



**Waterloo**  
FACULTY  
OF **ENGINEERING**  
1957-2007

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## GOLDEN MEMORIES

Our story was a modest beginning at best. Fifty years ago 74 young men started engineering classes at what was known at the time as Waterloo College Associate Faculties. Their classrooms were two tin-roofed portables outside of Willison Hall in the then Waterloo College parking lot. The heat that summer described by many as unbearable had students hosing down the flat roofs only to discover they leaked. As typical engineering students they had a Plan B. When watering the portables didn't work they stripped down to their underwear for classes. ■ In October of 1957 students started their first co-op placement which was also the first educational work term in Canada. As one of the original 74 recalls, many didn't understand the co-op concept. For his first couple of years the student answered questions like what is co-op and how does it work? After that, he says, there was no need to explain anything to anyone—Waterloo became synonymous with co-op. ■ In 1958 students, like those pictured above,

gathered their books and moved to a 1,000 acre campus. Granted, it was full of mud, but it was their own. Part of Waterloo Engineering's young history went along with the students—the portables were cut in half, trucked over the hill and became drafting halls and cafeterias. ■ Memories and photographs of a few of those early graduates and some of the over 28,000 others around the world are included in this issue that celebrates Waterloo Engineering's golden anniversary and looks ahead to the next 50 years.





Architecture graduates Tomislav Knezic and Christine Lolley are owners of Solares Design Build Inc.

## DESIGNING AN ENVIRONMENTALLY INTEGRATED HOUSE

Christine Lolley has always been fascinated with houses. Even as a child she would buy house plan books and pore over the designs. Tomislav (Tom) Knezic has always been fascinated with the environment in which people live. When he was a child he helped his parents renovate several houses and in his spare time watched the PBS restoration program *This Old House*. ■ With such similar interests it seems only natural that the two Waterloo School of Architecture graduates, now married, are designing and building houses together. But they aren't ordinary ones—they're environmentally integrated homes, a term coined by Lolley (BES 2001, MArch 2005) and Knezic (BES 1999, MArch 2003). "We needed a term that described our unique approach to house design and construction. Environmentally integrated homes combine a lifestyle of plenty with minimal environmental impact. They use high-quality materials and systems and exceed industry standards in terms of efficiency, which in turn minimizes the amount of green house gas emissions they produce," explains Knezic. ■ The couple's first major project together was designing and building a house for Lolley's parents in a rural area near Kingston over a year ago. "During the construction we had a lot of interest from friends, family and perfect strangers about the project and realized that we were on to something," says Knezic. ■ The pair took the something they were on to and last September opened Solares Design Build Inc., located in Toronto. The company's design focuses on sound construction principles, energy efficiency of building systems, passive heating and cooling techniques, including solar heating in winter and shading and heat reflectivity in

summer. The design also tailors the house to fit its surroundings and the needs of its owners. ■ Currently Solares Design Build is working on two major projects: the design for a solar house in the Cobourg, ON area and the renovation of a house in Brampton, ON to, among other things, make it more energy efficient. ■ Knezic says the next generation of Solares houses will go a step further to improve the environment. "With the implementation of energy harvesting equipment, such as photovoltaic solar panels or wind turbines, these houses could generate their own electricity and sell excess power to the electrical grid. If done right a house could end up generating more power than it uses on a yearly basis. Multiply that by several thousand houses and we could have a very interesting renewable energy source."



Lolley and Knezic combine their architectural talents to build Lolley's parents' new house.