# What Are the Most Common Foundation Problems You Might Encounter in a Home?

the underlying cause of each will clay and bentonite, both of which

help you make an informed **REAL ESTATE** are more absorbent than buying decision. Below are the most prevalent foundation problems according to professionals I've spoken with.

Every home foundation cracks at some point. Most homes have hairline cracks that formed during the natural settling process of the concrete after the foundation was poured. These appear as

very thin fissures running vertically up and down the foundation walls. Generally speaking, these gaps are harmless, although most homeowners choose to seal them to keep water and moisture from seeping in.

Horizontal or stair-step cracks on the basement walls of a home are far more problematic. If you discover these during a walk-through of a property, you should know that you might need to pay for stabilization and repair in the future.

Horizontal cracks on the foundation walls develop when the pressure from the soil outside becomes too intense for the concrete to resist.

Understanding the most common This is a common occurrence in our foundation problems and knowing area because the soil often contains

> other types of soil, and expand when they get wet.

We can expect up to 60 inches of snow each year, and when this snow melts, the soil around your home gets saturated. The highly absorbent clay can expand, at which point it puts intense stress on your foundation walls, sometimes caus-



**TODAY** 

Stair-step cracks occur most often because of the differential settling which occurs when different parts of the earth beneath a home get wet and dry out at different rates. This is typical in an area like ours, where the soil can expand rapidly even from being introduced to minimal amounts of runoff.

Eventually, an unsupported section of a foundation cracks away from the rest of the home and leaves a step-shaped crack, which usually indicates structural damage.

Concrete is relatively rigid, but an eight-foot wall can flex slightly before cracking under the pressure signs that they're bowing inward, the wall is at risk of cracking and losing its structural integrity. Just because a foundation may be slightly out of plumb, however, does not necessarily mean it needs repair.

Although it stands to reason that a bowing wall is easier and more affordable to correct than one that has flexed to the point of cracking, the repair process is roughly the same and just as expensive.

Water intrusion is a pervasive issue. Water can enter the basement through cracks in the concrete or directly through the pores of undamaged concrete. (Because concrete is porous, it's a common practice during construction to seal the outside of the foundation with a black coating which you may have observed.)

While you're inspecting a home, pay attention to visible water in the basement, musty odors, visible mold growth, noticeably damp air, and efflorescence on the walls. Efflorescence is a white, powdery substance that gets left behind by intruding water.

When basement walls have been finished, it's not possible to observe any cracks within a foundation wall. However, there are usually other indicators that may be visible, such as upstairs windows with cracked glass or that are difficult to open and close, interior doors that rub on the

from the soil outside. If there are frame or will not close, irregular cracking within the walls or ceilings and/or under windows or around door framing, sloped floors, etc.. These are a few conditions that could indicate a foundation issue.

Homes with cinder block, brick or rock foundations are far more susceptible to water damage and/or movement from expansive soils as they are unreinforced.

Also worth inspecting is proper drainage, downspout extensions and inadequately designed or improperly installed gutter systems, vegetation (trees, shrubs, grass, etc.), sprinkler systems and planters, etc. All of the aforementioned could cause cracks in a foundation.

No one should buy a home without hiring a professional inspector, even if you have waived some of your rights to demand repairs. A professional inspector is typically not a structural engineer, but he/she will recognize indicators that you should hire a structural engineer to make a separate assessment of the foundation.

When you're purchasing a home, you should be confident that it's structurally sound and won't end up costing you thousands of dollars in repairs.

Ava Tamber of Regional Foundation Repair and Jim Camp of Metropolitan Home Inspections assisted me in composing this article.

## Aurora Patio Home Just Listed by Jim Swanson



This lovely maintenance-free patio home with a 2car garage is at 2674 S. Troy Court in Aurora's desirable Danbury Park subdivision. It has a mainfloor master bedroom plus a second bedroom upstairs with its own full bath, plus a large loft space. The 762-sq.-ft basement is unfinished. This meticulously maintained turn-key home has many recent improvements, including new kitchen appliances,

new wood blinds throughout, new light fixtures and ceiling fans. The private back patio sides to a greenbelt and has a new retractable awning. Like any patio home this is a great "lock and leave" residence. You can find additional details and more pictures, inside and out, at www.AuroraPatioHome.info.

# Secluded Evergreen Home Listed by David Dlugasch

This spacious and beautiful mountain home at 28 Valley View Lane is move-in-ready. It is located 25 minutes from downtown Denver in Evergreen's Echo Hills. It has solid hardwood floors, vaulted ceilings, slab granite countertops, stainless steel appliances, a glass tile backsplash, and a whole house wood-burning stove. This 3bedroom, 3-bath home has newer carpets, high altitude casement windows, hail resistant roof



and a wide open floor plan. It's nestled among beautiful evergreens and has a great deck for BBQs and entertaining. The yard is flat and fenced in for your pet. It boasts scenic views and has a real mountain feel. Come experience mountain living and freedom at its best. The oversized garage is insulated and has 220V electricity for a workshop and/or electric car. The large 10'x12' storage shed can store winter wood or equipment. There's ample room for parking all your toys, vehicles and an RV. Find a video tour at www.EvergreenHome.info.

#### Just Listed: Duplex in Downtown Golden Historic District

It's not often that a home comes on the market in the 12th Street Historic District in downtown Golden. This home at 1014 12th Street was built in 1900 as a single family home, but is currently divided into an up/down duplex. Its refinished hardwood floors and high ceilings welcome you into the main level which has three bedrooms and one full bathroom. Upstairs you'll find an addi-



tional unit consisting of two bedrooms and one bathroom. Both units have a nice deck sitting area in the back. The 3-car brick garage might be able to support an ADU, assuming the new zoning code allows it. Location, of course, is a prime selling point of this home, being in downtown Golden, close to Clear Creek and two blocks from the School of Mines campus. Take a narrated video tour at www.HistoricGoldenHome.com, then come to the open house on Saturday, Oct. 9th, 10am to 2pm. Listed by broker associate Ty Scrable, 720-281-6783.



Every element of this ad is also posted at GoldenREblog.com

## Jim Smith

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