



Choice & Control

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?

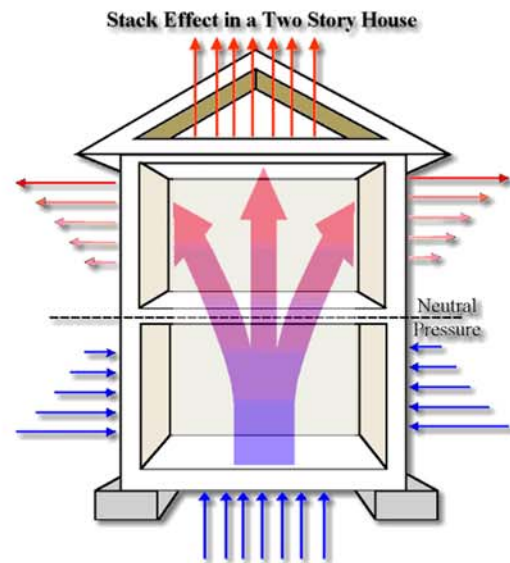
Every home in America needs a healthy basement. **Over 40% of the air you breathe** on the 1st floor of your home comes from your basement or crawl space through a natural occurrence called stack-effect. If your basement or crawl space is not healthy, then your home is not healthy.

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.

3 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

4 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.

"A wet & damp basement or crawl space can create an unhealthy indoor living environment"



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

"The basement and or crawl space is part of your home"

2 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.



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.



Choice & Control

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: 6.4amps
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



Choice & Control

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



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

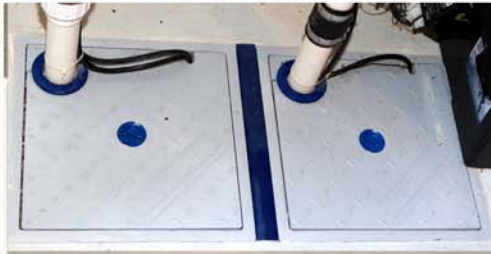
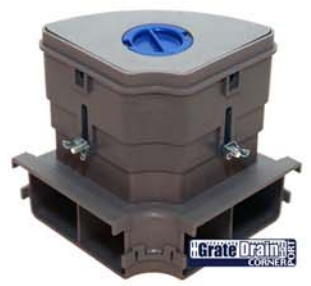
Grate Sump

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

- Health
- Value
- Dependability
- ✓ Budget
- ✓ Stands behind
- ✓ their work



Grate Drain



Grate Products
LLC.

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





Crawl Space

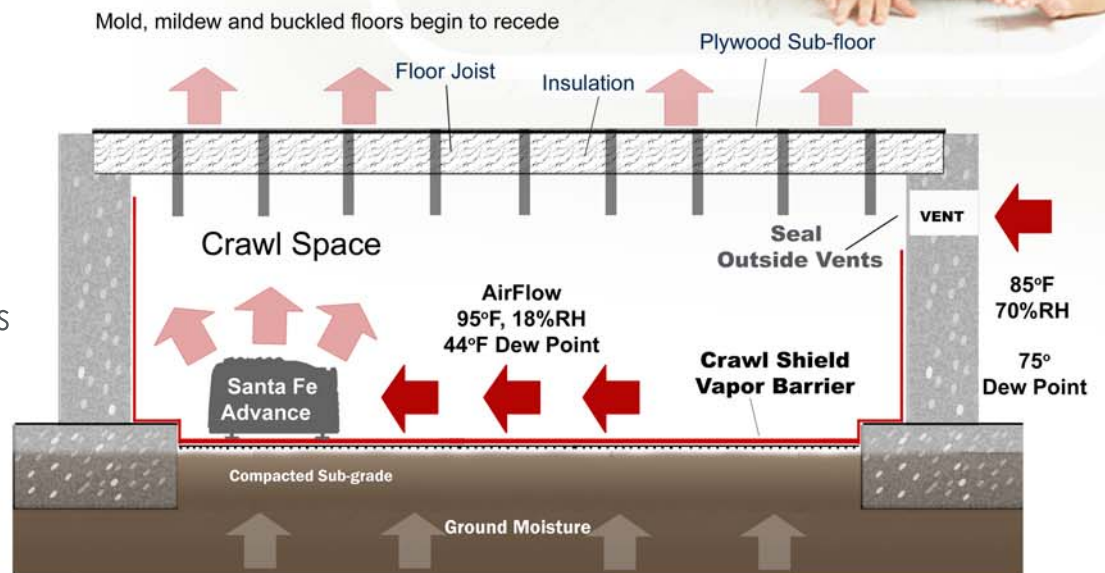
Protect the structure from the negative effects of moisture such as mold, floor failure, increased electricity costs, odors, insects, and dust mites.



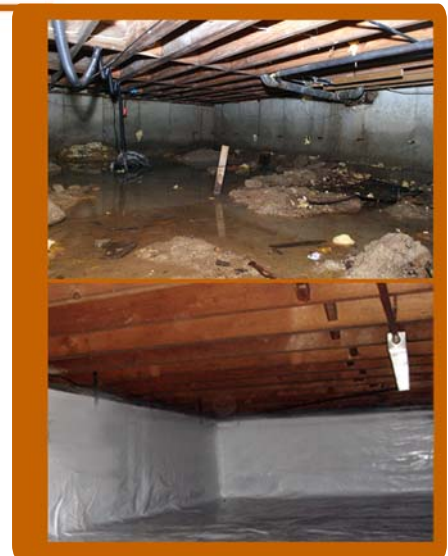
CrawlShield™
Crawl space vapor barrier application



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.



GrateProducts™
L.L.C.

Choice & Control

Crawl Space

Crawl Space Liner and Dehumidifier

Featured Products



CrawlShield™

CrawlShield minimizes crawl space moisture and solid gases from 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



CrawlShield™

Crawl space vapor barrier application



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 other allergies.

Tested & Certified

Low Water Vapor Permeance
High Puncture Resistance
High Tensile Strength



Choice & Control



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



- 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.



GrateProducts™
L.L.C.

Choice & Control

Foundation Repair

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



CrackShield™
Dual Process Foundation
Crack Repair System

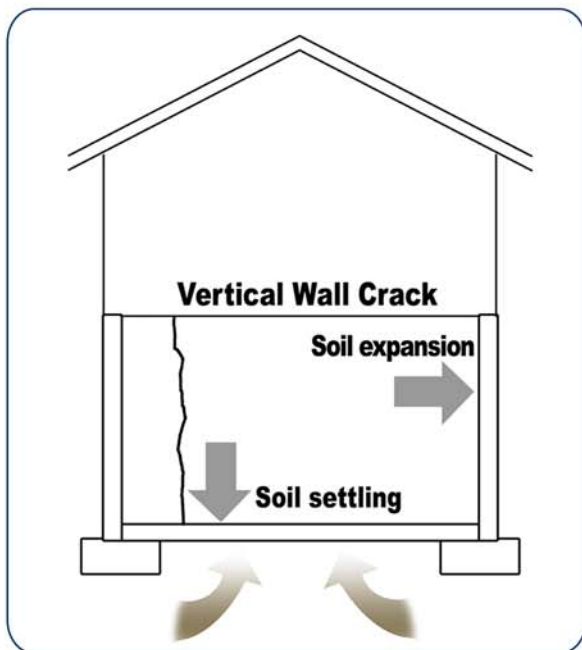


Foundation Wall Cracks

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



Iron Bacteria

Odors



Foundation Failures

Leaky Window



Musty Smells

Flooded Basement



Wall Leaks



Dampness



Air Quality
Reduce Mold



Backup Sump Pump



High Humidity



Save Energy

Reduce Radon



Sump Pump
Failure



Basement Drainage



Moisture Control



Exterior Drainage



Foundation Repair



Crawl Space Solutions

A healthy home
starts in the **basement.**



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