

Net Zero Housing Calls for Extreme Windows

>> Climate and Green initiatives are driving forces for Duxton Windows and Doors

Preserving an ambient indoor temperature is important to homeowners in all climates, but imagine living and working in one of the coldest cities in the world – Winnipeg, Manitoba, Canada.

Duxton Windows and Doors is very familiar with this challenge as producers of some of the most durable and energy-efficient windows available. The company, which caters to both light commercial and residential customers, takes it a step further by participating in cutting-edge, energy-saving projects, such as the EQUilibrium Housing Initiative sponsored by the Canadian Mortgage and Housing Corporation (CMHC).

>> “The Canadian housing industry has seen several Green design initiatives in the past few years, ranging



A Riverdale net zero home after the Duxton Window installation.

from R2000 to Super E,” said Al Dueck, president and founder of Duxton Windows and Doors. “We have been presented with a great opportunity to take part in EQUilibrium, which represents an unprecedented collaboration among industry, consumer and government parties. The objective is to build 12 net zero houses in Canada – meaning that the houses will produce as much energy as they use.”

The net zero home features a combination of resources and energy efficient technologies that reduce the structure’s environmental impact, while providing a healthier and more comfortable living space.

“In our climate, which can reach as low as -44 (Fahrenheit), creating windows that keep the cold air outside is imperative,” Dueck said. “But it’s also imperative that we do our part in preserving the environment for generations to come. The EQUilibrium project is very meaningful to us as we develop window systems

that meet the most stringent of standards.”



Al Dueck and his family (L to R) Arlene, Alexandra and Aynsley ran in the Montreal Marathon in September 2007.

Primary objectives of the EQUilibrium Housing program include: reducing the energy intensity of Canada’s housing sector; mitigating household energy cost increases; fostering a growing renewable energy and sustainable housing industry in Canada; contributing to meeting Canada’s international commitment of reducing Green house emissions; and supporting Canada’s inclusion in competitive international markets.

“We will provide the windows for four houses in the EQUilibrium project, collaborating with suppliers and advisors that compliment each other’s efforts and

expertise to make the net zero dream a reality,” Dueck added. “In addition to window design and components, we’ve learned a great deal about the importance of window orientation and window layout while working on this project.”

One example of this is the use of daylighting, a technique that uses natural light from windows, skylights and other openings to supplement or replace a building’s artificial lighting system. This technique can translate to reduced electricity usage and a greener structure.

According to Dueck, “There was a time when architects shied away from daylighting because, typically, the more windows you add, the less energy efficient the structure will be. However advancements in window technology, such as the use of Super Spacer® and utilizing pultruded fiberglass frames, have made effective daylighting possible.”

Continued on page 4...

In business since 1999, Duxton primarily focuses on the manufacture of high-performance fiberglass dual- and triple-pane windows. However, the company has faced the challenge of producing IG with up to five panes of glass.

“Super Spacer is used in all IG we purchase from AGC Flat Glass North America,” Dueck said. “It’s really the best spacer available in terms of energy efficiency and durability. This compliments our use of fiberglass framing and low-e coatings. Duxton window systems include the best materials available – a necessity in the harsh Canadian climates and for reducing a home’s carbon footprint.”

Creating a greener world is very important to Dueck. In

fact one of his favorite quotes is the Great Law of the Iroquois Confederacy, which he heard from Dale Wilker of Qiniscoe Homes:

In our every deliberation we must consider the impact of our decisions on the next seven generations.

“These are great words to live by,” concluded Dueck. “My family inspires me every day and it feels good to have even just a small part in creating a solution that will benefit many generations to come.”

For more information on Duxton Windows and Doors, the EQUilibrium Housing Project and the various Green projects Duxton has completed with Super Spacer, visit www.duxtonwindows.com. 