



^automotive centre of excellence

architects

Lyons Architects

photography

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text

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architect's statement

The Automotive Centre of Excellence (ACE) represents the first stage of a dedicated training and showcase facility for Victorian automotive trades and manufacturing by Kangan Batman TAFE. Stage One ACE consists of approximately 2500 square metres of high-bay workshop space and a similar one for specialist workrooms, classrooms and office accommodation.

As the only fully publicly-funded project in Melbourne's Docklands, the project required a specific response. Funded by the state as an industrial TAFE facility, it was required to create its own identity within the 'glamour land' of Docklands. The project references and absorbs a range of sources from automotive culture, and its relationship with the city – kerb signs, tyre treads, the adjacent Charles Grimes overpass, the sheen of car showrooms and the emblematic pitched roof of the pre-existing dock sheds. The interiors are intended to evoke something of the automotive predilection for contrasting the technological and mechanical with the finished and the smooth.

The primary automotive workshops have a façade system built out of industrial shed technologies, and transformed into a weave-like pattern of mullions and supporting structure. These workshops have significant areas of glazing, to allow the space of the city and passing motorists to view into the activities within the workshops. These workshops are ventilated through a series of continuous horizontal louvres.

Offices and classroom spaces face north and are also naturally ventilated via a permeable deep black façade. These spaces are also heated and cooled by a unique BATISO active thermal mass system. In concert with other environmental sustainable design features including radiant night cooling and water harvesting, ACE State One has achieved a five-star Green Star rating for design.

Conceived of as a small civic space, the main foyer space with its monumental staircase, acts as the key circulation pathway through the building while also acting as a thermal chimney for the administration and teaching areas. From this space visitors experience a 'transition' from traditional technical college materiality: raw blockwork, exposed steel and concrete to contemporary applications of carbon fibre and glass projection technology.



01. Essentially a training and service centre, the new Automotive Centre of Excellence achieves significant civic presence for such a industrial/educational program.

02. 03. A dynamic woven pattern of mullions and support structure, wraps around the otherwise functional interiors, here seen from two workshop areas on the first floor.

04. The building is expressed as a play of transparency and opacity. The activities of the centre are highly visual to the passer-by, while the dense urban fabric of the surrounding Docklands is visible from much of the workshops' interiors.

05. The building's dramatic presence at night is compounded by a full height glass wall revealing a monumental staircase and foyer space.

06. The chevron-like façade to the southern elevation helps protect the interior from the heavily trafficked street, while also forming a hyper-graphic gateway, for motorists exiting the highway and arriving at the Docklands.

ace stage one

What should the contemporary civic building look like? There are no set rules, and with no systems to tell us what architectural language they should employ, these projects offer an opportunity to innovate a new system. Unshackled from the 19th century, last century's modern architects dismissed decoration, rules and typology, only to install a new dogma of consistency, repetition and abstraction. The post-modernists' rejection of this sought to draw from historical forms to try and extract meaning from the memory of the pre-modern.

Lyons' work has often been linked to Robert Venturi's potent notion of the 'decorated shed' – flat decoration in the millimetres of the façade. This fast and furious new project is one of a series that has moved more toward form and surface as the key strategies. Lyon's 2001 Victoria University Plumbing School in Melbourne's western suburb of Sunshine is a true dec-shed, but like this project also recreates the factory floor for 'hands-on' workshop-based learning.

How then does this building successfully become more prominent, or more civic, than the other numerous larger buildings at the Docklands? Partly the siting strategy gives the building prominence, but this only helps if the building's language is strong. A project like this draws from a combination of program and context to inform its language of form, surface and type. The allure of cars – detailing, spray painting, panel beating are to be taught in this building; and the project picks up on colours and patterns of car culture. Nearby sheds provide contextual cues, with their horizontal extrusion and engagement with roof form – distinct from the otherwise pervasive Docklands culture of multi-level residential and commercial towers.

The brick warehouse across the road, housing a car museum, was a catalyst for the siting of the project. Together they form an automotive precinct – a ground level boutique workshop in the new building faces the museum and will service these cars, with views into this shopfront-like facility.

The building is both shed-like and not: an expressed steel construction, large open factory spaces, shallow pitched roof and overall horizontality. Its northern elevation, however, with its jagged and cranking form, tells a different story. Indeed the project has two halves; according to the architects the north side addresses the civic side of the project and houses the teaching spaces, circulation and offices, while the south side addresses the busy road and is essentially two factory floors stacked on each other. The southern façade treatment is split: large chevron-like emblems diagonally cross the façade on the southern half, alternating between solid cladding and glass. Here the primary structure is of vertical steel columns; however, both cladding/glazing and secondary structure are angled – in this way the diamond-like pattern is ingrained into the building's structure and not just appliqué. The half closed/half open façade allows for a strong relationship with the busy road and intersection outside. Particularly on the first floor there is a sense of elevation in an industrial-like context.

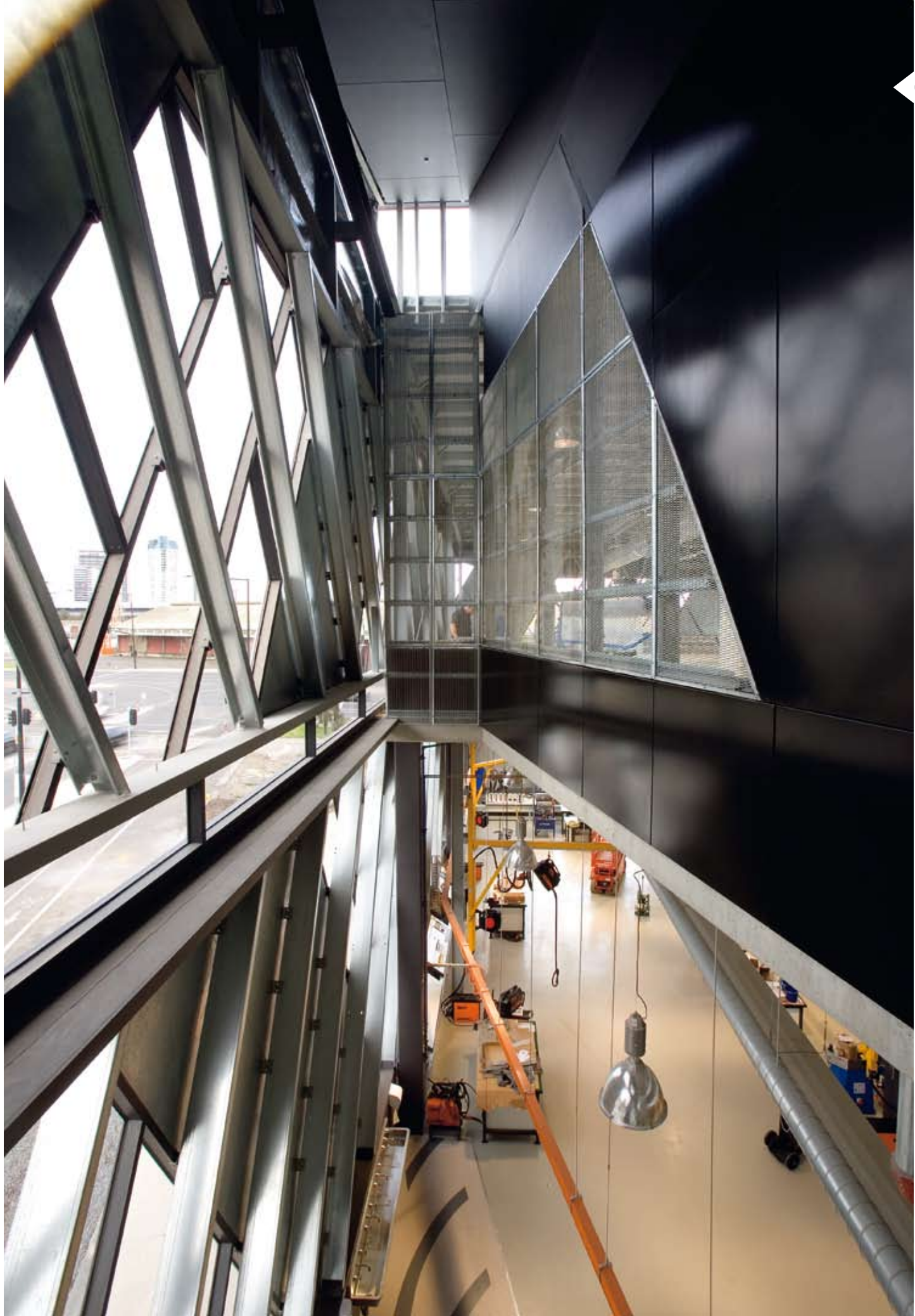
This is reminiscent of older types of manufacturing spaces, when vertically organised factories and mills within cities were common, before their migration to the suburbs.

A frieze-like horizontal rebate, or 'go-faster' stripe, acts to both express the floor slab and also to shift the patterning between ground and first floor levels. The giant chevrons act like large road signage to the wide Charles Grimes Bridge, bringing freeway users into the Docklands, suggesting direction in this new part of town. A more literal use of pattern is the tyre track ground treatment that leads to one of the two entries on the north half of the building, designed by the Landscape Architects, Rush Wright. The building has achieved a five-star rating, incorporating in-slab heating and cooling, while natural ventilation renders air-conditioning of the 20th century redundant. The northern façade system allows air intake, like a grill on a car, a machine.

The northern half of the building uses a large glazed wall, facing east to illuminate the tall stairwell space – this wraps on the northern elevation where deep-set strip windows cleverly form over the glass wall. The western face is metal deck sheeting with the chevron pattern continued, and is the side to which the campus will expand. The black roof becomes a unifying element over the project and overhangs on the north-east entry corner to form a sharp super-canopy for entry; this corner addressing both the street and the future plaza space to the north of the building. This entry takes you into the high stairwell, which forms part of a footpath-like public spine that comes into the building and escorts you to the workshops and mezzanine levels. In this space, angled steel braces fix the glass wall system back to the main structure. As well as optimising the steel used in this wall, these spokes flying across the void suggest a dynamic and efficient structure, something Formula One. Similar moves can be identified in the use of Ferrari red and British racing green, in areas of walling and joinery. For the most part, however, raw concrete block is extensively used internally, with steel and the occasional strips of timber 'trim' – such as for handrails. The project's main colour from the outside, however, is black, formed through painted Exotec cladding. Both the building's blackness and the viewing space around the building distinguish it from its surrounds – helping it look special.

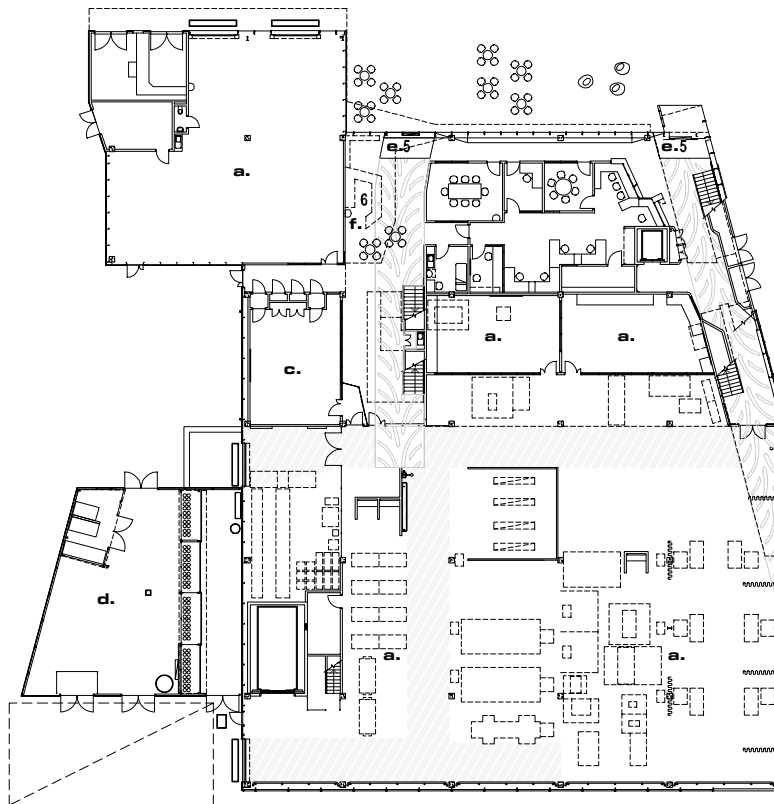
Can we judge this building's success by its context? Walter Butler's Mission to Seaman building of 1917, diagonally opposite, works in a similar way – a ground-based building that employs different languages to address particular programmatic and urban concerns. Lyons' desire to form a civic face for a flagship campus building, and indeed for all of Docklands, works on both the north and south sides, but perhaps best on the car-like side profile where both the diamond like chevron figure meets the expressed stair, the canopy overhangs and the streamlined roof bears down; ready to go.







ground level



legend.

- a. workshop
- b. admin / office
- c. training room
- d. external store
- e. entry
- f. cafe



ace stage one

principal architects Lyons **project team** Carey Lyon, Adrian Stanic, Stefano Scalzo, Darren Snowden, Michael Markham, Joseph Reyes, John Powell, Edward Berry, Alan Gibbons, Jessica Jen **project manager** Carson Group **consultants: engineer** ULA (Building Services), ULE (ESD), Robert Bird Group (Structural and Civil) **quantity surveyor** Wilde and Woollard **builder** Hansen Yunken **landscape architect** RushWright Associates **paint** booth advisers Lowbake BS PLP **acoustics** WMG **traffic engineering** Ratio **façade** Connell Wagner **size** 4500sqm **time to complete** 13 months **council** VicUrban **client** DET, Kangan Batman TAFE **design software used** ACAD **materials: walls** concrete block, Designer Block (Boral) **wall linings** rubber, Astral (Activa) **cladding** metal deck, Spandek (BlueScope Steel) compressed cement sheet, Exotec (James Hardie) composite aluminum panel, Symonite (Symonite) **roof** metal deck, Spandek (BlueScope Steel) **paint** external painting to Exotec, Grandskin (Wattyl) **windows** aluminum windows, St Kilda and Flushline (Capral) **glazing** atrium glazing, Comfortone Plus (Pilkington) **hardware** Lockwood **signage** Signcraft **heating/cooling systems** BATISO, chilled beams **interior materials: projection glazing** I-Glass (ADT) **acoustic panels** AcousticPro (Chessoir Industries) **paint** handrail stain, Detol TS (Sikkens) **lighting/light fittings** Zumbobel, Versalux, Inlite, Pierlite **flooring** rubber, Cosmo (Activa) **surfaces** laminate (Laminex) **joinery** carbon fibre (Topstage) **furniture** workstations (Schiavello) **audiovisual fittings/equipment** projectors (DRM Audio) **fittings and fixtures** Caroma, Enware