

# Habitat for Humanity LEED Platinum home



This home was designed by Chris Magwood and Jen Feigin, and built by the students of the 2010 Sustainable Building Design and Construction program at Fleming College under the direction of Chris Magwood and Jen Feigin.

Dan Earle

The Peterborough, Ontario Habitat for Humanity affiliate sponsored this LEED Platinum certified home as one of the four homes they built in the city in 2010. It is part of the affiliate's move to bring all their new builds to LEED standards.



A small, 39 x 90 suburban lot gets a high-slag content slab foundation





Prefabricated straw bale wall panels are built in a nearby shop and will be ready to install when the foundation is set.



The roof is built and sheathed on the ground while the foundation and walls are also being completed.





Within a matter of hours, the prefabricated straw bale walls are craned in place and ready for the roof. The walls will bear the weight of the roof.



The roof is craned into place and the building shell is complete.





Straw clay (slip straw) insulates the gable walls of the house.





A local pine ceiling is installed, and interior walls are framed. Some are sheathed in magnesium oxide board, others with clay plaster.



Bottles in a clay mortar decorate one wall.







The prefab bale walls are strapped on the exterior for the placement of horizontal siding.

The siding is a fiber-cement board, as is the trim.



Solar hot water and a 5 kW photovoltaic system are installed on the roof.





Non-toxic  
paints,  
finishes,  
glues and  
caulking  
were used  
exclusively  
on the  
interior.



The Habitat house shows that healthy, sustainable homes do not need large budgets to reach high levels of performance.

