

## 8 Ways Warmup® Underfloor Heating is Energy Efficient and Economical to Run

### Efficient Heat Distribution with Underfloor Heating

One of the unique benefits of radiant heat is **the gentle, uniform heat distribution from the whole floor surface, concentrating the heat in the lower half of the room, surrounding you with warmth.**

Radiators and other forms of "point" heating circulate heat inefficiently and hence need to run for longer periods to obtain comfort levels. They draw cold air across the floor and send warm air up to the ceiling, where it then falls, heating the room from the top down, creating drafts and circulating dust and allergens.

### Evenly Heats the Whole Room

With underfloor heating, the heat radiates evenly from the entire floor surface, heating the whole room. **The system emits a lower temperature, because it is operating over a larger area than a conventional heat surface.** The transmission is up to 15% more efficient compared with conventional radiators, which heat the air at the edges of the room, where it rises to the ceiling, cools and only then circulates down into the room.

### Better Comfort at a Lower Temperature

Physiologically, our bodies prefer warm feet with the temperature around our head being slightly cooler. Radiant heat provides the ideal temperature gradient while **operating at lower air temperatures of between 1-2°C compared with convention systems**, thereby lowering fuel consumption and saving money. More savings can be gained if the subfloor is well insulated.

### Insulation

Fundamental to all energy efficiency is the **retention of heat.** Insulation boards, placed on the subfloor prior to installing a Warmup® Heating System, will reflect the heat upwards to the floor. No heat is lost in the subfloor, reducing running times and using less energy. Tests have shown that insulation on the subfloor can reduce the heat up period by 60% or more.

### Electricity as a Renewable Energy Source vs Oil and Gas

With the volatility, dwindling supplies and frequent price rises of oil and gas, governments are exerting increasing pressure on energy suppliers to provide electricity from renewable sources such as wind and hydro power which are cleaner forms of energy. **Heating from electricity provided by renewable sources is clean, available and abundant.**

### Zoning - Heat when & where you want it

**Each room can be individually adjusted to suit your needs** throughout the day and year. Heat is concentrated exactly where and when you need it. Great during spring and autumn, when you need to "take the chill off" but don't want to heat your entire home.

### No Maintenance Costs

No moving parts means there's **nothing to maintain.**

### BEAB-approved Programmable Thermostat

Warmup® offers a unique and easy-to-program digital thermostat with 4 on/off 'events' for each day of the week. Working with the floor probe, under the floor surface, **it monitors the floor temperature, giving you the desired temperature for the times you've selected.** Once the floor has reached the desired temperature, it only cycles on to maintain the temperature.

The thermostat comes with a built in energy monitor feature, providing you with consumption readings, allowing for operating time modification for maximum economical efficiency. The programming functionality can trim anywhere between 15% to 35% from the energy consumption of a typical home.

**As consumers, builders and architects actively seek more energy-efficient options in an effort to meet Government Energy Targets, the advantages of underfloor heating are fueling a revolution.**

**The Romans enjoyed the benefits of radiant heat centuries ago and with today's renewable energy sources and advanced technology, it just got better.**