A Guide to

Home Ventilation

This guide will help you understand how air flows through your home. It does not replace the instructions from your equipment's manufacturer; it explains the essentials of ventilation. Whether you own, rent, or are planning a renovation, this guide covers what you need to know to maintain a healthy living space.

The Basics of **Breathing Homes**

What is Ventilation?

Ventilation is simply the process of swapping stale, damp indoor air with outdoor air.

Why It Matters

- Good ventilation improves your indoor air quality and creates a much healthier home environment.
- Daily activities like showering, cooking, and even breathing release a large amount of moisture into your indoor air.
- In colder months, trapped warm, moist air hits cold surfaces like external walls and windows, turning into condensation.
- Left unmanaged, this condensation leads to dampness and mould growth, which can damage your home and your families health.
- Proper airflow removes this moisture, drastically reducing the risk of condensation and mould.
- It also out harmful air pollution caused by cleaning products, paint, odors, and cooking.

Know Your System

Homes generally rely on one of two main ventilation strategies:

Natural Ventilation

- Air flows in, driven by wind and temperature differences.
- This setup relies on open windows, small trickle vents at the top of windows, and vents built into the walls.
- Normally this will also have fans that come on in bathroom and kitchens when those rooms are in use.

- Note: If your home has been heavily sealed and is very airtight, natural ventilation alone may not enough.

Mechanical Ventilation

- These systems use fans and controls to drive airflow, guaranteeing air regardless of the weather outside.
- Mechanical Extract Ventilation (MEV): Pulls stale air out of kitchens and bathrooms continuoulsy drawingair into living rooms and bedrooms from outside.

- Heat Recovery (MVHR): Extract stale air but capture its warmth to heat the fresh, incoming air, saving energy in the winter. This system mechanically extracts from bathrooms and kitchens and mechanically supplies air to bedrooms and living room.
- Demand Controlled (DCV): Smart systems (often like extract systems) that automatically adjust the airflow rate based on how much ventilation a specific room or building needs at that moment.

See if you can work out which one you have, and try to learn something about how it works.
If you can't find out yourself, ask someone to help.
These are the lungs of your building, we want them to work at their best.

Moving into a new home
Or renovating?

New Buildings

- When buying or building a new home, you should receive an energy rating certificate, an airtightness test certificate, and a certificate proving the ventilation works.
- Consider getting an independent check on the ventilation system yourself. It doesn't cost much and could play a very important part in you and your families health into the future.
- Ensure your system has an easily accessible control panel (like in the kitchen, not hidden in the attic) so you can control its operation easily.

Renovation

- Upgrading your insulation often blocks the gaps and cracks that used to let stale air escape. Always pair insulation upgrades with ventilation upgrades, ask your contractor how they have considered ventilation.
- Ventilation should always be designed by a competent person. If someone puts something new in or changes something, there should be a record of what the design was for your future reference.
- Ventilation should be installed and commissioned by a competent person. Have you got a piece of paper at the end that someone has signed to show that what they have installed met the design?
- Even if someone is just replacing an existing fan, what was there before might not have been the right thing or working in the right way. Always ask for a Design and Commissioning document
- Ask for documentation of competence.

Renting
A Team Effort

Your Landlords

- By law, they must ensure the property has a working, adequate ventilation system. This doesn't just mean a fan makes a noise, ask for proof of flow rates.
- They should provide you with the user guide and instructions on how to operate the system when they move in.
- You must allow housing inspectors to check the property, as poor ventilation is a top issue found during rental inspections.

For Tenants

- You have a responsibility to look after the home and keep it healthy.
- Never block or cover air vents.
- Always use the extractor fans provided in the kitchen and bathroom. This includes cooker hoods
- Try to keep your home adequately heated, if you are struggling to do this, speak to your landlord early. There is often help available, you don't want a cold home, and your landlord wants to help you prevent condensation.

Daily Habits for a Healthy Home

- **Do not close your vents:** Leave window trickle vents and wall vents open and unblocked by furniture or curtains all year round, even in the dead of winter. Using a little extra heating energy is worth preventing dampness and illness.
- **Mind the gap:** Keep interior doors open when possible to let air circulate. When closed, there should be a 10 mm gap under your doors to allow air to flow between rooms. (Never prop open designated fire doors).
- **Hob on - Hood On:** Always use your kitchen cooker hood to remove cooking moisture and pollutants. Ensure it vents directly to the outside rather than just recirculating the air.
- **Clean your vents:** Wall vents and extractor fans gather thick dust and moisture. Clean at least every 6 months.
- **Maintain mechanical systems:** If you have a whole-house system, check the manufacturer's guide. Usually, filters need to be cleaned or replaced once or twice a year.
- **Air it out:** Try to air out the home when you can, this means throwing open the windows for 15 to 30 minutes. It can have a big impact on the built up of moisture and pollutants and the heat built up in your walls and floors will bring those space back to normal once the window is closed.
- **Monitor your air:** Consider picking up an Indoor Air Quality (IAQ) monitor to learn about air quality and monitor your home.
- **Dry your clothes outdoors:** If you can, try and dry them in rooms better able to handle moisture like bathrooms and kitchens, use windows and extractors to help remove moisture and the scents that come from detergents.
- **Dont Burn Stuff:** Candles, incense, wood stoves and fireplaces. Anything that burns in the home introduces pollutants that are harmful
- **Smelly Stuff:** Be suspicious of anything with a scent, most will introduce pollutants that can react and cause harmful by products
- **New Stuff:** Furniture, paints, carpets, electronics, anything new really will also often release pollutants into the air, consider increasing ventilation in spaces with lots of new things or with that new thing smell.