

PASSIVE VENTILATION THROUGH MANUALLY OR AUTOMATED SYSTEMS

Air quality can be improved by ventilating the house. If too little fresh air enters a home, pollutants can accumulate to levels that can impose health and comfort problems on the occupants.

Contributors to indoor air pollution include:

- Use of synthetic building materials, or high emissions from a few materials finishes and furnishings which release pollutants;
- Use of pesticides and household cleaners; and
- Biological sources such as insects, mould, and other fungi.

Factors to consider:

- Emissions – some materials will emit more contaminants than others.
- Toxicity – the potential harm a compound can inflict immediately or over time.
- Quantity – Low emissions from large quantities of materials, or high emissions from a few materials can result in high total amounts of chemicals emitted.
- Proximity – The location of the material compared to occupants.

Some systems to employ to enhance indoor air quality include:

- Provide adequate cross-flow ventilation to allow fresh air to move through each room;
- Install ceiling fans to assist in air movement;
- Install extractor fans in rooms without natural ventilation e.g. bathrooms, kitchens etc.
- Employ measures to avoid dampness to minimise the growth of mould and fungi such as insulated walls, controllable vents and double glazed windows;
- Select mechanical fixing methods for floor coverings;
- Select natural untreated floor coverings eg linoleum, cork and natural fibres;
- Externally flue all gas stoves and heaters or provide an air path to allow these pollutants to escape;
- Follow correct installation and maintenance procedures for chimneys and flues;
- Ensure that where internal access from garages exist that these are well sealed and garage has appropriate ventilation measures installed;
- Install only low-NO_x heaters and avoid using them in confined spaces;
- Install an automated or manually operated ventilation system to enhance internal air movement;
- Select low or no emission paint and varnish finishes for cabinetry and flooring;
- Select low emission products for internal timber work;
- Select commonly used indoor plants to absorb emissions and if pesticides are used ensure this is undertaken outside; and
- Install an air filter where homes are located on a main road or in an industrial area.

Source: Your Home Manual