# DRTBAG SEDIMENT&P PUMPED SEDIMENT REMOVAL SYSTEM



Retains the silt, sand and fines while allowing the filtered water to drain out into the drainage system.

Protect the environment effectively and economically with Dirtbag®! Collect sand, silt and fines. Avoid silting streams, surrounding property and storm sewers. As more and more emphasis is put on saving our wetlands, regulations are becoming more stringent regarding the pumping of dirty water from holes around construction sites-such as foundations, pipe line construction, repairing municipal water/sewer lines, marine construction, utility, highway and site development areas. ACF can make custom Dirtbags® to suit your needs. We can produce the size, dimension, or use the fabric weight you request.



#### **Use Recommendations**

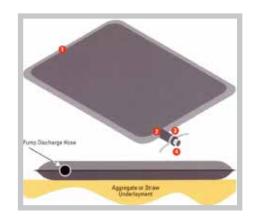
ACF Environmental manufactures Dirtbag® using a variety of woven and nonwoven geotextile fabrics. The fabric properties on the Specifications page affirm the strength of Dirtbag® and are a result of tests conducted at on-site laboratories at the geotextile factory. All test methods are ASTM or industry standards.

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

Strap the neck of 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.

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 Dirtbag®, the type and amount of sediment discharged into Dirtbag, the type of ground, rock or other substance under the bag. Under most circumstances Dirtbag® will accommodate flow rates of 500 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. **Dirtbag must be monitored during use.** 





## 80Z. SPECIFICATIONS

#### 1.0 Description

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

ACF Environmental, Inc. 2831 Cardwell Road Richmond, VA 23234 Phone: 800.448.3636 Fax: 804.743.7779

- 2.0 Materials
- 2.1 Dirtbag®
- **2.1.1** The Dirtbag shall be manufactured using a polypropylene 8 oz. non-woven geotextile sewn into a bag with a double needle, using a high strength thread.
- **2.1.2** Each standard Dirtbag has a fill spout large enough to accommodate a 4" discharge hose. Straps are attached to secure the hose and prevent pumped water from escaping without being filtered.
- **2.1.3** The non-woven geotextile shall meet or exceed the following properties:

| Property       | Test Method | Units                   | Test Results |
|----------------|-------------|-------------------------|--------------|
| Weight         | ASTM D-3776 | oz/yd                   | 8            |
| Grab Tensile   | ASTM D-4632 | lbs.                    | 205          |
| CBR Puncture   | ASTM D-6241 | lbs.                    | 525          |
| Flow Rate      | ASTM D-4491 | gal/min/ft <sup>2</sup> | 90           |
| Permittivity   | ASTM D-4491 | sec. <sup>-1</sup>      | 1.4          |
| UV Resistant   | ASTM D-4355 | %                       | 70           |
| AOS % Retained | ASTM D-4751 | <b>US Sieve</b>         | 80           |

2.1.4 Dirtbag® Testing Results

PropertyTest MethodTest ResultsOverall Bag Removal EfficiencyASTM D-788097.55%(including initial filling)

All properties are Minimum Average Roll Value (MARV) except the weight of the fabric, which is given for information purposes only. Depending on soil conditions and filtration requirements, additional geotextile options are available. Please call our engineering staff for solutions.

#### 3.0 Construction Sequence

- **3.1.1** To install Dirtbag on a slope so that incoming water flows downhill through 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 hay bale bed to maximize water flow through the surface area of the bag.
- filter sediment or allow water to pass 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, the Dirtbag will accommodate flow rates of 500 gallons per minute. Use of excessive flow rates or overfilling Dirtbag with sediment will cause the bag to rupture or will cause failure of the hose attachment straps.

### Dirtbag must be monitored during use!

3.1.3 Dispose Dirtbag as directed by the site engineer. If allowed, Dirtbag may be cut open and the contents seeded after removing visible fabric. Dirtbag is strong enough to be lifted with optional straps if it must be hauled away. 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 while in place, thereby eliminating the need to lift the Dirtbag.

ACF Environmental is not liable for failures or misuse of Dirtbag.

Dirtbag<sup>HD</sup> and Dirtbag<sup>SD</sup> Tube are also available from ACF.





