

Wet Basements and Crawl Spaces

Any home that has areas below the grade line is susceptible to water infiltration. It doesn't mean the house was constructed improperly; more likely, it is a result of other factors, such as changes in rainwater management or poor ground surface drainage.

What The Inspector Looks For

- Rust at the base of heating equipment or metal support posts
- Stains or discoloration on wood, paneling or dry-wall surfaces
- Damaged or stained floor tiles
- Efflorescence (mineral deposits) on foundation walls
- Cracks or bulges in foundation walls
- Evidence of wood-destroying organisms

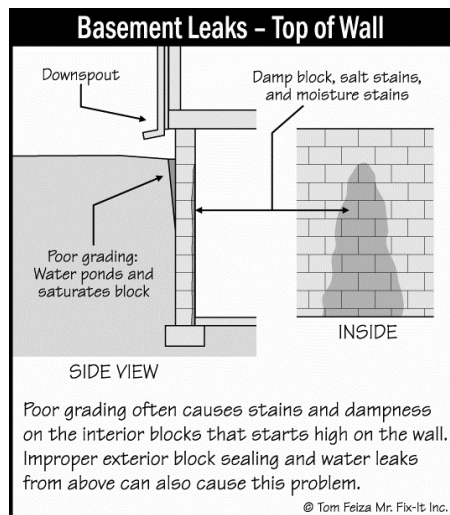
How Does Water Get In?

Leaks and Seepage

Water can get through cracks in foundation walls, through poorly-sealed doors and windows, and through the joint where the foundation wall meets the floor. While poor drainage is usually the culprit, water supply pipe leaks can also be the cause. Seepage can happen via the same routes, only slower.

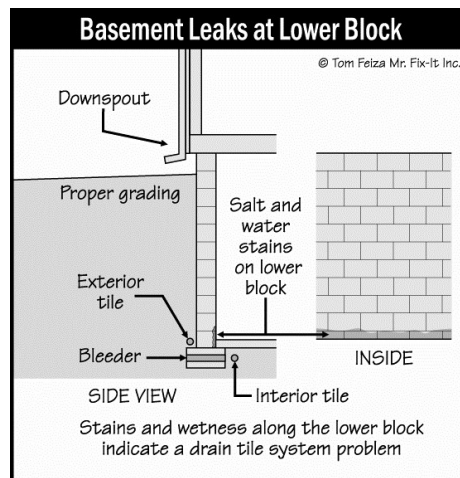
Condensation

When moisture-laden warm air comes in contact with cold air (or a cold object), the water condenses and collects on the cooler surface. This is why windows can fog up on cold mornings. Condensation can cause serious problems in poorly-insulated crawl spaces.

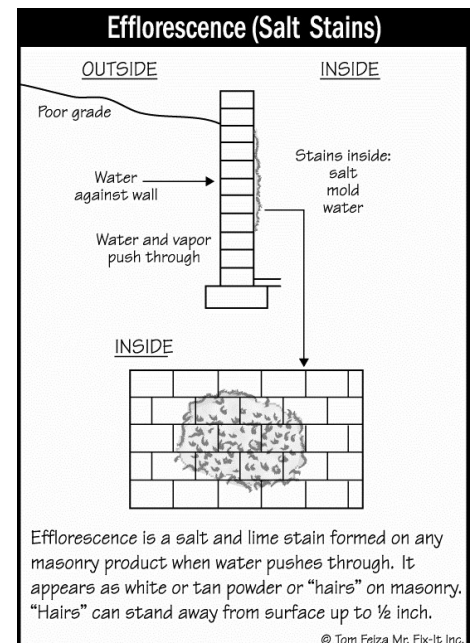


B013

A Home Inspector will look for telltale signs of water infiltration in below-grade spaces. The size, shape and location of the stains can reveal a lot about where the water is coming from.



B012



B033

Prevention is Key

Keeping water out of your below-grade areas doesn't necessarily mean expensive repair work. Often it is simply a matter of controlling the flow of rain and ground water so it stays away from your house.

Most waterproofing companies want to address issues of water already entering the home, with French drains, sump pumps and the like. Keeping water out in the first place is a better approach.

If the basement used to be dry and now is not, then something has changed. The culprit is most likely one of the following:

Grading

The ground around the foundation should slope away from the house by about one half to one inch per foot, for at least eight feet. The soil around the foundation should be clay, a dense brown/orange soil, rather than topsoil.

Gutters and Downspouts

Clogged gutters and downspouts are a major cause of basement flooding. Clean them out at least once a year; twice if you have overhanging trees. Gutter Guards can help keep some debris out but they are not a substitute for proper maintenance.

Downspouts should channel rainwater at least eight feet away from the foundation, rather than simply ending at a splash block right at the edge of the foundation.

Basement Doors and Windows

Window wells should extend about four inches above the grade level, and should be cleaned out periodically. Leaves and debris can hold water against the foundation wall. You can also install plastic domes that keep debris out of the window well without blocking light.

Exterior basement stairwells usually have drains at the bottom, and these need to be kept clear. A clogged stairwell drain can lead to water entering the basement through the door sill.

Sprinkler Systems and Watering

Sprinklers should not be set up so they spray against the foundation. Check soil moisture levels to ensure you're not over-watering.

Flower Beds

Sunken flower beds close to the foundation can hold too much water, leading to water infiltration. Keep flower beds away from the foundation, and avoid piling mulch against the foundation wall.

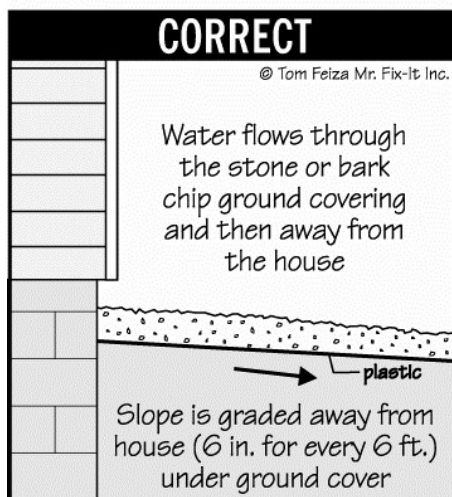
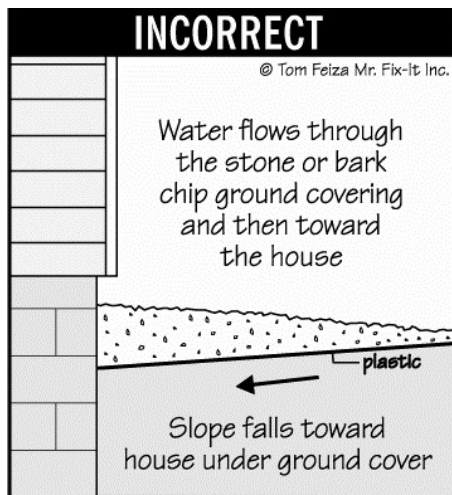
Inside Prevention

- Seal minor cracks and joints in foundation walls with flexible materials to prevent seepage.
- Cover crawl space dirt floors with heavy plastic (at least 6mil) to help reduce ground moisture.
- Insulate cold water pipes, air conditioning ducts and well tanks to prevent condensation.
- Use a dehumidifier during the summer or when humidity is high.
- Vent basement bathrooms and laundry areas to the outside.

Serious Problems, Serious Solutions

Fixing a serious water issue involves more than just a can of "miracle waterproofing paint." If the above methods fail to control your water problem, it's time to call in the professionals.

Waterproofing systems can be expensive to install. They can include passive systems such as French or curtain drains, or active systems such as hydrostatic pressure relief systems. Both methods require extensive excavation around the entire foundation, installation of pipes in a gravel base, and regrading of the soil around the house.



B009