Wind and water currents drive floating weeds and debris into canals and marinas where they become trapped and decompose releasing nutrients and foul odors. The dead plant material causes dissolved oxygen levels to drop stressing fish and wildlife and decreasing water clarity. Once attractive marinas and canals become an eyesore, fisheries and recreational activities decline, hydrogen sulfide odors persist, bottom muck accumulates and real estate values drop.

**VERTEX AIRGATE ECO-FRIENDLY TECHNOLOGY**

Vertex AirGates are designed to provide a simple, effective and environmentally safe solution to wind driven surface weeds, sea grasses and debris clogging up canals, marinas and docks. Using air supplied by a shore mounted air compressor, adjustable emitters along the channel bottom create a barrier of bubbles that push back surface weeds preventing them from entering the protected area while allowing boats and wildlife to easily and safely pass.

**VERTEX AIRGATE FEATURES & BENEFITS**

- Commercial grade Brookwood compressors for extended service intervals
- Heavy gauge, powder coated aluminum compressor cabinets for marina environments
- Flexible EPDM membrane bubble emitters to minimize organic fouling
- Valve manifold provides easy shoreline adjustment of each bubble emitter
- Uniform bubble pattern regardless of length, depth or slope
- AirGate allows boats to pass while rejecting surface weeds and light debris
- No electrical components in the water for unrestricted recreational activities
- AirGate operation is safe for wildlife, fisheries and manatees
- Weed choked areas recover water quality following AirGate installation
- Easy, non-technical equipment installation and maintenance
- Submersed materials are durable plastics, stainless steel and brass
- Free custom design by Vertex for proper airflow and long term operation
- Self install or installation services available
**AIRGATE™ 1 SYSTEM SPECIFICATIONS**

**AIRGATE™ Emitter Assembly**
Emitters consist of one 9” diameter flexible EPDM membrane disks with 100% rebound memory producing a flow of 0.5mm to 3.0mm size bubbles. Vertex FlowControl™ technology equalizes airflow to each disk when placed on uneven sediments.

**Brookwood™ HighFlow™ Compressor**
3/4hp or 1.0hp twin cylinder piston type compressor. 230v single phase 50 & 60 Hz. UR, CE, CSA listed and built for continuous 24/7 operation. Super-duty Brookwood™ HighFlow™ compressors incorporate upgraded rotors, stators and capacitors and are thermally protected, oil-free, and require no lubrication; just periodic replacement of air filter. Extended service cycle is approximately 2 to 3 years, about twice that of ordinary piston and rotary vane compressors. All Brookwood™ HighFlow™ compressor systems carry a 3-year parts warranty excluding wearable parts (air filters and compressor maintenance kits).

**Quietair™ AirGate™ Cabinet**
Equipped with keyed cam lock for security and fully gasketed and constructed of aluminum with gray electrostatically-bonded powder coating to provide a 5 year warranty against corrosion. Furnished with stamped ventilation grill and 3 integral redundant cooling fans to guard against excessive compressor operating temperatures. Equipped with Vertex SafeStart™ technology allowing auto restart under maximum rated pressure preventing motor damage. Customer to provide GFCI protection on their electrical supply circuit. Quick disconnect switch included. Houses up to four HighFlow compressors as specified by Vertex engineering per AirGate design.

**Bottomline™ Supply Tubing**
Self-weighted, direct burial submersible tubing for connection from compressor to diffuser stations. Tubing is flexible PVC composite construction for use with standard PVC solvent weld cement and insert fittings. Tubing has high wall thickness for long term durability and protection against punctures. Remains flexible in cold temperatures.

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**Install all electrical equipment in accordance with Article 682 of the National Electrical Code and all local codes. Vertex Water Features reserves the right to improve and change our designs and/or specifications of our aerators without notice or obligation.**

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