

GreenBuilding

Build Green, Stay Healthy

by Elizabeth DiSalvo

In my last column, we talked about building to be energy efficient; this month we'll discuss building to be healthy.

Keep It All Out

Here is a big plus. The more you adhere to the tenets of Green Building (like building a well-insulated, well-sealed, envelope) the less allergens and illness you will have inside your home:



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- The less air that flows through your walls in an uncontrolled way, the less problems you have with mold and mildew.

- Less mold and mildew means less allergens and asthma, and less sinus, lung, eye and skin irritants and rashes.

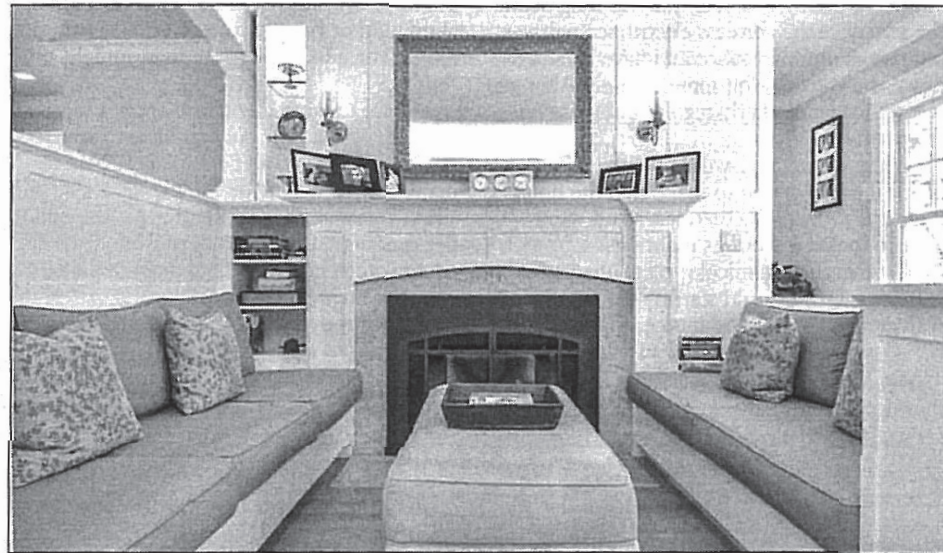
- Less mold and mildew also means less dust mites, spiders, flies and the

viruses and bacteria that they can carry.

- Less opportunity means less critters. Building a well-insulated, well-sealed, envelope creates a physical barrier that most bugs and animals either don't like to live in, or can't actually crawl or chew through.

- Less bugs and rodents means less feces and less pest borne disease. Dander from animals (often found in the dust in your home) can lead to rashes, hay fever, asthma, viruses, bacteria, runny noses, itchy eyes. If your home is more dust free to start with, it is easier to keep dust free.

People are naturally resistant to living in a



100% organic, latex foam cushions sit in formaldehyde free, FSC certified wood mill work and surround a fully sealed, 94% efficient gas fireplace with exterior make up air that radiates enough warmth to heat most of the house in a power outage. — Photo courtesy of Trillium Architects

sealed environment. But remember when we build a well-sealed envelope it is not because we think you should avoid breathing fresh air – quite the opposite. We believe you should be in control of the air – and everything else – coming and going in your house.

Creating a tight envelope and introducing a clean and filtered HVAC system – or simply opening a window or door – means that your interior air quality will be as clean and healthy as it can be.

NO VOCs, No Chemicals, No Toxins

Are toxins in your home really that bad for you? Aren't our innovations in chemistry one of the greatest things about being alive today?

More and more it is shown that toxins in high accumulation are likely the cause of inflammation, immune system disorders, chronic fatigue syndrome, cancer, chemical sensitivities and many other diseases.

I have made a big effort not to allow toxins into my body. This includes watching the food I eat, choosing organic whenever I can, choosing natural tooth pastes and being very careful of what lotions and make-up go on my skin. I

don't always succeed but I know the amount of toxins that enter my body has been greatly reduced.

When I turn the same attention to the house I live in, suddenly it all becomes very overwhelming. I realize all of the things that might be harming my family's health:

- Long term, low grade exposure to formaldehydes – found in furniture, and building materials – is directly linked to cancer.

- Brominated flame retardants in furniture, electronics, insulation and dust, have been shown to cause fertility problems in women and low birth weight and slowed development – both physically and mentally – in children.

- Radon can cause lung cancer; often many years after long term exposure.

- Chronic exposure to carbon monoxide can result in less energy, cardiovascular issues, angina, and depression. Even at low levels, it can have subtle and adverse effects on energy and overall well-being. Attached garages, fireplaces, heating equipment and dryers are just some of the possible sources.

- Nitrogen Dioxide is one of the biggest sources of Asthma in small children. Where does it come from? Your gas stove or fireplace. Try an electric induction stove.

- VOCs ... contribute to greenhouse gasses and can cause cancer.

- Pesticides – both indoor and out ...

- Chemical Cleaners ...

- Solvents and Glues ...

Many of these toxins are invisible and have no odor. You may not feel bad in the moment, but your body can be in the slow process of accumulating toxins that can do a lot of damage down the road.