

ERTEC Environmental Systems

Protecting Global Lands and Waterways™

Case Study S-Fence™ Silt Fence Alternative



- > Lower Project Costs
- > Better Performance
- > ZERO Waste
 - ✓Recycled
 - ✓Reusable
 - ✓Recyclable



Thousands of feet of standard silt fence (above) was destroyed and replaced by S-Fence (below).



In many places, S-Fence was installed on existing silt fence posts after silt fence was destroyed.



S-Fence is a 3 layer system. A rugged outer jacket houses a specialized sediment filter. 7' segments are overlapped and joint with wood stakes and nails. Wind driven knockovers are eliminated. Structural maintenance is eliminated. Maintenance is reduced to periodic removal of sediment to prepare for subsequent storms.

Application:	Road Construction—Perimeter Protection
Product:	ERTEC S-Fence™ (replaced failed silt fence)
Owner:	Caltrans District 01
Contractors:	Flatiron West (Prime), Decker Landscaping (Sub)
Project:	Bypass around the City of Willits, Major Route 101
Project Date:	2012-2016

S-Fence™ is a **high performance, low total cost and ZERO waste** system for construction sites which:

- Significantly reduces off-site sedimentation.
- Typically cuts first project costs by 50%.
- Better than ZERO Waste. (Recycled, Reusable, Recyclable).
- Solves silt fence problems by allowing water flow-through while filtering. Limits water back-up which causes undermining and fence toppling.
- Eliminates knock downs and significant maintenance resulting from storm driven winds



Over 11,000 LF of the original silt fence (initially installed by Caltrans) was destroyed during the storm of Dec 11, 2014.

The Challenge: The current best practice is to use traditional silt fence to keep sediment from moving off-site. Unfortunately, it is common to see silt fence topple in the wind, break down in UV light or allow ponding and undercutting during storms. Road Construction projects often last 18 months or more and it is typical for a large percentage of the silt fence installation to require maintenance or even complete replacement. Estimators often overlook the cost of silt fence maintenance, removal and waste handling. Proper installation, removal and disposal is costly. On multi-phase projects, it is also desirable to relocate and reuse the BMP as construction progresses, rather than dispose and start a new phase with new materials.

Results:

“Regular old silt fence was installed first when the project began. During the storm of Dec ‘14, thousands of feet of silt fence was destroyed. We converted to ERTEC S-Fence™. During the next major storm in February ‘15 there was no maintenance associated with the ERTEC S-Fence.” - John Decker, Decker Landscaping—Erosion and Sediment Control subcontractor.



S-Fence after installation—December 2014

Particle filter allows water flow-through, and retains soil particles

HDPE outer jacket 8,000 openings per yd²

