# DRTBAG 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 the ACF Dirtbag<sup>®</sup>!

The ACF Dirtbag<sup>®</sup> collects sand, silt and fines, while regulating that enters streams, surrounding property and storm sewers. ACF can make custom Dirtbags<sup>®</sup> to suit your needs. ACF Environmental manufactures the Dirtbag<sup>®</sup> using a variety of woven and nonwoven geotextile fabrics. We can produce any size, dimension, or fabric weight requested.

Each standard Dirtbag<sup>®</sup> 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. 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<sup>®</sup> is full when it no longer can efficiently filter sediment or pass water at a reasonable rate. Flow and removal rates will vary depending on the size of Dirtbag<sup>®</sup>, the type and amount of sediment discharged into Dirtbag<sup>®</sup>, the type of surface, rock or other substance under the bag. Under most circumstances Dirtbag<sup>®</sup> will accommodate flow rates of 500 gallons per minute. Use of excessive flow rates or overfilling Dirtbag<sup>®</sup> with sediment will cause ruptures of the bags or failure of the hose attachment straps.

### Dirtbag<sup>®</sup> must be monitored during use.

Dirtbag<sup>®</sup> and Dirtbag<sup>®</sup> HD have been tested under ASTM D-7880 and ASTM D-7701, which are Standard Test Methods for Determining Flow Rate of Water and Suspended Solids Retention from a Closed Geosynthetic Bag. Testing summary available upon request.

# **DirtBag**®

### Standard Dirtbag® Features

- Higher flow rate
- Higher removal rate
- Smaller openings

## **Dirtbag**®HD

### Dirtbag<sup>®HD</sup> Features

- Higher strength
- More cost effective
- Less susceptible to ruptures

NEW







# DIRTBAG® SPECIFICATIONS

### **STANDARD DIRTBAG®**

Standard Sizes: 4' x 6' 5' x 5' 8' x 10' 10' x 10' 15 x 15' Custom Sizes available upon request.

### DIRTBAG®HD

Standard Sizes: 3' x 5' 4' x 10' 6' x 20' 12' x 12.5' 12' x 18.75' Custom Sizes available upon request.

| Geotextile Properties - 8oz: Nonwoven |                                |                         |                 |  |  |
|---------------------------------------|--------------------------------|-------------------------|-----------------|--|--|
| 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> | <sup>2</sup> 90 |  |  |
| Permittivity                          | ASTM D-4491 sec. <sup>-1</sup> |                         | 1.4             |  |  |
| UV Resistant                          | ASTM D-4355                    | %                       | 70              |  |  |
| AOS %                                 | ASTM D-4751                    | US Sieve                | 80              |  |  |

| Geotextile Properties - Woven |             |                         |              |  |  |
|-------------------------------|-------------|-------------------------|--------------|--|--|
| Property                      | Test Method | Units                   | Test Results |  |  |
| Weight                        | ASTM D-3776 | oz/yd                   | 6.13         |  |  |
| Grab Tensile                  | ASTM D-4632 | lbs.                    | 168x300      |  |  |
| CBR Puncture                  | ASTM D-6241 | lbs.                    | 901          |  |  |
| Flow Rate                     | ASTM D-4491 | gal/min/ft <sup>2</sup> | 66.2         |  |  |
| Permittivity                  | ASTM D-4491 | sec1                    | 0.862        |  |  |
| UV Resistant                  | ASTM D-4355 | %                       | 96           |  |  |
| AOS %                         | ASTM D-4751 | US Sieve                | 30           |  |  |

### Dirtbag<sup>®</sup> Test Results

| Property                   | Test Method | Units | Standard<br>Dirtbag Results | Results |
|----------------------------|-------------|-------|-----------------------------|---------|
| Average Removal Efficiency | ASTM D-7701 | %     | 99.6                        | 95.3    |
| Residual Low-Head          | ASTM D-7701 | gpm   | <0.001                      | 0.004   |
| CBR Puncture               | ASTM D-6241 | lbs.  | 97.98                       | 93.29   |

#### Dirtbag® Seam Test Results (under ASTM D4884)

| NonWoven Dirtbag                          | Woven Dirtbag                                    |
|---|--|
| Maximum Load 786 lbs                      | Maximum Load 934 lbs                             |
| Maximum Strength 1178 lb/ft               | Maximum Strength 1402 lb/ft                      |
| NOTE: Each test result was derived from a | a material failure rather than a stitch failure. |

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. All test methods are ASTM or industry standard, and have been verified by a third party testing facility. Test data is available upon request.



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

