



# TURBIDITY CURTAINS

A turbidity barrier is a synthetic fabric curtain, suspended within a body of water, supported by floatation material in the top edge and held in a vertical position by a ballast in the bottom edge. It is also known as a floating turbidity barrier. Floating turbidity barriers are designed to restrict the flow of silt-laden runoff from a land disturbance, keeping it confined to a limited area. Confinement allows the silt and sediment to settle out and be collected before being carried into adjacent or adjoining watercourses.

## Turbidity Curtain Rapid Selection Criteria for DOT & Ecoplan Types

1. Type 1 Barriers are for waters with low currents (no more than one foot per second) and light winds: lakes, ponds, small streams, and marshes.
2. Type 2 curtains are for higher current waters (up to five feet per second): Deeper lakes, intercoastal, and tidal areas. These barriers have an encapsulated steel load cable along the top of the barrier and wear stress points are reinforced with shields.
3. Type 3 is similar to Type 2 barriers, except that a polypropylene filter fabric is permanently inserted into the barrier skirt to meet some jurisdictions' specifications. Application conditions are the same as the Type 2 barrier.

### Type 1 Ecoplan Curtain

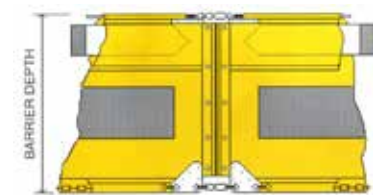
Layfield has developed Type 1 Ecoplan curtains to complement its line of turbidity barriers. Layfield Type 1 Ecoplan curtains are light-duty turbidity barriers used in still or slow-moving water applications. Curtains are used to control suspended solids, generated by dredging and the disposal of dredged material, making them very effective in protecting the marine environment. Layfield's Type 1 Ecoplan is best suited for construction sites located in protected areas. These protected areas are exposed only to light winds and current velocities of less than one foot per second.



Type 1



Type 2



Type 3

| Curtain Selection Parameters                 | FSC - Non Woven               | FSC - Woven (MTO Grade)       | Type 1 Ecoplan                | Type 1 DOT                     | Type 2 Ecoplan  | Type 2 DOT                      | Type 3 DOT  |
|--|-------------------------------|-------------------------------|-------------------------------|--------------------------------|---|---------------------------------|---|
| Flow Rates                                   | Standing water                | Standing or slow moving water | Standing or slow moving water | upto 1 ft/sec current velocity | upto 2 ft/sec current velocity*                                     | upto 3 ft/sec current velocity* | upto 5 ft/sec current velocity*                                     |
| Float Size                                   | 4" x 4"                       | 4" x 4"                       | 4" x 4"                       | 6" x 6"                        | 6" x 6"   | 8" x 8"                         | 8" x 8"   |
| Float Buoyancy                               | 7 lbs/ft                      | 7 lbs/ft                      | 7 lbs/ft                      | 13.5 lbs/ft                    | 13.5 lbs/ft   | 26.7 lbs/ft                     | 29 lbs/ft   |
| Float Covers                                 | RPE Orange                    | RPE Orange                    | 10 oz/yd <sup>2</sup> Yellow  | 18 oz/yd <sup>2</sup> Yellow   | 14 oz/yd <sup>2</sup> Yellow  | 18 oz/yd <sup>2</sup> Yellow    | 22 oz/yd <sup>2</sup> Yellow  |
| Top Load Line                                | None                          | 1/2" PP rope                  | None                          | None                           | 1/4" cable  | 5/16" cable                     | 5/16" cable   |
| Body Fabric                                  | Spun Bonded Non-Woven         | LP 250                        | 10 oz/yd <sup>2</sup> Yellow  | 18 oz/yd <sup>2</sup> Yellow   | Monofilament Geotextile (specs below) sewn to 14 oz/yd <sup>2</sup> | 18 oz/yd <sup>2</sup> Yellow    | Monofilament Geotextile (specs below) sewn to 22 oz/yd <sup>2</sup> |
| Grab Tensile                                 | 130 lbs                       | 250 lbs                       | 105 lbs                       | 410 x 410 lbs                  | 370 x 250 lbs   | 410 x 410 lbs                   | 370 x 250 lbs   |
| Tear   | 60 lbs                        | 75 lbs                        | 23 lbs                        | 100 x 100 lbs                  | 100 x 60 lbs  | 100 lbs x 100 lbs               | 100 x 60 lbs  |
| Hydrostatic                                  | Not Tested                    | 450 psi                       | Not Tested                    | 600 psi                        | 450 psi   | 600 psi                         | 450 psi   |
| AOS (sieve size)                             | 70                            | 40                            | Impermeable                   | Impermeable                    | 70  | Impermeable                     | 70  |
| Stress Plates at cable and chain termination | Not Included                  | Not Included                  | Not Included                  | Not Included                   | Yes   | Yes                             | Yes   |
| Bottom Chain                                 | Not included, sold separately | Not included, sold separately | 1/4"                          | 1/4"                           | 1/4"  | 5/16"                           | 5/16"   |
| Weight                                       | -                             | -                             | 67 lbs/100 ft                 | 67 lbs/100 ft                  | 67 lbs/100 ft   | 95 lbs/100 ft                   | 95 lbs/100 ft   |
| Standard Sizes                               | 7' x 50'                      | 7' x 50'                      | 5' x 50'                      | 3' x 50'                       | 5' x 50'  | 5' x 50'                        | 5' x 50'  |
|  | 13' x 50'                     | 10' x 50'                     | 10' x 50'                     | 5' x 50'                       | 10' x 50'   | 10' x 50'                       | 10' x 50'   |
|  | 19' x 50'                     | 15' x 50'                     | -                             | 10' x 50'                      | -   | 15' x 50'                       | 15' x 50'   |
| Durability                                   | Limited Use                   | Limited Use                   | Reusable                      | Reusable                       | Reusable  | Reusable                        | Reusable  |
| Seaming                                      | Sewn                          | Sewn                          | Heat Sealed                   | Heat Sealed                    | Heat Sealed   | Heat Sealed                     | Heat Sealed   |

Custom depths available from 3' to 75' deep.

## Floating Silt Curtain

Layfield also carries a light-duty floating silt curtain (FSC). Layfield's standard FSC units are available in nominal heights of 7ft, 13ft, and 19ft. The standard FSC body is constructed of Typar 3401 filter fabric, a strong, high filtration material exclusive to Layfield. The float and bottom sleeve of the FSC are wrapped with UV stable, high-strength RPE materials for durability. Layfield can custom fabricate curtains for specific project needs. Please call your Layfield representative for a curtain design to meet your requirements.



*Anchor Kits are sold separately.*

**Layfield requires a project assessment form to be filled out before recommending a curtain. These forms can be obtained directly from Layfield. For more information on any of Layfield's Turbidity Curtains, please contact your local Layfield Geosynthetics representative.**