



University of Nottingham - Space Heating and Cooling Policy

March 2022

Purpose

This policy defines the University of Nottingham's approach to space heating and cooling. We spend circa £14 million a year on utilities and it is estimated that over 20% of this cost is the result of heating, cooling and ventilating our buildings. Not only does this represent a significant cost to the University, it has a major environmental impact. It is therefore essential that actions are taken to reduce the level of energy used for heating and cooling, to support both the strategic carbon agenda and its financial sustainability, to support both the University's strategic carbon agenda and its financial sustainability as well as supporting the City of Nottingham's 2028 carbon ambition.

The University aims to ensure that buildings are heated or cooled to within a designated internal temperature range in order to meet reasonable standards of thermal comfort, to minimise CO₂ emissions and reduce expenditure on utilities.

Scope

This policy covers the portfolio of residential, academic and support buildings on all the University's UK campuses. It excludes premises solely occupied by commercial tenants and/or subsidiary companies.

Legal requirements

The Workplace (Health, Safety and Welfare) Regulations 1992 and the associated code of practice states that:

'During working hours a reasonable internal temperature must be maintained and this must not be less than 16°C unless the work involves severe physical effort in which case the temperature can be lowered to no less than 13°C.'

Working hours within this context are defined as Monday to Friday, 09:00 – 17:00 (unless otherwise agreed with building or other senior managers), excluding bank holidays and University closure days. Library and sports facility working hours will cover normal opening hours.



Heating Policy

There are essentially three heating seasons operated at the University

Winter – November, December, January and February

Spring/Autumn – March, April, May, September and October

Summer – June, July and August

In the Winter heating will be on, in the Summer heating will be turned off. During the Spring/Autumn season, the Building Management System will maintain comfortable internal temperatures informed by when either:

- External temperatures drop below 16°C for 8 consecutive hours in a 24 hour period or more.
- External temperatures drop below 17°C for 24 hours or more. This prevents heating being activated on cooler spring/autumn mornings which can cause over-heating later in the day.

For buildings not managed by the Building Management System, the heating season start date is managed by the Estate Office and informed by average outside temperatures.

Non Residential Buildings.

We will endeavour to maintain working hours space temperatures of between 18 and 20°C in all our non-residential buildings, with the exception of areas not used as office accommodation or teaching space (i.e. workshops, plant rooms, staircases etc.) The minimum maintained temperature for all work spaces will be no less than the statutory minimum. Where installed, heating will normally be controlled by the central Building Management System. Outside of normal working hours, heating (and cooling where installed) can normally be provided if this has been previously arranged with Estates & Facilities. A charge may be levied for heating or cooling that is operated outside working hours.

Out of hours heating will be provided to centrally bookable spaces when they are in use.

Specialist Buildings or Rooms.

There will be buildings or specific rooms that will require temperatures higher than those stated above. Areas such as Cripps Health Centre, Sir Peter Mansfield, Brain & Body that are used for clinical purposes, where vulnerable patients will be undressed should be maintained at around 22°C to 24°C.

University managed Halls of Residence

We will endeavour to maintain space temperatures of between 19 and 21°C in **all University managed halls of residence** during the hours of **7am – 10am, 12pm-2pm, 6pm – 8pm, 10pm-12am**, seven days a week.



Supplementary heating

The use of portable heaters is not authorised in any University premises. This is because:

- They increase the risk of fire.
- They prevent heating being provided in other parts of a building as they cause false temperatures to be sensed by the BMS which can prevent other parts of the building being heated. The electrical system may not be designed for heavy electrical loads associated with portable HVAC units potentially causing overloads, trips and disastrous circuit failures.
- Portable heating/cooling units produce more CO₂ compared to centralised heating/cooling systems and are significantly more costly to operate.

Where existing systems have been found to be incapable of meeting acceptable conditions due to plant failure, building condition, or extreme climatic conditions the Estate Office will provide the portable heating and cooling devices until the situation is rectified.

Building occupants are not permitted to use their own heaters. If non-approved heaters are found, these will be removed, as they potentially constitute a fire and/or electrical safety risk.

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.

Cooling Policy

Non Residential Buildings.

Cooling will only be provided in areas where it is critical to control temperature for statutory or regulatory reasons (Laboratories), process driven purposes (Supercomputers/Data Centres/Specialist Research Equipment), and areas with significant heat gain that cannot be mitigated by other means (Lecture Theatres), with the exception of areas not used as office accommodation or teaching space (i.e. plant rooms, staircases etc.).

In areas that have opening windows (natural ventilation) unless critical to control temperatures cooling will not be provided and any existing units will be de-commissioned. Where installed, cooling will normally be controlled by the central Building Management System. Cooling will operate when the space air temperature is 25°C or above and will cool to 2°C below the space air temperature set point.

There is no statutory maximum temperature.

Outside of normal working hours, cooling (where installed) can normally be provided if this has been previously arranged with Estates & Facilities. A charge may be levied for cooling that is operated outside working hours.

Out of hours cooling will be provided to centrally bookable spaces when they are in use.



University managed Halls of Residence

Cooling will not be provided within halls of residence.

Expectation of building users

- Take reasonable measures to retain heat within buildings in cold weather by closing windows and doors when appropriate.
- Ensure 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.
- Are not permitted to use their own heaters
- Wear suitable clothing in hot or cold weather.
- Report heating or cooling problems to the online Estates Help desk portal <https://estateshelpdesk.nottingham.ac.uk> If you are unable to access the online works request form then please call us : 0115-9516666 (or 16666 internally).