

Seven Things You Can Do To Keep Your Basement or Crawlspace Dry

*Spring has sprung and the water's riz,
I wonder how moldy my basement is.*

The most common complaint that Canadians have about their homes is that the basement is wet. In some cases, a wet basement calls for drastic measures involving backhoes, waterproofing and new weeping tiles. But in most cases, a damp basement can be dramatically improved or cured by following this list of seven easy, low cost improvements.

1. **Control Roof Runoff:** Extend downspouts 4 to 6 feet from your house. If you don't have eaves troughs and downspouts, have a qualified contractor install them.

Some of you may be saying, "But I get ice build up on my roof! If I put on eaves troughs the ice will tear them off every winter." If that's the case, you have excessive heat loss to your attic or roof cavity melting snow off the roof. Upgrading insulation and/or reducing the amount of air leaking into the attic will eliminate or, at least, dramatically reduce the snow melt that leads to ice build up.

2. **Control Surface Water:** Make sure the ground around your house slopes away from the house so that surface water will run off.

This is how you prevent water from coming into the basement. To summarize, keep the bulk water away from the foundation. If you don't have saturated soil next to the basement, you won't get water coming in. What about sealing cracks? If you have a crack, it might be a structural problem (or it might not, if there's no movement along it) but, I repeat, no water, no leak. But what if you've taken care of that and the water table is high? That brings me to number 3.

3. If the groundwater table is high, you shouldn't have built there, but we're too late for that. You can lower the water table using a sump pump. But, if you rely on a sump pump to keep the water table down, make sure you have a battery backup in case of power outage.

That covers water coming in from the outside and we're only at # 3. We still have to cover water from the inside. A lot of basement moisture problems come from condensation. The main thing here is to control humidity.

4. **Cover dirt floors:** If you have a dirt floor, cover it with a vapour barrier. Ten mil polyethylene will do the trick. Seal all seams with tape and fasten the edges to the walls.

5. **Eliminate or minimize other large sources of humidity.** Firewood is a good example. Don't bring firewood in until it is dry and, even then, don't store more than 2 or 3 cords at a time. Also:
 - Vent your dryer to the outside.
 - If you use a shower in the basement, run an exhaust fan.
 - If you hang your laundry to dry inside, limit it to one load per day.
 - If you have a hot tub, cover it when you're not using it.
6. Run a dehumidifier in the spring and summer to keep the humidity below 60%. **DO NOT** air out your basement or crawlspace in the spring and summer. You will only make the space wetter by bringing warm, moist air in contact with cold surfaces.
7. If your basement is insulated (and it should be – as long as you don't have problems with water entry), make sure you don't allow air from the basement to get behind the insulation where it will meet a cold surface and form condensation. That is, make sure you have a complete and continuous vapour barrier. It is common to see insulated basements where one can reach behind the insulation at a window or other location (see picture 1). This gap should be sealed with polyurethane foam to complete the vapour barrier.



Picture 1: Gap where air can get behind basement insulation and cause mold growth.

If you have taken care of these items and your basement is still wet, you may need more drastic measures. But these are all much less expensive and intrusive than having a backhoe in your yard.