CASE STUDY: KUWAIT MINISTRY OF EDUCATION



Brand-Rex receives top marks for its network infrastructure technology at Kuwait's Ministry of Education

Kuwait's Ministry of Education headquarters is a 12-floor state-of-the-art facility that comprises a plethora of outstanding features. Communications is central to its effective operation, so when it needed a cutting edge network infrastructure solution, it turned to Brand-Rex.



'Once again, the use of our products has ensured a smooth installation. As well as offering excellent performance and unrivalled usability, its new infrastructure is guaranteed to support the Ministry of Education's operations for at least 25 years, offering unrivalled peace of mind.'



Due to be completed in 2016, the Kuwait Ministry of Education's new headquarters in Kuwait City is one of the county's most awe-inspiring constructions. The design inspiration comes from the rich maritime history of Kuwait shipbuilders and two curved office buildings overlap to form an interior atrium, reminiscent of dhows passing each other at sea. The building's northeast face is smooth and shimmering, while the southwest facade has a protective screen.

Grand designs

Designed by Cambridge Seven Associates with Gulf Consult, this impressive 12-storey building in South Surra meets all the requirements of Leadership in Energy and Environmental Design (LEED) silver certification and serves more than 3,600 ministry employees. It houses administrative offices, a 600-seat auditorium, conference rooms, a central library, food service facilities, lounges, prayer rooms, exhibition space, and generous function areas.

The move to these new headquarters represented an opportunity to install a high quality IT network infrastructure to enable both internal and external communications to be fast and reliable. IT plays a vital role in the Ministry of Education's operation and as the main electromechanical infrastructure contractor, Kharafi National was tasked with finding a services provider that could specify, design and install the most appropriate solution. Kharafi National's Abdalla Musleh acted as construction manager for EPC and MEP services for the project, and comments:

'We contacted Alamiah Technology Group (ATG), as it is one of the leading suppliers and installers of structured cabling in Kuwait, and after describing what was required we felt confident that it could fulfil the brief. We needed a cutting edge cabling system that could offer the ultimate in future proofing and would be capable of supporting network speeds of 10 Gigabit Ethernet. This would not only support voice and data requirements, but would also permit other IP based building services to be networked as necessary.'

ATG is one of Kuwait's leading professional IT firms, with a 15 year history in providing intensive technology solutions thanks to its industry leading credentials and certifications. Ahmed Alfaleh, the company's infrastructure product manager, explains:

'Everything is smart in today's buildings and the Ministry of Education headquarters is no exception. Structured cabling must be able to handle the advanced networking services provided to the building occupants. As a Brand-Rex Approved Partner, we know how important a best in class network cabling infrastructure would be to the success of the project and decided that a Category 6A 10GPlus system for the horizontal and an optical fibre backbone from the FibrePlus portfolio would be the perfect solution.'

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Alaa Habanjar, country manager – Qatar, Kuwait and Levant at Brand-Rex, states:

'We wanted to go beyond the Ministry of Education's and Alamiah Technology Group's expectations by not just meeting Category 6_A performance standards, but exceeding them. 10GPlus is a 3P approved cabling system that has been rigorously tested under strict conditions and is manufactured in accordance with ISO 14001 and ISO 9001:2008. Meanwhile, for the fibre optic cable backbone, OM3 FibrePlus offered the most robust and resilient solution. The entire system is also backed up by an industry leading 25-year warranty, which the client found very impressive.'

After debating whether to use shielded or unshielded cable, it was decided to use the latter. Even though there has been a great deal of discussion in the press and elsewhere about the ability of unshielded twisted pair to achieve 10 Gigabit Ethernet performance due to alien crosstalk issues, this isn't a problem for 10GPlus U/UTP as it has a unique Reuleaux shaped cable that reduces interference from adjacent cables and incorporates very highly balanced pairs. This level of performance has been independently verified in 100m length testing for both the cable and the channel configurations.

The installation itself ran very smoothly, thanks in part to the design and flexibility of the Brand-Rex products. This was exemplified by the use of the company's tool-free snap-in-jacks, which revolutionise termination times.

The jacks are not only simple and quick to terminate, with a very low closure force, but their PCB design excellence offers exceptional electrical performance. They fit easily into standard panels and outlets, as well as high-density patch panels such as the Brand-Rex 48 port 1U panel.

Osama Seddik, project manager at ATG has been particularly pleased with the high level of technical and logistical support offered by Brand-Rex throughout the duration of the installation. He comments:

'We were responsible for the design, supply, installation, connection, labelling, termination, and testing of the structured cabling system, and Brand-Rex conducted extensive training for our team. Their technical and sales support is very thorough and highly effective, which helped overcome any challenges. The products were also delivered on time too, something that made life much easier on-site.'

With the new headquarters now fully operational, Kuwait has a building that mirrors the country's aspirations to have the most advanced learning and skills development programmes in the Middle East. Alaa Habanjar of Brand-Rex concludes:

'Once again, the use of our products has ensured a smooth installation. As well as offering excellent performance and unrivalled usability, its new infrastructure is guaranteed to support the Ministry of Education's operations for at least 25 years, offering unrivalled peace of mind.'



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