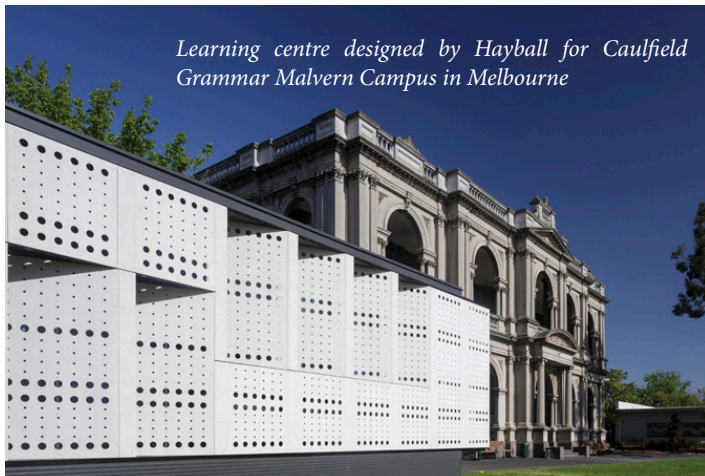


Modular shines when time is short and the site is challenging

ET Staff



When parents are clamouring for places and classrooms are needed in a hurry, the logical solution has been to buy or lease portables. They're cheap, can be delivered quickly, craned into position, services connected, furniture installed and they're ready for class. Though they may look inviting when new, they don't age gracefully. And they tend to take root... still there years later – utilitarian, unloved.

A mother of a son at a high-profile school Melbourne school said: "He's been in portable classrooms for the whole of his school career."

On the other hand, where there's time and good site access, in situ construction is the safe choice. But there's a third way and several recent highly successful projects have demonstrated that factory-built school buildings can deliver a great outcome.

Rob Colquhoun MD of Melbourne modular building specialist Prebuilt said: "the objective is to do minimal work on site and as much of the work as possible in the factory. It's a far better work environment and there are no hot, cold or wet weather delays.

"A modular building will be cost competitive, though not necessarily cheaper than building in situ, but when you factor in a handover date that can't be pushed back because the students are arriving next week, or the site is in the middle of a busy school, modular is a standout.

"We build and test-assemble the whole building in the factory so the modules will bolt together precisely on site. Our clients can inspect their building before it is delivered; they know in advance exactly what they will receive."

Though Prebuilt has talented building designers on staff, Colquhoun said that he would not embark on a school project without an architect to provide the design input and to manage planning and building permits and supervision of subcontractors.

"When a school comes to us direct, and they do, we will recommend that they commission an architect," he said. "Most architects are excited to be involved in a modular project, though sometimes it takes a bit of convincing to go away from a conventional build."

Three learning centres designed by Hayball for Caulfield Grammar School in Melbourne won the Overall and Education Innovation Awards in last year's Learning Environments Australasia Awards, the judges commenting: "...a prefabricated building designed for purposeful and

differentiated learning has been introduced to each campus, with 33 exceptional features. Each feature is pivotal to providing an engaging learning experience for students spanning the ages of 5–18 years, and the clear purpose of each offers teaching staff significant choice in how lessons are delivered."

Costing \$1.6m and \$1.5m respectively, the buildings at the school's Wheelers Hill and Caulfield campuses are mirror images, with a small deck added at Caulfield. The third, at the Malvern campus, sits beside the school's National Trust-classified Valentines Mansion on a tight site with very restricted access for trucks and machinery. Costing \$900,000 the four-module building features an angled perforated screen façade that tones with the of the grays of the Victorian mansion.

Principal Andrew Syme said: "Caulfield has a cultural change program and we wanted to find out what the response would be to prefabs. We knew that our community would not take well to anything less than inviting quality learning spaces.

And the outcome?

"We are working on another modular project and a refurbishment that will include modular units... time and access have been the deciding factors.

"We were very pleased with the Award win."

Architect David Tweedie is responsible for master-planning the school's three campuses. The Caulfield buildings were his first experience [of factory built] and, based on the successful outcomes, Hayball has since opted for modular construction for further school projects.

"It was something of a leap of faith for the school," he said. "Disruption was the key driver and at Malvern, the drawn-out process of obtaining heritage planning approval for a permanent structure.

"Portables have a bad reputation but they don't have to be ugly. We thought through what we wanted to achieve and worked with Prebuilt to find solutions. Design control was really important and to their credit, they were almost obsessively focused on the details."

Catholic Regional College Sydenham is the senior secondary College for feeder Catholic Regional Colleges in Melton, North Keilor, St Albans and Caroline Springs. Established in 1982, the College is the largest Catholic Senior Secondary College in Victoria. Current enrolment in Years 11 and 12 is 960 with another 700 students from schools, local businesses and

buildings and grounds

TAFEs in the area coming to the school weekly for VET courses.

With Melbourne's population in the outer western suburbs growing, the school was "...grappling with a desperate need for more classrooms in 2015," Principal Brendan Watson said.

Over his 11-year career with Catholic Education Victoria and as principal of Sydenham, Watson has been responsible for many building projects and knows what to look out for.

"The Sydenham Learning Commons was originally conceived as a conventional project and would have taken 18 months to complete but that was time we didn't have, and we would have had great difficulty with a construction site in the centre of the school, so a modular building was only workable solution.

"As it turned out, a comparison on a cost per square meter across Catholic Education Victoria building projects, worked out to be considerably less than we would usually expect to pay for an in situ build and we could afford to include a lift and some little luxuries, such as the swing bar."

The \$3.5 million contract for the 1200sqm building was awarded to Prebuilt and completed in six months from commencement in June to handover in November.

"We were concerned at the outset that the building might have the 'bouncy, echoey' feel of relocatables but Prebuilt suggested that we visit one of their modular McDonald's restaurants and that convinced us.

"Prebuilt trucked 28 modules to the site on the first day of the Term 3 holiday and when the students returned for Term 4, there was a new building ...their eyes told the story."

Designed by Henderson+Lodge Architects, the Learning Commons comprises six classrooms on the ground floor, offices, a library on the upper level with an under stairs nook for bookworms – and a substantial tree growing at the foot of the staircase.

Sydenham Learning Commons was not architect Joe Scully's first modular construction project, though it was the practice's first experience of working with Prebuilt.

He said: "We designed the building for the school and then Prebuilt worked out how to engineer it. The quality of the finishes and timberwork was outstanding."

Sunbury, 43km by road from Melbourne's CBD, used to be a sleepy little township but the population has boomed to 35,000 and it's becoming a popular choice for families wanting space, a home they can afford and a reasonable commute to the city.

And Salesian College keeps expanding to keep pace with the town's growth. At the heart of the sprawling campus is Rupertswood, a superb Victorian mansion built in 1874.

Five years back, when the school was debating whether to build an entirely new school elsewhere, or expand at Rupertswood, architects McIlldowie Partners developed a masterplan



to manage staged development. The two most recent projects are the Year 7 Savio Campus on the northern side of the complex and the Year 9 Centre to the east.

The Year 9 Centre is sited on a ridge overlooking the school's working farm on the floodplain. It replaced four very ordinary 1970s portables that Principal Mark Brockhus said would have cost as much to refurbish as starting again. It adjoins an old woolshed that has been brought back to life as an open learning commons and used for assemblies, dance, drama and agricultural science projects. Disability access is provided by a 100m timber walkway that links the Centre to nearby buildings.

Costing \$1.7 million the 700sqm two-storey Centre has glass fronted classrooms that open onto a large breakout area on the upper floor and four studios, staff rooms and toilets on the ground floor.

Brockhus said: "I like to get heavily involved in building design at the vision point and then leave the architects to get on with it... I love the soaring Year 9 atrium."

The project was McIlldowie Partners' first modular building project and architect Craig Brown admits that there was a degree of nervousness at the outset that evaporated as the project progressed.

"There is a Heritage overlay across the whole estate and we knew that the Council would take several months to assess the application. By building in the factory, the modules were ready to be delivered to site when the building permit was issued.

"Our experience at Salesian was very positive and we have gone onto use modular construction on other projects, including at a seven-story apartment block in South Yarra where we will lift a penthouse onto the roof."

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