

## Dewatering Socks

Keep your site in compliance with our Dewatering Socks for clean water discharge in dewatering operations.

### Product Summary

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

Dewatering Socks are one of the easiest ways to filter water runoff as it leaves your site. Designed to attach directly to the end of vertical dewatering pipes or hoses, these filter socks contain sediment, debris, and other pollutants as the water discharges from your site. The concentration of sediment and debris is an important consideration, as Dewatering Socks do not have as much volume for containment as other dewatering products.

GEI Dewatering Socks help keep runoff clean and to keep your site in compliance with local and federal stormwater regulations. They are DOT compliant and meet or exceed minimum DOT Erosion and Sediment Control requirements.

### Features

- Needle-punched, non-woven geotextile fabric
- Quick and intuitive installation direct to a discharge hose or pipe
- Easy to ship and store on site
- Filters soils and particles as small as 4x the width of a human hair
- Fits 4 - 16 in. diameter discharge hoses
- Can be implemented as a SWPPP solution or Stormwater BMP
- Helps Sites Comply with NPDES, 40 CFR 122.26 (1999)

### Dewatering Sock Specifications

Size	Material	Filter Rate*	Microns*	AOS*
6"x60"	8 oz. Non-Woven	90 gpm/ft <sup>2</sup>	177	80 US Sieve
6"x60"	10 oz. Non-Woven	75 gpm/ft <sup>2</sup>	149	100 US Sieve
8"x60"	8 oz. Non-Woven	90 gpm/ft <sup>2</sup>	177	80 US Sieve
8"x60"	10 oz. Non-Woven	75 gpm/ft <sup>2</sup>	149	100 US Sieve
12"x60"	8 oz. Non-Woven	90 gpm/ft <sup>2</sup>	177	80 US Sieve
12"x60"	10 oz. Non-Woven	75 gpm/ft <sup>2</sup>	149	100 US Sieve
16"x60"	8 oz. Non-Woven	90 gpm/ft <sup>2</sup>	177	80 US Sieve
16"x60"	10 oz. Non-Woven	75 gpm/ft <sup>2</sup>	149	100 US Sieve

### 8 oz and 10 oz Non-Woven Material Specifications

Specification	8 oz	10 oz
Material: Non-Woven, Polyethylene Geotextile	-	-
Grab Tensile - D4632	205 lbs	205 lbs
Elongation at break - D4632	50%	50%
Trapezoid Tear - D4533	80 lbs	100 lbs
CBR Puncture Strength - D4833	525 lbs	700 lbs
Permittivity - D4491	1.5 sec <sup>-1</sup>	1.2 sec <sup>-1</sup>
A.O.S. - D4781	80 Sieve	100 Sieve
UV Stability - D4355	70%	70%
Flow Rate	90 gpm/ft <sup>2</sup>	75 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

## When Do I Use Dewatering Socks?

When filtering water directly from hoses or pipes, Dewatering Socks are the most appropriate choice. Diameters range from 4" to 16" to fit around most pipe sizes. Each sock is secured via clamp, so fitting can be approximate as long as the pipe is smaller than the sock opening. The concentration of sediment and debris is an important consideration, as Dewatering Socks do not have as much volume for containment as other dewatering products.

## What Size Discharge Hoses are Compatible?

After choosing the Dewatering Sock closest to your pipe diameter, tightly secure the fabric to the hose with wire, ties, clamps, ropes or similar on-hand materials, ensuring the sock is securely fitted and attached to the discharge hose.

## Considerations for Filtered Water Runoff

Ensure to guide runoff from the Dewatering Sock 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.

## Monitoring Dewatering Socks

Dewatering Socks must be monitored — no Dewatering Sock is indestructible. We recommend checking on the sock's performance 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 Sock could lead to failure.

## Can Multiple Pipes Discharge into a Single Sock?

One Dewatering Sock per discharge is recommended.

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

Using the Dewatering Sock 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 Dewatering Socks Reusable?

We do not recommend using Dewatering Socks more than once. Contamination may occur with the composition of sediment that the Dewatering Socks 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 Sock?

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

## What Should I Consider When Choosing Size?

Determining the right sized Dewatering Sock 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 Sock 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 Socks should be placed near an inlet for runoff water to flow towards. Ensure the surface down-stream of the Dewatering Sock is resistant to erosion. For job site safety, we do not recommend placing Dewatering Socks on steep surfaces or steep slopes where it may roll. Likewise, to prevent pooling, Dewatering Socks 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 sock on an aggregate or hay bale bed to maximize water flow through the entire surface area of the sock. The surface should provide full coverage under the surface area of the sock.

## DOT Guidelines

Dewatering Socks can help your site stay in compliance with local and federal stormwater regulations. Their 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 Socks past 80% capacity. When the sock reaches this point, attach the discharge hose to another sock to keep operations continuous while ensuring the contents have time to settle. Flow rates will vary depending on the size of the Dewatering Sock, the type and amount of sediment discharged into the Dewatering Sock, the type of surface beneath the sock, and the degree of the slope on which the sock lies. Under most circumstances, our Dewatering Socks will accommodate flow rates of up to 1100 gallons per minute. Use of excessive flow rates or overfilling the Dewatering Sock with sediment can cause ruptures to the sock 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.