Space Temperature Policy

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1. Objective

This document seeks to clarify the position regarding internal space temperature limits that occupants may be exposed to and highlights relevant legislation. It is important that staff and students are made aware of this policy. The policy should be made reference to (web-link or hard copy) to all current staff and students as well as potential new joiners.

The responsibility here lies with;

- Student Services for Students
- Human Resources for Staff

2. Background

Brunel University London (BUL) spends a significant amount on energy costs; currently totalling around £5m per year. Gas and electric make up the majority of this cost, around 90%. This is mainly the result of heating, cooling, lighting and electrical equipment within buildings. This policy has been created to provide guidance on the thermal comfort levels expected around the University, while considering the impact on BUL's carbon footprint and energy costs.

The University feels that it is appropriate to produce a policy so building users know what to expect and why there are limitations as to what can be achieved. It should be noted that it is the responsibility of local managers for the welfare of their staff and therefore issues regarding space temperatures should be routed through them in order for the appropriate action to be taken.

3. Space Temperature Limits

The University aims to provide a thermal comfort level that satisfies the majority of occupants as in line with Health and Safety Executive (HSE) guidance. Target temperatures for normal working hours have been set for the various areas around the University. These are presented in Table 1 overleaf, and are in line with the Chartered Institute of Building Service Engineers (CIBSE) guidelines for operating buildings, Sports England as well as The Workplace (Health, Safety and Welfare) Regulations 1992 and the associated code of practice which states: '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'.

Table 1: Target temperatures for normal working hours.

Area Type	Winter	Summer
TEACHING SPACES		
Computer rooms/labs	20°C	<27°C
Conference / board / meeting rooms	19°C	<27°C
Teaching Spaces	20°C	<27°C
GENERAL BUILDING AREAS		
Entrance hall/lobby	19°C	<27°C
Commercial Kitchens	18°C	<28°C
Corridors	16°C	<28°C
Toilets	16°C	<28°C
Waiting areas/rooms	19°C	<27°C
Store rooms	16°C	<27°C
LIBRARY	19°C	<27°C
SPORTS AREAS		
Changing Rooms / clinic and treatment areas	20°C	<27°C
Sports Hall	16°C	<27°C
Gym Area	16°C	<27°C
OFFICES		
Executive	19°C	<27°C
General	19°C	<27°C
Open Plan	19°C	<27°C
Meeting rooms	19°C	<27°C
RESIDENTIAL ACCOMODATION	19°C	<27°C

4. Heating Policy

The University heating season generally runs from 1st October to 1st May each year. The heating season may be extended if it is deemed necessary. In the weeks before and after the heating season, the forecast will be monitored closely by the Estates staff and a decision will be made to turn on the heating if it is deemed necessary. Alternatively, the heating season may be reduced if there are five or more consecutive working days where outside daytime temperature is above 20°C.

Normal heating hours are optimised to achieve the target temperature between 8.00am and 6.00pm Monday to Friday. The University will provide out of hours heating to the Library and scheduled lectures/timetabled spaces as necessary. Heating will also be provided if necessary during summer examinations.

Student halls of residence will be heated as necessary to meet the target temperature detailed in Table 1.

The use of portable electric heaters is strongly discouraged. To comply with health and safety and to reduce fire risk, all temporary heaters and AC units on University campuses must be PAT tested. Only approved heaters issued by the Estates and Facilities Department shall be used on our campus and must be oil filled heaters. Heaters pose a significant fire risk and any unauthorised heaters may be removed by the maintenance team. All temporary heaters and AC units must be authorised by the Senior Maintenance Manager.

If your area is consistently hot or cold, please put a request on the Estates Helpdesk. A member of Estates maintenance will take temperature readings to gain an understanding of the average temperature within the area. Then an investigation will be undertaken to understand the cause and to consider the best solution.

5. Cooling Policy

The University shall provide cooling only for research purposes and for specific activities where cooling is required to maintain/control certain temperatures and humidity. The University does not provide comfort cooling. Any additional requirement for cooling must be outlined in a business case and provided to the Senior Maintenance Manager for consideration. Any decision must be authorised by the Director of Estates and Facilities, taking into account the energy cost, maintenance cost and legislative carbon reduction implications.

The target peak temperature for most University space in summer is 27°C. It is understood that some spaces may overheat, particularly in summer months. However, air conditioning will not be installed for cooling these spaces during these rare overheating events. Air conditioning uses around twice as much energy as natural ventilation. Therefore, lower energy solutions may be more appropriate than the installation of comfort cooling in many instances e.g. the use of desk fans, open windows, cool drinks, appropriate clothing etc.

The University will not fund the installation of air conditioning systems unless they are required:

- by regulation or enforceable code of practice
- by specific items of equipment such as a server room or laboratory
- because occupants and/or equipment consistently raise the ambient temperature to above 27°C

If it is deemed that cooling needs to be installed then the Estates team will need to agree on the cooling strategy before detailed design begins. All installed cooling equipment should:

- be as energy efficient as possible
- interface with the building management system
- contain refrigerant gases that comply with relevant legislation

Portable air conditioning units are not permitted for use in university buildings unless they are installed with an extract duct or a facility to remove the heat absorbed away from the area to be cooled. They must be cleaned and maintained in accordance with the manufacturers recommendations by the user. Desk fans may be used if they have been PAT tested.

Where air conditioning is installed, the space temperature will be set to no lower than 27°C and the system should be set to only provide cooling when the space is occupied. All doors and windows of the conditioned space should remain closed and no personal heaters should be in operation to warm up a cooled space. The settings and timings on the AC unit will be set and managed by Estates staff only, and settings will be password protected.

6. How you can help to save energy

There are several measures that staff and students can take to limit the extremes of temperature and help to save energy.

- Dress appropriately for the weather
- Drink hot or cold drinks depending on the conditions
- Use windows appropriately
- Make use of window blinds and curtains in hot weather to reduce solar gain
- Make use of flexible work times where appropriate to avoid extremes of temperature
- Look to work in areas that are already air conditioned but are not being used through hot desking if possible
- Take regular breaks
- Site workstations away from heat or cold sources
- Switch off unnecessary electrical equipment and lighting particularly in summer as these can contribute significantly to heat gains.
- Report any problems with heating or cooling to the Estates Helpdesk

Appendix 1 Temperature policy - explanatory note for COVID 19

As part of the mitigation strategy to reduce the spread of SARS-CoV-2 (the causative agent of COVID-19), one of the many measures that Brunel University London has put in place (following a thorough review of on campus ventilation systems) is to require staff to open windows in naturally ventilated spaces (offices, classrooms etc.).

This does, however, introduce challenges in meeting the thermal comfort preferences of staff and students, particularly during colder months over the winter period.

In this context the following points should be noted:

- The target temperatures and remedial processes set out in the Space Temperature policy will still apply, however it is possible that in some circumstance rooms may range between ***16°C*** - ***18°C*** due to the need for fresh air ventilation.

- The way in which Individuals experience temperature will vary, in order to provide a first step in establishing if a space is falling outside of parameters Estates are able to provide basic thermometers to staff on request which can be used to indicate if an intervention is required – e.g. a room drops to a temperature close to or below **16°C**

- Spaces will also be monitored via the Building management system, where possible, to enable proactive intervention.

- *HSE guidance is as follows*: The law does not state a minimum or maximum temperature, but the temperature in workrooms should normally be at least **16°C,** or **13°C** if much of the work involves rigorous physical effort.* Therefore, if temperatures drop below the relevant temperature then staff are entitled to request an alternative working location.

- **HSE guidance on how to limit the impact of having windows open is as follows: *windows and doors partially open can still provide acceptable ventilation while keeping the workplace comfortable. Opening higher-level windows will probably create fewer draughts. If the area is cold employers could relax dress codes so people can wear extra layers and warmer clothing.*

In summary, it is likely that spaces will generally feel colder than they have historically as we continue with increased ventilation mitigations to reduce the spread of coronavirus. Every effort will be made to maintain warmth in spaces as far as possible but should any space drop below **16°C** then alternative space will need to be considered to facilitate activities.

* *HSE - Temperature: Frequently asked questions*

** Balancing ventilation with keeping warm (hse.gov.uk)