

Your Basement's Deep End

A wet basement is the number one problem with Canadian homes. And I'm not just talking about odor and mould – left untreated it will lead to structural components rotting and concrete crumbling, resulting in a house with seriously weakened structural integrity.

The search for basement dampness begins on the roof, because there's no hiding lousy grading when you look down from above. Inadequate surface drainage is the major cause of basement water problems.

Faulty grading and faulty eavestroughs or downspouts mean every drop of rain that falls on the roof is going to end up on the ground within a few inches of the foundation wall.

You may want to leave the roof-climbing to a professional home inspector, but anyone can walk around the house and ensure that the grading is always away from the walls. Anywhere that the ground is flat or slopes toward the house there is a potential wet basement.

You can also look for stains on the eavestroughs and downspouts that might indicate they are blocked and overflowing. Or look at the connection where the downspout enters the storm drain because a depression or washout in that area indicates water is backing up or spilling onto the ground.

Inside the house the detective work is a little more tricky but there are signs of persistent dampness that even fresh paint can't hide.

Basement window sills should be free of rot and stain and there should be no rusty nails in the moulding anywhere in the basement. There should be no flaking of plaster walls or powder on the surface of masonry walls. Lifting tiles, stained sheet vinyl, buckled paneling or imperfections in drywall are also telltale signs of dampness. A musty smell is a sure sign of trouble.

A thorough review will force you into nooks and crannies if the basement is fully finished, because problems are often hidden behind paneling or under carpets. Where furnace pipes enter wall spaces or electrical service enters the distribution box are places that often provide a glimpse at conditions beneath the surface.

Home inspectors use an inexpensive moisture meter which can detect dampness inside walls, floors or window sills even if the room air has been dehumidified.

A bulge in seam compound or lifting drywall tape is also a warning sign. Efflorescence or subflorescence, which is the build-up of minerals and salts from water infiltrating walls, should set off alarm bells. If anything is wet to the touch you've got yourself a surefire problem.

What are the solutions? Fix the grading, eaves troughs and downspouts, and most problems will disappear. Installing a weeping tile system around the foundation will draw water away from the walls. Most homes built before the fifties do not have weeping tiles and even those of more recent construction may no longer be effective due to deterioration, clogging or poor design.

For lesser problems, improved ventilation (from simply opening basement windows to installing exhaust fans) can improve the situation. Raising the basement temperature in spring can reduce condensation, a significant source of basement moisture. Insulating cold water pipes and basement walls and placing a moisture barrier over the dirt floor in crawlspaces is also helpful.

Most basements will benefit from a dehumidifier and moist air from clothes dryers and bathrooms should always be vented.

It may routinely be cooler in the basement, but at all times of the year it should feel comfortable. If it doesn't, you need to take action.

