

HUMID-EVAC®

THE HUMIDITY EVACUATION SYSTEM

**1-800-Busy Dog
Basement
Technologies**
The Basement Specialists™
Basement Waterproofing

Basement Technologies recognizes that to be the leader in the basement waterproofing industry we must design and introduce new products to address old and new problems. Basement Technologies' Research and Development department has utilized a revolutionary concept in basement waterproofing technology and proudly introduces the Humid-Evac® to our customers.

EVACUATE THE DAMP AIR BEFORE IT GETS IN

Our revolutionary new product – Humid-Evac® – deals with humidity and condensation issues by drying under the slab before the moisture enters the basement. Independent research (see A) shows that 80% of moisture (condensation) in the basement originates from under the slab.

Our system is not a radon system.



BASEMENTS ARE SIMILAR TO A CAVE

Basements are below ground level and are conducive to a damp, wet environment. Independent studies (see A) show that up to 80% of moisture in a basement originates from under the floor, and if the source of the dampness is addressed, 80% of the problem is eliminated.

Radon professionals throughout the world have been unknowingly drying slabs and basements while curing the radon problem using sub-slab depressurization systems. Drafting the air under the slab dehumidifies your basement in a far superior manner than any current method on the market (see A on next page). After years of research and development, Humid-Evac® is designed exclusively to dry the basement floor and environment.

THE SUBFLOOR DRAINAGE SYSTEM IS ALWAYS THE FIRST STEP

The flooding of the basement must be stopped before any humidity or condensation problem can be addressed. We

always recommend a full perimeter Water Trek Aqua Route® system be installed prior to dealing with condensation and humidity.

WHAT IS COMMUNICATION UNDER THE FLOOR?

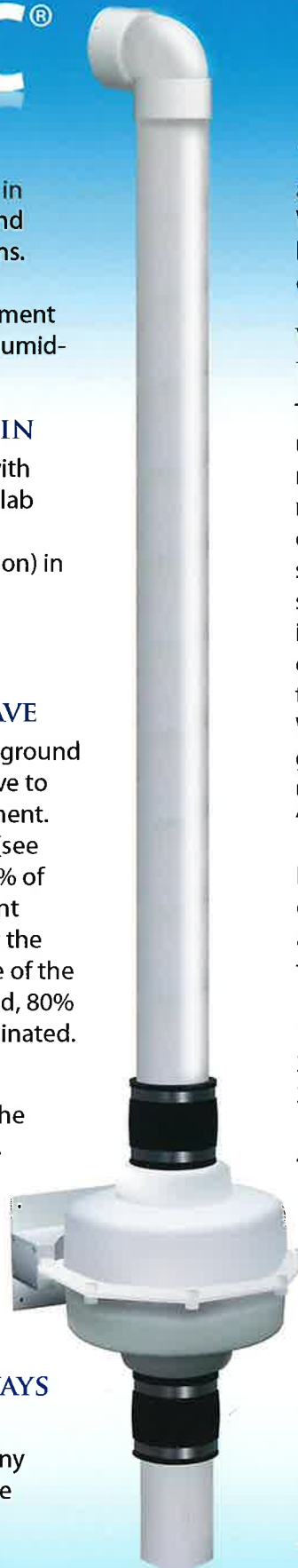
The science of communication under the floor is the ability to reach the entire subfloor area with a negative air pressure field. However, communication is based on sub-surface soil porosity and density of subfloor soil. For example, if there is gravel present, there will be good communication. If there is dense clay, there will be less communication. The Water Trek Aqua Route® system merely guarantees necessary communication under the slab, as well as, stopping the "flood waters".

Psychometry- the engineering science of drying a structure. In order to achieve a psychometric solution, four things need to be addressed:

1. Air Drying - removing damp air
2. Moisture on Surfaces
3. Air Movement - sub-slab and above slab
4. Temperature of the Air - take the cool damp air from the sub-slab and heat it by replacing with warmer air

The Humid-Evac® system addresses "all of the above" and cures most, if not all, dampness problems.

**THE HUMID-EVAC® IS NOT A
RADON MITIGATION SYSTEM**



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Independent Research Proves that 80% of Moisture Within the Building Originates from the Sub-Slab Area!

Other systems work but do not address the source of the problem; most of the source of the moisture is under the floor (see A). There are several ways to eliminate moisture:

1. DEHUMIDIFIER: This method allows dampness to return not really solving the "source issue". These dry the air only.

2. AIR EXCHANGE SYSTEMS (Bon Aire, Humidex, Humivent): This method takes warm, dry air from the upstairs to the basement area. An excellent process, but the problem still remains if it is humid in the upper portions of the home, or the customer does not use air conditioning in the home. The air exchange can be ineffective if we draw humid air from upstairs possibly nullifying any benefit the air exchange makes. This method is cost effective, but sometimes dehumidifiers may be a mandatory supplement depending on humidity levels in the home. This is a good method to eliminate odors in the basement.

3. HUMID-EVAC®: The "Source Solution". Evacuates cold, damp air from under the slab and helps dry the floor and a humid, damp basement. Our system works best with a full perimeter, subfloor Water Trek Aqua Route® system and Water Grabber® Bull Dog™ installed. The system consists of one (1) Water Grabber® Bull Dog™ liner with pipe attached to the Humid-Evac® fan through the side of the home. **The fan costs approximately \$17.50 per year to operate, an energy savings of 60% per year over dehumidifiers.** The fan runs continuously, but uses very little energy to accomplish the negative pressure field. By reducing the entrapped moisture, a dryer basement is created which reduces mold and eliminates odors.

It is natural for a basement to be damp. Sometimes we must create an "unnatural act" to thoroughly dry it. Some of the biggest complaints homeowners have are damp floors and humid basements. Even though water is stopped by our Water Trek Aqua Route® system, dampness can still occur due to temperature difference between the subfloor and basement air, and basic humidity levels of the air. The condensation should cease due to the temperature equilibrium and moisture extraction.

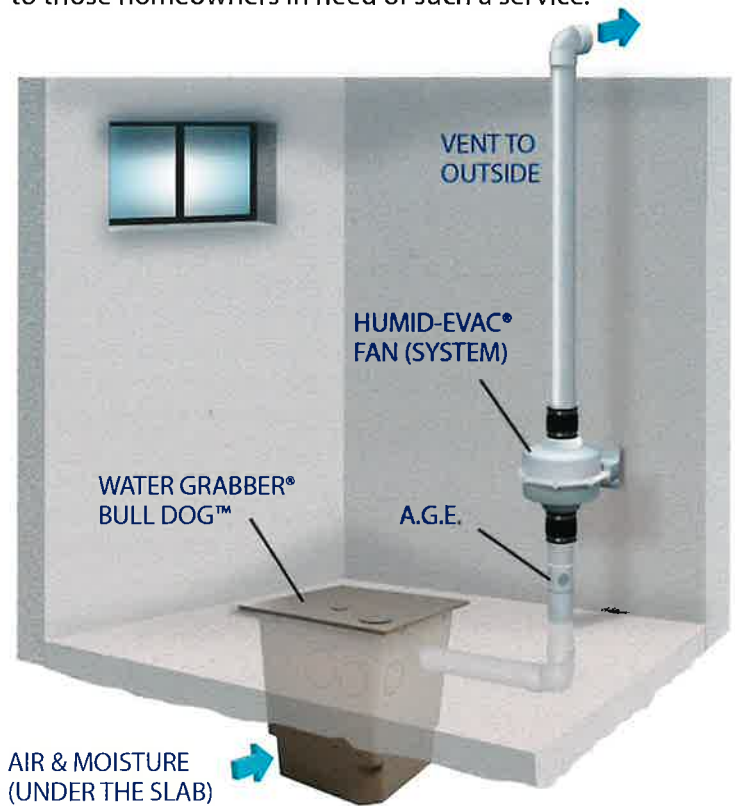
HUMID-EVAC®:

- Installed using our Water Grabber® Bull Dog™ liner as a large collection point for the subfloor air, the liner is sealed and draws air from the sub-slab. We always recommend a full perimeter Water Trek Aqua Route® system to enhance communication under the slab.

- Ventilation can be further enhanced by a small hole in our piping system called the Above Grade Evacuator or AGE. When the AGE is installed, vents to the upstairs through the floor or doors are necessary. This allows for further air exchange in the basement.



Active subfloor humidity evacuation units have been in use for years. Numerous independent studies have been conducted and the facts state this method is superior to many others and is economical. Basement Technologies has taken this a step further and has made a system unique to the industry ... effectuating state-of-the-art dehumidification. Basement Technologies now offers a cost effective solution to those homeowners in need of such a service.



RESEARCHING THE FACTS:

Some agencies that have done research on sub-slab drying

1. Finnish research program on Environmental Health
 - Improves slab drying
 - Reduces moisture
2. Mass DEP, Northeast Region
 - Site Remediation
 - Remove contaminants from subsurface

3. North Dakota DOH
 - Controls indoor moisture
4. Data Collecting "Preventing Mold Growth"
 - Up to 80% of moisture is from sub-slab & soil
5. GEI Consultants
 - Effective sub-slab vapor control
6. Colorado DOH&E
 - Reduces moisture from soil and reduces mold and mildew and other indoor air quality concerns.

7. Anecdotal Evidence (25 plus years experience)
 - Reduces Dehumidifier condensate problems
 - Changes in concrete slab color from drying
 - Reduction in musty odors
 - Less rust on metal and tools in basement
 - 10%-20% reduction in slab vapor transmission at "turn on"
 - 30% reduction in slab vapor

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