

Ventilation and Air Movement

Superior ventilation is a key characteristic of energy efficient homes. Beside the ability of ventilation to allow hot air to be replaced by cool air, air movement also has a physiological cooling effect that can reduce the perceived temperature by up to 3C. Air movement can be achieved by ceiling fans, or by designing with cross flow ventilation in mind. Cross flow ventilation has the additional benefit of bringing cool fresh air into a home and expelling hot stale air.

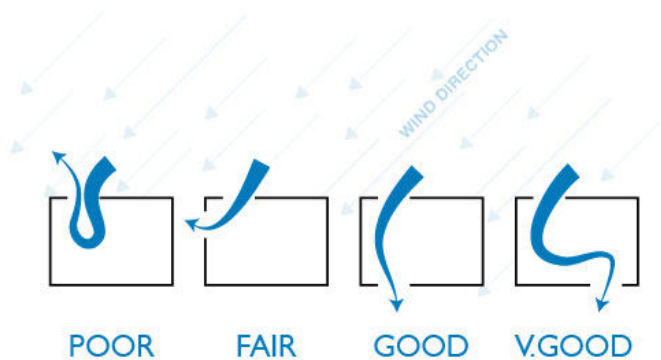
While all windows that can open do allow ventilation, Breezway Altair Louvre Windows offer superior ventilation to almost all other window types.

1. The whole of the window area can be opened up to allow airflow. (Sliding and double-hung windows only allow airflow through half of the window area.)
2. Breezes can be captured from all directions (casement windows offer full ventilation from one direction only as the opening pane can block the breeze.)
3. Breezway Louvre Windows can open fully horizontally. (Chain wind awning windows rarely open beyond 30 degrees and even friction stay awnings rarely open fully horizontally)



The positioning of windows and doors is almost as important to the establishment of cooling cross flow ventilation as the window types used (and we have already seen that Breezway Altair Louvre Windows offer superior ventilation to most other window types).

1. Each room needs an air entry point and an exit point. Therefore two or more windows are required.
2. Ideally the windows should be on opposite walls so that the air moves across the entire room.
3. Windows should be included on the walls that face the direction from which the wind most often blows.
4. If a room has only a single exterior wall, interior louvres and doors should be considered to allow the air flowing in from the window in the exterior wall to exit the room. (Breezway Fakro Opening Skylights can be used in a room with a single exterior wall to create an exit point)



Natural ventilation can reduce the reliance on power hungry air conditioning systems to maintain indoor comfort. This reduces the amount of electricity that is consumed by homes which consequently reduces the amount of greenhouse gasses emitted to produce electricity which helps to reduce climate change.