



CLARK COUNTY  
WASHINGTON

COMMUNITY DEVELOPMENT  
BUILDING SAFETY

# BMP C208

## Triangular Silt Dike

### (Geotextile-Encased Check Dam)

v. 1/7/16

*Working together. Securing your safety. Protecting your investment.*

### Purpose and Description

Triangular silt dikes may be used as check dams, for perimeter protection, for temporary soil stockpile protection, for drop inlet protection, or as a temporary interceptor dike.

### Conditions of Use

Triangular silt dikes may be used on soil or on pavement with adhesive or staples.

TSDs have been used to build temporary:

- sediment ponds
- diversion ditches
- concrete wash out facilities
- curbing
- water bars
- level spreaders
- berms

### Design Criteria

The triangular silt dike is made of a triangular prism of urethane foam sewn into a woven geosynthetic fabric.

### Dimensions

Height	10-14 inches high in the center
Base Width	20-28 inches
Length	7 feet (typical, but may vary)

A 2-foot apron extends beyond both sides of the triangle along its standard section of 7 feet. A sleeve at one end allows attachment of additional sections as needed.

### Installation

- Install with ends curved up to prevent water from flowing around the ends.
- The fabric flaps and check dam units are attached to the ground with wire staples. Wire staples should be No. 11 gauge wire and should be 200 mm to 300 mm in length.
- When multiple units are installed, the sleeve of fabric at the end of the unit shall overlap the abutting unit and be stapled.
- When used as check dams, the leading edge must be secured with rocks, sandbags, or a small key slot and staples.

## **Placement**

- Check dams should be located and installed as soon as construction will allow.
- Check dams should be placed perpendicular to the flow of water.

## **Removal**

- In the case of grass-lined ditches and swales, triangular silt dikes functioning as check dams and the accumulated sediment shall be removed when the grass has matured sufficiently to protect the ditch or swale unless the slope of the swale is greater than 4 percent. The area beneath the check dams shall be seeded and mulched immediately after dam removal.

## **Maintenance Standards**

- Triangular silt dams shall be inspected for performance and sediment accumulation during and after each runoff producing rainfall. Sediment shall be removed when it reaches one half the height of the dam.
- Anticipate submergence and deposition above the triangular silt dam and erosion from high flows around the edges of the dam. Immediately repair any damage or any undercutting of the dam.