

# Unmatched Comfort, Unbeatable Simplicity

Purmo electric radiators introduce a revolutionary way to heat homes, offering unparalleled comfort and convenience that stand out from conventional heating methods. Here's a deeper look into how Purmo compares to other heating systems:

## What we're comparing to:

### Hydronic Heating, General

- Purmo radiators offer the same quality of radiant and convection heat that you get from a hydronic system
- Purmo install time is minimal, no infrastructure required
- Purmo radiators are installed in less than 30 minutes out of the box
- Purmo radiators are all standalone, independent units, all with their own independent thermostats
- Purmo heat regulation is much better because each panel has its own thermostat and can be set differently
- Purmo has Unisenza off site control. Remote control via phone apps is not commonly available with hydronic

### Hydronic Heating (Gas Boiler)

- Extra space required for boiler, pump, expansion tanks and manifolds
- Boiler lifespan 10 years
- If any component fails, all heating is lost until repairs can be arranged
- Plumber callout fees
- All hydronic systems require regular maintenance to clear out metallic sludge build-up - so there are servicing costs every 3-4 years

### Hydronic Heating (Heat Pump)

- These are very efficient, and great for radiant heating in some situations, but the economics don't stack up in most situations.
- The typical upfront cost is 2x as much as an equivalent Purmo system
- The payback period is usually more than 20 years
- The panels need to be much larger for the same output, because the maximum water temperature from the heat pump is only around 55 degrees Celsius
- On larger houses, a second heat pump can be required, more cost
- An extra buffer tank is usually required, compensating defrost mode, more money and space
- Noise from heat pump can affect you and your neighbours

### Split System Aircon

- Good for resolving hot/cold solutions in one go, but not comfortable on heat cycle
- Split-systems work by heating air, this is convection heat

- In an 6-8 star home, aircon is rarely used for cooling as the insulation is doing the work
  - ◆ Many aircons sit idle, never used. If multiple aircon units are installed in a new home, cost is quite high.
  - ◆ Better to install one large family model for the extreme days in summer and think about your comfort level
- While they're very efficient at creating this kind of heat, there are some drawbacks.
  - ◆ Blowing air, cold air nice, hot air uncomfortable
  - ◆ Can be noisy, even a background drone noise becomes annoying over time
  - ◆ People complain of dry eyes. The dehumidifying effect will leave you feeling dry and uncomfortable over long periods.
  - ◆ Because hot air rises, the vertical distribution of heat in the room is uneven - your feet are much colder than your head.
  - ◆ Uncomfortable temperature swings.
- If you've got a split-system already, it's still a great idea to use it to efficiently and quickly get a cold room up to temperature. Then you can let the radiators take over and maintain a really comfortable room temperature.

### Oil-fin or Column Heaters

- Same basic principle - an enclosed element heats up oil which helps to distribute the heat
- However, these are typically designed for occasional use
- The design of the fins means they mostly generate convection heat
- Low thermal mass
- Purmo radiators generate significantly more radiant heat because of the panel design
- Low accuracy thermostat
- As a permanent appliance, they are not that suitable, cord trip hazards, "made to price" construction

### Convection Heaters (like Nobo, Noroit)

- Convection heat only
- Open element that burns dust
- Not suitable in drying cupboards, lint can catch fire
- Less comfortable type of heat.
- Generally these panels are built quite cheaply, and can make popping or ticking noises as they heat up.