



Directorate of Technology, Estates and Facilities



Heating & Cooling Policy

Version 8.0
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1. Introduction

The following document describes the University of York's policy regarding the heating and cooling of spaces within the University in line with the University Strategy 2030 and its associated Sustainability Plan.

2. Heating

2.1. Internal Temperature Setpoint

Campus buildings are generally heated to a target temperature of 20 deg C during the heating season.

2.2. Heating Season

Historically heating seasons spanned specific dates in the calendar, typically from the beginning of October, until the end of April, but realistically an annual assessment of weather conditions by the Estates Operations team gives a more effective start and end date to operation of the district heating system for building heating, so the target dates will move either way each year.

2.3. Heating Times

Lecture theatres and teaching areas are heated as close to the internal temperature set point as possible during the heating season to their class booking times . Similarly, library areas are heated during the heating seasons to cover their opening times.

Accommodation is heated every day as close to the internal temperature set point as possible during the heating season. Heating times within the overall heating hours constraint may be adjusted annually to suit the requirements of individual colleges according to hours agreed with Student Union representatives. Where the technical flexibility of the system allows these currently are 06.00 – 10.00 and 18:00 to Midnight . Heating hours on older systems will represent an approximation within the heating hours envelope

2.4. Portable Heaters & Coolers

The use of portable heaters is not recommended as:-

- They constitute an increased fire risk to the buildings and occupants
- They can cause false temperatures to be sensed by the thermostats and prevent heating being enabled.
- The electrical system is not designed for heavy load use such as multiple portable heaters; use of heaters can cause overload to occur and there is a potential risk of failure of circuits
- They are a highly inefficient way of creating heat compared to other relative heating systems at the University and therefore creates significantly more carbon emissions, and also increased costs. The University is committed to reduce its carbon footprint under its Sustainability Plan.

Use of either portable electric heaters or air-conditioning cooling is not authorised in any University premises unless specifically agreed by Estates Services. Oil filled portable heaters may be permitted when existing systems have been found by Estates Services to be incapable of meeting acceptable conditions due to plant failure which cannot be rectified in a reasonable time, building condition, extreme climatic conditions, or medical conditions as part of a reasonable adjustment.

All electric heaters and air conditioning units used on University premises must be provided by the University Estates department.

2.5. Building Energy Management System Controls

Buildings that are centrally controlled have the following automated software routines in place:

Frost and Fabric Protection

Outside of normal operating hours where the system allows, frost and fabric protection routines operate:

Stage 1 Frost protection

To prevent stagnant water freezing in pipes if the outside air temperature falls below 2 deg C all valves are opened and pump sets run.

Stage 2 Frost Protection

When frost stage 1 is active, the heating system shall be enabled as necessary to maintain 30 deg C in the return circuit.

Stage 3 - Fabric Protection

The heating shall be enabled to maintain a minimum internal temperature of 12 deg C.

Heating Economy

When the outside air temperature rises above 16 degC the heating plant shall be disabled.

3. Cooling

3.1. Cooling Provision

There will be situations where personal comfort cooling will be required, however due to the additional electrical energy demand and maintenance implications they impose on the University, it is recommended that the requesting Department/School shall transfer an annual recharge into the University energy and A/C maintenance budget.

All efforts should be made to ensure that comfort cooling is only enabled when necessary. To avoid the need for such systems the following principles should be adopted:

General awareness training should be provided encouraging staff to use alternatives to refrigerant cooling (i.e. air conditioning systems) to maintain an acceptable working environment by means such as use of opening windows and blinds for shading. Setpoint adjustments on local controllers should be restricted with instructions displayed locally.

3.2. Criteria for Refrigerant Cooling Provision

CIBSE TM52 guidance should be followed for Internal spaces that are identified as overheated.

In overheated spaces CIBSE Guide A Suggests:

- *Relaxation of formal office dress to encourage individual adaptation to conditions*
- *Individual control over the thermal environment, where practicable, such as by opening windows, using blinds or moving out of sunny areas*
- *Flexible working so people can work at more comfortable times — availability of hot or cold*

drinks

- *Increased air movement; e.g. the cooling effect of local fans can be equivalent to reducing the operative temperature by around 2 K.*

Installation of Comfort Cooling shall only be considered as where energy efficient solutions are exhausted.

Unseasonable and unexpected weather conditions will not be a basis for the installation of cooling systems.

3.3. Operating Criteria

The following design/control measures shall be incorporated:

- a) System designed to maintain an internal temperature of a minimum of 26 degC
- b) System controlled via the University's Building Energy Management System and interlinked with the heating to avoid both systems being in conflict with one another.
- c) If the outside air temperature falls below 18 degC, the comfort cooling plant shall be disabled.

3.4. Accountability

- a) The funding of the capital, energy and maintenance costs for the cooling system shall be identified and agreed, prior to installation.
- b) The requirements of the system are checked annually for suitability.
- c) Energy accounting methods shall be provided in accordance with Building Regulations, Part L, latest editions.

The cooling sections of this Policy refer to comfort cooling only. When the function of an area requires specific operating conditions i.e. processes, specialist equipment, chemical storage etc. then such areas will be assessed independently. If it is concluded that cooling or air conditioning is necessary then para a) above shall apply.

4. Revisions

Issue	Date	Revision	By
A	06/12/2010	First electronic manual issue	PAB
B	31/01/2011	Redrafted policy	KW
C	05/05/2011	Redraft simplified policy includes cooling	KW

D	07/06/2011	Minor amendments to heating / cooling criteria	RH
E	28/02/2013	24 hr heating operation in prolonged cold weather & reflect College variations	KW
F	18/11/2013	Agreed heating hours in student accommodation revision	KW
7.0	14/09/2020	Document reformatted and allocated new issue reference converted from alphabetical to numerical to align with other Estates Policy and Management Procedures	KW
8.0	06/10/2023	Document updated, with heating and cooling setpoints amended as approved by UEB.	Sarah Brown

5. Contact Details

For general queries, please contact the Facilities Helpdesk on 01904 325555 (Ext 5555) or email fm-helpdesk@york.ac.uk