

INSPECTING A NEW HOME

Do new homes really need an inspection? What can go wrong after you move in?

Most houses have over 10,000 individual parts - from wood framing members, electrical outlets, plumbing parts, baseboards, foundation walls, washers, rings, seals, insulation, flooring, bricks, tiles, shingles, nails and screws, etc. As home inspectors, we find that it is impossible to inspect each part, let alone do it during a four hour inspection. My guess is that it would take a whole team of professionals and trades people at least a day. Maybe longer. Then we would all have to submit a report.

Sometimes, a home has to be lived for a while to really learn about the house... what noises, squeaks and groans it makes and what happens when one takes a shower. One thing that everyone agrees on is that the house will change starting from the moment you move in. This is particularly important to understand when one purchases a brand new home.

When I inspect a home, I am only in the home for a few hours. I try to find, inspect, check, comment on, observe or touch as many things I can. I can't take a bath or cook a meal - nor can I stay overnight and listen for strange noises.

Many of these noises only occur after a series of normal events takes place, such as doors that open by themselves (when someone opens a window on a different floor) and sounds that are made when one has a shower. It's difficult to inspect the operation of plumbing in a basement to see what happens when the upstairs toilet is flushed..

Whether it's a new house or a previously owned home, you will find things that need attention, things that are broken, things that make strange noises, things that are missing, things that are not understood, and finally, things that were not installed properly.

Fortunately, we have building inspectors and other professionals that watch over the initial construction process. Most reputable home builders anticipate that things will happen and will offer to help you make repairs. Thanks also to the new home warranties as well! I encourage you to read over the paperwork and know what is covered. In BC, all new homes must have some sort of coverage.

So what might happens after a purchase? Well, expect that some things will need fixing that are missing, broken or not working as intended. Expect things to crack, but are not be that serious. And finally, expect to hear various noises.

MOISTURE AND CONDENSATION

New homes are very tight, and moisture can be an issue. Depending on the age of the new home, excess moisture can evaporate out of concrete foundation walls, drywall, wood framing and flooring

materials. As the home dries, wood regresses to a different humidity balance and it shrinks. Boards warp. Nails get loose. Hardwood flooring and laminate wood floors could start to make noises.

Wallboard, panelling and wood framing members shift and change shape. Things move inside the walls - such as piping supports and heating ducts.

The excess humidity can contribute to condensation issues. These typical sweating concerns are found on plumbing fixtures, toilet tanks and pipes that hold or transfer cold water. Condensation also manifests itself on windows and skylights, often to the point that the water will run down the glass and freeze.

All this is normal, and will become less noticeable as the house gets older - and dryer. Meanwhile, open some windows to let fresh air in and adjust the in-house humidity balancing fan.

CRACKS

When the home was built, there were likely no cracks in the interior drywall, the outside foundation walls or in the basement or garage floor slabs. Concrete foundations and flooring hold a lot of water when they are first poured. As they dry out, the concrete shrinks... much like the top of a cake after it comes out of the oven. "Shrinkage cracks" are normal, and generally harmless, even in the most well-built homes. Like the cake, it doesn't normally affect anything... just looks bad. These cracks normally don't let in water from the outside, so don't panic (unless the cracks are horizontal, or get excessively large). Virtually every home I have ever inspected has had some sort of crack in the walls or flooring - and only a few cases where there was concern.

If water does come into the home; however, it is usually because of poor drainage outside. If water enters the home through a crack, call your contractor and re-read your homeowners warranty to see what is covered.

Most cracks don't show up right away, but show up within a year of your move-in date. In this part of the interior of BC, it is suggested that the drying process can take several years - some people say up to seven years. When cracks happen, they often make a large popping noise, and for some reason, usually in the middle of the night. Or while watching a scary movie on the TV. If you are lucky, you'll find the new crack - but most often, you'll just know that you heard a loud noise and have no idea what happened.

MECHANICALS

It is not uncommon for various mechanical things in the home to need adjustments. Thermostats are factory set (often by someone in another country) and may not be to your liking. Automatic ventilation fans will turn on and off - depending on the whim of the furnace installer. Fridges might be too cold and heated water temperature might be too hot. Garage doors controllers and sensors may need adjusting. Once you live in the home for a while, you'll find your own balance points and favourite settings.

GRADING

The soil and builder installed landscaping around the perimeter of the home will settle. You'll get dips along the side of the house, sidewalks and patio slabs will crack and water might pond against the foundation wall or other places on the property. Be prepared to correct this yourself, or discuss this with your builder. Again, read the warranty package.

The following is a list of inconsistencies that can be found at many newly constructed properties. This list is not inclusive and many other concerns can be found if one looks hard enough.

1. Improperly compacted backfill and fill present around the foundation. All backfill and fill should be placed in layers and tamped for proper compaction. This could allow items like the driveway, sidewalk and front porch steps to settle.
2. Grading does not slope away from the foundation. Lots should be graded to drain surface water away from the foundation walls. The grade away from the foundation walls should fall a minimum of 6" within the first 10 feet.
3. Grading might hold ground water. Most codes requires all drainage to be diverted away from the yard. Surface drainage shall be diverted to a storm sewer conveyance or other point of collection.
4. Foundations with improperly compacted fill. Fills which support footings and foundations shall be designed, installed and tested in accordance with accepted engineering practices.
5. Exterior wood not properly protected. Some of the exterior wood has open joints which will allow moisture to enter and will cause deterioration. Some paint might peel off the wood trim. The trim may not be properly primed to bond the paint to the wood. All exterior walls shall be covered with approved materials designed and installed to provide a barrier against the weather. Plywood or OSB exterior walls are not an option - painted or not!
6. Exterior wood siding trim not properly caulked or sealed at the brick or concrete foundation walls to prevent water and moisture from damaging the wood. Water will run behind the wood and cause deterioration.
7. Improperly caulked cement-board material. Best practices call for caulk between and around all butt ends of fibre-cement product
8. Some of the exterior cement siding has recessed nails. Recessed nails lose their holding strength in fibre-cement siding. All manufacturers require the nails to be flush and not recessed. The recessed nails should be caulked and another flush nail installed next to it.
9. Exterior openings in the structure are not sealed. This will allow air leaks into the structure. All exterior joints in the building envelope, that are sources of air leaks, shall be caulked, gasketed, weather-stripped or otherwise sealed in an approved manner. This includes attic cover openings.
10. Roof shingles have toe-board nail holes present. Toe-boards are walk boards the roofers use. Any holes in the shingles could turn into a roof leak. All shingles with holes should be replaced or sealed with a sealant that will last as long as the shingles.
11. Step flashing is missing at sloped vertical walls, chimneys and skylights. Some of the roof flashing at the vertical
12. Attic insulation is not deep enough. Sometimes the insulation settles below the recommended depth. Every inspector has found a greater thickness of insulation nearest the opening, less than recommended in the farthest corners. Most municipalities in the Okanagan area suggest a minimum of R40..

13. Basement windows not large enough to be used for an emergency exit and as a result, cannot be used as a legal suite. Various communities have very specific measurements to make bedrooms “legal”.
14. Stairs are missing a 36" deep landing at the bottom of the stairs between the bottom step and the door. Any flight of stairs that are used for an emergency exit must have a landing at the bottom before opening a door. A minimum of 3 foot landing shall be required on each side of an egress door.
15. Garage floor does not slope enough to prevent liquids from running under the walls. Flammable liquids could run under the walls into the structure and be ignited by the basement furnace or water heater. That area of floor used for parking of automobiles or other vehicles shall be sloped to facilitate the movement of liquids to a drain or toward the main vehicle entry doorway.
16. Exterior gas meters mounted on an outside wall, in a driveway, should be protected with steel posts filled with concrete.
17. Furnace ductwork not properly sealed to prevent air leakage in non-conditioned areas. Sometimes the duct insulation is sealed, but the actual ducts are not sealed. All joints shall be securely fastened and sealed with welds, gaskets, mastic adhesives, mastic-plus-embedded-fabric systems or tapes.
18. Dishwashers should have an anti-tip mechanism at the front to prevent the unit from tipping forward when the door is open.
19. Attic openings should be air tight and insulated. Many new homes do not have a weather-stripping material around the opening so heated (or cooled air) can freely flow into the attic.
20. Rain gutter downspouts should not exit onto a lower level roof material. Add extensions to carry the excess water to the nearest gutter without flowing onto the roofing material.
21. Air conditioners and dryer vents are too close to each other. Dryer lint can clog up the air conditioner.
22. Door strikers can be improperly stalled. Every hole in the striker plate should have a screw which reaches to the rough opening door jamb. Slider windows should be adjusted to open and close easily.