

# Refenestration: The second chance to get it right

by **AL DUECK**, PRESIDENT AND AYNLEY DUECK, MARKETING MANAGER, DUXTON WINDOWS & DOORS



It may come as a surprise but the odds are that the typical homeowner has bought their windows and doors with very little input into their details. For the most part, first or second time home buyers of new homes have accepted the builder's window. When they sell their home, the new purchaser settles with whatever that home happens to have in place. Yet some of the most experienced builders such as John Friesen of Stratfield Properties feel quite differently, "Windows become one of the most important elements of the building envelope – helping to shape its energy efficiency, and allowing for lots of fresh air and natural lighting." There are, in fact, many considerations to help a serious buyer make their home more comfortable, energy efficient, and ultimately increase its value.

#### **WINDOW BRAND AND INSTALLER**

Windows and doors are "high ticket items" that are purchased infrequently, and they should ideally be replaced with some investigation as to the brand that fits their aesthetic and performance goals. The company should also be committed in the long run, as replacements are often done in stages over several years. A company with Energy Star qualified products represents a level of testing and performance verification within Fenestration Canada terms of reference.

Equally, finding an installer who is trained, knowledgeable and committed to your satisfaction is very important. Notes Alwin Kauenhowen of Kauenhowen Projects Limited (KPL), "Full frame window replacements are more typical. A commitment to detail on our behalf is critical to proper weather sealing and customer satisfaction during the installation."



#### **CUES FROM INDUSTRY LEADERS**

LEED and Passive House accredited buildings offer many design ideas influencing the amount of visible light, access to fresh air, and the overall U-value of the frame and insulating glass. Visible light transmission is a trade off when adding layers of glass and variations of "low emissivity" coatings, leading to more thoughtful applications of glass types. Experienced installers can also advise how to bring in more fresh air: while fixed windows are less costly, a modest added investment (ie sliding doors, tilt n turn windows, operating sidelites) will allow for cross-ventilation.

#### **THE VALUE PROPOSITION: INVESTMENT AND LONGEVITY**

The owners' budget will impact the decision but there are definitely differences in quality and longevity of different window fabrications. Many people start with pre-finished and low maintenance frames as the basic starting point. However, ever larger "walls of glass" are being used in replacements and in home additions, requiring a close look at a window manufacturer's capabilities. The strength of the frame becomes essential to holding the weight of the glass over time.

WINDOWS BECOME ONE OF THE MOST IMPORTANT ELEMENTS OF THE BUILDING ENVELOPE - HELPING TO SHAPE ITS ENERGY EFFICIENCY, AND ALLOWING FOR LOTS OF FRESH AIR AND NATURAL LIGHTING.

Life expectancy of the windows should also be a factor, as windows tend to be a large investment for a home and it would be preferable to delay another replacement as long as possible. For a given frame material, there can be large variations. An independent researcher from UBC has found that fiberglass windows are expected to last on average 38% longer than vinyl windows. This is partly due to the fact that fiberglass expands and contracts 7 times less when compared to vinyl. Higher quality insulating glass with a warm edge will also contribute to longevity, while reducing edge condensation, offering a limited 20 year warranty.

#### **AESTHETIC FEATURES**

A basic white exterior and interior has been a common starting point for years but has broadened a great deal in the past 10 years. Take the time to understand the key elements that influence the curb appeal of your property (considering permanent features such as brick or new roof) and whether there is a particular window frame colour that would be complementary. Light coloured frames against light stucco finish can create a

LIFE EXPECTANCY OF THE WINDOWS SHOULD BE A FACTOR, AS WINDOWS TEND TO BE A LARGE INVESTMENT FOR A HOME AND IT WOULD BE PREFERABLE TO DELAY ANOTHER REPLACEMENT AS LONG AS POSSIBLE.

very bland appearance. On the interior, there may be areas where exceptional finishes can become real features, framing amazing views.

As one of the key style features of any home, entry door replacements represent a great opportunity for enhanced aesthetics, energy performance, and security. To select a stylish entry door that suits your home, it is well worth the time to explore your options: Door panel finishes (woodgrain or smooth skin), frame colours, interior finishes, hardware styles, and decorative glass panels.

#### **INSULATING GLASS TO PROVIDE COMFORT TO YOUR HOME**

A certain number of window sellers or retailers are quite eager to simply sell "low e" glass, regardless of your needs. However, it is very clear that increasing the R-value (insulation) of your glass with triple pane and as little as 3 - 5% higher cost can have a great impact on your comfort level, while reducing heating bills and condensation/frost. A closer look (ask for performance charts) and a more informed decision with "low e" glass allows you to increase or reduce solar gain (typically shown as Solar Heat Gain Coefficient, SHGC) while maximizing insulation and visible light as desired. A well-informed sales representative can be invaluable in this process by making recommendations and presenting the trade-offs.

This "second chance" to up-grade windows and doors can greatly improve the appearance of the property, increase the energy efficiency with reduced cooling and heating costs, add more comfort with fresh air and fewer cold drafts, and even add greater security with multi point locking on doors. While sometimes a large task, research and careful consideration of your options can make "refenestration" a very positive experience.

