

ACF SILT SACK INLET PROTECTION SYSTEM GUIDE SPECIFICATION

Product:

ACF Silt Sack

Manufacturer:

Ferguson Enterprises LLC dba ACF Environmental 2831 Cardwell Rd Richmond, VA 23234

Sales: <u>infogeo@ferguson.com</u> Web: <u>www.fergusongss.com</u>

1.0 Description of Work

1.1 This work shall consist of furnishing, installing, maintaining, and removing Silt Sack sediment control device as directed by the engineer or as shown on the site drawings.

2.0 Silt Sack Materials

2.1 There 3 types of Silt Sack, available in High or Regular Flow, Black or Hi-Vis Yellow

Silt Sack (Standard) - Overflows optional

Silt Sack Curb - with Curb Deflector, Overflows optional

Silt Sack Frame - with Adjustable Frame, Overflows optional

2.2 Silt Sack shall be manufactured from a specially designed woven polypropylene geotextile and sewn by a double needle machine, using a high strength nylon thread.

Silt Sack seams have been tested by a third party laboratory under ASTM D-4884 (Standard Test Method for Strength of Sewn or Bonded Seams of Geotextiles). The results are listed in Table 1 & 2 below

Table 1: Silt Sack Regular Flow Seam Strength Results (ASTM D-4884)

Parameter	MARV	Units
Maximum Load	450	LBS
Maximum Strength	675	LB/FT

Table 1: Silt Sack High Flow Seam Strength Results (ASTM D-4884)

Parameter	MARV	Units
Maximum Load	650	LBS
Maximum Strength	1000	LB/FT

- 2.3 Silt Sack shall be manufactured to fit the opening of the catch basin or drop inlet. Silt Sack will have the following features: two dump straps attached at the bottom to facilitate the emptying of Silt Sack; Silt Sack shall have lifting straps as an integral part of the system to be used to lift Silt Sack from the basin; Silt Sack shall have a restraint cord approximately halfway up the depth of the sack to keep the sides from expanding toward the catch basin wall (this cord is also a visual means of indicating when the sack should be emptied). Once the cord is covered with sediment, Silt Sack should be emptied, cleaned, and placed back into the basin for reuse.
- 2.4 The Silt Sack unit shall utilize a woven fabric with the following characteristics:

Specs for Silt Sack Regular Flow

PROPERTY	TEST METHOD	UNITS	TEST RESULTS
Grab Tensile	ASTM D4632	lbs	250 x 230
Grab Elongation	ASTM D4632	%	15 x 12
Puncture	ASTM D6241	lbs	930
Trapezoid Tear	ASTM D4533	lbs	65 x 75
AOS	ASTM D4751	US Sieve	30
Flow Rate	ASTM D4491	gal/min/ft ²	40
Permittivity	ASTM D4491	sec 1	0.5

Specs for Silt Sack High Flow

PROPERTY	TEST METHOD	UNITS	TEST RESULTS
Grab Tensile	ASTM D4632	lbs	285 x 210
Grab Elongation	ASTM D4632	%	30 x 20
Puncture	ASTM D6241	Ibs	810
Trapezoid Tear	ASTM D4533	Ibs	110 x 95
AOS	ASTM D4751	US Sieve	20
Flow Rate	ASTM D4491	gal/min/ft ²	350
Permittivity	ASTM D4491	sec - ¹	4.85
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Note: Property values listed above are effective April 2023 and are subject to change.

All properties are Minimum Average Roll Values (MARV)

3.0 Construction Sequence

- 3.1 To install Silt Sack in the catch basin, remove the grate and place the sack in the opening. Hold approximately six inches of the sack outside the frame. This is the area of the lifting straps. Replace the grate to hold the sack in place.
- 3.2 When the restraint cord is no longer visible, Silt Sack is full and should be emptied.
- 3.3 To remove Silt Sack, take two pieces of 1" diameter rebar and place through the lifting loops on each side of the sack to facilitate the lifting of the Silt Sack.

3.4 To empty Silt Sack, place unit where the contents will be collected. Place the rebar through the lift straps (connected to the bottom of the sack) and lift. This will lift the Silt Sack from the bottom and empty the contents. Clean out and rinse. Return Silt Sack to its original shape and place back in the basin.

3.5 Silt Sack is reusable. Once the construction cycle is complete, remove Silt Sack from the basin and clean. Silt Sack should be stored out of sunlight until the next use.

4.0 Basis of Payment

4.1 Payment for all Silt Sack units used during construction is to be included in the bid price for the overall erosion and sediment control plan unless unit price is requested.

*Silt Sack is covered by U.S. Patent No. 5,575,925 *Revised March 21, 2024

Note: This information is provided as reference only and is not intended as a warranty or guarantee. Ferguson Enterprises LLC, dba ACF Environmental assumes no liability in connection with the use of this information (3/21/24).