

University of Glasgow Thermal Comfort Policy

Aim

The University of Glasgow is committed to achieving carbon neutrality by 2030 in response to the climate emergency. As part of this commitment, the University has identified building overheating and cooling as key parameters to reduce carbon emissions and save energy. Currently space heating and cooling contribute to 39% of the University's carbon footprint.

The objective of this policy is to establish guidelines and principles that ensure optimal comfort for our colleagues and students in work areas and teaching spaces, including office areas across the University of Glasgow estate, while minimising the energy required to condition each space. Everyone at the university has a role in ensuring comfort and conserving energy, and by doing so, the university can significantly reduce costs.

Summary

- The University is committed to achieving carbon neutrality by 2030 and has identified building overheating and conditioning as key parameters to tackle.
- The policy provides specific temperature ranges for heating and cooling in different types of spaces, in line with recommendations from the Chartered Institute of Building Services Engineers (CIBSE).
- If an area is already within the acceptable temperature range, it may be unnecessary to run cooling or heating equipment.
- The policy provides recommendations to increase occupant comfort in summer, including individual control over the thermal environment, workwear, flexible working, and increased air movement.
- The use of electric personal heaters is not recommended due to the risk of fire and impact on the Building Management System (BMS). All electric heaters must be authorised by Estates and have a current Portable Appliance Test (PAT) certificate.
- Any faults or issues with temperature control should be reported to the Estates Helpdesk.

Implementation and Compliance

This policy will be implemented by Estates and will be monitored for compliance. The University will provide information and training to occupants to ensure compliance with the thermal comfort parameters.

Revision

This policy will be reviewed regularly to ensure that it remains up-to-date and effective in achieving the University's goal of carbon neutrality by 2030 balanced with the need for user comfort and aligned with related University policies. Any changes to the policy will be communicated to relevant parties.

Exemptions

Specialist research and laboratory areas are exempt from this policy.

Thermal Comfort Parameters

The Chartered Institute of Building Services Engineers (CIBSE) guide to Environmental Design has been used to create this policy, with particular reference to Tables 1.5 and 1.7, excerpts are included as Appendices. It is recognised that comfort levels can be subjective for individuals and this policy seeks to be applied equitably by using the CIBSE guidance that relates to thermal comfort.

Heating

Offices and teaching spaces will be maintained at a target range of between 19°C and 21°C, with an acceptable operating range of 18°C to 28°C during operating hours.

Cooling

Offices and teaching spaces with natural ventilation and no dedicated cooling will have an indoor acceptable operating range of 18°C to 28°C during operating hours. Meanwhile, office spaces and teaching spaces with dedicated air conditioning will be cooled in summer to target setpoints of 24°C and 23°C, respectively.

Summer Comfort

To further enhance occupant comfort in summer, the university will implement the Chartered Institute of Building Services Engineers (CIBSE) recommendations, such as the relaxation of formal office attire, individual control over the thermal environment such as opening windows, in line with business requirements. Consideration can be given to hybrid working and a temporary change of working pattern during times of high external temperatures aligned with wider relevant University guidance.

Personal Electric Heaters

The use of personal electric heaters is not recommended due to their potential fire risk and impact on the Building Management System (BMS). In exceptional circumstances, personal electric heaters may be used with the approval of Estates and a current Portable Appliance Test (PAT) certificate. Requests for electric heaters must be made through the Estates Helpdesk, and a member of the Estates team will visit the site, carry out temperature readings, and discuss relevant criteria.

Overall, the university's thermal comfort parameters aim to create a comfortable and safe environment for its colleagues and students while promoting energy efficiency and contributing to the university's broader sustainability goals. The policy will be updated should there be a change in requirements, guidance and/or relevant regulation.

Heating and Cooling Outwith Term Time

The Facilities Management Team will control the overall heating and cooling systems, with a view to minimising energy use with due consideration to ambient conditions, building and room usage and any other relevant factors. Buildings being closed for normal use or at times of low demand are prime opportunities for energy reduction and require a collaborative approach by all parties.

Typically, heating is switched off in May and back on in October.

Designated areas to help mitigate appropriate aspects

The following buildings are open access for staff and students who wish to seek a shared and comfortably heated space:

- JMS
- Library
- ARC Level 2 (ground floor)
- IHW ground floor
- Fraser Building Level 3
- Mary Stewart (Garscube) - Level 1.

References

- *University of Glasgow - MyGlasgow - Sustainability [for students & staff] - Glasgow Green: The University of Glasgow's response to the climate emergency - Declaration of climate emergency*
- *CIBSE Guide A – Table 1.5 – Comfort Criteria*
- *CIBSE Guide A – Table 1.7 for 25°C acceptable indoor temperature and peak of 28°C <1% of occupied time*

Appendices

CIBSE Table 1.5 Recommended thermal comfort criteria for specific applications(excerpt)

Building/room type	Winter operative temp. range °C	Summer operative temp. range (air conditioned buildings) °C
Educational Buildings		
- Lecture Halls	19-21	21-23
- Seminar Rooms	19-21	21-23
- Teaching Spaces	19-21	21-23

CIBSE Table 1.7 General summer indoor comfort temperatures for non-air conditioned buildings

Building type	Operative temp. for indoor comfort in summer °C	Notes
Offices	25	Assuming warm summer conditions in UK
Schools	25	Assuming warm summer conditions in UK

Impact Assessment

Equality impacts and risks specific to this Thermal Comfort Policy are:

1. If implemented without due consideration: undesired effects on staff and student comfort levels may arise; staff well-being, depending on personal circumstances; and cost issues.
2. If not implemented: we will miss opportunities to reduce carbon emissions; accusations of hypocrisy in green credentials; culpable in climate crisis; negative reputational aspect when compared to the performance of other institutions.
3. Implications for colleagues and students: It is recognised that there are challenges around temperature that may arise for those with particular circumstances and who may seek specific interventions to help them feel more comfortable.
4. Reputational gains if implemented successfully. Positive engagement with climate crisis, despite some possible inconvenience.

Financial and environmental sustainability implications:

Considerable environmental sustainability implications; financial implications to be further explored

Legal implications: None; legal advice would be sought as with regards any EDI issues.

Reputational and ethical implications: Positive.