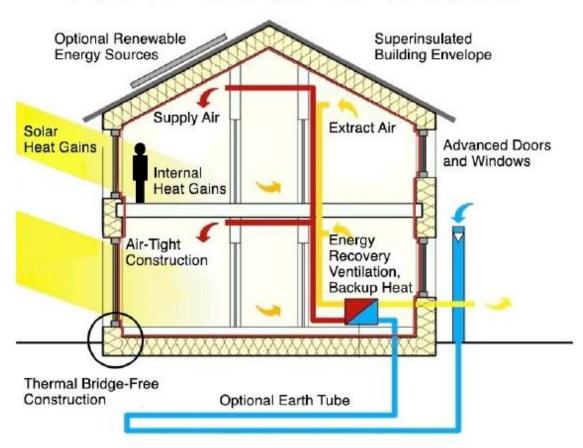
Passive House Construction - Hamilton Is Leading the Way!

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In any community today, buildings are a major source of greenhouse gas emissions, if not the largest source. The City of Hamilton is no exception. But bold efforts in Hamilton have demonstrated that the potential exists, both with new buildings and retrofits of existing buildings, to realize profound reductions in building-related greenhouse gas emissions. A key approach has emerged in these efforts – the Passive House method.

According to Passive House Canada, "(P)assive House (Passivhaus) is considered to be the most rigorous voluntary energy-based standard in the design and construction industry today" (see passivehousecanada.com).

How does it work?



Source: Krapmeier & Dressler 2001

Hamilton has become a leader in Ontario where passive house construction is concerned. The first efforts on this front emerged through an organization called Indwell, a Christian charity whose mandate is to provide 'Hope & Homes For All' (see www.indwell.ca). For Indwell, Passive House has become a core principle – a pragmatic method for ensuring that the social housing the organization is helping to build, continues to be as affordable as possible over time. Indwell's work is providing affordable housing in Hamilton that is more climate resilient through the enhanced ability of structures built to Passive House standards to handle extreme

heat and extreme cold using low/no carbon methods. Indwell has an impressive list of projects already completed or currently underway. Some of these projects are managed by Indwell on-going – such as the recently completed Parkdale Landing, while others have been undertaken in partnership with another entity like a local faith community, as is the case with North End Landing – a project that integrates affordable housing units and the new Hughson Street Baptist Church into an innovative Passive House structure.

The Passive House movement started by Indwell has inspired others to take up the torch. The City of Hamilton itself, through CityHousing Hamilton, jumped in with an impressive tower retrofit project that, now completed, is the largest Passive House tower retrofit in North American. Ken Sobel Tower, in Hamilton's North End, now provides affordable, incredibly energy efficient and comfortable housing for local seniors. The project was undertaken in partnership with The Atmospheric Fund and provides an incredible example of the benefits of retrofitting to Passive House standards. You can learn more about the Ken Sobel Tower retrofit by clicking here.

CityHousing Hamilton's commitment to building social housing that is climate resilient has not stopped with Ken Sobel Tower. The redevelopment of Jamesville – a social housing complex on James Street North – will include newly built social housing units constructed to Passive House standards. Through an open competition, Indwell is now part of a team that will work with the city to construct the new social housing units on the Jamesville site. More details about the vision for Jamesville can be found by clicking here.

Finally, other agencies have noticed the Passive House trend in Hamilton and have committed to doing the same. Most recently, YWCA Hamilton has committed to building to Passive House standards for the redevelopment of its Ottawa Street property in the east end of Hamilton. The new build will provide affordable housing for women, within walking distance of Hamilton's future LRT. Click here to learn more about YWCA's Ottawa Street project.

The efforts of organizations like Indwell and YWCA Hamilton, amplified by commitments from CityHousing Hamilton are working to raise public awareness about the huge benefits of Passive House construction methods, and to normalize this approach to new buildings and retrofits. These efforts have sparked important community-level conversations about the climate crisis, extreme heat, and the need for action to ensure that our most vulnerable community membes have safe shelter from extreme heat and extreme cold. Passive House provides a way to achieve this that is climate resilient and affordable over the long term. Now we need to push for this approach to become the norm right across the building stock of every community!

For more information about Passive House, including information about Passive House structures in other Ontario communities, visit <u>Passive House Canada</u>.