



For homeowners and families

Why is my room *so cold?*

The Homeowner's Guide to Cold Rooms, Bay Windows and Black Mould



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This guide is general information to help you understand your options. It is not legal, financial or structural advice for a specific property. Information correct at the time of writing (October 2026).

Why is my room so cold when the heating is on?

Most cold rooms in 1930s and Victorian homes are cold because their outside walls lose heat quickly and stay cold on the inside surface. The heating warms the air, but the walls keep pulling that warmth back out, and your body feels those cold surfaces even when the thermostat says 20°C.

I'm Wojtek Pankowski. I run aPlastering in Walsall, and I'm a qualified Retrofit Assessor and Domestic Energy Assessor. Most of the people who ring me start the same way: they love their house, they've spent money decorating it, and there is still one room they can't get comfortable. Often it's a bay bedroom. Sometimes it's a child's room with black mould behind the cot or around the window.

I wrote this guide so you can understand what is going on in your own home before you spend anything. You'll be able to check your rooms in ten minutes, read the signs, try the cheap fixes that genuinely help, and know when insulation is (and isn't) the answer.

In this guide: a 10-minute walk-round self-check, what your symptoms mean, how heat escapes, why mould keeps coming back, fixes for this week, the bay window explained, breathable vs PIR insulation, honest costs and a room-by-room plan.

How can I check my own home in 10 minutes?

You can learn a lot with your hands, your eyes and a cheap hygrometer. Do this walk-round on a cold morning, ideally before you open windows, with the heating on as normal.

You'll need

- A digital hygrometer (a small humidity and temperature meter, usually under £15 online or in DIY shops). Buy two if you can: one for the cold room, one for the living room.
- Your phone for photos and notes.
- A torch for corners and behind furniture.

The walk-round checklist

- ☐ **Hand test on the walls.** Put your palm flat on an inside wall, then on an outside wall in the same room. If the outside wall feels noticeably colder, it is losing heat faster. Note which walls, and where it feels coldest.
- ☐ **Bay panel knock test.** Knock gently on the wall under the bay window, then on the main wall beside it. A hollow, light sound under the window often means a thin timber-framed panel, not solid brick. Hold your hand near the skirting there on a windy day: can you feel a draught?
- ☐ **Window reveals.** Look at the sides and top of each window opening. Black spots, damp patches or peeling paint on the reveals point to a cold spot where the wall wraps around the frame.

- ☐ **Corners behind furniture.** Pull the wardrobe, bed or cot a little away from the outside wall. Corners where two outside walls meet, and walls hidden behind furniture, are the coldest surfaces in the room because warm air can't reach them.
- ☐ **Ceiling edges.** Look along the line where the outside wall meets the ceiling, especially in bay bedrooms and under a flat bay roof.
- ☐ **The glass.** Is there water running down the windows in the morning? Is it on every window, or just in some rooms?
- ☐ **Humidity reading.** Leave the hygrometer in the room for an hour, away from the window and radiator. Aim for 40–60% relative humidity. Regularly above 60% in winter means there is more moisture in the air than the room can cope with.
- ☐ **Extractor fans.** Hold a single sheet of toilet paper under the kitchen and bathroom fans while they run. If the fan doesn't hold it, it isn't moving much air.

Keep a 7-day condensation diary

One reading tells you little. A week of simple notes tells you a pattern, and it is exactly what I'd ask to see on a home visit.

Day	Outside weather	Room temp	Humidity (morning)	Condensation? Where?	Washing dried indoors? Showers?
Mon					
Tue					
Wed					
Thu					
Fri					
Sat					
Sun					

Key takeaway: if the cold room reads 16–17°C and 65–70% humidity while the living room reads 20°C and 50%, you already know the two things driving the problem: cold surfaces and moisture.

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What do my symptoms mean?

Most symptoms point to one of three causes: cold surfaces, too much moisture in the air, or water getting in from outside. The treatment is different for each, so it's worth matching what you see to the likely cause before buying anything.

What you notice	Likely cause	What to do
Room never feels warm, even at 20°C on the thermostat	Cold outside walls pulling radiant heat from your body	Check which walls feel coldest; consider insulating those walls
Bay area feels freezing, draught near the skirting	Thin, uninsulated timber panel under the window, air leaks	Seal gaps now; long term, insulate the bay properly
Black spots in corners, behind furniture, on reveals	Condensation on cold surfaces (surface mould)	Clean safely, reduce moisture, ventilate; warm the surface if it keeps returning
Water on windows every morning	High humidity meeting the coldest surface (glass)	Wipe daily, ventilate, check fans, dry clothes differently
Mould returns every winter after cleaning or anti-mould paint	The cause (cold wall plus moisture) hasn't changed	Treat the cause: ventilation plus a warmer wall surface
Damp patch that stays wet in summer, or appears after rain	Water getting in: gutters, downpipes, pointing, sills, roof	Get the leak repaired first; insulation is not the fix for this
Tide mark low on a ground-floor wall, salts, crumbling plaster	Possible rising or penetrating damp, or bridged damp-proof course, or high outside ground level	Get it investigated before any insulation
Room is fine by day but cold again soon after heating goes off	Walls losing heat fast, little to hold the warmth in	Insulating the external walls usually helps most

Key takeaway: condensation mould is usually in cold spots and worse in winter. Damp from a leak is usually in one place, linked to rain, and doesn't go away in summer. The second must be repaired, not insulated over.

How does heat escape through my walls?

Heat always moves from warm to cold, so your heating is constantly topping up warmth that leaks out through walls, windows, floors and the roof. In an uninsulated 1930s or Victorian house, the solid external walls are often one of the biggest routes.

U-values, simply

A U-value tells you how easily heat passes through a wall. The lower the number, the less heat escapes. A typical uninsulated solid brick wall is around $2.0 \text{ W/m}^2\text{K}$. Reduce that to 0.5 and, with the same temperatures inside and out, the heat lost through that wall falls by 75%.

That is heat loss through the wall, not your whole heating bill. Your bill also depends on windows, the roof, draughts, your boiler, controls and how you live. I always keep those two things separate, and so should anyone quoting you.

Why a warm room can still feel cold

You don't only feel the air. Your body also swaps heat by radiation with every surface around you. Sit next to a cold wall or a bay window and your body radiates heat towards it, so you feel chilly on that side even if the air is warm. This is why turning the thermostat up often doesn't fix a cold room: it warms the air, but the walls stay cold.

In the 1930s bedroom I insulated with wood fibre, the main wall's U-value was estimated at about $2.10 \text{ W/m}^2\text{K}$ before the work. On a 0°C day with the room at 20°C , the calculated inside surface temperature was about 14.5°C . After 40mm of wood-fibre insulation, it was about 18.4°C . The homeowner told me the room felt warmer, warmed up quicker and held its warmth longer.

Key takeaway: comfort comes from warm surfaces, not just warm air. A wall that stays nearer room temperature makes the whole room feel different.

Why does black mould keep coming back?

Black mould keeps coming back because the conditions that feed it are still there: moist air meeting a cold surface. Cleaning removes the mould you can see. It doesn't change the temperature of the wall or the amount of moisture in the room.

Where the moisture comes from

A family home makes a lot of water vapour every day from breathing, cooking, showers, kettles and drying washing indoors. That vapour stays in the air until it is extracted or meets something cold enough to turn it back into water.

Dew point and the "80% rule"

Air at 20°C and 60% humidity will form droplets on any surface colder than about 12°C. That's the dew point. But mould doesn't need visible water. It can start when the air right against a surface stays at around 80% humidity for long periods, which in the same room happens when the wall surface drops below roughly 15–16°C.

Go back to the case study: an uninsulated wall surface at about 14.5°C on a freezing day sits right in that risk zone. At about 18.4°C, it is well clear of it. That is why warming the surface matters, and why corners behind furniture (which are colder still) are where mould usually starts.

Mould and your family's health, calmly

Damp and mould mainly affect the airways and lungs. Government and NHS guidance lists coughing, wheezing and breathlessness, the development or worsening of asthma and allergies, a higher risk of respiratory infections, and irritated eyes and skin, including eczema flare-ups. Children, older people and anyone with a lung condition or weakened immune system are more vulnerable.

That's a reason to deal with the cause properly, not a reason to panic. If a family member has symptoms you're worried about, speak to your GP. In the meantime, move a baby's cot away from an affected outside wall and keep that room ventilated and evenly heated.

Key takeaway: mould is a symptom. Cold surface plus moist air is the cause. Fix one or, better, both.

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What can I do this week that actually helps?

Several low-cost changes genuinely reduce condensation and mould, and some popular ones don't. Start with the free and cheap ones below; they help whatever you decide later.

Worth doing

- ☐ **Wipe the windows every morning** with a cloth or window vac, then wring it out down the sink, not onto the radiator.
- ☐ **Lids on pans, fan on when cooking**, and leave the extractor running 15–20 minutes after you finish cooking or showering.
- ☐ **Shut the kitchen and bathroom doors** while in use, so the moisture goes out through the fan, not into the bedrooms.
- ☐ **Keep trickle vents open** (the slots at the top of the window frames). They're designed to be open all the time.
- ☐ **Open bedroom windows for 10–15 minutes in the morning** to swap moist night air for dry outside air. Short and wide works better than a crack open all day.
- ☐ **Pull furniture 5–10cm away from outside walls**, especially wardrobes, beds and cots.
- ☐ **Dry washing outside, in a tumble dryer that vents or condenses, or in one room with the door shut and a window open or a dehumidifier running.**

- ☐ **Heat cold rooms steadily** at a lower temperature rather than leaving them unheated and blasting them occasionally. A room at 13°C all day is a magnet for condensation.
- ☐ **Use an electric dehumidifier** in the worst room or where you dry clothes. A compressor model is typical for normal room temperatures; a desiccant model tends to work better in colder rooms. Empty it daily and watch your hygrometer.
- ☐ **Clean small patches of mould safely:** a proper mask, gloves and eye protection, a suitable fungicidal mould cleaner, windows open. Don't brush it dry, which spreads spores. Large areas, or mould in a room where someone has asthma, are worth getting professional advice on.

Not worth relying on

- **Dehumidifier crystals and moisture traps.** They absorb a small amount of water. Next to what a family produces in a day, it is a drop in the ocean.
- **Anti-mould paint on its own.** It can slow mould on the surface for a while, but the wall is just as cold and wet as before. Mould often comes back through it or around it.
- **Bleach.** It can take the colour out of mould on hard surfaces without dealing with the moisture, and the fumes aren't pleasant in a child's room.
- **Fogging and one-off "mould treatments".** They clean, which has its place, but nothing about the wall or ventilation changes, so you're usually paying for it again next winter.
- **Turning the heating right up and sealing every vent.** Warmer air holds more moisture, and without somewhere to go it will still find the coldest surface.

Key takeaway: if the diary shows humidity back in the 40–60% range and the mould stops returning, brilliant, you may not need anything more. If humidity is fine and the mould still comes back on the same cold wall, the wall is the problem.

Why is my bay window the coldest part of the room?

A bay window is usually the coldest part of the room because it's built differently from the main walls. Many 1930s bays have a lightweight panel under the window: a timber frame with clay tiles or render outside and a thin plaster lining inside, often with little or no insulation between them.

From inside a decorated bedroom you can't see any of this, so most people assume the bay is solid brick like the rest of the house. When I strip the lining, it's sometimes only about half an inch thick, and on a windy day you can feel air coming through the construction.

A bay also has three exposed sides, a lot of glass and often a small flat or pitched roof above it, which may be uninsulated too. All of that means more outside surface losing heat in a small space, which is why you can feel the cold from the other side of the room.

What a proper bay upgrade involves

- Removing the old lining to see the real construction.
- Dealing with draughts and gaps in the frame.
- Insulating the panel, and where suitable the bay ceiling and reveals, with a system chosen for that construction.
- Re-lining and plastering so the room is ready to decorate.

It typically takes 3–5 days. Because it's contained, it's often the single biggest comfort improvement you can make in a 1930s bay bedroom for the money.

When is wall insulation the right answer?

Wall insulation is the right answer when a room is cold because its external walls lose heat and stay cold on the surface, and when any water getting in from outside has been fixed first. It is not the answer to a leaking gutter, failed pointing or rising damp.

Signs it is likely to help:

- Solid brick walls (usually 225mm thick in 1930s and Victorian houses, with bricks laid showing their short ends in the pattern) or an uninsulated bay panel.
- Walls that feel much colder than internal walls by the hand test.
- Condensation mould on outside walls that returns every winter despite good habits and reasonable humidity.
- A room that takes ages to warm up and cools quickly when the heating goes off.

Internal wall insulation (IWI) adds an insulating layer to the inside face of the outside wall, then a new plaster finish. It makes the room-facing surface warmer and slows heat loss. It does change how the wall behaves with moisture, which is why the system has to be designed for your wall, not picked from a catalogue. External wall insulation can also be an option, but it changes the look of the house and is usually a whole-house job; for one cold room, internal is normally more practical.

Insulation and ventilation work as a pair. Insulation keeps heat in; ventilation takes moisture out. Even a breathable wall system does not replace a working extractor fan or open trickle vents.

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Breathable or PIR insulation: which is right for my walls?

For most traditional solid brick walls, I prefer a breathable (vapour-open) system, because government guidance on internal wall insulation generally favours moisture-open designs that keep the wall's drying routes. PIR boards can be the right choice in some rooms, especially where space is tight. The wall decides.

	Breathable (wood fibre, cork, lime, insulating plasters)	PIR (rigid foam board)
How it handles moisture	Lets water vapour move and dry out through the right layers	Blocks vapour; relies on careful sealing and detailing
Best suited to	Traditional solid brick and stone walls, period homes	Rooms where every centimetre counts and the moisture risk is assessed as suitable
Thickness for the same insulation	Thicker	Thinner
Finish	Lime plaster, ready to decorate with breathable paint	Plasterboard or plaster, ready to decorate
Typical time per wall	About 5 days	About 3–4 days
Typical price per wall	Around £3,000	About £2,000–£3,000

Whichever system you choose, the adhesive, fixings, base coat, plaster and even the paint have to work together. A natural board with the wrong plaster on top is not a breathable system. That's why I run moisture modelling before recommending a system and a thickness.

How much does it cost to fix a cold room?

Internal wall insulation starts from about £2,000 per wall, and bay window insulation from about £1,700 per bay. The exact figure depends on the size of the wall, the system, the detailing around windows and radiators, and what else needs moving.

Job	Typical price	Typical time
Bay window insulation	From about £1,700 per bay	3–5 days
Internal wall insulation, PIR	About £2,000–£3,000 per wall	3–4 days
Internal wall insulation, breathable	Around £3,000 per wall	About 5 days
Cheap fixes (hygrometer, dehumidifier, habits)	£15 to around £250	This week

Things that can add to the cost: moving a radiator or sockets, replacing skirting, repairs found when old plaster comes off, and ventilation improvements such as a new extractor fan or trickle vents, which I organise with trusted trades. A written quote should show all of this separately.

On grants: as of October 2026, the Great British Insulation Scheme has closed and ECO4 is due to finish at the end of 2026, with the government's Warm Homes Plan expected to take over for eligible, mainly lower-income households. If you think you might qualify, check that first. My work is privately funded, for homeowners who want the job designed and finished carefully.

Which room should I tackle first?

Start with the room that affects your family most, not the biggest wall. For most families that's a child's bedroom with mould or a bay bedroom nobody wants to sleep in.

1. **Fix water getting in.** Gutters, downpipes, cracked render, failed pointing, leaking sills. Do this before anything else, anywhere in the house.
2. **Sort ventilation in the wet rooms.** Working extractor fans in the kitchen and bathroom, trickle vents open, a gap under internal doors so air can move.
3. **Bedrooms with mould, especially children's rooms.** Clean, move furniture off the wall, keep a steady low heat, then insulate the cold walls if the mould keeps returning.
4. **The bay bedroom.** Often the biggest comfort gain per pound, and a contained 3–5 day job.
5. **The living room.** The room you use most in the evenings. Insulating the coldest external wall makes a noticeable difference to how long you can sit comfortably.
6. **Everything else, room by room.** Insulation can be done one room at a time, so you can spread the cost and disruption over several seasons. The aim should still be the whole house, including the loft and floors.

Key takeaway: water out, air moving, then warm the coldest surfaces in the rooms that matter most. That order saves money and avoids trapping a problem behind new plaster.

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What happens if I'd like a second opinion?

If you've done the self-check and still aren't sure what's going on, I'm happy to come and look. Every job I do starts with a free home visit, and there's no obligation to go ahead.

- I listen first: which rooms, when it's worst, what you've already tried.
- I look at the construction, the condition of the walls, any signs of damp and the ventilation. Your condensation diary helps a lot here.
- If insulation makes sense, I run moisture modelling to choose a safe system and thickness for your walls.
- You get a clear written quote with the reasons behind the recommendation. If something cheaper or different is the right answer, I'll tell you.

I'm based in Walsall and cover Sutton Coldfield, Great Barr, Aldridge, Solihull, Lichfield, Cannock, Wolverhampton and Birmingham. Call or text Wojtek on **07763 789272**, or send an enquiry through aplastering.co.uk.

SOURCES

Where this information comes from

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Want a second pair of eyes *on your home?*

If anything in this guide sounds familiar, I'm happy to come and look. The visit is free, I'll tell you honestly what's going on, and you'll get any price in writing.

- I check the construction, damp, ventilation and cold spots
- Moisture modelling before anything is recommended
- A clear written plan you can keep on file
- No pressure, no chasing



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