



**AIR CONDITIONING AGREEMENT**

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Revision January 2019	Reflects personel changes and removes some historic context now normalised.



## AIR CONDITIONING AGREEMENT

### BACKGROUND

1. The Estates Office presently maintains over 1000 air conditioning (A/C) units at the University. These use 7,000,000 kWh of electricity at a cost of over £500,000. This is over 10% of our total electrical consumption and more than the whole of Langford! The use of these systems leads to the emission of 3,000 tonnes of carbon dioxide as well as potentially releasing refrigerant to the atmosphere, both of which contribute to climate change. This Protocol has therefore been written to reduce the cost and environmental impact of these systems.

### REQUESTS FOR AIR CONDITIONING

2. All new requests for air conditioning will need to be assessed by University Estates using the cooling decision tree. For those applications where the cooling needs can be met using alternative solutions, the request for A/C will be refused and the alternative system offered e.g. mechanical ventilation.
3. For those areas where a need for A/C is confirmed using the decision tree, the request will be granted. However the installation will need to be in accordance with the University cooling design specification, delivered using the Hard FM team in the Estates Office and subject to the funding availability. Sustainability will sign off all new installations to ensure they have been installed in line with the A/C specification. Units which are installed without following these guidelines will be isolated and rendered inoperable and/or removed.
4. To make a request for new or replacement air conditioning units please use the request project work link on [bristol.ac.uk/estates/](http://bristol.ac.uk/estates/)
5. To request a repair to exiting air conditioning units please use the Request maintenance work link on the [bristol.ac.uk/estates/](http://bristol.ac.uk/estates/)

### EXISTING EQUIPMENT

6. All existing equipment will be reviewed regularly and managed to ensure that all units and systems are legally compliant, fully controlled in line with the design specification, energy efficient and fully maintained.
7. For systems where there is inadequate control which cannot be improved or the system does not have standard energy efficient features, replacement should be considered where cost effective to do so.

### END OF LIFE

8. Units will be deemed to have reached the end of their life when any of the following criteria have been met:

- a. remedial quotations for individual units, i.e. condenser or evaporator, exceed £1,500 exc. VAT
  - b. repair costs would exceed 60% of the cost of installing a new unit
  - c. Units are older than 10 years
  - d. Units that operating with R22 refrigerant or other non-compliant refrigerant
9. Units that have reached the end of their life will be decommissioned. If a replacement unit is required, it will be treated as a new request and the requirement for A/C will be assessed.

### **RELOCATION OF EQUIPMENT**

10. All requests for relocation must be treated as a new installation and go through the decision tree application. If the provision of A/C in the new location is agreed, the equipment may be relocated as long as the final installation meets the required design specification criteria.

### **REFURBISHMENT**

11. The provision of A/C will be revaluated using the above protocol when there is any material change of use in an area.

### **TRAINING AND AWARENESS**

12. Sustainability will provide information and / or training regarding the above for designers, contractors, departmental users and maintenance providers.

### **MAINTENANCE**

13. The Estates office maintain, test and repair all University air conditioning units. Maintenance specification and frequencies are completed in accordance with F Gas Regulations to satisfy compliance, this service level may differ from the standard recommended by the manufacturer.
14. Access for maintenance and the necessary downtime will be arranged in advance via school/department representatives and Facilities Managers. Prevention of maintenance for reasons outside the control of the Estates office and its contractors may result in abortive costs being incurred, these costs will be recharged to the department. Continued prevention of maintenance for reasons outside the control of the Estates office and its contractors may result in the unit being permanently isolated.

### **FUNDING**

15. Funding for annual maintenance and repair of air conditioning units is provided via the FIS allocation. Inclusion of air conditioning into a space may change the definition of space to type 2 and therefore increase the FIS cost for that space.
16. It is the responsibility of the requesting department/faculty to ensure that appropriate funding for the installation is in place and available.