



CASE STUDY: CSL GLOBAL HEADQUARTERS AND CENTRE FOR R&D

Architecture / Interior Design: COX Architecture **Specialised Laboratories Architecture:** Wood

Developer: PDG **Builder:** Roberts Co

Products:

- Glass Reinforced Shaft Liner Panel MP 25mm
- Aquachek 13mm Moisture Resistant Plasterboard
- Standard 13mm plasterboard
- Fyrchek Plasterboard 16mm



Background

Established in Australia in 1916 to service the health needs of a nation isolated by war; over the years CSL has evolved into a global biotechnology enterprise with presence across numerous continents, business sectors, and product offerings. In 2023, CSL moved into their new Global Headquarters in Melbourne, and the new facility - a reinvigorating rendition on CSL's founding campus in nearby Parkville - honours this exceptional heritage, while emerging as a state-of-the-art hub for cutting-edge scientific innovation.

"The new building provides a future-ready environment enabling the organisation to continue its contribution to biomedical science," says COX Architecture, the practice behind this significant project. "It also celebrates CSL's rich history while showcasing the organisation's values, particularly around healthier lives, medical innovation and superior performance."

COX Architecture's design - brought to life by a highly collaborative and multi-disciplinary team of clients, architects, designers, builders, engineers and suppliers - reinterprets the original horizontal campus as a vertical workplace triumph. A network of agile workspaces, development labs, exhibition areas, and various meeting, collaboration and retreat spaces is seamlessly connected by a green spine which, taking the form of a dynamic staircase linking all of the building's levels, emerges as a stunning design centrepiece.

While the transparent design showcases CSL's culture of innovation, a generous incorporation of internal planting and earthy colour palette emblematic of the Australian landscape fosters a biophilic environment that promotes wellbeing and productivity, while maintaining an essential connection with the building's geographical context.

"Australian hardwoods, eucalypt greens, soft ochres and stony greys define and link different programmatic areas whilst being warm and tactile," explains COX Architecture. "A custom artwork rug, based on a sketch of the local topology, connects both spaces within the building and pays homage to CSL's Parkville past - and Elizabeth Street future."

Sustainability was a key consideration, with the project achieving a Green Star Design Review rating and aiming for a 5 Star Green Star - Design & As Built rating. Designed with energy consumption, longevity and dematerialisation in mind, the building incorporates energy-efficient systems, water-saving technologies, onsite energy generation, and prioritises local, non-toxic, renewable, and recyclable materials.

Challenge

The project presented a complex challenge – creating a harmonious blend of diverse spaces within a single building, each with very distinct requirements. The laboratories demanded stringent hygiene standards and specific technical considerations, while the collaborative workspaces required flexibility and adaptability to support various work styles. Public exhibition areas needed to be welcoming and engaging, while maintaining the building's security protocols.

Balancing these diverse needs while upholding CSL's commitment to sustainability and aesthetic excellence presented a formidable task, and a selection of building materials that would meet rigorous performance standards, comply with safety regulations, and contribute to the desired visual and acoustic environment. Additionally, the materials had to be environmentally responsible, aligning with CSL's dedication to minimising their ecological footprint.

The project team also faced the challenge of ensuring seamless integration between different building systems and components. Achieving a cohesive and functional environment where everything worked together seamlessly required meticulous planning and coordination.

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Solution

To address these challenges, the project team turned to Gyprock, a renowned industry leader in plasterboard solutions. Gyprock's extensive range of products and their expertise in providing tailored solutions for complex architectural projects made them an ideal partner for this undertaking.

“Gyprock plasterboard products were used throughout the CSL fitout in wall and ceiling applications to create functional and comfortable spaces for users,” explains COX Architecture.

The standard 13mm plasterboard was used in meeting rooms, event spaces, and the auditorium to ensure optimal sound quality and minimise distractions. The moisture-resistant Aquachek 13mm plasterboard was applied in wet areas to prevent damage and ensure longevity, while Gyprock's fire-rated Fyrchek 16mm and Shaft Liner MP 25mm – a glass fibre-reinforced core with heavy-duty linerboard – were used to meet stringent fire safety regulations.

These products, along with recessed floor boxes, ensured the building's compliance with safety codes while maintaining its aesthetic integrity, while Gyprock's commitment to sustainability further highlighted its suitability for the project. The use of GECA-approved products manufactured with long warranties proved advantageous to the project, contributing to the building's overall environmental performance.

This innovative, highly considered and collaborative project certainly sets the scene for consequential scientific breakthroughs. At the same time, it reads as an outstanding example of sustainable design that masterfully fuses past, present and the future to foster comfort, wellbeing, creativity and innovation, while honouring the local typology. But the success of this project is perhaps best encapsulated by the results of a recent post-occupancy evaluation which boasted excellent scores across thermal comfort, acoustics, lighting levels – and connection to natural light and external views.