



UltimateAir®

Energy Recovery Ventilation and Passive House

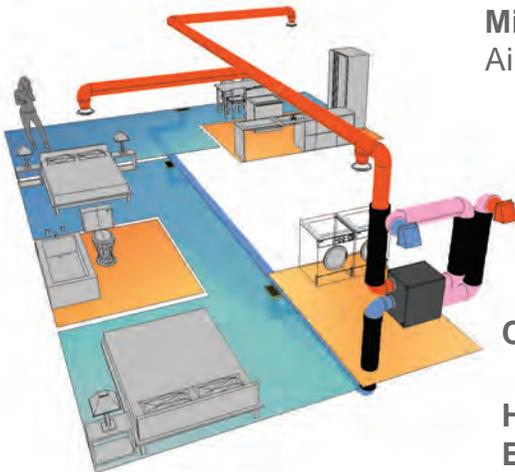
The RecoupAerator 200DX is 96% efficient



High efficiency electronically commutated motors
Capable of less than 0.8 Watt/CFM
MERV 12 Filtration



RecoupAerator® 200DX



Minimum Requirements for Passive House Ventilation Air to Air Heat Exchanger must have:

- Minimum 75% efficient heat recovery
- Less than 0.8 watt/cfm, and
- Meet a minimum air filtration level of F7
- Strongly encouraged by Passive House to use products that have electronically commutated motors

Current PHPP inputs for the RecoupAerator® 200DX : (Inputs currently under review)

- Heat Recovery Efficiency----- 83%
- Efficiency Humidity Recovery--- 43%
- Electric Efficiency----- 0.72 watt/cfm



The Passive House

Standard:



Superinsulation



Passive Solar Gain



Efficient Appliances



Ventilation System



Renewable Energy



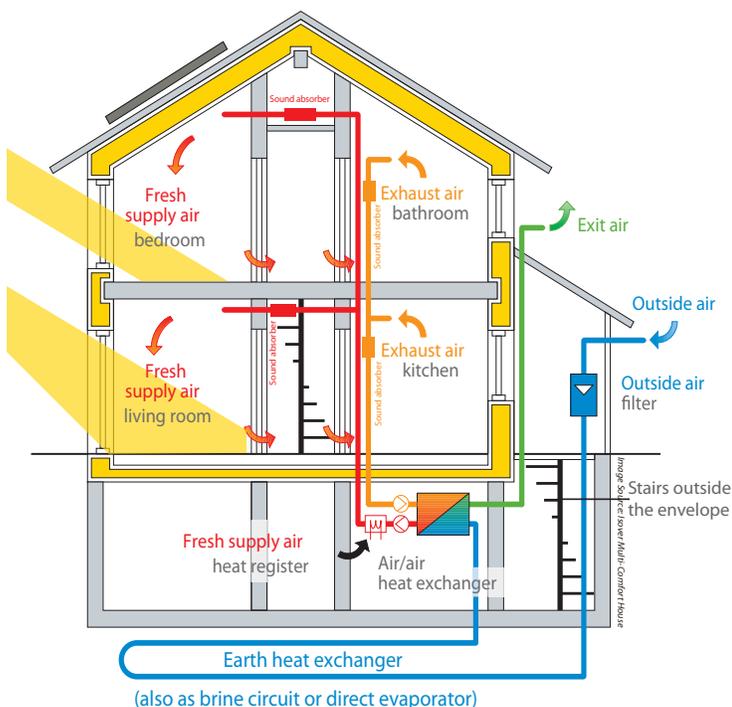
Cost Benefit Optimization

The Passive House Standard is the world's highest energy efficiency standard. It drastically reduces the energy load required to operate a building as much as 90 percent compared to existing buildings.

Building to the Passive House Standard makes renewable energy systems become more affordable and practical. Significantly shrinking a building's energy demand, will allow smaller and less expensive alternative energy systems to satisfy its needs. Therefore building to the standard is the best starting point for a net-zero project.

Passive House relies on principles that have been proven over the past 20 years, not on pie-in-the-sky technologies. Many of these principles, like airtight building envelopes and super insulation, were originally developed in the 1970's \ right here in the United States and Canada. Passive House does not dictate an aesthetic; structures that meet the standard can be traditional, ultra-sleek modern, or anything in-between.

Passive House can be applied to residential, commercial, institutional and industrial buildings, implementations, as well as retrofit scenarios. The common set of features and characteristics that a Passive House building delivers are:



- Superb consistent comfort and indoor air quality
- An Airtight, superinsulated building envelope
- High-performance windows --Triple paned in most climates
- **Energy Recovery Ventilation** for continuous exhausting of stale Air, while capturing it's temperature, conditioning and recycling it into the incoming fresh air

