

HEATING OPERATION: POLICY & PROCEDURES

1 Introduction

The purpose of this document is to establish institutional policy for the operation of heating installations across campus and to provide guidance and procedures for dealing with heating problems on any University of Aberdeen premises.

2 Policy Statement

The University of Aberdeen will operate its heating systems in a manner designed to achieve appropriate thermal conditions for staff and students undertaking work and study on its premises. In so doing, the University will comply with all relevant Health and Safety requirements. It will also, as part of its heating regime, make every effort to operate its heating systems cost-effectively and in a manner designed to minimise unnecessary energy use and to reduce the emissions of carbon dioxide arising from their operation.

3 Target Temperature

The University's target temperature for its buildings is 20°C. This is in line with Workplace (Health, Safety and Welfare) Regulations 1992 which state that internal temperatures should provide "reasonable comfort" and goes on to specify that this should normally be at least 16°C. Lower temperatures may apply in areas where work is non-sedentary or where a process or activity in the space requires a lower temperature such as corridors, workshops and some laboratories. There is no maximum temperature defined in Health & Safety legislation.

During the heating season (which is usually October to April), the University's Heating Policy aims to maintain a temperature of 20°C during normal working hours. This is an average temperature; actual temperatures may vary within buildings and at different times of day. In assessing the thermal comfort of building users, account will be taken of the building, the number of occupants, any equipment being used, and the nature of any activity taking place.

The target temperature will normally apply Monday to Friday during the hours of 8am to 6pm and when required for out of hours teaching or key service provision e.g. extended library opening. Buildings will not be heated outside of these hours unless it is operationally vital to do so. While it is understood that a small number of building occupants may wish to operate outside these hours, it is inefficient to heat a building in those circumstances. Where thermal comfort cannot be maintained outside core hours, alternative arrangements are available, either through flexible or home working, or by utilising space in facilities that are heated e.g. Sir Duncan Rice Library.

Building users may also wish to note that heating systems are designed to prevent circumstances in which buildings are being simultaneously heated and cooled. Heating control systems will only allow the heating of buildings beyond the target temperature in exceptional circumstances e.g. where there are medical or critical operational requirements.

4 Heating Problems: Identification and Investigation

Initial Assessment: where a building user is concerned about the level of heating in their vicinity, wall mounted thermometers are available on request from the Estates Helpdesk [T: 3333] to allow the user to gauge the temperature. If conditions are consistently outside the target temperature, this should be reported back to the Estates Helpdesk.

The space temperature should be within the target range at the start and end of occupancy hours. Please note that radiators are managed by the building heating controls to attain optimal operational performance and may not be on throughout occupancy hours.

When logging complaints, please provide as much information as possible regarding the circumstances e.g. timings, frequency, initial occurrence etc. The Estates team will arrange further action to investigate the situation.

Investigation: Estates staff will use digital monitoring devices to record temperature data over a representative period. Where problems in reaching or maintaining the target temperature persist, an Estates engineer will determine whether the target temperature can be achieved in a reasonable timescale e.g. by repair or maintenance. Where that is not possible, the use of supplementary heating will be considered until more permanent improvements can be made.

Wherever possible, investigative action will be taken within 24 hours of reporting a problem to the Estates Helpdesk. This will allow Estates engineers time to assess any mechanical or controls issues and make a judgement about how the problem can be resolved. In exceptional circumstances these timings may vary where key operational or service issues have to take precedence e.g. during exams.

Staff should be aware that in certain buildings and at certain times of year, the target temperature may not always be achieved first thing in the morning but may reach that temperature shortly thereafter. In such circumstances supplementary heating will not be issued unless it is established that there is a mechanical fault causing the issue.

It is vital that all heating problems are reported to Estates so that they can be investigated, recorded, and managed by an Estates engineer. The unauthorised use of alternative heating appliances will serve only to mask or exacerbate heating problems, while also increasing energy use, associated emissions and costs.

Under no circumstances should staff use their own supplementary heating.

5 Provision of Supplementary Heating Appliances

Where it has not been possible to resolve a heating issue and where an Estates engineer has determined that temporary heating is necessary, the Estates team will provide a supplementary heating appliance.

Building users who are issued with a supplementary heating appliance will receive instructions on its safe and effective use and will be expected to use the appliance as instructed. Estates will undertake a regular review of the performance and operation of the appliance. Users will be asked to sign for the appliance and agree to return it when requested by Estates.

Under no circumstances should recipients of a supplementary heating appliance remove it from the room it was issued for (this includes use in another room or removal from campus).

Where supplied, supplementary heating appliances will normally be of the portable electric oil filled radiator type. The following points should be noted:

- 1 The use of an electric heater with exposed radiant elements (open bar fires) is prohibited within University premises;
- 2 Portable LPG (butane or propane) fuelled gas heaters can present a significant fire risk due to the presence of naked flames and flammable substances. Unless explicitly authorised, their use in University buildings is prohibited. Use of such systems will only be authorised where operationally imperative and with the explicit agreement of the University's Health and Safety advisers. Where they are used, additional safety requirements may be applied.

All forms of supplementary heating represent an enhanced fire safety risk. Where they are in use they **must be switched off** when the area is unoccupied and **must not be covered** or used for any form of drying. No combustible materials should be stored near the heaters. Any breach of this safety guidance will see the heater removed immediately. Where heaters have been used in an unsafe manner, further action may be taken.

The widespread use of portable electrical heaters can also undermine the efficiency of conventional heating systems and can even result in those systems shutting down if thermostatic

controls are confused by false readings. In such cases the thermal comfort of all building users would be compromised. Electrical heating also results in 250% more carbon dioxide emissions and at three times the cost of installed heating systems.

Supplementary electrical heating is permissible only where authorised by the Estates team.

6 Recall and Removal of Supplementary Heating Appliances

Portable electrically powered heaters will be removed for the following reasons:

- 1 To reduce any potential health and safety risks;
- 2 To reduce any potential overload of electrical systems;
- 3 To address energy efficiency considerations;
- 4 Where the heating problem has been rectified.

Estates will ensure that supplementary heating appliances are collected once a heating issue has been rectified. Where heating appliances have been issued in the past but have not been recalled by Estates, efforts will be made to identify and recover such appliances. Any heating appliance that is found to be unnecessary or unsafe will be removed immediately.

7 Building User Responsibilities

Building users are invited to assist Estates by reporting all heating problems and adapting their own behaviour to recognise the environmental conditions e.g. by wearing appropriate clothing during spells of colder weather when buildings may take longer to reach target temperatures.

It is expected that building users will:

- Report areas of under/over-heating to the Estates Helpdesk [T:3333];
- Take all reasonable steps to retain heat within a building e.g. by closing doors and windows;
- Ensure radiators are not blocked e.g. with furniture or clothing and that valves are open;
- Dress appropriately for the weather conditions e.g. by wearing extra layers in winter months;
- **Under no circumstances bring an unauthorised heating appliance into a building.**

8 Building Fabric/Office layout

Where a problem with local heating is identified as being a function of the building's fabric, the way the space is used, or a result of building layout, further investigation will be undertaken to identify possible solutions. Building users will be kept informed of developments in a timely manner.

Should the heating service to a building be disrupted more extensively, for example across multiple rooms or for more than a short period, Estates staff will liaise with building users and University management to agree the action necessary to allow normal activity to continue.

9 Context: Energy Efficiency and Carbon Management

The operation of University heating systems is calculated to result in the annual emission of approximately 15,000 tonnes of carbon dioxide each year. The University is legally obliged to purchase carbon allowances to cover our emissions from energy use in buildings. In 2016 this cost the University £190,000 excluding administrative costs.

The University aims to improve the environmental conditions in its properties, whilst also working to improve the energy efficiency of its buildings and services. The University operates a highly efficient Combined Heat and Power (CHP) district heating system and is constantly investing in infrastructure improvements to improve energy efficiency and thermal comfort e.g. insulation, windows, and draught-proofing.

10 Further Information

For further clarification or information contact the University Energy Manager on 01224 273266.

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