

## **HEATING OPERATION POLICY & PROCEDURE NOTE**

The purpose of this note is to provide guidance on the University's policy on the operation of heating installations and the procedure for dealing with heating problems within Edinburgh Napier University premises.

The University aims to provide reasonable internal comfort conditions for staff and students and to comply with Health and Safety requirements while minimising emissions of carbon dioxide arising from the operation of heating systems.

### **Statement of Target Conditions to be achieved by Heating Installations**

The Workplace (Health Safety and Welfare) Regulations 1992 Approved Code of Practice states that internal temperatures should provide reasonable comfort and goes on to specify that this should normally be at least **16°C**.

During the heating season, usually October to April, in recognition that these temperatures may not always ensure reasonable comfort the University's Heating Policy is to strive to maintain a temperature of **20°C** during normal working hours. Building users should be aware that this is an average as the actual in localised areas could vary by up to 2 °C at certain times of the day due to local influences. The definition of reasonable and adequate will take into account; the building, the number of people, the equipment used and the activity.

These temperatures normally apply to Monday to Friday during the hours of 8am to 6pm or where exceptional provision is made for agreed activity such as the JKCC, Learning Resource Centres and events.

Lower temperatures may apply in areas where work is non-sedentary in nature 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 by Health & Safety Legislation, however, the target maximum heating temperature within Edinburgh Napier University's buildings is **23°C**, above this temperature heating should not be supplied or used.

Thermometers shall be provided to allow building users to determine the indicative temperature of the internal environment. Digital temperature monitoring devices will be used by Property & Facilities should problem areas be reported to record more accurate data over a representative period to allow further investigation of any problems.

Electrical heating results in at least twice the CO<sup>2</sup> emissions of a controlled gas heating system. In addition, the un-controlled use of portable electrical heaters can result in the conventional heating within the building shutting down as sensors get false readings and also introduces additional health & safety considerations. Thus the use of portable electrical heating must be avoided unless under the direct issue by Property & Facilities.

## Statement Summarising the Action Plan for Improving Environmental Conditions and Energy Efficiency

The operation of University heating systems is calculated to result in the annual emission of about 3443 tonnes of carbon dioxide. An internal temperature increase of 1°C can cause carbon dioxide emissions and heating costs to rise by as much as 8%-10%.

The University aims to improve the environmental conditions within its properties, whilst also working towards improving the energy efficiency of buildings and services. The intention is to have efficient, fully operational, fixed heating systems within all our buildings which provide heating to the target temperatures, thus eliminating the need to rely on the inefficient use of temporary supplementary heating.

Where problems are encountered in reaching or maintaining the target temperature the problem will be investigated and managed by Property & Facilities staff to determine if the target temperature can be achieved by carrying out additional maintenance, through capital investment in improved heating and/or improved thermal insulation and general building fabric upgrading.

Where the above cannot be improved within a short timescale to meet target temperatures, then supplementary heating will be considered for a limited period until more permanent improvements can be made.

The resultant benefits of the above are that where there are heating problems they are identified, recorded, investigated and managed by Property & Facilities. Any heating problems will not be masked by the inefficient use of temporary heaters on long term use. Benefits will also be achieved in terms of responsible environmental management and the resultant reduction in carbon emissions and energy costs.

The space temperature should be within the target policy range at the start and end of occupancy. This may result in the radiators being on before occupancy and becoming cool prior to the end of occupancy as the heating controls continually calculate optimum operating parameters to meet the local requirements.

## Expectation on Users of the University

It is expected that occupants of buildings will take into consideration the environmental conditions and show due tolerance and understanding particularly during extreme external conditions. It is also expected that individuals will:

1. Report areas of under/overheating to Facilities Service Helpdesk, email: [FacilitiesServicedesk@napier.ac.uk](mailto:FacilitiesServicedesk@napier.ac.uk) or ext: 5000.
2. Take all reasonable steps to retain heat within the building such as by closing doors and windows as appropriate.
3. Ensure radiators and convectors are not blocked with furniture, clothing, etc. and valves are in the open position. **Under no circumstances must unauthorised heating appliances be introduced to the area.**

## Issuing of Room Thermometers

Room thermometers shall be provided by Property & Facilities, to allow building users to determine the **indicative** internal temperature of their environment.

Property & Facilities have already fitted thermometers to lecture theatres, meeting rooms, classrooms, offices etc. Any requests for the fitting of a thermometer may be directed to the Facilities Service Helpdesk on ext: 5000 or e-mail: [FacilitiesServicedesk@napier.ac.uk](mailto:FacilitiesServicedesk@napier.ac.uk)

## Procedure for Dealing with Heating Problems

1. The space user should determine the temperature of the room by reading the wall mounted thermometer.
2. Establish if the conditions are consistently out with the standards detailed.
3. If the conditions are outwith the standards detailed please contact Facilities Service Helpdesk (as above). The caller will be asked to answer a core script of questions designed to attempt to provide an early diagnosis of the problem.
4. Facilities Service Helpdesk will arrange action to review and to correct the situation.

### Heating Issue

If a problem is confirmed and the heating system within the room/area cannot be rectified in a reasonable timescale then Property & Facilities will arrange the allocation of appropriate supplementary heating. The target maximum time for a temporary heater being delivered from time of first reporting a deficiency to the Property & Facilities Helpdesk will be 4 hours under normal circumstances however each case will be considered to ensure timeliness e.g. during exams etc . **Under no circumstances should staff purchase or bring in portable electric/free standing calor gas heating.**

### Building Fabric/Office layout

If the issue is identified as being with the building fabric, space use or office layout further investigations will be undertaken to establish possible solutions with recommendations on potential solutions made to local management for consideration.

Should circumstances occur whereby the heating service is disrupted in more than a relatively local area or it is established that the disruption is likely to be for more than a short period then Property & Facilities staff will liaise with staff and campus management to agree the necessary action to allow normal activity to continue.

## Procedure for Arranging Adjustments to Heating Times for Non-standard Circumstances/ Events

The core operating times of the heating installations are usually 8am to 6pm Monday to Friday..

If any adjustments to these core operating times are required and this has not previously been booked as a one off event:

1. Advise the Property & Facilities Service Desk of your requirement, giving as much notice as possible and certainly no less than 24 hours' notice.
2. If determined as an authorised adjustment Property & Facilities staff will make the necessary arrangements to have the times on the relevant heating time-clock or building management system adjusted, for the duration of the event. Property & Facilities will also make arrangements for the time-clock to be reset back to the standard times afterwards.

## Temporary Issue of Portable Electrical Heaters

Property & Facilities will issue heaters only in appropriate circumstances and only for a limited period.

Guidance on the safe and effective use of the heater(s) will be provided. The responsible staff will accept responsibility for their safe and effective operation and storage of the appliances.

The circumstances requiring the issue of the heater(s) will be recorded and investigated by Property & Facilities and a regular review of the performance and operation of the heaters will be carried out.

Where portable heating appliances are to be provided, these will normally be of the electric convector, fan-assisted convector or electric fan heater type. The following points should be noted:

- The use of an electric heater with exposed radiant elements (open bar fires) is prohibited within University premises
- Portable LPG (butane or propane) fuelled gas heaters can present a significant fire risk due to the presence of naked flames and large amounts of liquefied, flammable gas. Health and Safety will be consulted before introducing such equipment into University premises. As a general rule, their use in the University as a permanent means of heating a workplace is prohibited, however it is recognised that circumstances can arise where their use may be justifiable (e.g. space heating, emergency use). In this case specific additional safety requirements may be applied.

Where electric heaters are used 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. These are general H&S considerations and are the requirements of the universities insurance providers.

## Inspection, Testing and Storage of Portable Electrical Heaters

All electrically powered heaters are subject to the general requirements of the University as regards electrical safety. Every heater must receive a visual inspection by a competent person to verify its electrical safety before it is used. All electrically powered heaters shall also comply to and be in accordance with the legal requirements of the University's Portable Appliance Policy.

**If any defect is found then use must be discontinued immediately and the defect reported to Facilities Service Helpdesk.**

As stated above the temporary heaters will be stored and tested by Property & Facilities for future temporary use in a safe and controlled manner in emergency situations.

## Recall & Removal of all Existing Portable Electrical Heaters

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

1. To reduce potential health and safety risks
2. To reduce potential overload of electrical systems
3. Energy efficiency considerations

A programme of recalling all portable electrically powered heaters will be initiated. Heaters found to be unnecessary or unsafe will be removed immediately. In all other cases Property & Facilities will recall or remove temporary heaters as part of the improvement process.

## Temperature Guidance

	<b>Core Heating Times</b> (Mon – Fri)	<b>Heating Times</b> (Sat & Sun)	<b>Minimum temp</b>	<b>Maximum temp</b>	<b>Optimum Temp</b>
Classrooms	8:00 am - 6:00 pm + known events	Nil (Apart from known events)	16°C	23°C	20°C
Lecture Theatres	8:00 am - 6:00 pm + known events	Nil (Apart from known events)	16°C	23°C	20°C
Conference Rooms	8:00 am - 6:00 pm + known events	Nil (Apart from known events)	16°C	23°C	20°C
Libraries at Craiglockhart Merchiston Sighthill	As per published opening	As per published opening	16°C	23°C	20°C
Catering Outlets	8:00 am - 6:00 pm	Nil	16°C	23°C	20°C
Labs	8:00 am - 6:00 pm	Nil	16°C	23°C	19°C
Jack Kilby Centre	24 hours	24 hours	16°C	23°C	20°C
Workshops	8:00 am - 6:00 pm	Nil	16°C	21°C	19°C
Offices	8:00 am - 6:00 pm	Nil	16°C	23°C	20°C
Corridors	8:00 am - 6:00 pm	Nil	16°C	21°C	18°C