

The 9.3°C Trap

Stop fighting the mould in your home. You've been heating it wrong.

The biggest threat to your house isn't the cold outside—it's a single degree hidden inside.

Let's talk about the temperature of doom. For most of us, when we see mould creeping up a cold wall or behind the sofa, our first instinct is to turn the thermostat up. We think: *If the room is warm, it can't be damp*. But I'm here to tell you that turning up the heat in bursts is often the very thing that sets the **9.3°C Trap**.

It all comes down to something called the **Dew Point**. Imagine the air in your living room—let's say it's a comfortable 20°C with 50% relative humidity (RH). That air is holding a certain amount of water vapour. But if that same air cools, its capacity to hold that moisture drops.

The dew point is the precise temperature where that air is 100% full—where it physically *must* drop the excess moisture it's carrying. In our example, that temperature is roughly **9.3°C**.

Think about a single-glazed window on a frosty morning, or an uninsulated corner behind a heavy bookcase. When your nice, warm, 20°C, 50% RH air touches that surface, and that surface is 9°C or colder—you get instant condensation. It's not that there's "too much moisture" in the air; it's that the surface is too cold *relative* to the air's dew point. That tiny, chilling degree is where comfort ends and decay begins.

Now, here is the psychological trap: many of us only heat our homes in the evening. The walls, the floors, the entire building fabric cools down all day. We rush home, *blast* the heating, and the air warms quickly. But the cold surfaces—the walls—they stay cold for a while. Warm, humid air rushes to meet them, hits that invisible 9.3°C boundary, and condensation begins.

The takeaway is simple, but counter-intuitive: Gentle, consistent warmth and controlled ventilation prevent mould far better than blasting the heat twice a day. We must shift our focus from heating the *air* for our comfort to heating the *building fabric* to keep surfaces above that invisible, critical dew point. Mould doesn't grow in damp air—it grows on cold surfaces where warm air meets its limit. Break the cycle. Keep the surfaces warm.

Avoid the trap.