

**Curb Inlet Protection
Sediment and Debris Control
GUIDE SPECIFICATION**

PRODUCT:
Curb Inlet Guard™

MANUFACTURER:
ERTEC®
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1.0 Description:

Work covered under this item consists of installing a Curb Inlet Guard™ inlet protection system for curb drain inlets without grates. The purpose is to minimize silt and sediment and stop debris from entering the storm drain system.

2.0 Material:

Provide a low profile curb inlet protection device:

- **Size.** Furnish "L"-shaped low profile curb inlet protection device with a maximum vertical height of 8 inches and a maximum horizontal anchor/seal flap dimension of 8 inches. The vertical and horizontal components shall not protrude horizontally from the curb surface or vertically from the gutter pan surface by more than 0.5 in.
- **Structure.** Furnish low profile curb inlet protection device manufactured from non-biodegradable materials. It shall be UV stable, resist cracking or performance deterioration from sunlight for at least 4 years. Filter material shall be laminated between and protected by semi-rigid layers of a Rigid Polymer Matrix™ made from high density polyethylene (HDPE recyclable as #2) or polyethylene terephthalate (PET recyclable as #1). Service temperature shall be from -30 to 160 deg F.
- **Flow Rate.** Furnish low profile curb inlet protection device containing an integrated filter fabric with a minimum clean water flow-through rate between 130 and 180 gallons per square foot per minute and a percentage-open-area of 9% to 13%.
- **High-Flow-Bypass / Debris Screen:** Furnish low profile curb inlet protection device with a high-flow-bypass/debris-screen. The high-flow-bypass/debris-screen area should be greater than 2.5 square feet per unit, contain at least two through-holes of 2.5" diameter and allow a minimum clean water flow-through rate greater than 1000 gallons per square foot. The high-flow-bypass/debris screen should be made from a semi-rigid layer of a polymeric matrix made from either high density polyethylene (HDPE recyclable as #2) or polyethylene terephthalate (PET recyclable as #1).
- **Single unit Construction:** Furnish low profile curb inlet protection device with the horizontal anchor flap/seal and vertical curb opening filter/cover constructed as a single unit.
- **Underflow Seal:** Furnish low profile curb inlet protection device with an underflow seal gasket to prevent sediment laden water from flowing under the filtering system.

- **Reinforcement brackets:** Furnish low profile curb inlet device with a bracketing system to prevent the device from getting pushed or pulled into the storm drain system during high flow events. Provide brackets that can be extended vertically to the top of the curb opening fascia if the curb opening height is higher than 7.0”.

3.0 Installation:

1. **Installation and Anchoring:** Placement: Place CIG tightly against drain opening with metal variable height pins at top and horizontal flap pointing away from curb. Position CIG so that water cannot flow behind.
2. **Interconnecting for long curb openings:** Overlap segments so the bottom gasket provides a continuous seal. One end of each segment has a cut-out in the gasket layer for overlapping (Fig 1). Each 6.25’ segment fits a 5 foot opening or smaller. Use 2 segments for 8 to 10 foot opening, 3 for a 15 foot opening, etc. (Table 1). Position gravel bag at overlap (Fig 2). If necessary, tie segments together with rebar tie-wire or cable-ties (Fig 3).
3. **Alternative anchor methods:** A) Install gravel bags at each end and at overlaps. Use ½ full bags (15 to 20 lbs) with round drain-rock for low profile and best traffic avoidance. Use clean gravel at drain inlets, not sand. Select bags with long UV resistance and toughness for resistance to traffic. Or where it is not possible to install gravel bags due to traffic proximity, B) anchor with concrete anchors, or masonry nails, one at each end or C) secure with outdoor caulking around edges.
4. **Reuse** low profile curb inlet protection device when allowed by the engineer.

4.0 Maintenance:

- **Maintenance.** Perform maintenance as required. Inspect following rainfall events and at least daily during prolonged rainfall. Maintain to provide an adequate sediment holding capacity. Trash shall be removed daily and sediment shall be removed when the sediment accumulation reaches 1 inch. 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.

5.0 Method of Measurement:

- **Low Profile Curb Inlet Protection Device.** Low profile curb inlet protection device will be measured by the segment. Each segment is 6.25 ft, and fits a 5 foot opening. Two segments fit a 10 foot opening, etc.

6.0 Basis of payment:

- **Low Profile Curb Inlet Protection Device.** The work performed and materials furnished in accordance with this Item and measured as provided under “Measurement” will be paid for at the unit price bid for “Low Profile Curb Inlet Protection Device.” This price is full compensation for furnishing, placing, maintaining, and for permanently removing the low profile curb inlet protection device from the project, and for all other materials, labor, tools, equipment, and incidentals.
- Removal of low-profile curb inlet protection device will not be paid for directly but is subsidiary to the installation item. When the Engineer directs that the low profile curb inlet protection device installation or portions thereof be replaced, payment will be made at the unit price bid for “Low Profile Curb Inlet Protection Device,” which is full compensation for the removal and reinstallation of the low profile curb inlet protection device installation.