

## CASE STUDY



# Pushing the Boundaries of Perception: Fairfield Primary School in Melbourne, Australia

MBI member **Fleetwood Building Solutions** recently constructed and delivered an architectural centrepiece for Fairfield Primary School in Melbourne, Australia. The dedicated Years 5 & 6 learning communities are housed in a contemporary 2-storey building that pushes the boundaries of perception around design for modular construction.

The building replaces an existing permanent facility that had reached the end of its life. Delivering resilience through design, the project maximised the value proposition of the new building through a collaborative process. Structural and spatial solutions enabled a cost-effective refurbishment of the first-floor space from contemporary learning environments to a library and ERC “hub”, allowing this modular building to meet the changing future needs of a growing and vibrant school. Constructed off-site in 16 modules (733 sq. meters), which were then separately transported to site and installed, the project delivered extensive integrated outdoor educational spaces and decking areas linking learning areas with new social settings.

Maximising the established benefits of offsite construction, time, quality and cost, the project explored further opportunities to leverage other construction industry practises, resulting in a “hybrid” approach for the precast lift core. The deliberate evaluation of construction and factory build tolerances ensured a seamless delivery and installation process. The first floor of the building has been innovatively designed for both the current general learning environments and a potential future use as a library and education resource centre, allowing the cost-effective refurbishment of the first floor, extending the building’s useful life. This enhanced the project’s sustainability credentials beyond current best practice energy and operating cost control measures (e.g., the use of prefinished panel cladding which reduces ongoing school maintenance, and eliminating the safety risks associated with working at heights during the project life).



The catalyst for the project’s procurement through offsite construction was borne out of the inability for the project to be cost effectively delivered through traditional insitu construction. Working with a significant government agency, the project validated the pilot demonstration of the high-quality design and built form outcomes that can be achieved through prefabrication and modular construction. The adoption of a mass-customisation strategy yielded a cost-effective manufacturing platform approach, tailored to the project brief. The outcome is an architecture without compromise that delivers a high calibre spatial experience which is fit for purpose. Efficiencies in the supply chain can be harnessed through this approach, as well as maximising the use of local materials, certainty and control over supply and material provenance.

The project was completed in just 166 days and won First Place in MBI’s 2020 Awards of Distinction Contest in the Education Under 10,000 sq. ft. category.