

Product Explainer

Flat Roof Insulation



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A smart upgrade that cuts heat loss through flat roofs.

What is flat roof insulation?

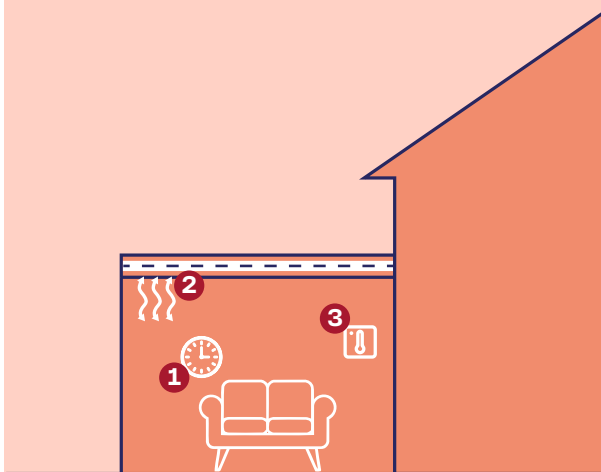
Flat roof insulation is a layer of high-performance insulating material added to flat or low-pitched roof areas to reduce heat loss through the top of your home.

Flat roofs are common on extensions, garages, and some older property designs. Without insulation, these areas can allow warmth to escape easily, making rooms below feel colder and harder to heat.

Insulating a flat roof helps your home hold onto warmth, improving comfort and reducing wasted energy.



How does flat roof insulation work



Heat naturally rises, so the roof is one of the main areas where warmth can be lost.

Flat roof insulation slows heat loss by adding an extra barrier between the warm air inside your home and the colder outdoor air above the roof.

This means:

- 1 your home stays warmer for longer
- 2 less heat escapes through the roof structure
- 3 your heating system will not need to run as often and so your energy is being used more efficiently

Is flat roof insulation right for you and your home?

Flat roof insulation can be suitable for many homes, particularly if:

- you have a flat-roof extension that feels cold
- rooms beneath the roof are harder to keep warm
- your roof has little or no existing insulation
- you want to improve energy efficiency before other upgrades

The home survey will assess:

- the condition of the existing flat roof
- The safest, most effective insulation method.
- If repairs are needed before work begins.
- ventilation and moisture protection requirements

Flat roofs are most commonly insulated from above, which avoids disruption inside the home.

Key benefits of flat roof insulation

Flat roof insulation can make a noticeable difference, with benefits including:

A warmer, more comfortable home

Rooms beneath flat roofs often feel much warmer after insulation is added.

Lower heating bills

With less heat escaping, you may need less energy to stay comfortable.

Improved energy efficiency

Insulating the roof reduces overall heat loss and supports a more efficient home.

Helps protect the roof structure

Modern insulation systems often include weatherproof membranes that improve durability

Supports low-carbon heating upgrades

A well-insulated home is the best foundation for technologies like heat pumps.

Long-lasting performance

Once installed correctly, flat roof insulation can last for decades with minimal maintenance.

What you should be aware of

Flat roof insulation is an effective improvement, but a few practical points are worth knowing:

Roof condition matters

The roof needs to be structurally sound, including gutters, downpipes, soffits and barge boards.

External access is required

Installers will usually work from above the roof, so scaffolding is often needed.

Installation may take a few days

Flat roof insulation can only take place on dry days and typically takes longer than loft insulation due to the roofing layers involved.

Ventilation and moisture control are important

Insulation must be installed in a way that prevents condensation and allows the roof to “breathe.”

Specialist asbestos removal

Wherever asbestos is detected, it's essential this should be tested and removed by specialist contractors.

What to expect during installation

Flat roof insulation is usually installed over **2–3 days**, depending on roof size and weather conditions. The process may involve:

- erecting scaffolding for safe access
- removing or adjusting guttering and roof edges
- building a new timber frame to accommodate insulation depth
- fitting rigid insulation boards above the existing roof surface
- adding a protective weatherproof membrane
- finishes with refitted or new fascia, soffits, and guttering as required

Installers will keep disruption to a minimum and ensure your home remains protected throughout.



Flat roof insulation requires minimal maintenance, but proper ventilation is essential to prevent condensation, mould, and maintain healthy indoor air.

What you need to know after installation

Once installed, flat roof insulation requires very little maintenance. To keep it performing well:

- avoid walking or storing items on the roof
- keep gutters clear to prevent water build-up
- follow any aftercare guidance provided by the installer

You'll also receive warranty information and confirmation of the work completed.

Ventilation: an essential part of insulation upgrades

When a home is insulated, it becomes much better at holding onto warmth, which is exactly what is wanted.

But it also means that moisture created through everyday life can stay trapped indoors unless there is enough airflow.

That's why ventilation is included as part of any funded insulation installation.

Good ventilation helps:

- maintain healthy indoor air quality
- reduce condensation on windows and walls
- lower the risk of damp and mould
- protect your home's structure, timbers and insulation materials

Why is ventilation needed?

Daily activities such as cooking, showering, drying clothes and even breathing all release moisture into the air.

Without proper ventilation, that moisture can settle on cooler surfaces, leading to condensation and over time, this can cause mould or damp patches.

Insulation keeps heat in, but it's important that your home can still "breathe" properly. As part of the survey, ventilation will be assessed for the property.

Please note: funded works cannot go ahead unless ventilation standards are met, in line with the PAS2035:2023 retrofit framework.

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.

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Top tips for reducing moisture at home

- 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

How much can flat roof insulation help?

Flat roofs can lose a lot of heat, especially in extensions. Insulation can significantly improve comfort.

Will I need to leave the house during installation?

In most cases, no. Work is usually completed externally with minimal disruption indoors.

How long does flat roof insulation last?

Flat roof insulation systems are designed to last for decades and often come with long guarantees.

Will ventilation be included?

Yes. Maintaining airflow is essential to reduce condensation risk and protect the structure of your home.

Check your funding options

Flat roof insulation may be fully grant-funded, including surveys and installation. Availability and eligibility vary by region—check what's offered in your area. There's no catch or obligation; you only proceed if you're happy with the plan.

Other solutions that could work for you

Flat roof insulation is often part of a whole-home approach, alongside:

- Loft Insulation
- Cavity Wall Insulation
- Ventilation Improvements

WE CAN HELP YOU GET THAT WARM FUZZY FEELING.

Ready to make your home warmer?

If you have a flat roof area that feels cold or difficult to heat, insulation could make a real difference.

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

