



Aqua-Barrier® Water Inflated Dam Product Specification

1.1 Aqua-Barrier Product Description

Aqua-Barriers are water-inflated dams used to control invasive water in floodwater situations, a means of water management to provide access to underwater areas for construction and maintenance operations, hazardous liquid containment, sediment retention in environmentally sensitive areas in addition to a continually expanding list of water control related applications.

1.2 Specification

A water inflated dam shall consist of the following:

- 1) The water inflated dam will consist of a self contained, single tube with an inner restraint baffle(s)/diaphragm(s) stabilization system. The water-inflated dam must have the ability to stand alone, without any additional external mechanical or gravitational stabilization devices, as a positive water barrier and water management system.
- 2) The water-inflated dam shall be produced from heavy gauge polyvinyl chloride (PVC) reinforced with polyester. The PVC fabric used to create the inflatable dam will be infield repairable utilizing a vinyl adhesive and patch material.
- 3) The water-inflated dam must maintain mechanical stability in addition to providing anti rolling when exposed to uneven hydrostatic pressure from either side
- 4) The self-contained water inflated dam shall have threaded fill ports and drain ports for rapid inflation and draining. The dam will be equipped with end lifting loops used to control the dam with equipment during the installation and removal process.
- 5) Method for connecting the individual units together will consist of overlapping the end of the units a specific length which will create a watertight connection. No other devices or methods for connecting the barriers are required.

1.3 Dam size requirements

The water-inflated temporary dam height shall be as follows:

- 1) Static water height conditions shall not exceed 75% of the properly filled height of the barrier
- 2) Installation site criteria are required for assessment of all relevant factors.

Disclaimer:

Certain site conditions such as slick or weak soils, excess slope, high water velocities, dynamic loads resulting from wave actions, surface irregularities, and changes in interrelated hydrological conditions may result in the need for additional external support and/or increased freeboard requirement to insure the dam(s) and overlap connections are stable.