

GREEN TECH THE SERIES COLUMN FOR NOVEMBER 2, 2016
HEADLINE: GREEN AND SUSTAINABLE-THE PROCESS

A week rarely goes by that I don't receive e-mails and/or client calls describing how difficult it is to find a balance with respect to upgrading or improving living costs in their homes. When a new home is involved, balance starts with design. For a renovated home, it focuses on a blend of energy use, sustainability and air quality. Finding balance can be a daunting task and there is no one single answer. Admittedly cost usually becomes the governing factor. Recently, a reader called venting over the cost of living in their electrically heated home and how it's affecting their budget; a well-known fact today. A friend is renovating an older home and is finding information difficult to align with time and budget, when trying to arrive at an affordable, sustainable home. Both these ladies expressed frustration. They are trying to find effective answers and, even with the mass of media knowledge, at times it's daunting weeding through all the information and how it relates to their individual homes.

Our reader is going to proceed with a thermal scan of the home, its older and finding the air loss is a good start. Our friend is utilizing the, Ontario funded, Enbridge supported Energy Program for homes. A quick trip to www.knowyourenergyscore.ca will give you a place to begin, starting with an energy audit. From what I know, assistance for the audit is \$150.00 and upwards of \$1950.00 is available for upgrades. You can also go to www.saveonenergy.ca for other incentives and coupons for instant savings when you buy items like Energy Star light bulbs, weather stripping and a blanket for your electric water heater, for example.

Now let's look at the process. How should we look at our homes from a green perspective. The marketplace is overflowing with "green" products. It's a popular movement today. Unfortunately, "greenwashing" is an often used term for manufacturers who jump on the bandwagon. In fact, one study actually suggests that upwards of 98% of green marketing is inaccurate. The consumer has to do their homework, remembering that they are all trying to sell you something. This brings me to my first suggestion, which is to get either an energy audit or a thermal scan done on your home. These professionals are, in fact, or should be an unbiased third party reference on your home. If one tries to sell you on a specific product or contractor, show them the door.

Purchasing materials for your new home or for a renovation, even simple upgrades like weather stripping, should be researched. Remember there are very few totally green products. They may purport to be green, but it comes down to the level or percentage. The other factor is installation. Fiberglass batt insulation with a recycled content, most often of reclaimed glass, is a good insulation product. However, if not installed properly, it's not going to do its job. There are trade-offs and looking past the slick marketing to your application is more important than ever.

We live in a global world. With so many products made outside our country, in our cold climate, attention to the value of the product in Canada is important. This is especially true in buying windows. It is one upgrade where research is simply a must. Make sure you get the best type, style, thermal insert and installation. This is one area where I would strongly recommend at least three quotes. I have seen more products in the past year where the manufacturer has simply disappeared than I wish to calculate. Don't only check the product, delve into the integrity of the company, too.

Along with performance, impact on your health is equally important. For example, you do not want to buy anything for your home that will adversely impact the level of air quality, which in turn becomes a health issue for the occupants, especially children and seniors. Off-gassing is the single largest issue impacting the health of, not only those who install interior finishes and insulation, but occupants of the home, as well. Selection of materials blends with its green attributes. This is where recycled or waste content becomes the next factor for consideration. Cellulose insulation, for example, is manufactured with upwards of 85% recycled paper and then it's blended with fire retardants for safety. It has the highest recycled content of any insulation. The drawback is that it is a miserable insulation to blow into an attic or walls, but, on the other hand, it has no off gassing effects.

Consideration with respect to maintenance, repair and replacement cycles should be next on the list. I know of very few homeowners with a set-a-side budget for this. What should be right up there with cost, sustainability and energy efficiency should be life cycle assessment. As a society, we need products used in our home to last longer, a lot longer. It's simply senseless to continue to use energy and natural resources due to the fact we are not considering life span. One product that comes to mind is fiber-cement cladding like Hardiboard. I admit to a bias against vinyl siding. The manufacture of vinyl siding produces double the

carbon dioxide emissions that cement does. Recycling vinyl siding is difficult and expensive, whereas fiber-cement board can be reground and recycled.

When choosing materials for inside your home, take a close look at man-made vs. natural products and the manufacture, recycle, longevity and renewable capabilities. For example, with flooring consider natural materials like tile or manmade flooring, such as engineered wood, which has considerably less twisting and warping. A lot of the laminate flooring's life span is lower when compared to engineered wood, most of which can be refinished.

The process is not simple, it takes time and you should take the time. It's your hard earned money. Take into consideration where it's made, how long it will last, can it be recycled and then consider the cost. That's a different process than many consumers take. If you try it, you will be surprised to discover that you can find a good balance of products for your home.

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