Perimeter Sediment Control System for Hard Surfaces
Sediment Control
GUIDE SPECIFICATION

PRODUCT:
Hard Surface Guard™

MANUFACTURER:
ERTEC®
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1.0 Description:

Perimeter Sediment Control System for hard surfaces (such as asphalt or concrete) shall conform to the details shown on the plans and these special provisions and shall be installed downstream of disturbed soil areas. The intended function of the Sediment Control System for Hard Surfaces is to minimize the flow of sediment into storm drain systems.

2.0 Material:

Perimeter Sediment Control System for hard surfaces. Provide sediment control device as shown on the plans.

A. **Size.** Furnish "L" shaped sediment control device with a height of 6 inches as shown on the plans. Each segment shall be 7 feet long and have minimum vertical freeboard of at least 6" with a 4 inch hinged horizontal flap at the base, to be secured in place with pneumatically applied nails, pea gravel, gravel bags or bonding agent.

B. **Apparent Opening Size.** Furnish Perimeter Sediment Control System for hard surfaces containing a filter fabric such that the Apparent Opening Size is between 200 and 250 microns. The Percentage Open Area (POA) should be greater than 20%.

C. **Structure.** Furnish sediment control device manufactured from non- biodegradable materials which is UV Stable for at least 4 years. The system shall comprise semi-rigid, overlapping layers of thermally extruded, apertured polymeric high-density polyethylene (HDPE) sheets, and one or more integrated filter sheets. The system shall be durable, such that it can be returned to original shape when deformed on the job site. The Perimeter Sediment Control System for hard surfaces shall have an integrated filter fabric. The system shall comprise a gasket attached to the bottom to prevent underflow. The system shall also conform to the following:

Specification	Requirements
Height (freeboard), inches, min. – sheet flow – typically 99% of perimeter	6 or 10
Mass per Unit Weight, (pounds/foot) (maximum) (6" / 10")	0.39 / 0.50
Tensile Yield ASTM D-638 (lb/in2)	1800 - 2800
Ultimate Tensile Strength: ASTM D-638 (lb/in2)	2000 - 2800

Specification	Requirements
Filter Percentage Open Area (POA) (COE 22125-86) (min %)	20
Filter Average Opening Size (AOS) (ASTM D 4751) microns	250
Ultraviolet stability (outer jacket & filter), percent tensile strength retained after 500 hours, min. ASTM Designation: D 4355 (xenon-arc lamp and water spray weathering method)	90
Gasket Weight (minimum ounces per square yard)	14.5
Life in application (years - minimum)	4

* or appropriate test method for specific polymer

D. A copy of the manufacturer's product sheet together with instructions for installation shall be furnished to the Engineer 5 days before installation.

3.0 Installation:

Perimeter Sediment Control System for hard surfaces can be installed in the following alternative ways:

A. On asphalt: Install nails flush with netting so that gasket is in good contact with surface. Install 4 to 5 nails per each seven-foot segment. Use HILTI X-ZF 1½" fasteners with 23mm pre-mounted steel washer (X-ZF 32 P8 S23) or equivalent with automatic powder-actuated hand tool.
B. Concrete: Install anchors flush with netting so that gasket is in good contact with surface.
C. Install 4 to 5 anchors per each seven-foot segment. Use Red Head Redi-Drive or Hammer Set ¼" x 1-1/4" anchors or equivalent.
D. Asphalt or Concrete: Install bonding agent between gasket and surface. Use PaverBond, Liquid Nails, or other equivalent. Anchor with gravel bags or other weights until set.
E. Asphalt or Concrete: Cover flap with clean pea sized gravel or gravel bags such that gasket makes good contact with surface.

4.0 Maintenance:

Perform maintenance as required. Inspect following rainfall events and at least daily during prolonged rainfall. Maintain to provide an adequate sediment holding capacity. Sediment shall be removed when the sediment accumulation reaches half the vertical height. Removed sediment shall be incorporated in the project at designated locations or disposed-of outside the project or in conformance with requirements. Damage to Perimeter Sediment Control System for hard surfaces resulting from the Contractor's vehicles, equipment, or operations shall be repaired at the contractor's expense.

Split or torn segments shall be repaired with zip-ties, 16-gauge galvanized wire or replaced. Deformed segments shall be reshaped. Locations where evidence of runoff has occurred beneath the Perimeter Sediment Control System for hard surfaces shall be corrected. Segments needing repair shall be repaired or replaced within 24 hours of identifying the deficiency.

5.0 Method of Measurement:

Quantities of Perimeter Sediment Control System for hard surfaces to be paid for will be determined by the linear foot measured along the centerline of the installed strip. Where Perimeter Sediment Control System segments are joined and overlapped, the overlap will be measured as a single installed strip.

6.0 Basis of payment:

The contract price paid per linear foot for Perimeter Sediment Control System shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing the Perimeter Sediment Control System, complete in place, including trench excavation and backfill, and maintenance, as shown on the plans, and in these special provisions, and as directed by the Engineer.