

EVOGUARD PRO MULTIFUNCTIONAL PROTECTIVE BARRIER**PART 1 - GENERAL****1.1 SECTION INCLUDES**

- A. Section Includes:
 - 1. Modular HDPE knitted technical mesh.

1.2 SUMMARY

- A. EvoGuard Pro is a multi-functional protective project barrier that retains silt & sediments, slows water encroachment, and serves as a containment barrier for mudslides & debris flow, soil erosion, windblown sand, snow drifts, and other land encroachment threats

1.3 SUBMITTALS

- A. Submit the following:
 - 1. Manufacturer shop drawings, and installation instructions.

PART 2 - PRODUCTS**2.1 MANUFACTURERS**

- A. Specification is based on products manufactured by Sox Erosion Solutions; Boca Raton, FL.; (561) 501-0057 or Architect approved equal.

2.2 MATERIALS

- A. Modular HDPE knitted technical mesh:
 - 1. Basis of Design: EvoGuard Pro as manufactured by Sox Erosion Solutions.
 - 2. Features:
 - a. Knitted polyethylene mesh with the following:
 - a) 11 spi course count
 - b) 88.5% shade factor (acffa 1989)
 - c) 3.67 oz/sq-yd weight (astm d3776)
 - a) Break Strength Grab Method ASTM-D5034:
 - i. Warp = 63lbs
 - ii. Fill = 84lbs
 - b) Break Elongation Grab Method ASTM-5034
 - i. Warp = 36.6%
 - ii. Fill = 51.3%
 - c) Tear Strength Trapezoid ASTM- D5587 #1
 - i. Warp = 25.7 lbs
 - ii. Fill = 31.7 lbs
 - d) Bursting Strength ASTM- D3786
 - i. 150 PSI
 - d) 441 cfm/sf air permeability (astm d737)
 - e) Tan or green in color

- f) Available in fire retardant version
 - g) 50' or 100' long sections (rolls)
- b. Elevation:
 - a) Height Varies: 1-, 2-, 3-ft
 - b) Length Varies: 50-, 100-ft
 - c) 5'-6' OC
 - d) Integrated 4" diameter rope sleeves/pockets for stake attachment
 - e) Reinforced anchor rope top and bottom
 - f) Stake: t-post, 2"x2" untreated wood post, or similar
- b. Gromet for securing stake with zip-tie or tie-wire; if using wood stake, drill pilot hole or notch in wood
- c. Panel overlap connection per opsd 219.130
- d. Bursting Strength: the system can withstand an excess of 22,000 lbs/sf of static bursting strength.
- e. Non-flammable: Rated fire retardant by the American Society for Testing and Materials, the technical mesh is manufactured with UV protection and is rendered non-accelerant.
- f. Containment Toe:
 - a) The technical mesh extends into a horizontal flap that makes positive contact with the ground.
 - b) Allows for sediments to collect, adding mass and weight to the system and therefore increasing its function while it works.
 - c) No trenching necessary.
- g. Rip-stop Technology:
 - a) The technical mesh is designed to allow for impact penetration without resulting in unraveling.
 - b) The system can withstand the impact of an isolated event, without weakening the integrity of the remaining panels.
- h. Integrated Sleeves: The technical mesh is constructed with post sleeves that fully integrate the stakes into the system, maximizing its structural integrity.
- i. Structural Zones: The integrated structural rope channel (running along the top and bottom of the technical mesh) paired with integrated post sleeves (on the left & right side of each panel) create individual structural zones that function independently and together as a unit.
- j. Layers of HDPE.
- k. Inert- meaning it does not and cannot maintain a magnetic charge so it will not negatively impact the surrounding environments.
- l. Waterproof (Not Biodegradable).
- m. Will hold earthen material equal to or greater than 150 Microns.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Standard Anchoring Method:
 - 1. Knitted polyethylene mesh*
 - 2. Containment toe and reinforced anchor rope is used to create positive contact with soil (containment toe faces direction of desired containment area)
 - 3. Containment toe pins: 6" galvanized landscape staples, 4" biodegradable sod stakes, or similar

- (spaced every 2')
 - 4. Existing Grade
 - B. Alternate Trenching Method
 - 1. Reinforced anchor rope top and bottom
 - 2. Anchor Trench: 6"
 - C. Stakes:
 - 1. T-posts
 - 2. 2"x2" untreated wood posts, or similar
 - 3. Basalt fiber stake posts

END OF SECTION