

## Founding Renovated Home: REEP House for Sustainable Living



Insulating the basement

Photo: REEP

Home Sweet Home is fortunate to have an office in Waterloo Region where we get to witness some of the leading green building and renovating companies in the province. This is undoubtedly the case with the recipients of the Founding Renovated Home award.

Waterloo Region's Residential Energy Efficiency Project (REEP) is one of Canada's leading home energy auditors and energy retrofit experts, having completed a staggering 10,000 home energy audits. The non-profit is working closely with two local

LEED-experienced partners, sustainable design architect Whiting Design and builder Ball Construction, along with many other local partners, to create REEP House for Sustainable Living. REEP House ambitiously explores and demonstrates how to retrofit Canada's "leakiest" category of housing – our beautiful old century homes – without losing their heritage value.

The house at 20 Mill Street in Kitchener aims to reduce energy demands by 90%, and water needs by 60%, while keeping the charm of the old house relatively intact. Rigorous materials selection and waste reduction practices were part of the goal of achieving LEED Platinum (a first for a renovation project in Canada). The team also aims to raise the home's EnerGuide score from 44 to an impressive 89. The design approach is intentionally simple, low-tech and local -- "In a nutshell: seal the envelope, insulate heavily, and install high performance heating."

REEP House plans to attract tens of thousands of visitors to tour the house. Using cutting edge software tools, visitors will complete their own Sustainable Home Action Plan, which models the energy savings, investment potential, comfort and health benefits and payback of everything from adding sensor light switches, to installing solar PV. The focus is on presenting solutions that people will feel empowered to implement in their own homes.

Note that next door, at 24 Mill Street, REEP has completed a similarly impressive project that is probably more relevant to the average homeowner. This renovation of another older home reduced the energy demand by 50% for only \$20,000.

Please see the Detailed Profile by REEP and Whiting Design for further details, and visit:

REEP House: [http://www.reepwaterlooregion.ca/prog\\_house.php](http://www.reepwaterlooregion.ca/prog_house.php).

Whiting Design: <http://www.whitingdesign.ca/>

Ball Construction: <http://www.ballcon.com/>