

MANCHESTER
1824

The University of Manchester

Case study

University of Manchester Cabling Infrastructure

About

Location: Manchester

Project Value: £110,000

Site Size: 10,284m² floor
space

Duration: 5 months

The University of Manchester is the largest full-time non-collegiate University in the UK. It educates the greatest number of full-time students and teaches more academic subjects than any other British University.

The brief

Having worked with the University over the last two decades, Sudlows were approached to design and install a robust data cabling infrastructure for the new building.

The University wanted a cost-effective structured cabling solution that would provide the kind of bandwidth students and lecturers demand.

The project

Sudlows considered Brand Rex Cat 5e copper cabling to be the most reliable network option for the University; it mirrors the infrastructure of the surrounding Manchester campus, which was also designed and installed by Sudlows.

Our engineers installed 800 user outlets to individual PCs within the state-of-the-art building, leading to termination patch panels located in two Communications Rooms on either side of the third floor.



The project *(cont..)*

Cat 5e perfectly handles speeds of up to 1GB, which transmits approximately 100MB to each individual user outlet. This sufficiently benefits the needs of students and staff, who predominantly process low capacity Microsoft Office, Outlook and internet applications.

At the time of install, Cat 5e was the most prominent media for business communications, but since intensified demand for multiple network capacity in dynamic environments, advanced Cat 6A and even Cat 7 cabling has become more prominent. Cat 6A (augmented for greater strength) has been specifically designed to support the latest 10G Ethernet protocol.

Although newly emerging cabling standards, such as Cat 6A or Cat 7, would undoubtedly provide future-proofing to the university, it would not benefit the needs of students and staff. Plus, installing the larger cables would cause much disruption to the busy campus for very little benefit.



Tony Jones at Manchester University Computing commented;

“The new Arthur Lewis building exposes the best building model in terms of cabling infrastructure. It presents an enviable, visually neat system of world-class calibre.

We have found a partner in Sudlows, who truly understands the needs of the university. All of our students rely on the university networks for support during their studies, so our communications network cannot be anything other than robust.”

The conclusion

Robust Cat 5e communication infrastructure connecting 800 user outlets.

Communications infrastructure implemented without disruption to the busy campus environment.

Cost effective high bandwidth to cope with student demands.

Environmentally friendly communications network.

“We have found a partner in Sudlows, who truly understands the needs of the university”