**Type E - Surface Course Curb Inlet Filters**

**Plan Symbol**

Use surface course inlet filters that have a minimum height or diameter of 9-inches and have a minimum length that is 2-feet longer than the length of the curb opening. Surface course inlet filters are not designed to completely block the inlet opening.

Use surface course inlet filters constructed with a synthetic material that will allow storm water to freely flow through while trapping sediment and debris. Use a material that is non-biodegradable and resistant to degradation by ultraviolet exposure and resistant to contaminants commonly encountered in storm water. Straw, straw fiber, straw bales, pine needles, and leaf mulch are not permissible filter materials.

Surface course inlet filters have aggregate compartments for stone, sand or other weighted materials or mechanisms to hold the unit in place.

Use filter fabric that is capable of reducing effluent sediment concentrations by no less than 80% under typical sediment migration conditions.

Select Type E inlet filters from the SCDOT approved products list.

**Installation**

Surface course inlet filters are applicable for road Catch Basin after the road surface course is placed. Place surface course inlet filters where sediment may spill over sidewalks and curbs.

Install surface course inlet filters in front of curb inlet openings. The filter has a minimum height or diameter of 9-inches and has a minimum length that is 2-feet longer than the length of the curb opening to allow sufficient length to cover the inlet with at least 1-foot of clearance beyond the inlet on both ends.

Do not completely block the inlet opening with surface course inlet filters. Install surface course inlet filters in a manner to allow overflows to enter the catch basin.

Fill the aggregate compartment to a level (at least ½ full) that will keep the surface course inlet filter in place and create a seal between the surface course inlet filter and the road surface.

**Inspection and Maintenance**

- Inspect every 7 calendar days and within 24-hours after each storm that produces ½-inches or more of rain. Any needed repairs should be handled immediately.
- Ponding is likely if sediment is not removed regularly.
- Inspect surface course curb inlet filters on a regular basis and immediately after major rain events.
- Clean the surface course curb inlet filter if a visual inspection shows silt and debris build up around the filter.
### Preventive Measures and Troubleshooting Guide

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<th>Field Condition</th>
<th>Common Solutions</th>
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<tr>
<td>Excessive sediment is entering the inlet.</td>
<td>Ensure that soil stabilization and sediment control devices are installed upstream of inlets. Ensure that the surface course inlet filters are installed correctly.</td>
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<tr>
<td>Sediment reaches 1/3 the height of the structure.</td>
<td>Remove sediment.</td>
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<tr>
<td>Surface course inlet filter material becomes clogged with sediment.</td>
<td>Pull surface course filters from inlet and clean them, or replace surface course inlet filters with new filter material.</td>
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<tr>
<td>Ponded water causes a traffic concern.</td>
<td>Use alternate BMPs upstream. Remove surface course inlet filter if necessary.</td>
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