

Energy Reduction in non-domestic council buildings

OBJECTIVE

The Council shall reduce energy consumption and ensure high standards of energy efficiency across non-domestic council properties thereby minimising expenditure and reducing CO2 emissions in line with Council climate change targets. This will be done by establishing:

- Set heating time periods
- Set heating temperature ranges
- Detailed responsibilities for action on both services and staff
- Outlined processes for exceptions and exceptional circumstances

HEATING DELIVERY

South Ayrshire Council is to set and control the temperature ranges in the heating season, from the October school holiday break to the May Day Bank Holiday.

SCOPE

During core occupancy times in the heating season:

- the heating temperature set point will be 20°C
- heating will apply between the hours of 0800 and 1700 Monday to Friday.
- buildings are required to be at their operating temperature within one hour of occupancy.
- Outside of core occupation times, all buildings default to a temperature setting of 10°C to maintain the fabric of the building and to protect water pipes.

Exceptions can apply to buildings operating outside of normal office hours, including swimming pools, sports facilities, school buildings and nurseries with young children, buildings with vulnerable and elderly occupants where appropriate.

Exceptions for each property type are detailed in Appendix 1.

Depots and buildings where manual labour is performed will have their heating set to 16°C.

Heating time schedules to be agreed with the principal users of buildings and represent the best possible balance between the need to provide comfortable working conditions and the requirement to conserve energy and avoid waste.

In spaces where occupants have direct control of their heating temperature it is expected that they will set the workplace thermostats in accordance with this document. This will be monitored through existing management systems.

On days that are warm for the specific time of the year, heating may not be switched on where it is judged that temperatures will rise quickly to target levels during the working day.

The heating for the building:

- will normally be turned off on May Day Bank Holiday until the October school holiday break saving energy and cost, and allowing time for heating system maintenance,
- the domestic hot water system will be left on to provide hot water at sinks and for Legionella control.

Unseasonal weather conditions may determine changes to these dates. The actual times and dates of daily heating operations can be altered on the authority of Asset Management.

With regards to portable electric heaters:

- individual heaters **may not** be brought in from home
- and are prohibited for safety reasons,

Supplemental electric heaters, which are Portable Appliance Tested annually and held by Facilities staff or Property and Maintenance teams, may be authorised by Asset Management in special agreed circumstances.

In particular circumstances, where an individual for health reasons may need special consideration then their Line Manager should refer to the Occupational Health Service for advice.

RESPONSIBILITIES FOR DELIVERY

Responsibility for formulating and implementing this workstream lies with Asset Management.

Responsibility for extending or shortening the heating season in view of weather conditions lies with Asset Management.

Responsibility for reducing/exceeding localised set temperatures in temporary unseasonal weather conditions lies with Asset Management.

Responsibility for setting/altering set times to meet localised situations lies with Asset Management.

Responsibility for investigating queries lies with Asset Management and these can be sent to asset.management@south-ayrshire.gov.uk. Depending on the nature of the complaint, the appropriate manager will respond accordingly and provide suitable feedback.

RESPONSIBILITIES OF ALL STAFF

All staff are responsible for keeping heat in the building by closing windows and doors as appropriate and to ensure that radiators are not blocked with furniture, clothing etc. Any faults should be reported through normal channels.

All staff are responsible for wearing suitable clothing for the weather conditions.

IMPLEMENTATION

The Workplace (Health, Safety and Welfare) Regulations 1992 lay down requirements for the working environment. Regulation 7 deals specifically with the temperature in workplaces and states that: "During working hours, the temperature in all workplaces inside buildings shall be reasonable".

Although the law does not state a minimum temperature it does advise that the temperature in the workplace should normally be at least 16°C for office-based activities and 13°C if much of the work is physical.

A building takes time to heat from unoccupied temperature to the desired set point and this time can vary with the weather and thermal characteristics of the heating system. The Council has optimiser controllers (time controllers incorporating an internal and an external temperature sensor) fitted to the heating systems.

Using these sensors, the controller learns the response rate of the building and then minimises the start-up period of the heating system dependent upon the prevailing outside temperature to achieve the required occupancy temperature by the start of the working day. Similar facilities are used at the end of the working day. By fully utilising these controls efficiency gains and financial savings will be achieved.

Further information can be obtained from Asset Management.

EVALUATION

Asset Management will monitor the efficiency of this workstream by continually monitoring energy consumption.

Heating set points and occupancy times will be monitored remotely via the IQVision Platform. The Systemslink platform will be used to ensure energy consumption is within the expected margins.

SPECIFICATIONS FOR HEATING CONTROLS AND SETPOINTS

The set points below have been agreed by Asset Management.

Changes to these setpoints will only be allowed as part of the exceptions process and agreed with Asset Management in advance.

Item	Action	Setting
Frost 1 – External Temp	Run Heating	1`C
Frost 2 – Boiler Return	Run Heating	10`C
Frost 3 – Fabric	Run Heating	10`C
Extension Override Switch	Extend heating and cooling	60 mins
External High Limit	Disable heating when OAT above	18`C
External Low Limit	Disable cooling when OAT below	12`C
Internal High Limit	Disable heating when room above	20`C
Internal Low Limit	Disable cooling when room below	19`C
Optimum Start	Warm up period should not exceed	120 mins
Optimum Stop	Cool down period should be no less than	60 mins

EXCEPTIONS TO CORE OPERATING PROCEDURES

Exceptions to core operating procedures can be applied where:

- Occupancy is out with core operating times,
- Buildings have elderly or vulnerable occupants,
- Swimming pools and sports facilities with legal temperature requirements.

Occupancy outside of core operating times

Where buildings are occupied outside of core operating times for long term lets, heating time exceptions can be built into the schedule. Staff must notify Asset Management annually to ensure heating exceptions will be maintained.

Buildings with elderly or vulnerable occupants

Where buildings have elderly or vulnerable occupants such as care homes, supported living, or sheltered housing facilities will be applied exceptions to heating times and setpoints to ensure temperatures in buildings are reasonable.

Swimming pools and Sports facilities

Where buildings have legal requirements on temperatures for changing or swimming areas exceptions will be applied to accommodate. Where extended opening hours are in place for these facilities, this will be agreed annually with Asset Management. Where opening hours change during the year, it is the responsibility of the building staff to notify Asset Management in advance of these changes.