

UNIVERSITY OF BRADFORD

Planning and Resources Committee

Building, Land and Estate Strategy Sub-committee

AIR CONDITIONING POLICY

FORWARD

Air conditioned buildings use twice as much energy as naturally ventilated buildings as extra energy is required for the refrigeration of air and to power the pumps and fans to circulate the cooled air through the building.

Providing cooling consequently has a significant impact on the environment and is expensive both in terms of capital and running costs.

It is therefore the policy of the University to avoid comfort air conditioning where fresh air, odour removal and the limitation of high temperatures can be accomplished by natural ventilation.

In some rooms, this will result in high summer time temperatures on approximately 23 working days per year, for which approved PAT tested desktop fans are acceptable for use.

POLICY STATEMENT

The University will carefully consider ventilation during the design stage of all new build and major refurbishment works.

Mechanical ventilation will be considered where:

- Natural ventilation is insufficient for oxygen replenishment and air movement
- Stale, hot or noxious fumes require removal from toilets, cooking canopies, fume cupboards or the like

Air conditioning will be considered where:

- Room processes require close temperature control
- The combined effects of the heat input from people, lights, machinery and solar gain cause the room temperature to consistently rise above 28^oC and where all other options have been exploited
- Where Academic Schools or Departments are prepared to pay the life-cycle cost of installing, running, maintaining and decommissioning a comfort air conditioning system to the University's utilities budget (see Appendix A – Air Conditioning Costs)

APPENDIX A – AIR CONDITIONING COSTS

Academic Schools or Departments prepared to pay for comfort air conditioning will be expected to arrange for the funds to cover the planned works to be transferred to the University's utilities budget before installation work can be undertaken. Indicative costs are detailed below. Actual costs will be calculated at the time a request is made.

Typical Comfort Air Conditioning Costs

1. Installation costs: £300/m² of conditioned space
2. Running Costs: £57/m² for electricity payable in one payment each year as long as the air conditioning equipment is in use
3. Maintenance Costs: £16/m² payable in one payment each year as long as the air conditioning equipment is in use
4. Decommissioning Costs: To be calculated at time of removal

Example: consider an office occupying 10m² of floor space. In order to install air conditioning the cost would be:

£3000 installation cost

£570 per annum running cost

£160 per annum maintenance cost

Plus decommissioning costs to be calculated at time of removal