

Type 3 DOT Turbidity Curtain

Our Turbidity Curtains help protect local environments, intake equipment, and waterways by reliably containing or diverting floating pollutants.



Product Summary

Type 3 DOT Turbidity Curtains provide a high-strength solution for containing silt, turbidity and displaced particles for projects with DOT requirements. Designed for fast water, waves or demanding conditions, these curtains add increased strength to containment or control areas. Permeable curtains feature a woven geotextile filter panel that is located within the bottom skirt that allows water to pass through. Type 3 DOT models are typically recommended for use in areas with flows up to 1.5 knots.

Features

- Controls Turbidity in Demanding Areas
- Constructed with Yellow High Visibility Fabric
- Lengths Up to 50' to Fit Various Size Projects
- Custom Skirt Depth and Flotations Available
- Universal Connectors, Tension Cable and Ballast Chain
- Meets or Exceeds Most State DOT Requirements

Applications

- Inter-Coastal Projects
- Dredging Sites
- Remediation Projects
- Bays and Harbors
- Projects with Wind or Waves

Type 3 DOT Specifications

Spec	Measure
Length	50' or 100'
Depth	5' STD (3' - 20' Available on Request)
Fabric	18 oz. PVC w/ Monofilament Fabric
Floatation	Square Foam Filled Flotation
Floatation Size	6" or 8"
Tension Cable	5/16" Galvanized Steel Cable Sheathed in Vinyl
Bottom Ballast Chain	5/16" Galvanized Steel Chain
Section Connectors	Top Stress Plates with Grommets
Color	Yellow
Anchor Points	Every 50' to 100'



What Sizes Do Silt/Turbidity Curtains Come In?

Lengths: Turbidity curtains are typically sold by the section. Standard section lengths are either 50 feet or 100 feet.

Depths: Depths for the curtains will vary significantly and are dependent on the water depth/conditions in your location. Standard depth for all curtains is 5 feet, however, the depths of our curtains can range anywhere from 3 to 100 feet.

How Do I Know What Depth I Need?

Depth for the turbidity curtain is chosen based on the depth of the water in your location. As a standard rule of thumb, the ACOE recommends the depth of the skirt to extend down until it is about one foot (1') from the floor. This allows for aquatic life to pass through and for the curtain to provide maximum containment without the bottom of the skirt getting bogged down with settled silt.

Which Silt/Turbidity Curtain Should I Use?

Choosing the right silt curtain for your location is often dependent on different site factors and conditions. The standard classifications for our silt curtains are as follows:

Type 1: Calm Water
Type 2: Medium Water Conditions
Type 3: Fast Water Conditions

When Should I Use a Permeable Silt Curtain?

Permeable Silt Barriers are most commonly used when they are either specified in a site project or when the curtain will be dealing with a significant amount of water pressure. Use of the bottom filter panel can help reduce pressure on the curtain by allowing water to continue to flow through the curtain.

What Site Conditions Do I Need to Evaluate?

For many locations, the three most influential factors on the silt curtain are wind, waves and current. Depending on where your work area is located these factors can act as a force on the turbidity curtain causing it to move and adjust while installed. This, in turn, can limit the turbidity curtain's ability to contain silt and sediment in a given location.

If you are dealing with a site that has any of the above conditions a Type 2 or Type 3 silt curtain will probably work best for your area. These silt curtains include the addition of a single or dual tension cable along the top of the curtain. This increases the strength of the curtain and its ability to hold up to moving water areas.

Can I Use My Turbidity Curtain in Salt Water?

When using the Type II Silt Barrier in salt water areas, consideration should be given to the tension cables and connectors. The following component adjustments are recommended for any location with salt water; Stainless Steel Cable and Zinc Anode Connectors upgrade, Stainless Steel Chain upgrade, or a combined Cable/Chain upgrade. For short term projects, galvanized components can be used for a period of up to 12 months.

Do I Need Lights for my Floating Barrier?

You will want to check your local regulations for lighting requirements of floating barriers on public waterways. With boater safety in mind, it is common to have night-time lighting requirements and high-visibility colors or floating markers for barriers in public waters. This also helps protect your barrier. The USGC recommends marine lights be placed every 100' along the length of your curtain system where marine traffic is present.

Best Practice for Installing Anchors and Buoys

There are a couple of common errors that can impact success with your project if you are unfamiliar with boom installation. Anchors should not be connected from the barrier directly to the ocean/lake/river floor, or attached to the boom without a painter line and float for shock absorption. Improperly anchored boom systems significantly impair the curtain's performance and create excessive load and strain. As this can cause damage to your curtain, we recommend following our anchoring guides.

What If I Don't Use the Right Number of Anchors?

Without proper anchoring, your project may fail. Anchoring helps to keep your curtain in the proper position and accounts for reasonable fluctuations due to weather. The impact of not using enough anchors (or placing them incorrectly) is significant:

- The turbidity curtain may not stay in position causing the debris or surface substances to bypass the barrier. The barrier may break free and cause damage.
- Insufficient anchoring places additional strain on the curtain itself. This frequently causes unnecessary damage, shortening the curtain's use-life.
- Various anchor design options may be recommended based on project requirements and conditions at the site, such as chevrons, top hats, segmented, or dual barriers.

Using the Proper Number of Anchors

It depends on multiple variables such as the current, depth, and conditions of your project. We can help. Our representatives use several key factors to determine both the number and placement of the anchors for minimizing the load placed on your curtain. Proper anchoring is crucial to your project's success and protects your investment and project.

How Do I Install or Remove the Curtain?

Installation instructions are curtain-specific. Please see the installation guide from the product page of the type of curtain you're considering. Turbidity curtain removal reverses the process of installation. All floating barriers should be removed prior to a significant storm event. Curtain systems are designed for 'typical' conditions, excessive forces during storm events are likely to cause the barrier system to fail, receive significant damage or become unmoored, posing fouling risks and damage to other aquatic life and property. Turbidity Curtain should be safely removed from moorings and stored until it can be re-installed after conditions return to normal.

Can a Turbidity Curtain Be Repaired or Reused?

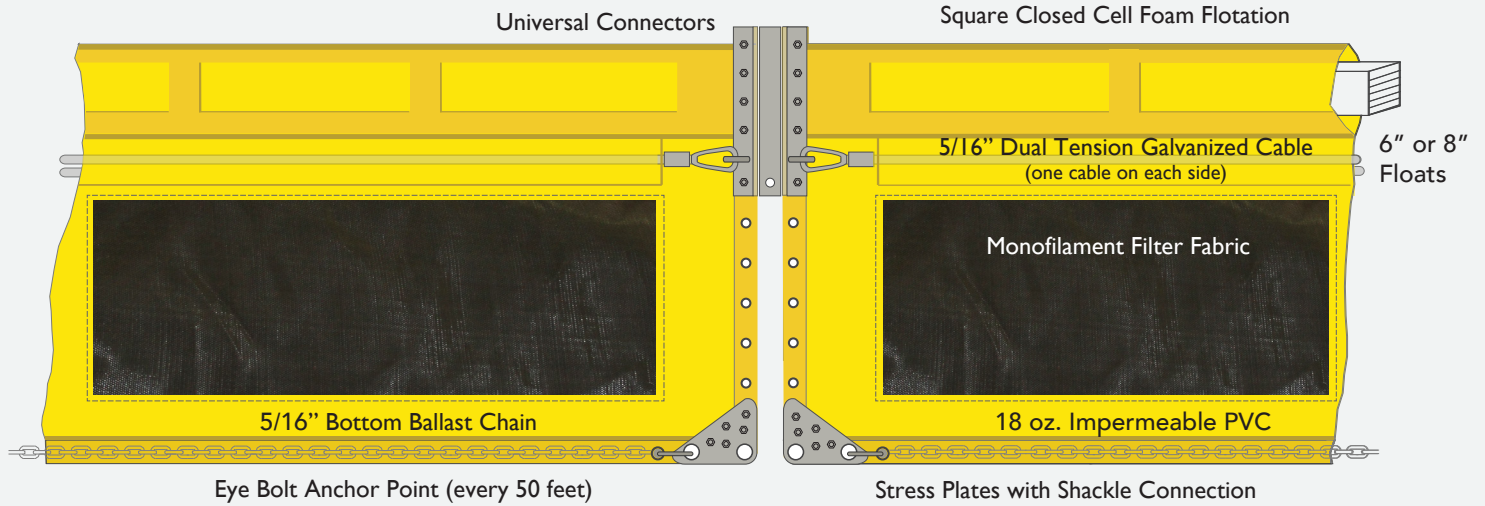
Turbidity Curtain can be cleaned and reused but any contaminated curtain has to be handled very carefully. For repairs, we have patch repair kits, hardware and accessories available, depending on the nature, location, and extent of the repair required for your curtain. If your curtain experiences damage, please provide photos to assist. We can also offer advice on how best to maintain and care for your turbidity curtain, to prevent damage and promote a longer use-life. Occasionally components or sections of curtains should be replaced.

Do I Have to Maintain My Barriers?

All floating barriers, containment or spill response curtains should be installed with a plan to maintain the system. It is not a 'set it and forget it' solution. It will require regular monitoring, and may require occasional re-tensioning, or resetting of the anchoring, and inspection of components and lines to ensure the current and curtain are working congruently. In any marine environment, fouling will occur, and lines, hardware, and barriers should be kept free of overgrowth. Additionally, turbidity curtain systems should be monitored for efficacy, to ensure there is not too much debris piling up against the system, or sinking below it. Maintenance plans should include regular inspection, cleaning, repair, retensioning or repositioning to work better with site conditions as required.



Type 3 DOT Turbidity Curtain



Drawings are for illustrative purposes only. Not to scale.
Copyright © GEI Works 2022

Natural forces such as current, wind, waves, and location affect your product and may require engineering, additional anchoring, and customization.