



MCQUESTEN PASSIVE

TRIPLEX

WHITEHORSE, YUKON



In response to the City of Whitehorse's growth and sustainability strategies and the owner's desire to provide an energy efficient healthy and affordable development, this triplex is being designed to meet the stringent Passive House standard.

The three 2-storey compact units are located on a vacant undersized lot in a mature urban neighbourhood. The scale, massing and materiality has been designed to integrate into the existing streetscape in order to positively impact the neighbourhood. In doing so, the entire development ends up no bigger than a large single family home.



In order to meet Passive House certification standards, the project is extremely energy efficient, requiring less than 15 kWh/m² annually for space heating. To achieve this the units open to the south in order to benefit from solar gains in order to offset heat losses elsewhere. These gains are addressed in the summer by large overhangs and sun shading devices along the south facade. The project will also feature a highly insulated envelope, low energy consumption appliances and fixtures, and Passive House certified HRVs and windows.

The building is schedule to be completed in 2012.