



TL ROBERTSON LIBRARY

## Siemon Powers the Future of Learning at Curtin University

Case Study

Reading Time: 4 min.

# Creating a Foundation for Learning

Curtin University is a publicly owned institution based in Perth, Western Australia. The institution's TL Robertson Library, built in 1972, is a state-of-the-art facility with over two million visitors a year and houses over one million books, journals, and other resources. The library is the largest and busiest building on Curtin's Bentley campus and is integral to the Curtin community. With ever-evolving technology and the development of a vast array of learning styles, Curtin University acknowledged a need to upgrade its facilities to support the student and library user's experience.

The university committed to a major upgrade of the library with significant network infrastructure changes, to provide a more digitally innovative and collaborative space for its students and users, aiming to bring the building into the 21st century.

The intended enhanced offerings of the new library required a network infrastructure, that could support the expanding bandwidth and wide array of new applications, while also providing a flexible foundation ready to support future updates. In addition, delivering a top level sustainability rating was imperative to support the university's ongoing commitment to environmental responsibility. Ensuring the most reliable and sustainable solution required a combination of both the highest performing, quality products as well as an experienced team of installation experts. After a rigorous tender process, including various vendors, the combination of Everett-Smith & Co and Siemon presented the ideal combination.

Founded in 1965, Everett-Smith & Co is one of the largest and well respected electrical engineering firms in Australia, with an excellent reputation for providing high-quality installation services. Siemon was selected as the provider for the project due to the product quality, performance and service levels they offer, as well as the organizations sustainability credentials, which track back to 1962.



**“The choice to select Siemon for this installation was a clear one for all involved. The client has a clearly defined specification, that required products of the highest quality, as well as exceptional reliability, and the vendor needed to be able to provide local availability and stock in Perth. We knew, that this made Siemon the best partner for the project given our experience of working with them on Building 418 previously at Curtin University. We weren't disappointed.”**

**— Trent Hackett**  
Project Manager, Everett-Smith & Co

# Creating a Space for Collaboration and Innovation

The new infrastructure design incorporated over 5,000 outlets with 150 Siemon consolidation enclosures to provide a flexible and scalable solution, that can help to future-proof the library as it grows and changes. With the expansion of the library, multiple consolidation points allow for ease of changes to the cabling configuration, without the need to re-run cables throughout the entire space. This in turn can be helpful in ensuring less wastage of materials and reduced future costs when making layout changes. In addition, the installation of multiple consolidation points helps to mitigate the complexity of troubleshooting and maintenance of the network. With a dedicated consolidation point to each area, it is now easier to identify and fix problems should they arise.

The digitalisation of Curtin's new spaces also meant an increased number of end devices to be supported, and one of Siemon's products provided the ideal option for simplifying field terminations. The Z-Plug™ is a field-terminatable solution that can be used to support both UTP & shielded connections and eliminates the need for outlets and patch cords for IP-based, PoE-enabled devices. The Z-Plug offers on-site fast connection to end devices and has the easiest repeatable termination process on the market. The plug's enhanced performance supports 10G system transmission performance, which is ideal for the library's high-speed requirements. It features a shorter plug design with rounded edges and the ability to eliminate the boot and latch protector to fit easily into tight spaces, perfect for connecting directly to end devices, such as security cameras.



To support the increased bandwidth, Siemon's industry-leading Z-MAX® category 6A shielded F/UTP cable & connectivity was chosen, which supports data transfer rates of up to 10 Gigabit per second, allowing for improved performance and extended reach. This presented a significant upgrade from the previous Category 5e system and gave the Curtin University team the ability to run Power Over Ethernet throughout the library to run various applications including AV, Wi-Fi, VoIP and Security. The entire solution is supported by Siemon's innovative PowerGUARD® technology, which prevents the erosion of plug and jack contacts at the mated location, when the plug is unmated under PoE load conditions.



Siemon's **PowerGUARD** technology with a 75°C operating temperature improves heat dissipation for reduced length derating and bundling requirements in remote powering applications, including PoE and power over HDBaseT (PoH).

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The newly refurbished library now offers numerous spaces for study, a maker space for creative projects, new event spaces and an AV-production room for creating content. The 15,000m2 of refurbished space also involves additional accessibility features including parent's rooms, resting rooms and a 24/7 student kitchen.



Now more than ever, companies are being urged to commit to more sustainable practices, and this was a critical factor within Curtin University's decision making. Siemon's long-standing commitment to sustainability is encapsulated by its sustainability pledge and ensures that users benefit from products, systems, and services that have been designed, built and delivered with this ethos in mind. The Curtin University library upgrade is a showcase for sustainable design and is a testament to the university's commitment to environmental stewardship.

**"The Siemon team feels very privileged to have supported this latest project with Curtin University. It has delivered a next-generation structured cabling infrastructure, that unlocks all the benefits of a PoE-enabled network. This upgrade provides the university with a quality, high performance and future-ready foundation, that will allow students and staff to enjoy the best experience possible while in that environment for many years to come."**

**— Ben Mok**

*State Manager for Western and Southern Australia at Siemon*



The new library network infrastructure now supports and encourages individuality of learning styles with 50 percent of the library now dedicated to collaboration and connection. It is structured to support the library's future plans for digital innovation and will provide its users with a high-quality experience for many years to come.

**“At Siemon, we pride ourselves on working with some of the largest educational organizations around the world. We work collaboratively with those institutions, their partners, and our own partner ecosystems, to design and deliver best-in-class fiber optic and copper network infrastructure solutions. These future-ready installations empower organizations and their students to harness their full potential and deliver experiences that support, educate and inspire. We thank everyone involved for choosing Siemon.”**

**— Luke Harmston**  
VP Sales APAC, Siemon

All photography used on pages 1 and 4 sourced from Curtin University ([www.curtin.edu.au](http://www.curtin.edu.au)).

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