BMP SUPPLIES

Turbidity Curtains

Installation Guide

Now that you've selected the best Turbidity Curtain for your project's success, it's time to plan for installation. When properly installed, Turbidity Curtains will last longer in the field and provide reliable performance that can satisfy common erosion and sediment control compliance requirements.

Not all Turbidity Curtains are the same. Making sure that you have the right one for your project's specific needs is important. Contact us for assistance (1.855.422.0066)

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Before installation:

- Ensure that the curtain is not expected to hold back flowing water. Minimize the flow against the curtain during installation.

- Account for movement caused by wind. Consider wind direction when installing.

- To minimize strain on the webbing attaching the cable to the curtain, install the curtain in a way that allows the fabric to be pushed against the cable under the flotation, rather than away from it.

- Determine and construct the anchor point(s) on land where the curtain will be attached before placing it in the water. Note: Do not attach the curtain onshore to the top anchor eye loop, as it is designed for connection to anchors in the water and may cause the curtain to tear away from the connector plate. Instead, use tow bridles onshore or ensure that the tension on the curtains aligns with the cable.

- Decide where the curtain will enter the water. Most contractors assemble the curtain sections at a single location onshore, place the curtain into the water at that spot, and then pull the connected curtain further into the water from one end. Depending on the site and the distance from shore where the curtain will be anchored, it may be easier to stretch out the curtain on the shoreline and then place the entire length into the water. In either situation, DO NOT CUT the twine that holds the chain to the flotation until the curtain is properly positioned in the water. Each 50 ft. curtain section is bundled separately and should be clearly marked if sections have different skirt depths. If a shore section(s) has been ordered with a skirt depth change from one foot to 5', 7.5', or 10', identify those sections and connect them to the beginning and end of the assembled curtain.

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Assembly Steps

Laydown & Assemble:

- Choose a suitable area at the water's edge, free of sharp objects and abrasive surfaces. Most damage occurs through contact with abrasive surfaces or sharp objects.

- Unpack the curtain sections, inspecting for shipping damage. Damages, if they exist, should be settled with the shipper.

- Lay out the curtain sections float-by-float, removing poly ties as needed. Contact with sharp surfaces or objects such as jagged rocks and barnacles can puncture and tear the turbidity curtain and should be avoided.

- Connect sections using universal connectors and cable ties. These connectors provide a versatile means of joining sections of turbidity curtain together. Each end of the turbidity curtain skirt has a rope-reinforced edge with grommets on 6-inch centers. Bring the skirt ends together such that the rope edges overlap by the width of the rope. With the grommet holes aligned, insert a tie-wrap down through one grommet and up through the opposing grommet and secure after completing all grommet connections, connect the two shackles on the stress plates on the bottom of the curtain sections. Depending on the type of curtain being installed, using the quick link connector (provided) connect the top tension cables from one to another together joining each section.

- Re-tie the curtain fabric and chain to the flotation. Next, fold the skirt accordion style back up underneath the float elements and re-tie the straps around both the skirt and the floats. The two turbidity curtain sections can now be bundled at the water’s edge or even floated in a staging pattern in the water until all sections are connected. Remove and connect all subsequent sections until the entire length is made up.

Assembly Steps

Deployment

- Tow the assembled curtain using a Tow Bridle to prevent damage. It will prevent damage to the curtain and connector. The Tow Bridle mates directly to the connector on the curtain and is secured with a toggle pin.

- Anchor the curtain according to the anchor layout plan. An anchoring plan should be developed prior to deploying the curtain with due consideration to the desired shape and anticipated current, wind, and wave conditions. The engineers should use a proprietary computational software package to accurately determine anchor and curtain loads and can develop an engineered anchoring plan in advance of the scheduled deployment.

- Keep the skirt furled until the anchoring operation is complete. Note: the skirt portion of the curtain remains furled up and secured under the floats until the anchoring operation is complete.

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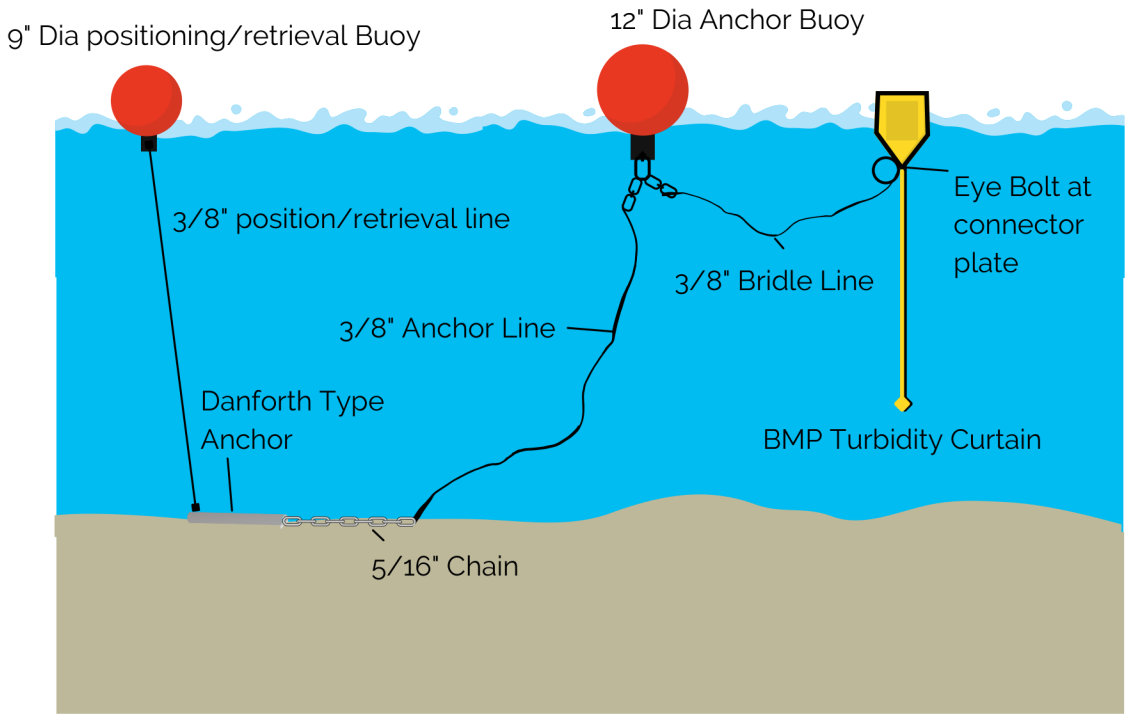
Anchoring

- Develop an anchoring plan considering current, wind, and wave conditions.
- Anchor from both sides in tidal or dynamic conditions. In areas with flowing water, every attempt should be made to orient the turbidity curtain parallel to the flow.
- Select appropriate anchors based on site conditions (Danforth, dead weight, or earth anchors).
- Set anchors before moving the curtain from the staging area. In general, if there is no current and little to no wind, anchors may be set after the curtain is towed into position. Otherwise, it is recommended to deploy the anchors before moving the curtain from the staging area and have each anchor line attached to a buoy for easy retrieval.
- Monitor curtain shape and adjust anchors as necessary after deployment. Once the anchoring operation is complete, the poly ties holding the skirt may be cut allowing the skirt to fall.



Monitoring

- Regularly inspect the curtain, depending on usage and conditions. The frequency of inspection will depend on the application. Turbidity curtain used around high marine traffic, construction activities and/or in high current/wind/waves should be inspected daily. Turbidity curtain used in calm water with little marine traffic can have inspection intervals of several weeks. Turbidity curtain should always be inspected after experiencing severe weather conditions and should be possibly removed in advance of severe storms to avoid risk of damage or loss of the turbidity curtain.

- Check for maintained freeboard, anchored profile, and proper positioning. Each inspection should include: Confirm that the design freeboard is being maintained. If freeboard is reduced, inspect the curtain skirt for marine growth, sediment or debris that might cause reduced freeboard. Check floats for damage. Confirm that the curtain is maintaining its anchored profile. If the curtain or a portion thereof appears out of place, inspect the anchoring system and placement of the anchors. Adjust and/or repair the anchoring system as required. Ensure the turbidity curtain has not moved into shallower water whereby the bottom of the curtain is resting on the bottom.

Recovery

- Remove the curtain carefully to avoid damage. After use, the turbidity curtains should be removed from the water for disposal or cleaning and repacking for storage. Care must be exercised during turbidity curtain removal so as not to drag the turbidity curtain across sharp surfaces, rocks, concrete walls, etc. If the turbidity curtain must be moved over such an area, providing a protective covering, such as a tarp or even some heavy polyethylene sheet between the turbidity curtain and the surface can prevent damage.

- Clean with industrial detergent and water solution or pressure washing. Cleaning: Find a suitable area where the turbidity curtain can be spread out as much as possible. Spray with a commercially available industrial detergent and water solution. Scrub with a brush or broom as necessary or alternatively a pressure washer with a wide spray pattern may be used exercising care to avoid punching through the fabric. Rinse and allow to dry before storage.

- Dry thoroughly before storage. BMP Supplies turbidity curtain can be recovered and placed into storage for reuse later. The curtain should be stored under cover from the sun and laying

Disclaimer

ASP Enterprises | Bowman Construction Supply Inc. | Quick Supply Co. | Cascade GEOSYNTHETICS

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- Safety Fence

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Sediment Basin Skimmers
Dewatering Bags
Trackout Control
- FODS
- Rumble Grates

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- Straw

High-Performance Hydraulically Applied Products
- BFM
- FGM
- Additives & Tackifiers

Temporary Erosion Control Blankets
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- Short-Term ECBs
- Extended-Term ECBs

Permanent Erosion Control Blankets
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- HP-TRMs
- Anchor Reinforced Vegetation System

Structural BMPs
- Transition Mats
- Geoweb Cellular Confinement
- Composite Vegetated Armor System
- Flex MSE Vegetated Wall System
- Articulated Concrete Block
- Gabions
- Grout-Filled Geotextile Mats

Vegetation Establishment
- Native Seed & Turf Seed
- Fertilizers
- Organic Soil Additives
- Stratavault Soil Cells

STORMWATER MANAGEMENT
Water Quality
- Inlet Filter Boxes
- Pre-Treatment Chamber
- Nutrient Separating Baffle Boxes
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- Hydrodynamic Separators
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Water Quantity
- Modular Underground Storage Systems
- Chamber Detention Systems

Drainage
- HDPE Swale Liner
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Inlet Structures
- PVC
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