

IEQ-22 Natural Ventilation Guideline

COMPLIANCE REQUIREMENTS

Effective Natural Ventilation

The guidance in this document clarifies what 'Effective Natural Ventilation' is and how it is assessed for purposes of Green Star. It is applicable to all projects regardless of registration date.

For the purpose of this Green Star credit, effective natural ventilation is achieved when the following is met:

- There is a continuous breeze path between two ventilation openings either within the room or from one room to another. One ventilation opening can be used as supply, or exhaust for up to two breeze paths. Above the tenth floor, as the wind pressure would result in uncomfortable breezes, the ventilation openings must be located at a level above door height.
- The length of the breeze path is less than 15m measured between ventilation openings and around internal walls, obstructions & partitions. It includes change in height where the breeze path travels from one level to another.
- Ventilation openings are located either in opposite or adjacent external walls or an external wall and an operable ceiling mounted skylight. If the ventilation openings are on adjacent walls or the ceiling, they must be at least 3m apart at their closest point.
- Ventilation openings have at least 1m² of clear opening.
- There is no more than one doorway or opening smaller than 2m² between the ventilation openings.
- All internal doors that form part of the breeze path are provided with door catches to prevent the doors from being blown shut.
- Doors that are required to be closed to maintain fire separation, or that provide entry to a dwelling from a public space, cannot be used to comply with the cross ventilation criteria, unless they are fitted with a security screen door that maintains security to the dwelling while the door to the common area is open. Where fire doors are held open, the catch holding the door must automatically release the door and the door must automatically close if the fire alarm system is activated.
- Where ventilation openings for a single breeze path are on the same wall or face the same direction, for the purposes of this Green Star credit, effective natural ventilation cannot be achieved.

If a project wishes to submit more complex breeze paths than this guideline recognises, a Credit Interpretation Request must be submitted prior to Round 1 assessment.

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DEFINITIONS

Adjacent wall: A wall perpendicular to another.

Breeze path: a path of air flow within a dwelling between two ventilation openings. (BASIX, 2009)

Ventilation opening: an opening in the external wall, floor or roof of a building, room or area, designed to allow air movement into or out of the building, room or area by natural means, including a door, window, or other device that can be held open. (BASIX, 2009)

REFERENCES AND FURTHER INFORMATION

BASIX NSW Department of Planning, 'BASIX Help notes for Multi - Dwellings', http://www.basix.nsw.gov.au/information/common/pdf/help_files_multi.pdf, accessed August, 2009.