Helping Customers

Wet Basement  Pump Service  Foundation Crack  Crawl Space  Moisture Problems

How Healthy is your basement or crawl space?
Healthy Home

How healthy is your home?

Every home in America needs a healthy basement. **Over 40% of the air you breathe** on the 1st floor of your home comes from your basement or crawl space through a natural occurrence called stack-effect. If your basement or crawl space is not healthy, then your home is not healthy.

A wet & damp basement or crawl space can create an unhealthy indoor living environment. Even a small corrective step can make a major difference in someone’s home or work place.

Pollutants can enter from lower levels.

Most people spend as much as 12 hours a day in their homes. Since the 1970s, homes have been built increasingly airtight to save on gas and electricity reducing the amount of air exchange. Air tight (Energy Efficient) homes have drawn more attention to all of the **pollutants a basement or crawl space** has to offer through what we call “stack effect”.

**Stack effect** is the movement of air into and out of buildings, chimneys and flues and is driven by a difference in indoor to outdoor air density resulting from temperature and moisture differences. Less dense hot air rises and is replaced by denser, cool air. The greater the thermal difference and the height of the structure, the greater the stack effect. The stack effect is also referred to as the “chimney effect” and it helps drive natural ventilation in a house through infiltration/exfiltration of air.
Basement & Crawl Space

Health Tips

- Perform Radon test every 2 years
- Don’t ignore a musty smell
- Close & seal all sump pits & drains
- Seal all foundation cracks

Protect against:

1. **Mold & Mildew**
   Mold and Mildew can cause a stuffy nose, irritated eyes, wheezing or skin irritation in those sensitive to them. Mold growth will often occur, particularly if the moisture problem remains undiscovered or unaddressed. The decomposition of organic material caused by the growth of mold creates a ‘musty’ smell. The only effective way to control mold is to control moisture.

2. **Iron Bacteria**
   The presence of high levels of iron or manganese in ground water and wells often gives rise to the growth of an organism called iron bacteria. This material often clogs filters, plumbing components and contributes to staining. While it may not be possible to remove all iron bacteria from the environment, it can be concentrated and controlled by the use of a closed sealed water and moisture control system in a basement or crawl space.

3. **Insects & Rodents**
   Openings in a basement or crawl space allow moisture to get in, providing an excellent habitat for bugs. Those same openings also provide places for insects to enter upper living portions of the home. Moisture in a basement or crawl space can attract insects, rodents and other pests. Sealing and controlling the amount of moisture in the basement or crawl space will keep insects from being attracted to that environment.

4. **Radon Gas**
   Radon is a cancer-causing natural radioactive gas that you can’t see, smell or taste. Its presence in your home can pose a danger to your family’s health. Radon is the leading cause of lung cancer among non-smokers. It claims about 21,000 lives annually. Minimize the entry of Radon Gas by sealing cracks and openings in the foundation and along the basement or crawl space walls and floors. Close sump pits and floor drains.

5. **Structural Damage**
   Excessive moisture in a basement or crawl space will eventually create problems for structural wood components such as the sill plate, joist, beams and sub-floor. These wood components will experience damage in the form of mold, fungus, and rot. With enough time, it can damage the structural integrity of your home.

6. **Energy Cost**
   A home with a damp basement or crawl space cost more to heat and cool. Damp air requires more energy to heat and cool. An estimated 15% to 35% in energy bills can be saved by controlling the level of moisture in a home.

“EPA recommends:
Relative Humidity below 50%
Radon Gas Levels below 4pCi/L

“The basement and or crawl space is part of your home”

“A wet & damp basement or crawl space can create an unhealthy indoor living environment”
Control Moisture

Over 40% of the air you breathe upstairs in your home comes from your basement or crawlspace.

A healthy home starts in the basement

Choose a High efficiency, high-capacity Dehumidification for basements.

Features

1. Energy Star Listed
   Uses only 6.4 amps of electricity offering as much as $275 per year in energy savings compared to the conventional dehumidifier.

2. Large Capacity
   This high capacity basement dehumidifier removes up to 110 pints of water per day.

3. MERV-11 Filtration
   Standard MERV-11 filtration is 65% efficient and captures particles 1.0 microns in size resulting in effective filtration of most mold spores.

4. Optional Ductability
   Attaching ductwork to the unit promotes air circulation throughout the basement, allowing for placement of the dehumidifier in a remote location such as the mechanical room.
Control Moisture
Dehumidification For Basements (High Efficiency, High Capacity)

Featured Products

**Classic Air**
- Removes 110 pints/day
- Blower: 275 CFM @ 0.0" WG
- Current draw: 6.4 amps
- Size up to: 2500 Sq. Ft
- 5yr limited warranty

**Advance 2**
- Removes 90 Pints/Day
- 309 CFM CFM @ 0.0" WG
- Current draw: 6.4 amps
- Size up to: 2200 Sq. Ft.
- 5yr limited warranty

**Max Dry Dual XT**
- Removes 155 pints/day on 8.0amps
- Blower: 391 CFM @ 0.0" WG
- Current Draw: 8.0 amps
- Sized for up to: 3600 Sq. Ft.
- 5yr limited warranty

**Force**
- Removes 120 pints/day
- Blower: 365 CFM @ 0.0" WG
- Current draw: 7.8 amps
- Size up to: 2,900 Sq. Ft
- 5yr limited warranty

**Impact XT**
- Removes 105 Pints/Day
- 257 CFM CFM @ 0.0" WG
- Current draw: 4.9 amps
- Size up to: 2500 Sq. Ft.
- 5yr limited warranty

**Upper Duct Kit**
- Ductwork allows for placement of the dehumidifier in a remote location such as the mechanical room. Ref. Fig1

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Tel: 866-279-2837
Url: www.GrateProducts.com
Drainage

Even A Small Leak Can Cause An Unhealthy Home.

1. When you correct one problem it is important that you don't create another one.

2. We only recommend Ground Water Control Products that promote good health for your foundation and family.

3. Closed System - Any water, moisture, or ground humidity collected by our system can not evaporate back into the home environment.

Basement

its all about choice and what is right for you...

Health
Value
Dependability
Nutrition
Budget
Stands behind their work

Dehumidifier Plug
Sealed Cover
Large Inlet Holes
Strong/Durable Construction
Built-in Pump Stand

Grate Products
Choice & Control
Drainage

**Featured Products (Sump Pump & Battery Backup Systems)**

**FastSump Pump**
1/3 HP sump pump
(2400 GPH)
Float Switch - 3 yr warranty
Energy Efficient - Only 4amps

**PS3033**
1/3 HP sump pump
(3000 GPH) Deluxe
Dual Float Switch - 3 yr warranty
Energy Efficient - Only 4amps

**PS3050**
1/2 HP sump pump
(3900 GPH) Deluxe
Dual Float Switch - 3 yr warranty
Energy Efficient - Only 4.3amps

**GrateSump Plus**
FastSump Pump 1/3 HP - 3 yr warranty
(2400 GPH) w/ AC or DC power
GrateSump Advance Sump Liner
FastSump Power Inverter - 1 yr warranty
900w Inverter converts 12v DC to 115v AC
12v DC Battery - 1 yr warranty

**GrateSump Plus II**
(2) FastSump Pump 1/3 HP - 3 yr warranty
(2400 GPH) w/ AC or DC power
(2) GrateSump Advance Sump Liner
(2) FastSump Power Inverter - 1 yr warranty
900w Inverter converts 12v DC to 115v AC
(2) 12v DC Battery - 1 yr warranty

**PHCC2400**
Pump up to 2400 GPH on bat.power
Pro Series 2400 Controller
Dual Float Switch - 3 yr warranty
GrateSump Advance Sump Liner
(2) 12v DC Battery - 1 yr warranty

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**GrateDrain Installation**
Crawl Space

Protect the structure from the negative effects of moisture such as mold, floor failure, increased electricity costs, odors, insects, and dust mites.

CrawlShield™
Crawl space vapor barrier application

Control moisture in your crawl space & protect your family's health.

1. Reduce moisture & soil gas
2. Reduces condensation, mold growth, and poor air quality within a home or building.
3. Crawl space can be used for storage.
4. Crawl Shield is absolutely the best product on the market for a crawl space application.
Crawl Space Liner and Dehumidifier

Featured Products

**CrawlShield™**
- CrawlShield minimizes crawl space moisture and solid gases form entering the home or building.
- 16MIL Woven Polyethylene
- Fire Retardant
- Class A Fire Rated
- Perm Rate: .0015

**Dimple Shield**
- Use on high footings or on concrete floor / dirt floor crawl spaces
- (Install underneath CrawlShield)

**Advance**
- Removes 90 Pints/Day
- 220 CFM @ 0.0" WG
- Current draw: 6.7 amps
- Size up to: 2200 Sq. Ft.
- 5yr limited warranty

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A dirt crawl space is typically saturated with moisture. Since warm air rises, the moisture in the crawl space will rise and enter the home or building. Installing a vapor barrier provides the crawl space with a moisture protection layer to protect the structure from the negative effects of moisture such as mold, floor failure, increased electricity costs, odors, insects, and dust mites. Moisture effects can also cause or worsen conditions such as asthma, hay fever, and or other allergies.

**Tested & Certified**
- Low Water Vapor Permeance
- High Puncture Resistance
- High Tensile Strength
Foundation Repair

Major structural problems can lead to foundation cracks, leaks and other issues with the rest of the home.

Wet or damp basement was not in your plans...

CrackShield™

Dual Process Foundation Crack Repair System

Stop water seepage
Strengthen foundation
Add stability
Minimize soil gas entry
Reliability (15 year warranty)
Peace of mind

1. CrackShield foundation wall crack repair system is the most effective way to repair wall cracks.

2. The CrackShield system comes with everything needed to repair a foundation crack correctly.

3. It provides the contractor with the right tools and equipment to help any homeowner repair the walls in their basement or crawl spaces.

4. Even minor cracks can expand and cause a loss of structural stability or, more commonly, cause your basement to leak or flood.
Foundation Repair

Stop water seepage and strengthen foundation. reliability - 15 year warranty

Foundation Wall Cracks

Foundation wall cracks result from soil expansion, settling, shifting, or movement under the foundation footing. Wall cracks can occur horizontally, vertically, and diagonally in the wall. Each type of crack is an indicator of a different type of stress. Cracks can allow insects, soil gases and water to easily enter the basement or crawlspace.

Properly repairing a foundation wall crack can:

- Help to prevent leaks and seepages
- Protect against flooding
- Prevent more serious foundation problems
- Prevent insects and soil gas from entering
- Help reduce humidity and moisture levels
Solutions
For Creating a Healthy Basement Environment

A healthy home starts in the basement.

Basement Drainage
Moisture Control
Exterior Drainage
Foundation Repair
Crawl Space Solutions

Tel: 866.279.2837
www.grateproducts.com