

CASE STUDY

3rd Floor R Block refurbishment De Havilland Campus Hatfield

For the University of Hertfordshire

De Havilland Campus is home to the University of Hertfordshire's business school, school of education, sports village, law court building and enterprise hub.

The university wanted to refurbish the third floor of R block on the campus to make better use of 740sq m of teaching and office space.



Meticulous timing and precision work to tight tolerances was essential so that accurate measurements could be taken for fire doorsets to be installed safely for the start of term."

Jordan Robbins

Ashe Construction contracts manager

THE CHALLENGE

Major strip out and refurbishment

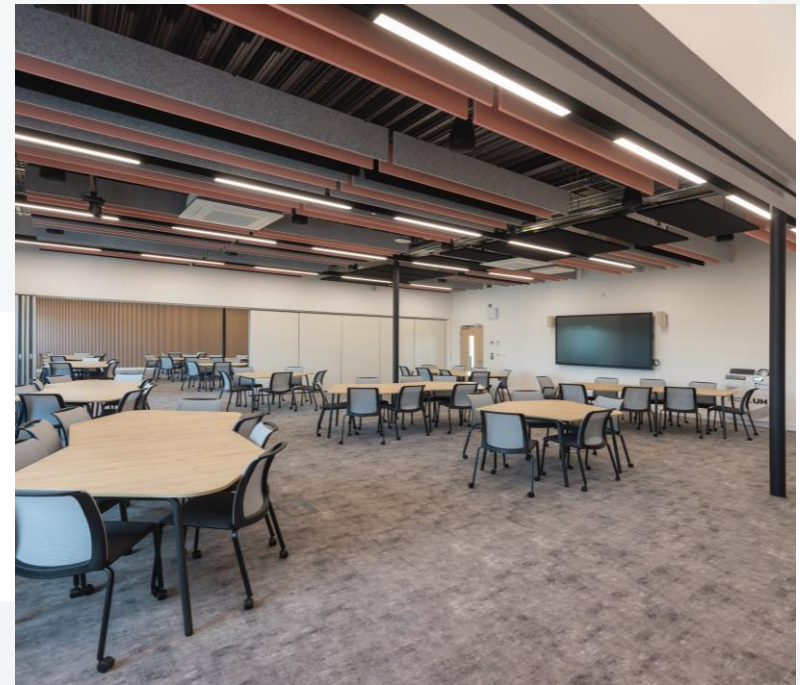
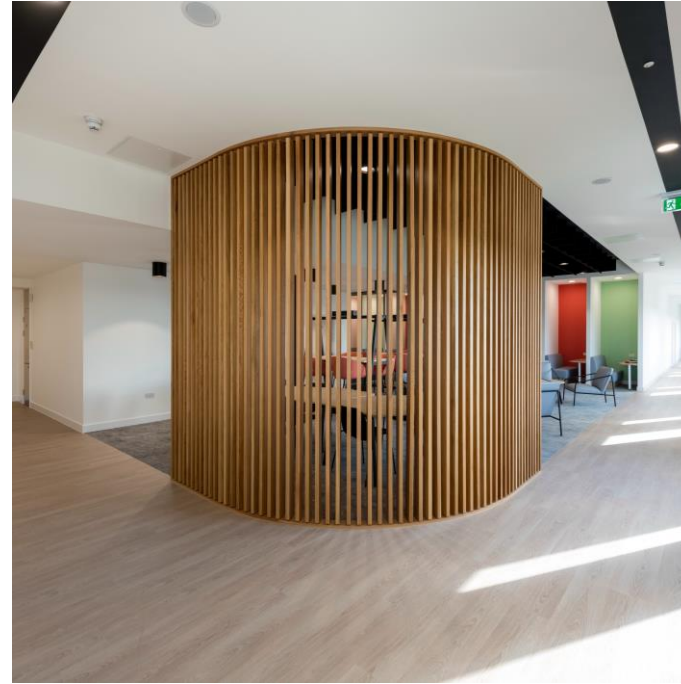
Procured through the NHS SBS PS-Works: Public Sector Construction Works Framework Agreement, Ashe was instructed to undertake the transformation under a £1.4m contract with the aim of creating four new 40–60-person flexible teaching spaces.

The works required stripping out all services, walls and ceilings in existing teachers' offices, a kitchenette and smaller classrooms to create four large new flexible teaching spaces with three movable walls and a breakout room.

Project timeline

One of the key challenges was the fast-track nature of the project. From receipt of the order there were only three weeks to organise subcontractors and start work on site followed by only 13 weeks on site to complete the strip out, develop the design and construct the finished project in time for the start of the university's academic year.

With only a small staircase for access, demolition waste and new building materials had to be manoeuvred in and out of the building with the use of a hoist. Due to the size of the hardstanding below, only a 500kg hoist could be used, requiring many more loads than a larger 1500kg hoist would have accommodated.





THE CHALLENGE

Craning in steels

Another hurdle to overcome was the need to install three, 11m long steels and eight 5m steels into the third floor of the building. With the only access to the third floor being a staircase, the solution was to remove a section of curtain walling and carefully lift them into place using a crane. The steels were slid into position at a precise angle so the aperture could be kept to a minimum.

Fire door precision

Fire doorsets were required for the new spaces to create the correct compartmentation for the fire safety strategy. The doorsets could only be ordered once all the preparatory work was complete and accurate measurements could be taken, however with an eight-week order lead time for the doorsets to be delivered, on a 13-week project, every element of this aspect of the project required meticulousness timing to allow them to be fitted for the start of term.



THE SCOPE

Ashe has installed new flooring, and movable partitions to create the flexible teaching spaces. The works also included fitting ducting and conduit for power and data services in preparation for the university to install their AV equipment.

Sustainability

New VRF (variable refrigerant flow) heating which is designed to be energy efficient, quiet, and compact has been installed along with air conditioning, CO2 monitoring and efficient LED lighting.

During the works the project team was able to use the existing electrical supply therefore avoiding use of a generator. The site supply was monitored by Grid Duck software to ensure that the team was aware of any unnecessary power being used.

