

*Stephen's Healthy Housing Column***Welcome to MCS: Time to Look at Your Home in a Different Light***- Stephen Collette, BBEC, LEED AP*

Stephen Collette is a Certified Building Biology Environmental Consultant (BBEC). This lengthy certification analyses the built environment and how it impacts people's health. Stephen was a natural builder for 5 years specializing in straw bale construction. Stephen has an engineering background and training which enables him to understand the various processes occurring within the home and how they can interact. Applying these skills and knowledge to the standard home and small office enables Your Healthy House to find the reasons for poor indoor air quality and to create solutions to help create your healthy house.

Stephen Collette is a Leadership in Energy and Environmental Design - Accredited Professional (LEED AP), which allows Stephen to use the Canada Green Building Council's guidelines and method to ensure a quantitative approach to building green.

Intro and Outside

For many people who have had MCS for some time, they have slowly made their living space their sanctuary. For those who are newly diagnosed, whether by a medical professional or themselves, things are going to be different and need to be for you to stay as well as possible. That means looking at your home in a different light. This series of articles will walk through the kinds of elements that I look for in a healthy house and where the potential problems lie within a home. We will focus on the sneaky things that you may have missed in your own process as well.

Write Everything Down

Start a journal about all of this stuff in your home. Even the best of us forget stuff, so writing it down or typing it in a journal are key to staying on top of things and remembering what still needs research, personal testing, or removal.

Write down all the issues that you remember about the house, such as plumbing leaks, roof leaks, the time the kids stuffed their toys down the toilet and it overflowed... all of it. I've had people tell me all the time that it wasn't a lot of water in the basement, just an inch or so. Wrong!

That's a stupendous amount of water, so it is a big deal. Write it all down. Has the house ever been in a fire? Did the former owner have pets (and maybe fleas)? Did they/you spray pesticides outside or inside? If you don't know about past owners ask the neighbors, as there is always someone around who remembers and watches everything.

Outside

Beginning with pictures of your home is helpful. It's a way to look back on what was in a few years and see the differences, with hopefully more good improvements and less ongoing bad things. It also helps to catalogue stuff and email it off to others to look through. Checking Google Earth for your house is helpful as well. Pictures of your neighborhood show what is going on around you. Didn't know that auto shop was upwind of you? Now you do.

Many large urban centers have a "Right To Know" policy which means that even small businesses such as auto body shops or welding shops have to tell local government what they are doing and what they are exhausting into the air. Know thy enemy, and track them. If there is no policy in place, get together with neighbors and start on that.

Do your downspouts and grading drain water away from the building, or does water run towards it? Running towards it puts a tremendous amount of hydrostatic pressure on the building, so make sure that this isn't the case. Extra water pressure on the basement walls means water will eventually get in. Don't let that happen.

Does snow build up on the roof anywhere, such as behind a chimney? Does water run effectively along your eaves trough to the downspouts? All important questions in how the building sheds moisture. Getting outside in a good rainstorm can answer a lot of questions, including whether your boots leak! Seriously though, watch where the water does and doesn't go, and you will know where to regrade.

Windows and Doors

While outside, check the condition of the caulking of your windows. Can you stick your nail into the caulking? If it's too brittle or stiff, then you will need new caulking. This is an important issue as the connection points such as windows to walls is often a failure point in buildings. Water, water vapor, air, and conditioned air all move between this point. Dumping moist air into a wall system is generally frowned upon as it can lead to water damage and mold. The old caulking will have to be removed and replaced with zero VOC (Volatile Organic Compound) caulking. See past articles on how to carry that out. Inspect your weather stripping on the doors as well. We can't have moisture as stated above intrude, nor can we have odors from outside coming in. A good weather stripping is important for air quality and energy efficiency. To test whether it's working, run some chalk around the door edge and close it tightly. Now open it up and see where it's made contact with the weather stripping, as the chalk should have transferred. Adjust the weather stripping if possi-



ble. If it didn't touch or you can't adjust it, pull it off and replace. This point is paramount when we have an attached garage.

Garages

Attached garages are a serious health concern. It takes roughly 8 hours to remove all the chemicals in the garage when a garage door is opened, a car is started and immediately driven out and the door closed. 8 Hours! Just in time for you to come home and repeat the process. The quicker way to clear out the toxins is to depressurize the space. That's done two ways, one with a bathroom fan wired into the door opener to run for 15 minutes or so after the door closes. The second more popular way to depressurize the garage is to open the interior door of the house. The stack effect of the building will draw the garage air into the house, chemicals and all. If you can, don't use this door at all. If you do, then the weather stripping seal must be inspected regularly and install an exhaust fan.

By taking a good look at the outside of your home, and the neighbors around you, you can catalogue a fair amount of information and begin the process of understanding how your local outside environment can impact your health and the soundness of your building. Keeping good notes of everything you see and asking questions about it is the best way to find, identify and remove environmental triggers in your surroundings. In the next issue we will move inside and begin the process of looking at the inside of your house.

Stephen Collette is a Building Biology Environmental Consultant and LEED accredited professional, who owns *Your Healthy House*, and is living with his family in Lakefield, Ontario.

www.yourhealthyhouse.ca

705-652-5159

stephen@yourhealthyhouse.ca