



# University of Nottingham - Heating and Cooling Policy

## Purpose

The University is committed to providing a comfortable working environment for staff and students, ensuring compliance with Health and Safety requirements, and aligning with our environmental sustainability goals. Heating and cooling are estimated to contribute 20% of the university's energy use, amounting to 3,208 tCO<sub>2</sub>e.

## Scope

This policy covers the portfolio of residential, academic and support buildings on all the University's UK campuses. It excludes areas where temperature sensitive research is conducted.

## Legal requirements

The policy adheres to the Workplace (Health, Safety and Welfare) Regulations 1992 Approved Code of Practice, which mandates maintaining a reasonable internal temperature during working hours. Specifically, the minimum temperature should reach at least 16°C within an hour of starting work (or 13°C if the work involves strenuous physical effort). It is important to note that there is no statutory maximum temperature.

## Cooling policy

### Non-residential buildings

Cooling will only be provided in areas where it is critical to control temperature for statutory or regulatory reasons, process driven purposes (laboratories, supercomputers, data centres, specialist research equipment), and areas with significant internal heat gain of 80W per square meter that cannot be mitigated by other means. Offices with occupancy levels aligned with the recommendations of the Space Management Team will not exceed this threshold, and cooling will not be provided.



In areas with access to natural or forced mechanical ventilation, cooling systems will not be provided unless deemed critical for temperature control. Where a cooling system is installed, it will be managed through the central Building Management System. Cooling will operate when the external air temperature exceeds 26°C and internal temperatures surpass 24°C.

A charge may be levied for cooling that is operated outside working hours.

### University managed halls of residence

Cooling systems will not be provided within halls of residence.

### Heating policy

The university uses a complex Building Management System (BMS) to regulate heating and cooling across most of its buildings. The BMS adjusts the central heating temperature and modifies the heating start times based on internal and external conditions. The maximum internal setpoint for the system is set at 21°C.

During the winter period (November, December, January, and February) and in spring and autumn (March, April, May, September, and October), the heating system will be activated when outside temperatures fall below 16°C.

In the summer period (June, July, and August) the heating will be turned off.

### Non-residential buildings

We will endeavour to maintain room temperatures between 19°C and 21°C during working hours across all non-residential buildings (with the exception of plant rooms, staircases, and circulation zones). Central heating systems will have an optimised start to ensure temperatures reach the set point during standard working hours.

For centrally bookable spaces, heating will be provided outside of standard hours when these spaces are in use. This must be arranged through the helpdesk via a works request. A charge may be levied for heating or cooling services operated outside standard working hours, which are defined as 8:00 to 17:00.



## University managed halls of residence

We will endeavour to maintain internal temperature between 19°C and 21°C in all University managed halls of residence. The halls working ours are consider between 7:00 – 23:00 seven days a week during term time. Heating will be adjusted based on the outside air temperature, and central heating systems will have an optimized start time to ensure the set point is reached during these hours.

## Supplementary Heating

The use of portable heaters is not authorized on any University premises without the express permission of the Estates Department. This policy is in place because:

- Supplementary heating can prevent heating from being provided in other parts of a building as they cause false temperatures to be sensed by the BMS which can hold off the buildings primary heating systems.
- Increased fire risk arises from the potential overloading of the building's electrical system, which may not be designed to accommodate the heavy electrical loads associated with portable heaters. This can lead to overloads, circuit trips, and catastrophic failures, particularly when using unapproved heater models. Currently, only 1.5kW oil-filled radiators are authorized by the Safety Office.
- Portable heating/cooling devices utilize more energy and thus produce more CO<sub>2</sub> compared to centralised heating/cooling systems and are significantly more costly to operate.

Where existing systems are found to be incapable of meeting acceptable conditions, the Estates Office will, if practicable, temporarily provide portable heating until the issue is resolved. The portable heater should be returned to the Estates Office once the situation has been resolved.

## Expectation of building users

- Perception of a comfortable temperature is subjective. It is based on a combination of factors including; air temperature; radiant temperature; humidity; individual metabolism and clothing. It is recognised that not everyone will achieve ‘thermal comfort’ at the same temperature, and it is expected that occupants will moderate their own comfort by dressing appropriately for their preference.



- Take reasonable measures to retain heat or cooling within buildings when the respective systems are running by closing windows and doors when appropriate.
- Ensure any locally controlled heating and cooling is switched off when not needed or when leaving a room.
- Ensure radiators and grilles are not blocked with furniture, clothing or other items which might prevent the heating or cooling system from operating effectively by stopping the transference of heat (or air) from the heat emitter.
- It is not permitted to use any heaters that are not provided by the Estates Department.
- Supplementary electric heaters must not be left on if the room is left un-occupied for more than 15 minutes. If un-monitored heaters are found, these may be removed.
- All Maintenance and heating or cooling Issues must be reported to the online Estates Help <https://estateshelpdesk.nottingham.ac.uk> 0115-9516666 at the first instance.