Your home's foundation is arguably the most crucial part of your home. If it becomes damaged and is not repaired, the walls will fall down around you. As the foundational structure is made from concrete, water damage is the furthest thing from your mind, but it shouldn't be.

Water can damage a home's concrete foundation just as it can warp the wood structures. To properly maintain your home, you need to understand:

- **How standing water gets into the concrete foundation**
- **What other ways water affects the concrete foundation**
- **How long it takes for water to begin damaging the foundation**
- **What preventative measures to take**
- **The signs of foundation damage**

Keep reading to learn how to ensure that your home stays on stable ground.

How Does Standing Water Get Into The Concrete Foundation?
To the naked eye, concrete looks like a solid slab, impenetrable. The truth is, concrete is a porous substance that easily allows for water to seep inside. If you live in an area with heavy rain or your yard has poor drainage, water entering the pores can compromise the foundation.

Iamagazine.com explains that water is forced into the concrete due to hydrostatic pressure. It is caused by an oversaturation of water in the soil. The pressure from the standing water forces it into the tiny pores. As this continues to happen, the concrete will crack and break down, causing structural issues.

What Other Ways Does Water Affect The Concrete Foundation?
Water getting inside the concrete is only one way it can affect the foundation. Erosion and soil expansion are additional ways that damage could occur.

Erosion
Rainwater can wash away the soil surrounding your house and under the foundation. As the soil erodes, the concrete foundation begins to settle or sink due to the lack of dirt. When your home is built, contractors try to account for average rainfall and temperature for that area.

They'll expect some settling eventually and will account for it during construction. In some instances, extreme weather will occur and cause the soil to erode without warning.

Expanding and Retracting Soil

Erosion is not the only way water can affect the soil around your home. When rain falls, the dirt absorbs the water and begins to swell. As this occurs, the ground then pushes against the foundation. The force from the soil can make the concrete crack.

While expanding soil is a problem, it's not the only one. When the ground retracts, there can be foundational issues as well. During extreme droughts, your home can sink five inches or more which causes foundational issues.

How Long Does It Take for Water to Damage The Foundation?

It's not uncommon to wonder how long it will take before you begin to see a problem with the concrete slab under your home. Unfortunately, no one factor causes damage, and so there is no fixed amount of time.

Underground water sources can cause the concrete to crack. If this is the case, it could be years before you notice any damage. However, these gradual changes are almost a constant attack on the foundation. Therefore, you should periodically check for any noticeable signs of damage.

If your home floods, you may see foundational issues a lot sooner. Once the water is removed and any plumbing damage is corrected, bring in a licensed repair company to inspect your foundation.

What Are Some Preventative Measures?

Keeping your home's foundation from cracking is not out of the realm of possibility. There are some measures you can take to help keep the concrete from breaking.

Gutters

According to Angi.com, one of the first things you should do is watch your gutters. If you don't have any, get them professionally installed. The downspouts should direct rainwater away from your home a minimum of 10 feet.

Inspect your gutters at least once a month. Clean out leaves and other debris and make sure that the drains are free of clogs. You should also make sure there is no damage to the downspout that would prevent it from draining correctly.

Grade the Yard

Everyone wants a nice flat yard, but your yard should have a gradual slope to it in actuality. Ideally, the grade should move away from the house so that water drains away

from your foundation.

If for some reason your yard slopes, you may need to do a little work to redirect the flow. Build up the yard around your house and create a gradual slope away from the foundation.

What Are Signs You Have Foundation Issues?

Cracks in the concrete foundation are not always obvious. However, some signs can alert you to trouble.

Cracks on Walls and Floors

One of the most common tale-tell signs of foundational issues is cracks. For example, in the basement or on the lowest floor of your home, you may see cracks forming along the floors. In addition, if you have tiles or hardwood, you may notice separation in your tiles or wooden slats as the damages occur.

Even if you don't notice fissures forming on the floor, you might see cracks on the walls. This is because as the foundation settles, the walls will begin to shift and develop cracks.

Mold Issues Out of Control

When water gets into your home, mold is usually not far behind. You can clean mold and mildew spots, but if you don't address the source of the problem, the mold will return. For example, suppose you notice a continuing mold problem even after you've remediated the area. In that case, you may have a crack in your foundation.

Musty Air in Basement

If you have a basement, you'll notice that there always seems to be a strange smell. The problem is that being below ground, basements don't get the same airflow as the rest of the house, so odors tend to develop. If it is a heavy, stale scent, that means water has affected the area and needs to be dealt with immediately!

Conclusion

Water can have a profound effect on your home's concrete foundation. Through hydrostatic pressure, standing water can enter the pores and cause breaks. Erosion and soil expansion or retraction can cause a loss of support for your structure. You can use preventative methods to mitigate the damage, but always keep an eye out for warning signs.

Sources

https://www.angi.com/articles/five-tips-protect-your-foundation.html

https://www.iamagazine.com/markets/advising-policyholders-on-hydrostatic-water-pressure-damage