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PROFESSIONAL HOUSE DOCTOR SINCE MARCH 1976  
PROFESSIONAL HOME INSPECTOR SINCE MARCH 1986

## WHAT IS THE BUILDING ENVELOPE?

The building envelope is made up of the components that separate conditioned space from unconditioned space. Typically, in most of Ontario, those components consist of the basement floor, the below grade foundation walls, the above grade wall assembly, windows and doors, and the upper most ceiling (mostly having an attic space and roof above). However, with some types of construction it could be slab-on-grade or ceiling/roof assemblies of flat or almost flat roofs and cathedral or vaulted ceilings.

What do you mean by conditioned space?

It is the interior of the house or building (where occupants live, play or work) that is temperature and humidity controlled by heating and cooling systems also known as mechanical systems. In modern construction there are often ventilation systems that help to condition this space as well.

But isn't the roof part of the building envelope?

No, in most cases it acts as an umbrella shedding or shielding weather elements and exterior forces from the actual building envelope.

You know, in the two opening paragraphs I just named the three components that make up the "House As A System": building envelope, occupants and mechanical systems. You may now think that this is getting way too complicated. Not really, it all boils down to building science which is nothing but grade eleven physics.

The important issue here is, you want to deal with a home inspector, investigative contractor or building envelope specialist that knows how all of these factors work together and with someone who has studied, taught and practiced the correct procedures for making things right, first hand for many years. That is what Ron Bolender brings to every inspection, job site and class. Ron has learned from observing so many negative issues in houses and buildings what materials and methods of construction and renovation work and which ones don't. Why waste your time and money experimenting with a contractor or doing it yourself who does not know or use the right materials and methods. Ron and his staff have taken apart numerous problem houses and fixed them. We specialize in dealing with building envelope problems such as air leakage, water leakage, thermal weaknesses, condensation issues, mold issues and just overall poor building and renovation practices. We work on almost new houses and older houses. Remember, the more complex the house often the more complex the negative issues.

*Ron Bolender*