

## Standard Sediment Bag

Keep your site in compliance with our Standard Sediment Bags for clean water discharge in dewatering operations.

### Product Summary

Dewatering Bags, also known as sediment filter bags or silt bags, are an easy and economical option for any site looking to remove sediment or silt from their discharge. Each Standard Sediment Bag is constructed from a robust geotextile filter fabric to catch and contain sediment as muddy water is pumped from your site.

These filtering bags are made from a non-woven geotextile fabric that is needle-punched to allow water to flow back out while retaining fine soils and particles. Its high filtering qualities make it ideal for pumping trenches, construction sites, dredging areas, ponds, lakes and for dewatering in municipalities or plants.

Standard Sediment Dewatering Bags are the most common option for removing unwanted materials from discharge or stormwater runoff. Bags are generally smaller in size, making them ideal for dumpsters, drop boxes, or other small dewatering areas.

### Features

- Needle-punched, non-woven geotextile fabric
- Filters soils and particles as small as 4x the width of a human hair
- Quick and intuitive installation
- Works with up to 8 in. diameter discharge hoses
- Helps comply with NPDES Phase II regulations

### Standard Sediment Bag Specifications

Size	Material	Filter Rate*	Microns*	AOS*	Capacity*
6'x6'	8 oz. Non-Woven	90 gpm/ft <sup>2</sup>	177	80 US Sieve	1.44 yds <sup>3</sup>
10'x15'	8 oz. Non-Woven	90 gpm/ft <sup>2</sup>	177	80 US Sieve	6 yds <sup>3</sup>
15'x15'	8 oz. Non-Woven	90 gpm/ft <sup>2</sup>	177	80 US Sieve	9.6 yds <sup>3</sup>
15'x20'	8 oz. Non-Woven	90 gpm/ft <sup>2</sup>	177	80 US Sieve	12 yds <sup>3</sup>
15'x25'	8 oz. Non-Woven	90 gpm/ft <sup>2</sup>	177	80 US Sieve	15 yds <sup>3</sup>

### 8 oz Non-Woven Material Specifications

Specification	ASTM* Test	Value
Material: Non-Woven, Polyethylene Geotextile	-	-
Grab Tensile	D4632	205 lbs
Elongation at break	D4632	50%
Trapezoid Tear	D4533	80 lbs
Puncture	D4833	525 lbs
Mullen Burst	D3786	420 psi
Permittivity	D4491	1.5 sec <sup>-1</sup>
A.O.S. (U.S. sieve.) / mm	D4781	80/0.18
UV Stability (strength retained %) 500 Hours	D4355	70%
Fabric Weight (oz./yd <sup>2</sup> )(typical)	D5261	8 oz/yd <sup>2</sup>
Flow Rate	D4491	90 gpm/ft <sup>2</sup>

**Filter Rate:** Flow rates are based on fabric ratings at the time of manufacturing. During a dewatering process, times may slow depending on the sediment content of your water and bag size. Please contact our sales team to discuss pumping rates for the duration of your project.

**Capacity:** is estimated only and is intended as a guide to users. Volume per sediment filter bag is dependent on soil composition, site conditions, and use. Information is provided in good faith. Actual field trials are the only true benchmark for how your bag will perform.

**AOS:** Apparent Opening Size. The sieve number denotes the number of holes present in the sieve within one inch length of a sieve mesh.

**Microns:** a unit of length equal to one millionth of a meter. This number denotes the size of the holes in a sieve. For reference, a human hair is roughly 50 microns wide.

**ASTM:** The American Society for Testing and Materials

## What Size Discharge Hoses are Compatible?

Each Standard Dewatering Bag is designed to handle a discharge hose that is up to 8 in. in diameter. These Dewatering Bags most commonly feature a hose inlet (fill port) where you can insert the hose. Once the hose is in place, tightly secure the fabric to the hose with wire, ties, clamps, ropes or similar on-hand materials. GEI Standard Dewatering Bags ship with a 3" hose clamp for this purpose.

## Considerations for Filtered Water Runoff

Ensure to guide runoff from the Standard Dewatering Bag into the nearest inlet. Avoid causing any erosion to the down-stream environment. Ask your representative if a scour pad may be required to protect your dewatering project laydown area and discharge paths.

## Do Dewatering Bags Need to Be Monitored?

Standard Dewatering Bags must be monitored — no dewatering bag is indestructible. We recommend checking on the bag's performance several times a day initially, then daily to ensure the bag is still properly attached and the pump rate and the concentration of sediment is not excessive. Failure to properly monitor the dewatering bag could lead to failure.

## Can Multiple Pipes Discharge into a Single Bag?

One Dewatering Bag per discharge is recommended, unless specifically designed to handle multiple discharge pipes.

## How Do I Filter Even Finer Sediments, Like Clay?

Using the Dewatering Bag in conjunction with a flocculent or polymer for finer clay and organic materials will improve flow rates, discharge clarity and percentage of solids retained.

## Are Standard Dewatering Bags Reusable?

We do not recommend using Dewatering Bags more than once. Contamination may occur with the composition of sediment that the Dewatering Bags may absorb from one project to the next, the stress on the seams and folds through the filling and drying process, and the weight of the solids left after the water has mostly evaporated. Handling alone makes reuse unfeasible for most applications.

## How Do I Dispose of the Used Dewatering Bag?

Dispose of the Dewatering Bag and its contents as directed by the site engineer, as it is dependent on the jobsite. If allowed, the Dewatering Bag may be cut open and the contents seeded after removing visible fabric. The Dewatering Bag as a whole is not recyclable.

## What Should I Consider When Choosing Size?

Determining the right sized Dewatering Bag is dependent on your site's conditions. Some common factors to consider are:

- The flow rate of your discharge hose
- The type of sediment and quantity you need to filter
- The volume of materials needing containment
- How permeable the Dewatering Bag needs to be
- Size restrictions based on your site's rules and ordinances

## What Are Some Common Placement Options?

- 20 ft. drop box / rolloff
- Dump truck or flatbed
- Construction site laydown area with sufficient space and drainage
- Containment vehicles

## Where Should I Place the Dewatering Bag?

Dewatering Bags should be placed near an inlet for runoff water to flow towards. Ensure the surface down-stream of the Dewatering Bag is resistant to erosion. For jobsite safety, we do not recommend placing Dewatering Bags on steep surfaces or steep slopes where it may roll. Likewise, to prevent pooling, Dewatering Bags are not recommended to be placed on flat surfaces without a nearby inlet.

## How can I improve the filtration of the bag?

To increase the efficiency of filtration, we recommend placing the bag on an aggregate, pallets or a hay bale bed to maximize water flow through the entire surface area of the bag. The surface should provide full coverage under the surface area of the bag.

## DOT Guidelines

Standard Dewatering Bags can help your site stay in compliance with local and federal stormwater regulations. Its components meet USDOT Erosion and Sediment Control requirements and exceed minimum guidelines outlined in your local DOT Erosion and Sediment Control Design and Review Manual.

## How do I know when it is full?

We recommend that you do not fill Dewatering bags past 80% capacity. When the bag reaches this point, attach the discharge hose to another bag to keep operations continuous while ensuring the contents have time to settle. Flow rates will vary depending on the size of the Dewatering Bag, the type and amount of sediment discharged into the Dewatering Bag, the type of surface beneath the bag, and the degree of the slope on which the bag lies. Under most circumstances, our Dewatering Bags will accommodate flow rates of up to 1100 gallons per minute. Use of excessive flow rates or overfilling the Dewatering Bag with sediment can cause ruptures of the bags or failure of the hose attachment straps.

## Florida Compliance

In February of 2015, Florida DEP added dewatering operations to the revised Generic Permit for Stormwater Discharges from Construction Activities (CGP). It is not uncommon for land development to require dewatering onsite. Dewatering is the act of temporarily lowering the water table by pumping groundwater from one location to another, and discharge should not cause a violation to surface water quality standards during dewatering. Operators may obtain a Generic Permit for Discharge of Groundwater from Dewatering Operations through the FDEP when filing for their NPDES NOI. In addition, it's important to note that Standards must also get authorization from their respective local municipality and water management districts. In order for dewatering activities to meet the requirements of the DEP permit, the FDEP or EPA must identify the site or sites within 500 feet as not contaminated or remediated. If contamination is present, the responsible party must remediate the site before dewatering can begin. Adding dewatering activity to the CGP last year has allowed Standards to file one NOI with DEP for NPDES and Dewatering. If dewatering is not notated during the initial application the Standard would need to file a Notice of Intent to Use the Generic Permit for Discharge of Ground Water from Dewatering Operations.