Rialtas na hÉireann
Government of Ireland

Why you need proper ventilation in your home

This guide will help you better understand the ventilation in your home. It does not replace manufacturer's instructions, which you should always follow. It explains ventilation, what you need to know if you own or rent your home and if you are planning renovations.

What is ventilation for?

Ventilation is the exchange of:

- **stale air and moisture from the inside of the building with**
- **fresh and clean air.**

Why is ventilation important?

Good ventilation improves indoor air quality and creates healthy homes. Moisture, harmful pollutants and viruses such as COVID can get trapped in buildings, and ventilation helps remove them.

Good ventilation helps keep your home dry and helps protect health.

Reduces condensation and mould growth in your home.

Through our normal household activities such as showering, cooking and even just by breathing, we generate a lot of moisture that enters the air inside our homes. When damp or moist air is trapped in a building, it can turn into condensation - drops of water that appear on windows and walls - particularly in the winter when surfaces such as walls are cold.

Condensation makes your house damp and helps mould grow. This can damage your home, and it can cause illness for you and your family, such as coughs, colds and other illnesses.

If your home has good ventilation, this moisture is removed and this reduces the risk of condensation.

← Inadequate ventilation of your home will fail to remove excess moisture from your home. This can then be the source of condensation and mould growth that can be harmful to you and your family.

Keeps the air clean in your home.

Good ventilation cleans the air in your home. Activities you do and products you use every day in your home can cause air pollution. This pollution can harm you and your family. Air pollution can come from:

- **cooking,**
- **wet rooms,**
- **cleaning products,**
- **paint and varnishes, and**
- **fabric furnishings**

1 I am buying or building a new home. What do I need to know?

If you have a newly built home, you should have these documents:

- ✓ A Building Energy Rating (BER) certificate.
- ✓ Your ventilation system user guide or other information about using your system.
- ✓ An Air Tightness Test certificate, which shows your new home meets the air tightness requirements in Part L of the Building Regulations.
- ✓ A Ventilation Validation certificate, which shows that your new home meets the ventilation requirements in Part F of the Building Regulations.

Different types of ventilation systems.

There are two main types of ventilation systems with some variants: Natural ventilation and Mechanical ventilation.

- **Natural Ventilation** is the process by which fresh airflow driven by the natural forces of wind and temperature difference flows in the house through openings in walls and windows. It consists of openable windows, trickle ventilators on windows, vents on walls, openable roof lights etc.

- **Mechanical Ventilation** systems incorporate fans and control systems to drive the ventilation process. They are thus able to provide ventilation irrespective of the availability or suitability of natural forces. Mechanical Extract Ventilation systems extract bad air from the kitchen and wet rooms and let in good air in living rooms and bedrooms. Demand Controlled Mechanical Extract Ventilation (DCV) systems adjust the rate of ventilation according to the demands of each room. Mechanical Ventilation with Heat Recovery (MVHR) systems allow for the recovery of heat from the extracted bad air to heat your home.

In a very airtight dwelling, Natural Ventilation should not be used.

All new dwellings in Ireland should have their ventilation systems designed by a competent person and validated by a person certified by an independent third party to carry out this work - for example Irish National Accreditation Board (INAB), National Standards Authority of Ireland (NSAI) - to ensure it achieves the design ventilation air flow rates.

Control panel for ventilation.

In a newly built home, you should have a control panel that lets you control your ventilation system and gives you information about how it is working.

This panel should be somewhere visible and that you can get to easily. For example, it might be in your kitchen. It should not be hidden away in an attic or above the ceiling.

Your ventilation system's user guide should give you information about:

- Guarantee, commissioning and validation documentations of the ventilation system that is installed in your home,
- How it works to provide adequate ventilation to your home,
- How it is intended to work and why it should not be turned off,
- How to keep it working well efficiently and effectively:
  - How the control indicators should be used, and
  - How and when the system should be cleaned and maintained.

Use the control indicators of your ventilation systems to check that the system is operating correctly.

2 I am renting a home. What do I need to know?

If you are renting a home, you and your landlord share responsibilities for your ventilation.

Your landlord's responsibilities.

When you move in, your landlord or their agent should give you:

- ✓ Information about how to use and look after the ventilation system.

By law, your landlord must make sure your home has good ventilation that works.

Your home may also be inspected to make sure that your accommodation meets the Minimum Rental Standards which includes ventilation. Your landlord is expected to permit these inspections.

These inspections are important - ventilation is one of the top five issues that inspectors find.

Your responsibilities in your rented home.

As a tenant, you must make sure that the ventilation in your home is looked after. This is because you have a responsibility to look after your rented home. It will also help keep you comfortable and healthy.

To look after your ventilation:

- ✓ keep air vents clear and unblocked,
- ✓ use the mechanical extraction ventilation in bathrooms and kitchens,
- ✓ open windows during the day,
- ✓ make sure your home is heated, and
- ✓ dry clothes outdoors (not in your home) or in a clothes dryer.

3 I am renovating my home. What do I need to know?

When you renovate your home, it is important to make sure that changes make things better. Some energy efficiency measures, such as insulation, may block up gaps and cracks that were letting fresh air in and stale or polluted air out of your house.

These tips will help you make the right choices for ventilation.

- ✓ Look at the standards from the NSAI. For ventilation, look for the **NSAI document S.R. 54:2014&A2:2022.** This will help you meet the building regulations for ventilation.
- ✓ Install windows with **trickle vents** or put **background ventilators** in external walls.

  - Trickle vents are small vents at the tops of windows that let in fresh air.
  - Background ventilators are often openings in a wall with a vented cover inside and outside.
- ✓ Condensation in ductwork is a danger to the supply of fresh clean air in your home. Mechanical extract fan units should have condensate drains fitted and pipe insulated where passing through unheated spaces such as in the attic.
- ✓ When making wall vents, ensure these are properly sized and sleeved with ducting through the wall and not just an unsleeved hole in the wall of any size.
- ✓ If you renovate more than 25% of your building envelope and install a mechanical ventilation system, **have your system validated**. This means a professional will come to check that your ventilation system has the correct airflow and your system complies with Part F of the Building Regulations. The NSAI has a webpage of registered ventilation validators.
- ✓ If you are installing a mechanical ventilation system, contact the Sustainable Energy Authority of Ireland (SEAI) about the grants that are available as part of their One Stop Shop service.
- ✓ If you have an older home, retrofitting a ventilation system may not always be possible and you should seek professional advice.

4 Tips for keeping your home well ventilated.

- ✓ Always leave trickle vents and wall vents open and unblocked by curtains or furniture, even in winter. You will use a little more energy to heat your home but you will have fresh air to prevent illnesses.
- ✓ Where possible, leave doors open between rooms so that air flows between rooms. There should be a 10 mm gap under doors to facilitate the transfer of air between rooms when doors are closed. If there are fire doors in your house, you should not leave them open.

- ✓ Check and clean any wall vents and extractor fans in bathrooms and kitchens. It is a good idea to clean them at least every 6 months.

Filters of your wall vents can get very dirty with layers of dust and moisture. Clean the filters of your wall vents with a vacuum cleaner and in accordance with the manufacturer's instructions.

Filters of your mechanical ventilation systems can get very dirty with layers of dust and moisture. Regularly replace or clean the filters of your mechanical ventilation system in accordance with the manufacturer's instructions.

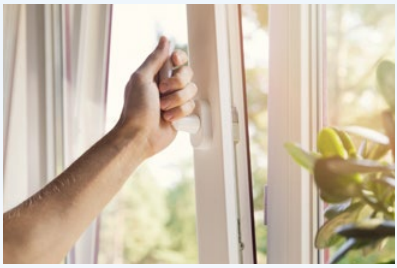
Tips for keeping your home well ventilated

- If you have a whole-house mechanical ventilation system, **check the manufacturer's instructions** about replacing filters. Usually, you should replace these once a year – but follow the manufacturer's recommendations.

- Cooking at home generates moisture and harmful pollutants. Cooker hoods should be used when cooking and they should extract to external air and not be recirculating air in your home.

When cooking, always use the cooker hoods to remove the moisture and harmful volatile substances.

- Ventilation is an important factor in reducing the risk of airborne transmission of viruses like COVID. The Department of Health has published advice on the role of ventilation in reducing the transmission of COVID at home that includes:
  - Regularly air rooms and keep windows open as widely as can be tolerated, but at least partly open at all times when occupied.
  - Ensure that wall vents and window trickle vents are kept open and not blocked.
  - Where bathroom and kitchen fans are present, set to run permanently.



Keep windows open as widely as can be tolerated, but at least partly open at all times when occupied. This can greatly assist in reducing the transmission of COVID at home.

- Indoor Air Quality (IAQ) monitors are available in your local DIY stores. Getting one IAQ monitor in your house can help you control, monitor and demonstrate good ventilation of your house.

For more information, please visit
www.gov.ie/homeventilation

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