

Case Study

Writtle College

Customer	Writtle College
Location	Chelmsford, Essex
Requirements	Update their fibre connectivity
Equipment	Excel OS1, 12 core fibre cable and Excel fibre patch panels

Customer's View

"Although we knew we needed to upgrade our fibre connectivity, we really needed the right expertise to help us achieve it. Paul Cave from Mayflex not only helped us design a successful installation taking into account numerous hurdles, but also provided quality products offering us peace of mind and allowing us to focus on the future developments of the college."

James Ling, Head of Information Services.

excel
without compromise.

Established in 1893, Writtle College has been producing leaders in the land-based industries for over 100 years. It is one of the oldest and largest specialist university colleges, supporting careers focused on Business and the "Green Industries", and has a well established international reputation with numerous links across five continents, including North America, Asia, Europe, Africa, and Australasia.

Writtle College is one of the premier colleges in the country and wants to maintain that position. In 2005, the college started to develop a strategic plan with an aim to ensure it remains a successful and attractive place that students, staff and village residents can be proud of.

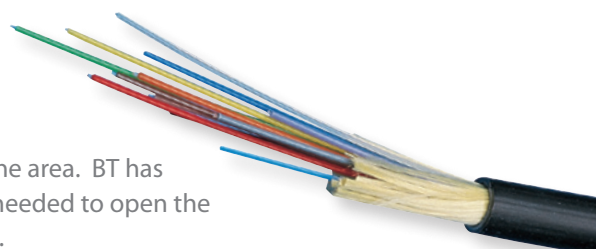
The development is set to run until 2021, and will mean significant changes be made to the campus. As a starting point for this, an alternative fibre route became a necessity. The college needed to upgrade its fibre connectivity between two Server and Network rooms placed at opposite ends of the college campus, separated by a main road. This new diverse fibre link would back up the existing single route, which would be at risk during any construction on the site. Losing the link between the sides of the campus would be disastrous to their whole IT network, and therefore back up was vital.

Although they knew what they needed, they didn't know how best to achieve their requirements and needed someone with the right expertise to help them. This is where James Ling, Head of Information Services for Writtle College, contacted Paul Cave, Market Development Manager for Mayflex. Paul was a great asset to the development team. Not only is he a qualified telecoms project manager, but he also understood the estate, what they wanted to achieve, and the hurdles they had to overcome, and became the Consultant and Project Manager for the installation.

The first task for Paul was to conduct research around the site. There was little previous documentation relating to the existing infrastructure and utility plans due to a fire some years earlier, so Paul had to design the installation virtually from scratch.

Straight away this meant it became very difficult to ascertain who owned what in the area. BT has a number of inspection pits and ducts across the site, and to help clarify things BT needed to open the pits so the overall existing routes for both BT and the college could be mapped out.

Once this had been completed, Paul further surveyed the site and found some other major problems which would greatly



affect the design of the route. Quite simply, the fibre just had to run across the estate to link the two buildings, but this was complicated by many obstacles. Streams, drainage ditches, public and college roads, and most importantly the gardens, all greatly affected the route of the installation. The front garden of the college not only has a first class lawn area it also has a number of memorial trees.

Finally there was the issue of the main road. The local council would not allow the civil contractor to dig the trench for the duct as close to the road as ideally needed. This was due to their concerns that the road, or part of the road, may need to be closed. This could be circumvented quite easily, but needed to be considered as part of the plan.

After taking all the issues into consideration, the installation was designed, the right products chosen, and the route was agreed with all the stakeholders from the college. Paul then ran the tender and tender evaluation process on behalf of the college and was on hand as their representative at both the project kick off and handover stages.

The products used were from the extensive Excel range, and Paul knew that these would be the best products for the job.

Excel structured cabling products, developed and distributed by Mayflex, constitute an end-to-end solution where performance, ease of installation and cost effectiveness are prerequisites.

The Excel loaded patch panels are supplied with pre-configured adaptors for fast and easy installation, and also come with a cable management kit and cage nuts. The LC connector series are small form factor (SMF) style options. Each adaptor accommodates a two fibre connector, resulting in a high density solution ideal for this sort of installation.

The Excel fibre cable is constructed around a silica gel filled tube containing 12 Core 9/125 OS1 loose tube fibre cable and is covered with aramid strength members, and a flame retardant and low smoke halogen free outer sheath.

Using these Excel products, a straight forward fibre duct was installed across the campus, buried 800 mm below the surface of the extensive lawns and gardens, with a 3 metre exclusion zone around each tree so as to not impact upon them.

In addition to this, to overcome the small stream that lay in the route path, a metal duct was installed that bridges across the stream and then continues as normal on the other side.

A number of inspection pits were added along the route to allow for the future expansion route as the campus expands in line with the college's strategic plan.

Once the new route was complete, 2 x 12 core singlemode fibre cables were drawn through and terminated at each end in the current Network and Server rooms. The complete route is almost 1km in length.



The installation took place in January and February 2009. There were a number of delays due to the weather, including extreme flooding at one point, making it temporarily impossible to work on the installation; but the final solution was successfully handed over in March.

The college has seen huge benefits from the installation. They are now able to relax and move forward with the development of the campus, as well as being able to now operate an effective back up for both academic and corporate data on the campus. With huge plans ahead, having reliable and secure fibre connectivity has been invaluable to them and will continue to be so for many years to come.



European Headquarters

Excel House
Junction Six Industrial Park
Electric Avenue
Birmingham B6 7JJ
England

T: +44 (0) 121 326 7557

F: +44(0) 121 327 1537

E: sales@excel-networking.com

www.excel-networking.com

excel
without compromise.