

PROJECTS

BUILDING ENCLOSURE LABS INC.

A client-focused laboratory and consulting company bringing building and sustainability science and education to the industry

ST. PETER'S LUTHERAN CHURCH



Kitchener, ON

St. Peter's Lutheran Church in Kitchener, Ontario, is an example of one of many projects that inspires us. The Church's pastor, Mark Ehlebracht, responded to calls for help from homeless people literally living in an air intake vent behind the Church's altar. He and the congregation decided to convert a large part of the Church into 40 units of affordable housing. Indwell, a housing project management company, contacted Invizij Architect, who then contacted BELi to provide our expertise in diagnostics, testing and analysis.

We assessed existing moisture and decay issues and provided our freeze thaw risk assessment to help guide the client to low risk options for interior insulation retrofit of the wall assemblies. We tested brick samples from different locations to determine critical saturation values and hygrothermal material properties which were used in WUFI Pro software enabling us to recommend suitable insulation strategies. During our field work air leakage issues were identified through pressure assist theatrical fogging. One of our team members assisted the designer in addressing retrofit detailing of a range of conditions presented by converting the facility to residential usage.