



The Open University – Building 10

RPA were part of a design and build consortium to provide a new £11.2m design and build laboratory and office building to house expanding Planetary Sciences and Space Research Institute (PSSRI) and Chemistry Departments. RPA's main role was to translate the client's technical brief to full services design but included site inspection and reporting, commissioning programme and witnessing.

Due to the highly specialised experimental work undertaken in the building, complex ventilation systems have been incorporated which do not lend themselves to high energy efficiency. Nevertheless, RPA carried out detailed procurement analysis on fume cupboard options and as a result the team selected a higher cost fume cupboard system. This significantly reduced air volumes while maintaining safety standards and resulted in reduced plant capital and running costs.

The building is also heavily serviced with IT requirements with an average of 10 category 6 structured cabling points per occupant. The associated equipment heat gains were onerous but RPA developed a cost effective strategy which was not based on maintaining a fixed temperature but on a temperature differential between inside and outside, again reducing plant and energy costs.

With so many complex engineering systems associated with the laboratories, RPA produced a critical path programme of commissioning, proving, training and handover period.

The building uses thermal mass and solar shading to regulate it's summertime internal environment but also benefits from high levels of natural light.

The building was completed and handed over in March 2004

