



SUPERIOR LINER VENTILATION FOR METHANE, RADON, AND SOIL GASES

Hydravent is an innovative and cost-effective ventilation system for naturally occurring gases such as methane, radon, and soil gases.

Hydravent is a series of collector lines, systematically spaced, that are connected to vents. It acts as an absorption material beneath liners and vents gases in a controlled, efficient, and safe manner. By using components of the proven Hydraway drainage system, this venting system realizes unparalleled strength, an industry-leading in-flow rate, and a history of long life. Using Hydravent as a flow path for gases prevents damage caused by these gases, such as lifting or tearing of a liner beneath a water retention pond.

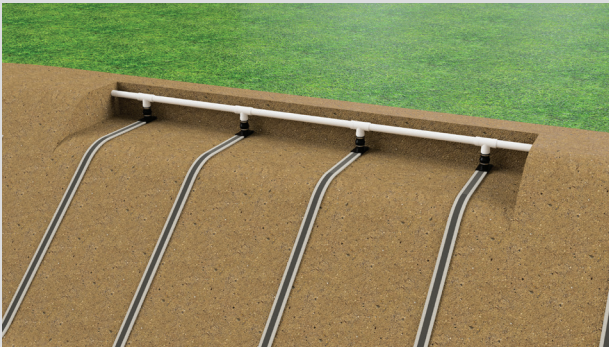


INSTALLING HYDRAVENT

Hydravent is rolled out in a pattern and is covered by a liner. It's designed with no memory so it easily keeps its shape while the liner is installed. Taking advantage of gravity and slope, Hydravent follows the contours of the area being vented, while the collector lines are orientated in the direction that offers a path of least resistance to the high point. The system is usually spaced at 15-20 foot intervals, creating a grid for collection and removal of gases. Hydravent comes in widths of 6 and 12 inches, with a standard length of 150 feet, though it can be customized in a variety of lengths and widths upon request. And because every project is unique, our engineering team provides consulting and layout designs to ensure the most efficient ventilation of gases.

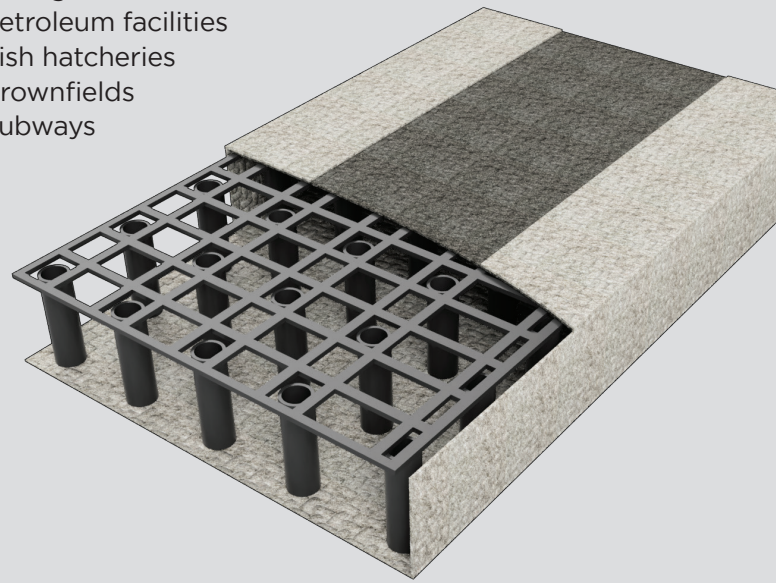
VENT MANIFOLD

This system design is used when individual vents are not desirable, aesthetically pleasing, or prevented by local codes. A manifold is usually constructed around the perimeter and PVC/Sch. 40 pipe is used to transport gas.



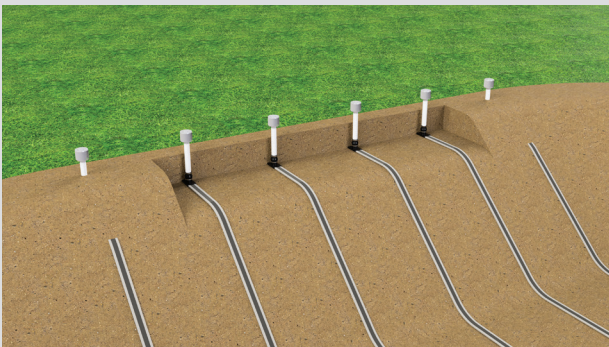
HYDRAVENT IS IDEAL FOR:

- Pond or lagoon liners
- Landfills
- Water treatment facilities
- Mining
- Petroleum facilities
- Fish hatcheries
- Brownfields
- Subways



VENT STACK

This system design is used to vent collected gases to the atmosphere, while protecting the system from the elements. They are connected at the highest point of the collector lines. This system is compatible with PVC/Sch. 40 pipe.



Property	Test Method	Unit of Measurement
GEOTEXTILE¹ - NEEDLE-PUNCTURED, NONWOVEN		
Elongation	ASTM D-4632-91	50%
Grab Tensile	ASTM D-4632-92	120 lbs
Flow Rate	ASTM D-4491	135 gal/mn/ft ² ₃
CORE - HDPE		
Compressive Strength	ASTM D-695/1621 ⁴	11,400 PSF
Flow Rate at 1,500 PSF	ASTM D-47162 ²	21 GPM/ft-width
Peel Strength ³	ASTM D-1876	50 lbs/ft-width

1. 4 oz fabric
2. Gradient of 0.1
3. Values shown are in weaker principal direction. Minimum average roll values are calculated as the typical minus two standard deviations. Statistically, it yields a 97.7% degree of confidence that any samples taken from quality assurance testing will exceed the value reported.
4. Modification was made to an existing ASTM test since a recognized test method had not been established for this type of product at time of testing.

