

Ecohome harvests rain, warmth

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BY L.H. TIFFANY HSIEH

It took perseverance, patience and lots of money, but Mark White, his wife, Elizabeth, their two kids and the family dog can finally move into one of the greenest homes in Markham this summer.

Two years ago, Mr. and Mrs. White bought a 160-year-old home on Euclid Street in Unionville. Upon making an offer, they knew what needed to be done for the house to be livable - gutting and turning it into an environmentally friendly home.

It took a year of planning and working out a redesign for the house, which, except for the front structure, is completely rebuilt from the ground up.

It then took another year to construct the home with features such as geothermal power, an in-ground heating and air-conditioning system, soy-based foam insulation, a "green kitchen" by Aya Kitchen and a rain-harvesting system.

"As with most environmentally friendly stuff, it's costly and you have to be a wealthy person to do this. I'm broke now," said Mr. White, who owns and operates Toronto Litho Art at the old Unionville jail house on Main Street.

In addition to the serious financial commitment (Mrs. White is a nurse practitioner at SickKids), the project required obtaining a series of approvals from the Town of Markham under its building codes as well as heritage guidelines.

"The town is a little behind in this. For example, it took them three months to approve the geo and about a month for the soy-based foam insulation," Mr. White said. "There were a lot of hurdles just because it's not the norm."

One of the features Mr. White insisted on installing is a 3,000-gallon rain harvesting system he saw at the Green Living Show. It was there that he met fellow Markhamite Joe Genovese, whose landscaping and design company, Genoscape, installs the RainXchange Rain Barrel from U.S.-based Aquascape.

It's a six-foot below ground containment unit comprised of several modular blocks, Mr. Genovese said. It's designed to reduce water bills and cut demand on municipal systems and is integrated with a decorative water feature, a key component that cleans and filters the water.

"Basically, all of the water used in the house gets diverted into the system," Mr. Genovese explained.

"This customer will not have to use city water for any of his outdoor needs ever. It's like a mega rain barrel."

Mr. Genovese said the Whites' is the first residential home in Markham to have a rain harvesting system and it's one of the largest in GTA.

"Obviously, the bigger the system, the faster the payback per litre," Mr. Genovese said. "The first 500 gallons are the most expensive, after that it incrementally gets cheaper."

Costs for the RainXchange Rain Barrel, he added, run from \$5,000 and up, based on size and components.

"Rain water is better for watering plants indoors or outdoors, because there are no chemicals. I believe in it," Mr. White said.

Despite being "tapped out" for the moment, he said it has been an exciting learning experience for his family.

"Our house would pass for LEED certification instantly, but we are just trying to do our part in being green - we are not overly environmental, we just appreciate it," he said.

"It's been a hard ride, but the end result is beautiful. You have to work for what you believe in and once you start, you can't really stop."