HOME ENERGY HUB NORFOLK

Product Explainer

Ventilation

Ventilation

Keeping your home warm, healthy, and balanced.

What is ventilation?

Ventilation is the process of allowing fresh air to move in and out of your home.

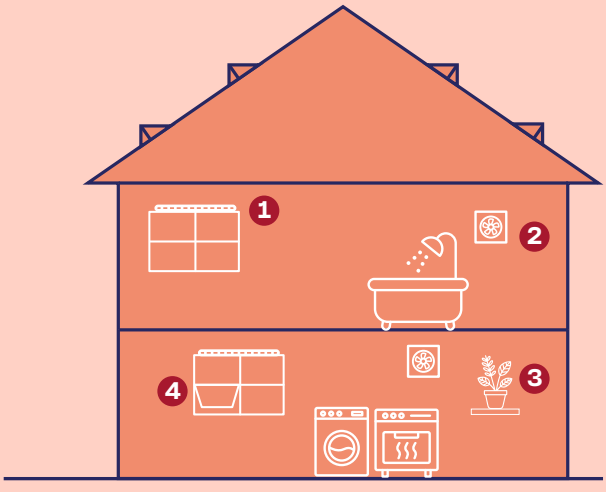
Everyday activities like cooking, showering, drying clothes and even breathing release moisture into the air. Without enough airflow, that moisture can build up indoors.

Ventilation helps your home stay:

- comfortable
- fresh
- free from excess condensation
- protected from damp and mould

It's an essential part of improving energy efficiency safely, especially when insulation is added.

How does ventilation work?



Ventilation works by creating controlled airflow through your home. Fresh air enters, stale or moist air leaves, and moisture levels stay balanced.

When a home becomes better insulated, it also becomes more airtight — which is great for warmth, but it means moisture has fewer ways to escape naturally.

Good ventilation ensures that:

1. circulates airflow
2. moisture can still leave
3. indoor air quality remains healthy
4. condensation risk is reduced

Visit **homeenergyhubnorfolk.org.uk/ventilationsystems** for more information.

Product Explainer

Ventilation systems

Is ventilation right for you and your home?

Ventilation improvements may be recommended if:

- you're having insulation installed
- you notice condensation on windows
- there are signs of damp or mould
- rooms feel stuffy or slow to dry out
- your bathroom or kitchen holds moisture for a long time

The home survey will assess:

- how airflow currently works in your property
- whether moisture is building up
- what type of ventilation is needed
- how improvements can be made with minimal disruption

Please note: ventilation is a required part of safe retrofit standards.

Proper ventilation is essential in well-insulated homes to prevent damp, protect the structure, and ensure long-term comfort.

Key benefits of ventilation

Ventilation plays a huge role in making energy upgrades work properly, including:

A healthier indoor environment

Fresh airflow helps reduce pollutants, moisture and stale air.

Lower risk of damp and mould

Ventilation prevents moisture becoming trapped in insulated spaces.

Protects your home's structure

Good airflow helps safeguard timbers, plaster and insulation materials.

Supports long-term comfort

A warm home should also feel fresh and breathable.

Improves overall retrofit performance

Ventilation ensures insulation upgrades work as intended without unintended side effects.

Peace of mind

Knowing your home is warm and well-balanced makes a big difference.

What you should be aware of

Ventilation improvements are usually simple, but there are a few key things to understand:

Insulation changes how your home behaves

Once heat is held in better, moisture is held in too — unless airflow is improved.

Ventilation doesn't mean making your home colder

These measures are designed to manage moisture without losing warmth.

Every home is different

The right approach depends on the property, lifestyle, and existing airflow.

Ventilation may be required before funded works can go ahead

Funded upgrades must meet the **PAS2035:2023 retrofit framework**, which includes ventilation standards.

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Product Explainer

Ventilation systems

Ventilation improvements are typically quick, unobtrusive, and low-disruption, ensuring healthy airflow, reducing moisture, and supporting long-term home comfort.

What to expect during installation

Ventilation measures are usually quick and low-disruption.

Depending on what your home needs, installation may involve:

- fitting discreet wall or window vents
- upgrading extractor fans in kitchens or bathrooms
- ensuring airflow pathways between rooms
- installing humidity-controlled fans where appropriate

Most work can be completed in a short visit, and installers will explain what's being added and why.

What you need to know after installation

Once ventilation improvements are in place, there's very little maintenance required.

To keep your home performing well:

- use extractor fans when cooking or showering
- keep vents open and unblocked
- allow airflow around furniture and cupboards
- follow any guidance provided by your installer

Ventilation works best when it becomes part of everyday living — quietly supporting comfort in the background.

What types of ventilation might be installed?

Every home is different, but common solutions include:

- **Background vents:** small wall vents that allow gentle airflow in key rooms
- **Trickle vents:** discreet vents fitted to window frames to improve day-to-day ventilation
- **Door undercuts:** a small gap beneath internal doors to allow air to move through the home
- **Extractor fans:** fitted in kitchens and bathrooms to remove moisture at source
- **Humidity-controlled fans:** which automatically activate when moisture levels rise

These measures are designed to be simple, effective, and as unobtrusive as possible.

Product Explainer

Ventilation systems

Top tips for reducing moisture at home

There are also small everyday habits that can help:

1. Avoid drying clothes directly on radiators where possible
2. If drying indoors, keep a window slightly open and close the door
3. Use extractor fans when cooking or showering
4. Cover pans while cooking to reduce steam
5. Keep trickle vents open, especially during winter
6. Close kitchen and bathroom doors when those rooms are in use
7. Allow airflow around wardrobes and cupboards
8. Avoid pushing large furniture tightly against external walls

Ventilation is not about making your home colder, it's about keeping it warm, comfortable and healthy.

Frequently asked questions

Why is ventilation included with insulation upgrades?

Because insulation reduces heat loss, but it can also trap moisture. Ventilation ensures the home stays balanced and free from damp risk.

Will ventilation make my home colder?

No. Ventilation improvements are designed to manage moisture without undoing the benefits of insulation.

What if I already have extractor fans?

That's a great start, but the survey will check if they are sufficient for your upgraded home or if you will need further ventilation.

Is ventilation always required?

Yes. Any funded insulation installation must meet ventilation standards under PAS2035

Check your funding options

Ventilation measures may be included as part of funded home energy improvements, especially alongside insulation upgrades.

Eligibility and availability vary, so check what support is available in your area.

There's no obligation; you'll only proceed once you're happy with the plan for your home.

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Ventilation systems

Types of home ventilation explained

Ventilation is essential for a healthy home, but it can feel like a balancing act. Natural methods, like opening windows, bring in fresh air, in summer or winter if done carefully, while mechanical systems circulate air efficiently.

Briefly opening windows before the heating comes on, for example, can freshen the home without wasting energy. Too much ventilation, however, can raise heating bills, leaving residents caught in a cycle of managing warmth, comfort, condensation, and mould. Understanding how to ventilate effectively helps break this cycle, and here are the types of ventilation available.

- **Extractor Fans** Mechanical fans in kitchens, bathrooms, or utility rooms to remove moisture and odours.
- **Moisture-Controlled Extractor Fan** Extractor fans that turn on automatically when humidity rises.
- **Trickle Vents** Small vents in window frames providing constant background airflow while windows are closed.
- **Door Undercuts** Small gaps under interior doors that allow air to circulate between rooms.
- **Background Wall Vents** Passive vents in walls to maintain airflow and reduce condensation.
- **Natural Ventilation** Air movement driven by open windows, doors, and differences in temperature or wind.
- **Mechanical Ventilation with Heat Recovery** (**MVHR**) Whole-house system that extracts stale air, supplies fresh air, and recovers heat from the outgoing air.
- **Hybrid Ventilation Systems** Systems that combine natural and mechanical ventilation for flexible airflow control.

WE CAN HELP YOU GET THAT WARM FUZZY FEELING.

Ready to improve your air quality?

A warm home should feel safe and healthy. For those planning upgrades or seeking support to reduce condensation and damp, help is available.

Contact us to check eligibility and next steps
Visit homeenergyhubnorfolk.org.uk