# What is a Degree Day?

**A Degree Day is a measure used to quantify the demand for energy required to heat or cool a building. It is calculated by comparing the average outdoor temperature to a base temperature (typically 15.5°C in the UK for heating). For example, if the average outdoor temperature on a given day is 10°C, the Degree Days for that day would be 5.5 (15.5°C – 10°C). This metric is essential for estimating energy consumption, sizing heating systems, and assessing building performance.**

Degree Days are widely used in the UK house building, residential retrofit, and home renovation sectors to ensure heating systems are appropriately designed and energy-efficient. They are particularly relevant when complying with **Part L of the Building Regulations (Conservation of Fuel and Power)**, which mandates energy efficiency standards. For instance, when retrofitting insulation in a home, Degree Days can help assess the potential reduction in heating demand and energy savings.

**Synonym(s):** Heating Degree Day (HDD), Cooling Degree Day (CDD)

**Practical Example:**
A homeowner in Manchester plans to install a new boiler. By analysing historical Degree Day data, they can estimate the annual heating demand and select a boiler with the correct capacity, avoiding oversizing (which wastes energy) or undersizing (which compromises comfort).

**Related Terms:**

1. **Base Temperature:** The reference temperature used in Degree Day calculations, typically 15.5°C in the UK for heating.
2. **Heating Degree Day (HDD):** A measure of how much and for how long the outdoor temperature is below the base temperature, indicating heating demand.
3. **Cooling Degree Day (CDD):** A measure of how much and for how long the outdoor temperature is above the base temperature, indicating cooling demand.
4. **Energy Performance Certificate (EPC):** A document that rates a building’s energy efficiency, often influenced by heating and cooling demands calculated using Degree Days.
5. **U-Value:** A measure of heat loss through a building element, such as walls or roofs, which directly impacts heating demand and Degree Day calculations.
6. **Part L (Building Regulations):** The section of UK Building Regulations that sets standards for energy efficiency, referencing Degree Days for heating system design.
7. **Retrofit Insulation:** Improvements made to existing buildings to reduce heat loss, often evaluated using Degree Days to estimate energy savings.