb & Grate Inlet Protection

## ERTEC Combo Guard™

425 micron integrated particle filter – set 2 inches high to allow high-flow bypass



Acceptable Anchor Methods: a) install gravel bags at each side – half on and half off the edge of the Combo Guard or b) attach with 16 gauge tie-wire at each corner of CG. Feed wire down thru CG, around grate bar and back up. Twist and snip excess or c) fasten with concrete anchors/nails at outside edges

Product Designation	Grate Size
CG 28x22	Fits 23" by 19" Grate
CG 48x22	Fits 36" x 18" and 36" x 20" and 40" x 17" Grates
CG 48x27	Fits 40" x 24" Grate
CG 48x30	Fits 42" x 28" Grate
Custom sizes available upon request	

### Definition – ERTEC Combo Guard™

A temporary sediment filter made of high density polyethylene with an integrated filter. During construction, place device over the grate and curb opening of the drain inlet near disturbed soil. Anchor with 2 Gravel Bags, or alternately black UV stable cable ties (16 to 24"), or alternately concrete anchors/masonry nails. Anchor so that water cannot flow behind vertical component.

### Purpose

Storm drain inlet protection intercepts sediment laden water at the curb and grate opening and minimizes the sediment, associated pollutants and debris from entering the storm water underground pipe systems. The system reduces water velocity which causes heavier soil particles to be deposited 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. Heavy flows are passed over the top of the filter or through the bypass openings. Advantages are that it is effective, durable, re-usable, easily installed and cleaned.

### Conditions Where the Practice Applies

It is recommended for use over curb & grate 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

- Geo-textile Filter: Apparent Opening Size (AOS) = 425 micron integrated particle filter. Flow rate (ASTM D-4491) = 145 gpm/ft<sup>2</sup>. Provide a bypass over the top.
- Outer Jacket Material: HDPE. For detailed characteristics contact ERTEC. Module weight = 3 to 5 lbs. Module height = 6.0". Module length/opening size protected varies as per the chart above – according to grate size. Service temperature (deg F) = -30 to 160.
- Install system with the vertical section covering the curb inlet and the horizontal section covering the grate. Alternate anchor methods listed above. If using gravel bags - place ½ to ½ full gravel bags containing clean, pea-sized graded gravel on each end of the cover and butt the bags tightly against the curb to keep water in the gutter from flowing behind the filter (do not use sandbags). The bag should be durable enough to last the period of intended use. If the storm inlet opening exceeds 42" in length, overlap one module by 6" over side of adjoining module for a continuous run until the desired length is achieved. Anchor on top of the overlap as necessary.

### Maintenance

Perform maintenance as required. Inspect following rainfall events and at least daily during prolonged rainfall. Maintain to provide an adequate sediment holding capacity. Debris shall be removed daily and sediment shall be removed when the sediment accumulation reaches 2 inches. Removed sediment shall be incorporated in the project at designated locations or disposed-of outside the project or in conformance with requirements. Remove the device after final stabilization has been achieved.



**Combo Guard™**  
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