



## **WIPP® Water Inflated Property Protector Product Specification**

### **1.1 WIPP Product Description**

WIPP Water Inflated Property Protector barriers are used to control invasive floodwaters and prevent property, buildings, land, highways, roads etc... from flooding.

### **1.2 Specification**

**A water-inflated temporary barrier shall consist of the following:**

- 1) The water inflated barrier will consist of a self contained, single tube with an inner restraint baffle(s)/diaphragm(s) stabilization system. The water-inflated barrier 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 barrier shall be produced from heavy gauge polyvinyl chloride (PVC) reinforced with polyester. The PVC fabric used to create the inflatable barrier will be infield repairable utilizing a vinyl adhesive and patch material.
- 3) The water-inflated barrier 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 barrier shall have threaded fill ports and drain ports for rapid inflation and draining.
- 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 Barrier size requirements**

**The water-inflated temporary barrier height shall be determined 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.**

**The WIPP System when properly used is a temporary barrier against surface water. Due to the unknown variables involved with the complex task of preventing floodwater from entering a facility, Hydrological Solutions, Inc. accepts no responsibility for floodwater infiltration under or around a properly inflated WIPP System. The WIPP System cannot prevent water from migrating underneath the system via cracks, crevices, pipes, etc., and/or porous soil conditions. Preparations should be made prior to a flood event and the installation of the WIPP System to make sure any area where water can infiltrate is properly sealed.**