



BMP Section and Design

Sediment Control Fence

Construction stormwater Best Management Practice must be installed, maintained, and removed in accordance with specific manufacturer specifications, where applicable, and the Construction General Permit (TXR150000).

	<p>DESCRIPTION</p> <p>A sediment control fence (or silt fence) (SCF) is a temporary barrier made of woven geo-textile fabric that filters sediments and temporarily retains runoff before the runoff discharges from the project.</p>
<p>TYPES</p>	
<p>Temporary Sediment Control Fence – an SCF fence used in standard conditions</p>	
<p>APPLICATION</p>	
<p>SCF is used to treat overland, non-concentrated flows. General use includes:</p> <ul style="list-style-type: none"> • Along perimeter of project (if the roadway elevation is higher than the ROW elevation) • Down-slope of exposed soil areas • Along streams and channels • Around temporary stockpiles • Around areas of higher flow • Below the toe of exposed and erodible slopes <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p style="text-align: center;">Advantages</p> <ul style="list-style-type: none"> • Cost effective sediment control device • Filters out sediment during rain events • Slows down stormwater runoff </div> <div style="width: 45%;"> <p style="text-align: center;">Disadvantages</p> <ul style="list-style-type: none"> • Localized flooding due to minor ponding at the upslope side of the sediment control fence • Can fail structurally under heavy storm flows • Must be removed and disposed of • For projects using amphibian and reptile exclusion fence (AREF), contractors may confuse usage with silt fence. </div> </div>	
<p>DESIGN CRITERIA</p>	
<ol style="list-style-type: none"> 1. SCF placement must be parallel to slope contours along a line of constant elevation. 2. Should not be used in areas of concentrated flow 3. A 2-year storm frequency may be used to calculate flow rate to be filtered 4. SCF should be sized to filter a maximum flow rate through rate of 100 gpm/ft² 5. Not recommended to control erosion from a drainage larger than 2 acres. Additional controls may be needed. 6. Provide space for sediment removal activities and equipment between the SCF and other obstructions 7. SCF is primarily used as a perimeter control on the down slope side of disturbed areas. 	
<p>REFERENCES</p>	
<p>TXDOT Temporary Erosion, Sediment and Water Pollution Control Measures: Fence & Vertical Tracking: EC (1) – 16 TXDOT Temporary Erosion, Sedimentation, and Environmental Controls: Item 506 (Sections 2.9 & 4.4.8)</p>	