



In order to provide accurate indoor temperatures, the heat supplied to the building must equal the heat loss from the building. The greatest factor affecting how much heat a building requires is the outdoor temperature. Even in a well-insulated building, heat loss increases as the outdoor temperature falls.

A boiler heating system is typically designed to always operate at the highest temperature possible to match a building's heat loss on the coldest day of the year. Most United Kingdom locations have less than 10 days in a year that actually require this high temperature.

So what happens when the outdoor temperature is relatively mild? The heating system delivers too much heat, therefore overheating the space and costing more money. In commercial or apartment style buildings, where occupants do not directly pay for heating bills, energy and costs increase even more as occupants open windows to compensate for overheating conditions.

Weather Compensation is a control strategy that continuously adjusts heating system supply water temperatures to compensate, providing more heat when it's colder and less heat when it's warmer. For most of the heating season, the control saves energy by operating at a lower temperature, reducing the amount of heat lost to the stack.

kanmor offers a wide range of Weather Compensating controls that operate a single boiler, multiple boilers, or a mixing device to ensure the proper water temperature is delivered based on the outdoor temperature. These controls are also equipped with additional features, such as the automatic boiler differential, to ensure the boiler gets a long, efficient on time, followed by a long off time.

These controls not only provide typical energy savings of 5 to 30% but also improve comfort to the building occupants by delivering the right amount of heat.

Key benefits:

- Easy installation and wiring
- Operate the boiler at the lowest possible temperature to improve efficiency
- Minimise ticking expansion noises in radiators by preventing large temperature swings
- Improve the comfort of occupants by better matching the heat requirements based on outdoor temperature
- Expand boiler life cycle with the automatic differential feature to minimise boiler short cycling

For more information about kanmor weather compensating controllers click on the product links below:

- Weather Compensation Control [260e](#)
- Multiple Boiler Control [264e](#)
- Mixing Controls [360e](#) and [361e](#)