Superior Insulation

Our building has high levels of insulation in the walls, roof, and floor to minimize heat loss.

R Values:
Wall Insulation: R=60
Roof Insulation Value : R-140
Floor Insulation Value : R-40

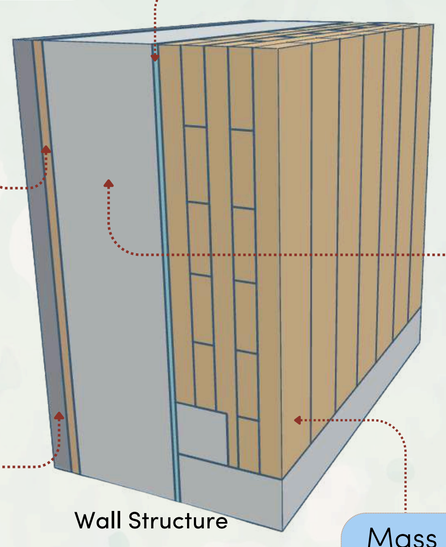
R value reflects how well insullation resist heat flow

Higher values means better insulation

Vapour permeable, weather resistant. Air Barrier

1x4 Strapping
Reduce Thermal Bridging, and structural support for the cladding

Polyiso Insulation Board
Resistant to air and Moisture Infiltration



Wall Structure

Mass Timber

Steel Cladding

Airtight Construction

The structure is built with meticulous attention to airtightness, ensuring no drafts or air leaks.

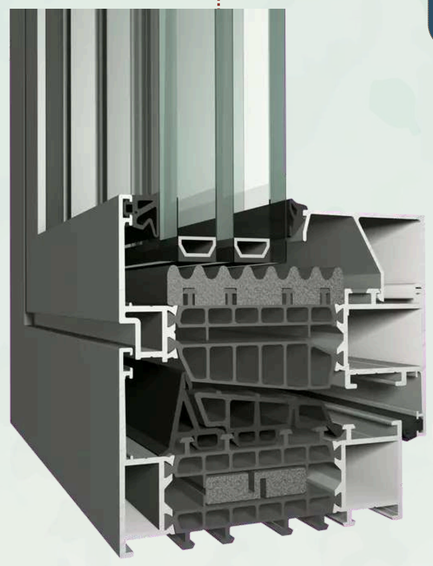
ACH50 (Air Changes per Hour) = 0,46

A low ACH50 prevents unwanted air from escaping or entering the building. Think of it as keeping the heat in during winter and the cool air in during summer

Required: <0.6
Non Passive House: >10

High-Performance Windows

We use triple-pane windows with insulated frames to prevent heat loss and gain.



Excellent thermal insulation properties

that reduce heat loss in winter and heat gain in summer, leading to lower energy consumption.

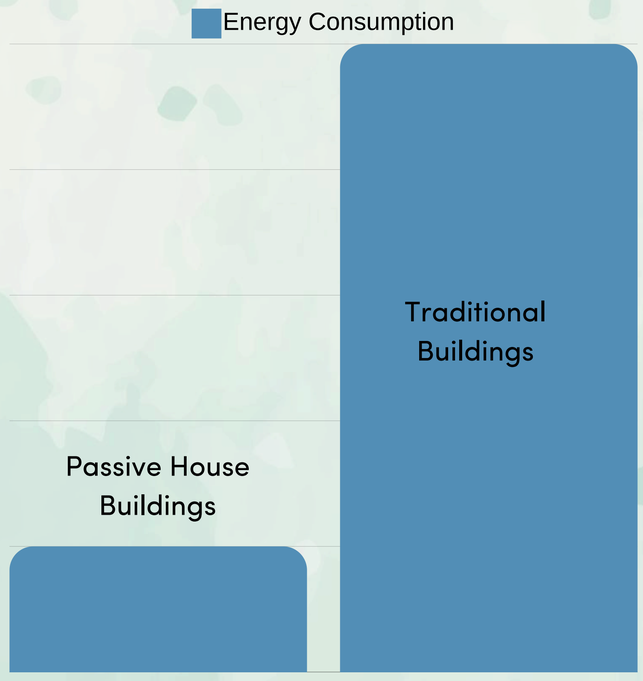
Airtightness of the windows

contributes to a more comfortable indoor environment by minimizing drafts and preventing moisture infiltration.

THE CONFLUENCE
Passive House

Environmental Benefits

By adhering to the Passive House standard, our building significantly reduces its carbon footprint, contributing to a sustainable future for Castlegar and beyond.

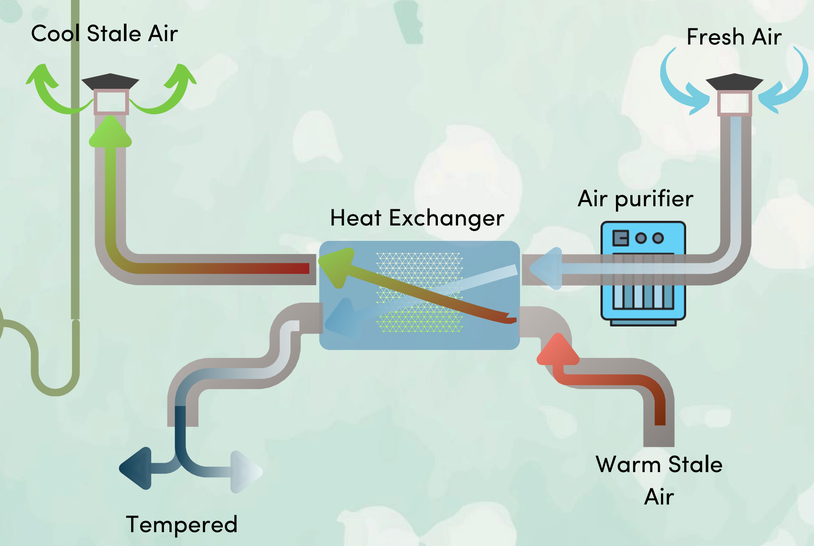


Energy Efficiency and Comfort

The Confluence Building Passive House design reduces energy consumption by up to 80% compared to traditional buildings. This results in lower utility bills and a comfortable indoor environment year-round.

Heat Recovery Ventilation (HRV)

Our HRV system recovers heat from outgoing air to warm incoming fresh air, maintaining indoor air quality and comfort



Design: Diana Quisobony
Text: Lukas Armstrong, Stand Architecture

WWW.CASTLEGARCONFLUENCE.COM