

Dirtbag® Specifications Control of Sediment In Pumped Water

1.0 Description

1.1 This work shall consist of furnishing, placing and removing the DIRTBAG® pumped sediment control device as directed by the design engineer or as shown on the contract drawings. The dirtbag® pumped-silt control system is marketed by:

ACF Environmental, Inc.
2831 Cardwell Drive
Richmond, Virginia 23234
Phone: 800-448-3636
Fax: 804-743-7779

2.0 Materials

2.1 Dirtbag®

2.1.1 The DIRTBAG® shall be a nonwoven bag which is sewn with a double needle matching using a high strength thread.

2.1.2 The DIRTBAG® seams shall have an average wide width strength per ASTM D-4884 as follows.

Dirtbag Style	Test Method	Test Result
Dirtbag® 53	ASTM D-4884	60 LB/IN
Dirtbag® 55	ASTM D-4884	100 LB/IN

2.1.3 Each standard DIRTBAG® has a fill spout large enough to accommodate a 4" discharge hose. Attached are straps to secure the hose and prevent pumped water from escaping without being filtered.

2.1.4 The geotextile fabric shall be nonwoven fabric with the following properties:

Properties	Test Method	Units	Nonwoven	
			53	55
Weight	ASTM D-3776	Oz/yd	8	10
Grab Tensile	ASTM D-4632	Lbs.	203	250
Puncture	ASTM D-4833	Lbs.	130	165
Flow Rate	ASTM D-4491	Gal/Min/Ft2	80	70
Permittivity	ASTM D-4491	Sec. ⁻¹	1.5	1.3
Mullen Burst	ASTM D-3786	Lbs. ⁱⁿ²	400	550
UV Resistant	ASTM D-4355	%	70	70
AOS % Retained	ASTM D-4751	%	100	100

All properties are minimum average roll value except the weight of the fabric which is given for information only.

3.0 Construction Sequence

3.1.1 Install DIRTBAG® on a slope so incoming water flows downhill through the DIRTBAG® without creating more erosion. Strap the neck of the DIRTBAG® tightly to the discharge hose. To increase the efficiency of filtration, place the bag on an aggregate or haybale bed to maximize water flow through the surface area of the bag.

3.1.2 The DIRTBAG® is full when it no longer can efficiently filter sediment or pass water at a reasonable rate. Flow rates will vary depending on the size of the DIRTBAG®, the type and amount of sediment discharged into the DIRTBAG®, the type of ground, rock or other substance under the bag and the degree of the slope on which the bag lies. Under most circumstances DIRTBAG'S® will accommodate flow rates of 1500 gallons per minute. Use of excessive flow rates or overfilling DIRTBAG® with sediment will cause ruptures of the bags or failure of the hose attachment straps.

3.1.3 Dispose DIRTBAG® as directed by the site engineer. If allowed, the DIRTBAG® may be cut open and the contents seeded after removing visible fabric. DIRTBAG is strong enough to be lifted with added straps if it must be hauled away (extra option). Off-site disposal may be facilitated by placing the DIRTBAG® in the back of a dump truck or flatbed prior to use and allowing the water to drain from the bag in place, thereby dismissing the need to lift the DIRTBAG®.

4.0 Basis of Payment

4.1 The payment for any DIRTBAG® used during construction is to be included in the bid of overall erosion and sediment control plan unless a unit price is requested.