

February 7, 2012

## PHIUS' Certification of Vert Design's Rideau Residences in Ottawa

The Passive House Institute (PHI), an independent research body, developed the Passive House Standard using straightforward physical principles. The strict application of efficiency measures allows for such a reduction of the heating, cooling and dehumidification loads that heating and air conditioning systems can be radically simplified. Due to its proven success, this energy performance standard has enjoyed immense surges in uptake from its beginnings in the late 1980s and is now recognized worldwide for the optimal levels of comfort and superior building quality it offers.

The efficiency, comfort and quality for which Passive House is known is achieved through the application of the climate independent Passive House concept, which itself leads to a set of key, internationally applicable [criteria](#) (available on [www.passivehouse.com](http://www.passivehouse.com)). It stands that even in the most extreme of climates, Passive House buildings have been successfully built and properly certified and have performed outstandingly all around the globe.

To help ensure compliance with these international criteria and thus the performance of the building, a high level of quality is required throughout project design and planning. The Passive House Institute has developed the [Passive House Planning Package](#) (PHPP) design tool (available on [www.passivehouse.com](http://www.passivehouse.com)) to facilitate the design process and has instituted a rigorous (voluntary) certification process. This certification scheme is carried out by Passive House Institute accredited building [certifiers](#) worldwide (listed on [www.passivehouse.com](http://www.passivehouse.com)), who may certify *in the name of the Passive House Institute* anywhere in the world according to the well defined Standard. The certifiers are entrusted with upholding the standard and ensuring the quality of the buildings they certify. They thus carry a great responsibility in their work and must diligently document the building as well as the quality of the components used. Should it become clear that an accredited Building Certifier is not up to this task, it is the Passive House Institute's duty to revoke this Certifier's rights to certify in the Institute's name so as not to undermine either the Institute's principles or the Passive House Standard itself.

PHIUS' assessment of the Ottawa house, unfortunately, was just such a case. In fact, much of the essential documentation necessary to determine energy balances - the foundation for the entire certification process - was not available when requested by PHI. Even on the basis of the partial data provided to PHI, it was clear that any properly conducted energy balance would result in an energy performance far removed from the Passive House Standard. PHIUS' latest statements have shown that the organization is not even trying to claim that either the 15 kWh/m<sup>2</sup>a heating demand criterion or the 10 W/m<sup>2</sup> heating load criterion have been met. On the contrary, they claim that these criteria do not make sense. There is no question that an organisation taking this position did not take and, indeed, could not have taken its responsibilities as an accredited Building Certifier seriously and was acting to the detriment of the Standard. It is simply irresponsible to misguide the public by claiming that such changed criteria lead to the same proven results as the well-recognized Passive House Standard does. Those choosing to use different criteria should at least be so honest as to not use the term "Passive House".

The Passive House Standard can only be met with high quality components adapted to regional climatic conditions. PHI's building certification criteria, however, do allow the use of non-certified products as long as the characteristic values for these components are independently reviewed and well-documented. Quality assured Certified Passive House Components greatly facilitate Passive House design. As such, PHI does its utmost to support the development of such components adapted to regional conditions by providing baseline research on the component requirements as well as offering consulting and component certification services; all done with great success. The Passive House Institute is dedicated to aiding motivated, North American manufacturers in bringing regionally adapted Passive House components to the market – a commitment further evinced by PHI's efforts to connect international market players with events like the [2012 International Passive House Conference \(www.passivehouse-conference.org\)](http://www.passivehouse-conference.org), taking place in Hanover, Germany from May 2–6, 2012.

The Passive House Institute has always supported the Passive House movement in North America: a fact ever more evident through PHI initiatives such as the International Passive House Association ([www.passivehouse-international.org](http://www.passivehouse-international.org)) and the Passive House knowledge database, Passipedia ([www.passipedia.org](http://www.passipedia.org)). Quality and quality assurance are principles behind which the Passive House Institute stands. PHI will continue along its path, working with all institutions that share these principles.



Passive House Institute

A handwritten signature in blue ink that reads "Wolfgang Feist".

Prof. Dr. Wolfgang Feist