

WELCOME

03

Welcome to the third edition of FOLIO, where we explore how materials help to both inspire and create great architecture. A magazine by **Brickworks Building Products**, each issue of FOLIO sets out to unpick the design thinking behind a selection of exceptional buildings to understand how and why a specific material—be it brick, concrete, timber or tile—was used. In this issue we showcase projects by esteemed architects, including John Wardle Architects, BVN Architecture, ARM Architecture, and more, and profile practice WOWOWA.

As with previous issues, our editorial emphasis is on architectural ideas and, importantly, how these ideas are made real through material and construction. Whether you're in the business of architecture, looking to commission an architect, or just passionate about good design, **FL**I**O** should prove to be both a source of inspiration and an invaluable reference tool. We hope you enjoy the issue.

– Lindsay Partridge

MANAGING DIRECTOR, BRICKWORKS BUILDING PRODUCTS **[06]** WOWOWA

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ERRATUM

Folio magazine apologises for a misattribution in Folio 2, page 56. Our "Street Performer" feature incorrectly identified the architect for Kensington Street. **Tonkin Zulaikha Greer** was the architect for the Kensington Street Precinct, while **Turf Design Studio** in collaboration with **Jeppe Aagaard Andersen** were the landscape architects for Kensington Street. Folio recognises large complex public projects such as the Kensington Street Precinct are made up of multidisciplinary teams and this credit may have created confusion around the authorship of this project.

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P.06 Casa de Gatos interior. Image-Martina Gemmola





From left to right: Andre Bonnice, Monique Woodward and Scott Woodward

WOWOWA is renowned for its clever use of materials, a playful approach to colour and a love of celebrating Australian culture through design.

[07]

[08]

orofile Wowowa

Wowowhoa! A practice with such an emphatic name can only be inspired by banana Paddle Pops, the vernacular of the Aussie Hills Hoist and a floor-to-ceiling cat-scratchable feature wall. At WOWOWA more is always more.

'Say it with conviction and you'll get it right,' says Monique Woodward, one of three directors at the Melbourne-based architectural studio alliteratively named WOWOWA. Pronounce it phonetically, like you're really surprised, and you're in the door. Monique and husband Scott Woodward opened WoodWoodWard in 2010 using their surnames as their practice name, but when that domain name wasn't available, it was abbreviated to the more lyrical WOWOWA.

In 2016 longtime friend Andre Bonnice joined the practice, helping Scott and Monique to expand their mostly residential practice into more community-orientated public projects. They studied together at RMIT University and share an interest in combining art and architecture. Scott and Monique had collaborated with Andre on the Port Melbourne Pool pro-bono project. The collaboration worked so well together that they decided to officiate the partnership. The practice now numbers 10-all women besides Scott and Andre. 'It's basically a power team of ladies,' says Monique.

Monique is co-chair of the Australian Institute of Architects' Small Practice Forum, a Victorian Chapter councillor (EmAGN chair). Monique and her co-directors teach at various Melbourne universities and consider WOWOWA 'to be a teaching office, where everyone can upskill and try and be the best architect they can be'. To that end, the directors have deliberately created a nonhierarchical environment. Everyone sits in a circular, inwardfacing desk configuration, where conversation about projects becomes ambient noise and everyone is encouraged to contribute regardless of who's working on what. The mantra of the studio has always been: 'Create the office you wished you worked at as a student,' Monique says. 'It feels like that is the "why" of what we do, in the projects we take on and in the culture that we have within the practice.'

The practice's studio is set-up in a cosy shopfront on Rathdowne Street in Melbourne's Carlton North (formerly the home of cult video shop Small Screen). The syllables 'WO' 'WO' 'WA' are vertically stacked in thick gold lettering on the window, deliberately drawing passersby to peer inside. 'One test of a new client for us is how much they like colour. We tell them "you know we're going to try and pick some pretty crazy colours right—are you good with that?" If they are then we're good.'

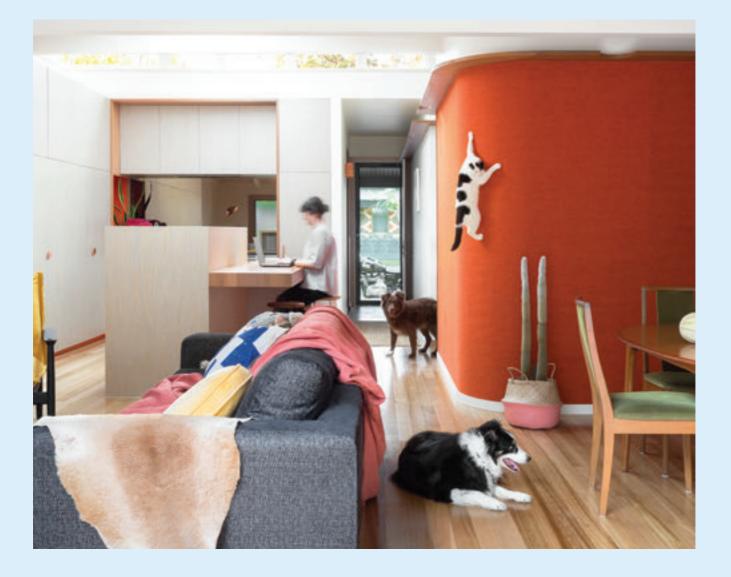
Colour is of course a dramatic through-theme in the practice's output. Their projects are marked by pantone abandon: Paddle Pop yellow, Bottle Brush red, Rainbow trout pink and fiesta-level orange. Then there's the wild embrace of Australiana and Australian architecture. The practice website states: 'WOWOWA architecture celebrates Australian culture, the kitsch and a love of daffy colloquialisms translated into architectural ambition.'

'It's reinterpreting. It's not kitsch for kitsch sake. It's playing with the level of nostalgia. It's a general ambition to be playful and to try and really unpack what it is to live in contemporary spaces and to live in these conditions in Melbourne, where there are six or seven different climates.

P.09—1 Exterior of the Finn house.
Image—John Gollings
—2 Interior of Casa de Gatos.
Image—Martina Gemmola

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It's a general ambition to be playful and unpack what it is to live in contemporary spaces and conditions where there are six or seven different climates.

P.10 & P.11 –1
Tedwardian house interior.
–2 Pillar Talk house interior.
Images–Martina Gemmola







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'We embrace the traditional owners of the land and their keen relationship to seasonality, which is different from the four European seasons. 'We like putting different materials together, being experimental with what goes with what. Embellishing the ordinary into the extraordinary. So it doesn't necessarily need expensive material, but it might be materials coupled in unexpected ways. There's joy in that. It seems like a clever find that they went together.'

In Merri Creek house the team pair copper bricks with a beautiful orange brick, creating gleaming circularbricked turrets. The dreamy peachcoloured bathroom in Pillar Talk bungalow is apparently Inside Out magazine's 'Most Pinned Picture' -a covetable prop for any modern architect. The Tiger Prawn client found the practice via WOWOWA's YouTube series If You Were Mine, which was created as a word-ofmouth stunt to promote the studio's work, but its popularity segued into Monique being invited to host the Community Designs television show on Channel 31.

The client called up saying 'We've got a Tiger Prawn house!' and the project quickly developed an under-the-sea theme with a scallop gesture, though the name was originally a reference to the bricks at the front of the house. The scallops form a 'castlelike' facade, which rolls around the corner and peels away (much like the corners on their as-yet un-built Literature Lane tower) to create an interesting side angle.

'Victorian terraces are really stripy horizontally and we wanted to create a similar ornamentation, but with a vertical perspective. The clients love grey, and raw tiger prawns are grey and green, so that became the colour theme for the outside,' says Monique. The Forever house is an exercise in creative camouflage. 'They're all clinker brick houses in that area and we wanted to do a contemporary reinterpretation of the traditional clinker style,' says Scott. 'The clients gave us a picture of a rainbow trout as one of their inspiration images and a lot of ideas came from that.'

'We do that a lot actually—ask clients to pick their spirit colour animal, because we find there are nuances within that rather than just one solid colour. The aspiration for this client was that the alterations to the house would be the belly of the fish, which is rainbow-coloured. So when you get up close you can see the house is made up of seven different coloured bricks, not just one, and it's all contextualised in the lineage of clinker bricks, in a way.'

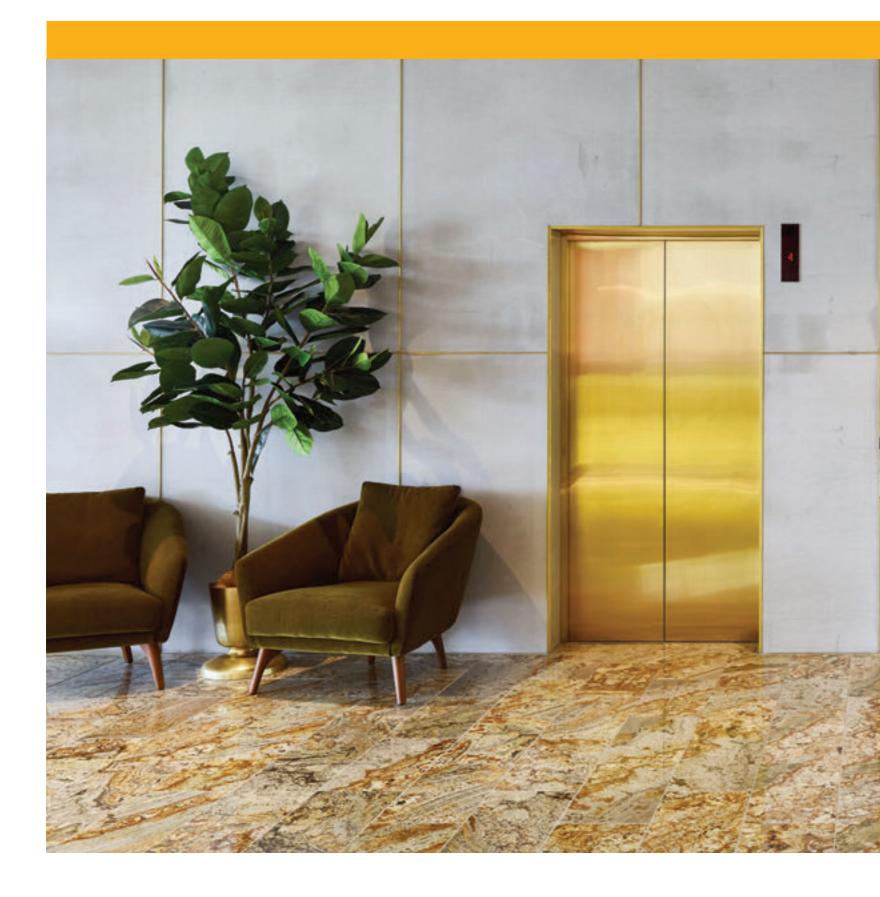
'We use the term radically conservative and ask how do we celebrate a particular element of an existing typology?' explains Monique. 'The colour is coming from something. It's enounced,' says Scott. 'The spirit animal helps sell the colour back to the client. It gives them a narrative that they can get behind.'

WOWOWA's contribution to the forthcoming Nightingale Housing project 'will definitely be the most colourful,' says Andre. WOWOWA is collaborating with Breathe Architecture on the precinct—where seven architects will design seven buildings for seven communities this will be a landmark project that reflects WOWOWA's passion for challenging the status quo. ● **P.12** —1 Exterior view of Tiger Prawn house. Image—Shannon McGrath

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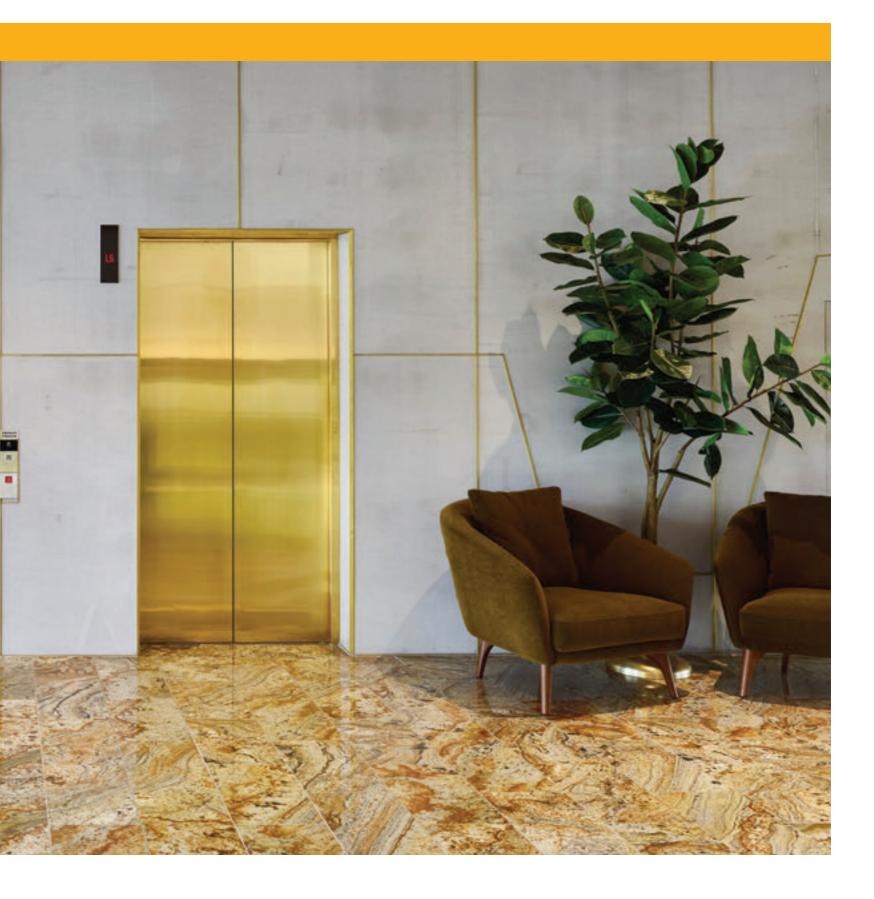
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Attractor factor



EATONS HILL HOTEL COMPLEX

Architect Cox Architecture Location Eatons Hill, Brisbane Year of completion 2017 **P.14** The lift lobby at Eatons Hill Hotel fuses raw unfinished INEX cladding with metallic details in golden hues.





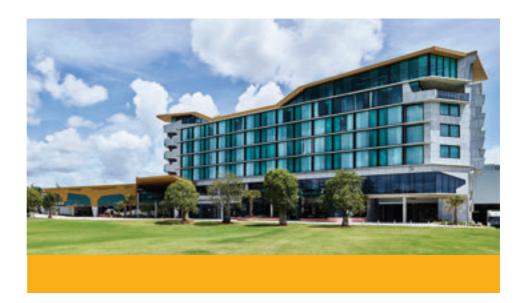
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A luxury hotel and a shopping and entertainment complex designed by *Cox Architecture* signals the future growth of this quiet suburb on Brisbane's edge as both a leisure and business destination.

Twenty kilometres northwest of Brisbane's CBD, Eatons Hill may seem an unlikely location for this Cox Architecture-designed, 4.5-star hotel. Surrounded by low-set suburban dwellings and open green space, this sevenstorey hotel currently outscales its urban environment. However, by rising above its context, with a monumental, yet site-specific aesthetic, the Eatons Hill Hotel Complex heralds the future popularity of this unassuming suburb as both an entertainment and business destination.

Late 2017, the Eatons Hill Hotel Complex unfolded its elegant, goldcoloured wings to the public. Its robust, concrete-clad body towers above expansive park reserves, the city-fed artery of South Pine Road, and the popular pub and music venue Eatons Hill Hotel.

As client for this new hotel complex, the Comiskey Group saw present and future needs for luxury accommodation in Eatons Hill. Alongside the popularity of the existing entertainment venue also owned by Comiskey—Eatons Hill is close to the Brisbane Entertainment Centre, Brisbane Airport, and adjacent to Brendale, a growing industrial estate, which

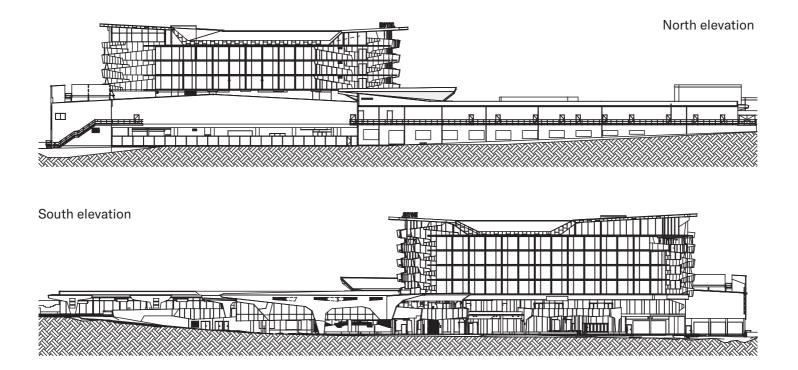


when fully developed, will be one of the largest in the country. This new hotel is the first of its kind in this gradually growing northern suburb and is also designed to meet community demands for a shopping and entertainment district, with Cox Architecture creating a dynamic program for this complex.

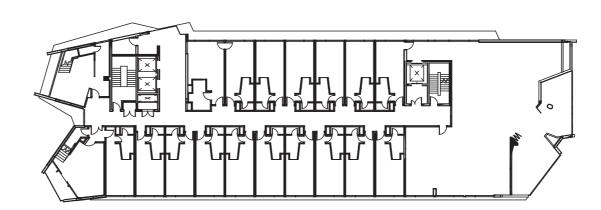
Its bold, angular forms are striking, with its distinctive gold-coloured terrace roof structure rising upward. The roof artfully winds around the carpark, sheltering specialty stores and cafes. Matching gold-coloured soffit lining reflects and distributes light beneath the terrace roof, with openings for light and air to filter into the public space below. **P.16** The hotel lobby continues the gold-flecked theme, including soft furnishings that give off a similar sheen.

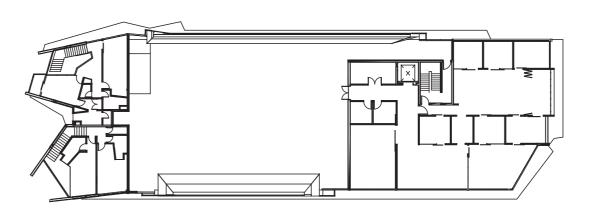
P.17 A composition of grey INEX cladding, cut in a variation of dynamic geometries, lends visual interest to the building exterior.





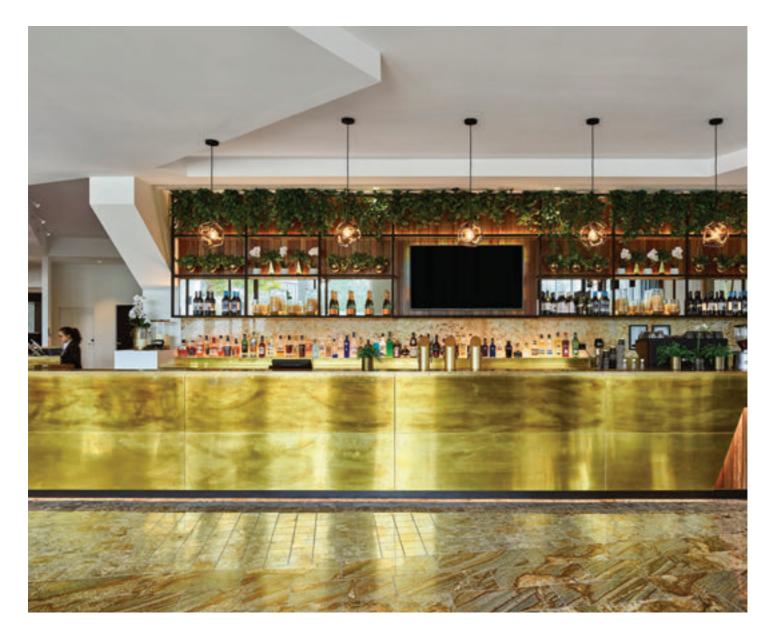
We always say if you build something special, it's like that *Field of Dreams* thing, 'if you build it then they'll come'.





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the hotel turns and angles its stone-clad body towards prominent views, maximising its outlook over the surrounding open spaces and park reserves. Despite the opacity of this towering form, within communal zones, the curious public can peer indirectly into conference and restaurant areas. The hotel's projecting balconies, extended floor plates and angular concrete fins are

Above this busy community space,

and angular concrete fins are crowned by its soaring roof structure. The overall effect is that of an agile, yet regal monument, proudly overlooking its domain.

INEX cladding has been used throughout to unify the design scheme. INEX Wallboard, a high-

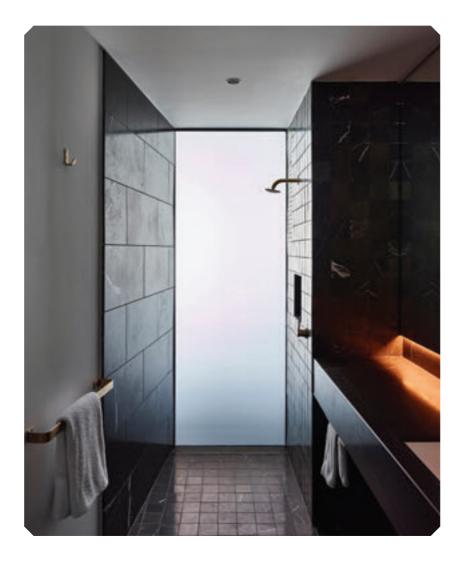
strength engineered cementitious composite, is used alongside INEX Renderboard for high-use public areas. For the hotel tower, raw concrete INEX Renderboard panels have an intricate, tessellating pattern that softens its large scale in a suburban context. In public zones, raw concrete finished INEX Wallboard for wall and column cladding complements the red-tinted honed concrete of planter beds and floor plates. The placement of the terrace roof and the soffit lining alongside the INEX wallboard sets up an interesting material contrast.

Sleek, golden surfaces suggest luxury, while the earthier palette of INEX and rust-coloured concrete are in keeping with its suburban context. Since its opening, the shopping village has become a vibrant community meeting place. Casey Vallance, design leader at Cox Architecture, says the complex fulfils its conceptual intent, to create an engaging experience for visitors where a 'variety of spaces are shaped to show care, dignity and delight'.

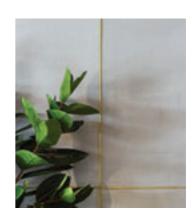
The hotel is still in its early days of operation, just opening its doors to its first guests, and yet to assume its role as a popular luxury hotel destination. What will 'future-proof' the Eatons Hill Hotel Complex, though, is its active public program alongside its iconic and durable material aesthetic, as it gracefully settles amongst its surroundings, and awaits the crowds to come. ●



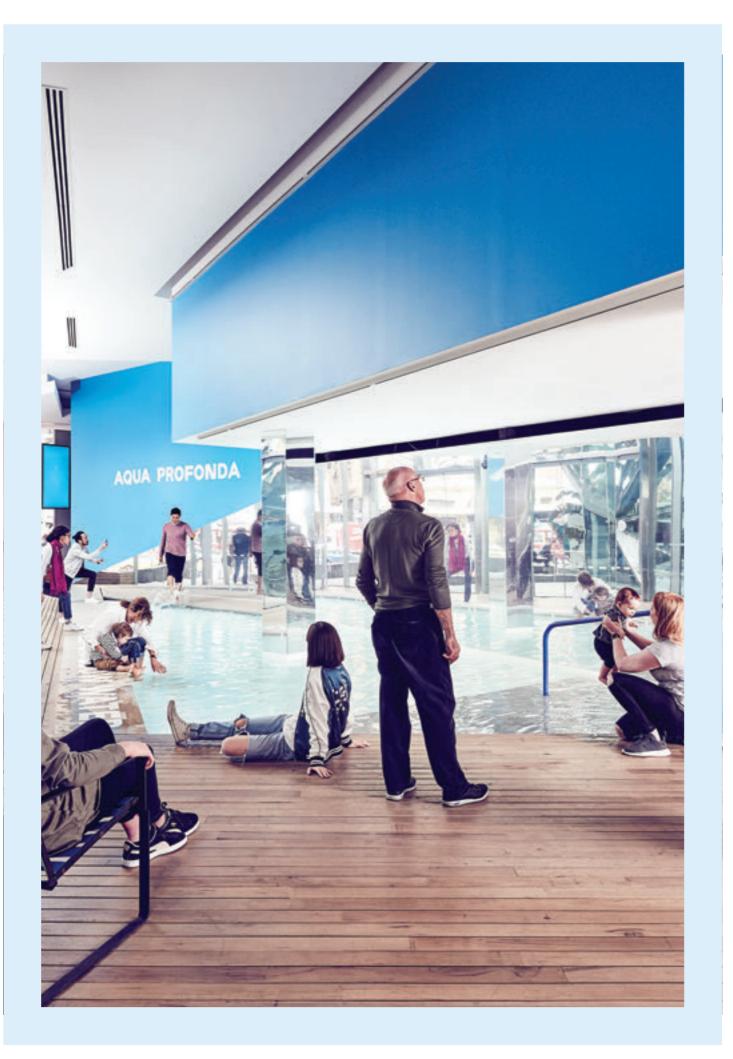
P.20 Golden hues continue in the bar area, with natural light reflecting off the various surfaces.
P.21-1 Progressing through the building, the lift lobby walls switch from light to dark. -2 High-quality materials have been used throughout the complex, including guest bathrooms.



INEX board has been used throughout the Eatons Hill Hotel Complex to unify the design scheme, with INEX Wallboard, a high-strength engineered cementitious composite, used alongside INEX Renderboard for high-use public areas. The hotel tower's raw concrete INEX Renderboard panels have an intricate, tessellating pattern that softens its large scale in its suburban context. For more information on INEX board, go to page 103.



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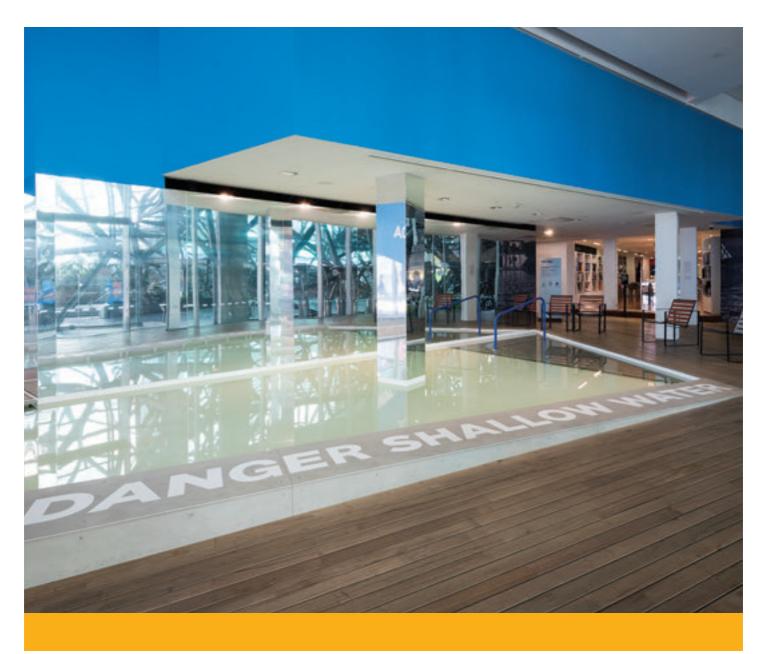
View from the edge

THE POOL

Curators Amelia Holliday, Isabelle Toland, Michelle Tabet Location National Gallery of Victoria Exhibition date 2017-2018



The Pool is a fresh and joyful exhibition that extends the practice and thinking of architecture, and celebrates the ways in which pools as places affect us both socially and culturally.



Swimming may be the most common sporting activity in Australia, but as The Pool exhibition at the National Gallery of Victoria suggests, we are also champion voyeurs. We like to watch. Sure we like to get fit, but the pool is a place to hang out, soak in the sun and cool off from taking it all in—ogling others, keeping vigil over kids and admiring ourselves.

Peer through the glass walls of the NGV design gallery on busy Flinders Street and that sense of voyeurism is writ large. A shallow wading pool has been recreated. Above it are the words 'Aqua Profonda'—deep water. It's less irony than homage to the Fitzroy Swimming Pool, which still carries this quaint Italian misspelling.

Follow the undulating timber decking down to the deep end of Flinders Street, past a pool ladder on a gallery pylon, and a blown-up underwater image depicts friends swimming in architect Robin Williams' Villa Marittima pool. At the shallow end of the gallery is another image, displaying the structural gymnastics of the Melbourne Olympic Swimming Pool from the 1956 Summer Olympics. Its taut grandstands span like a swimmer's latissimus dorsi muscles. **P.24–25** Installation view of The Pool: Architecture, Culture and Identity, exhibition by Aileen Sage Architects (Isabelle Toland and Amelia Holliday) with Michelle Tabet, at NGV Australia 2017.

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Before us in this giant glass 'tank' is a celebration of Australian public and private spaces, as seen through the prism of the pool.

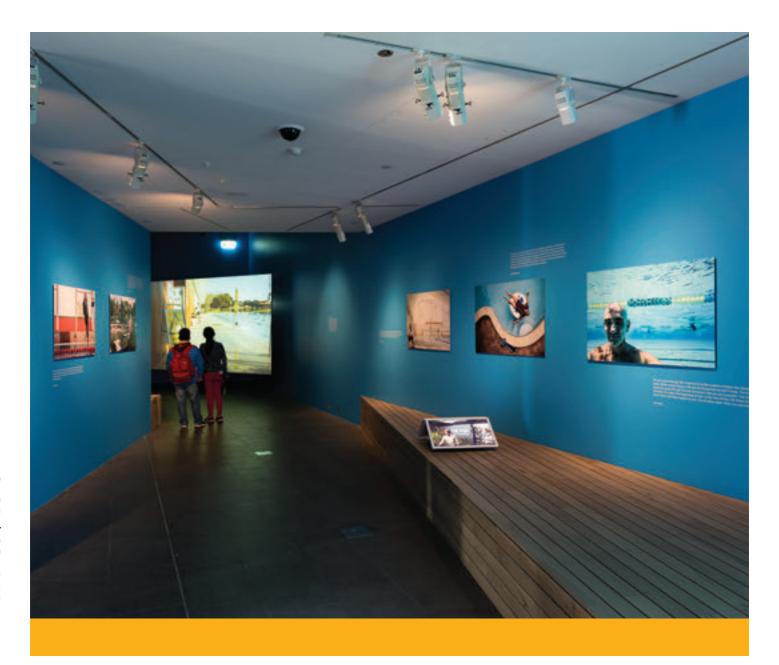
Creative directors, Amelia Holliday, Isabelle Toland and Michelle Tabet, first took The Pool to Italy as Australia's entry into the 2016 Venice Architecture Biennale. It reflects on architecture, national identity and our way of life. 'We liked this idea of cultural narrative and how it informs projects,' says Holliday. 'As architects that's as important to us as making crazy forms or exploring particular new materials.'

Walk in and around the striking recreation of a public wading pool and what's noticeable is what's noticeably absent—the smell of chlorine. Artists Lyn Balzer and Tony Perkins, together with scent designer Maison Balzac, created L'Étrangeté, a 'two-part scent', evoking smoky bushfires and the bush after rain. 'From the beginning, we were interested in using a scent to evoke a sense of the Australian landscape,' says Holliday. 'We didn't want the exhibition to just be about manmade indoor aquatic centre pools, but also natural waterholes and coastal pools. We wanted it to represent all these different places.

For international audiences it had an other-worldly smell.'

Everyone has a formative experience associated with the swimming pool. The exhibition features eight prominent Australians—including environmentalist Tim Flannery, Olympic swimmer Shane Gould, singer Paul Kelly, and author Christos Tsiolkas—each delivering evocative personal stories that emanate through a richly layered soundscape.

Composer Bree van Reyk's specially commissioned soundtrack takes core elements of Peter Sculthorpe's melody from *Djilile* (1986), which in turn is based on an Indigenous melody



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that translates as 'whistling duck on a billabong', and weaves the stories and music together.

Indigenous presence is felt further. Hettie Perkins retells the story of a landmark indigenous rights showdown at the Moree pool, led by her father Charles Perkins and his Freedom Riders during the mid-1960s. The stories can be heard while sitting around the pool in chairs designed by Elliat Rich in collaboration with the indigenous training and enterprise workshop centre. The colour bands on the poolside chairs—orange, blue and turquoise—inspired by the colours of the now demolished Moree pool grandstand. Rich's Anerle-aneme chair takes its name from Central Australia's Arrernte language and translates as 'sit a little while'. 'We love the idea that [visitors] could customise public space and move the chairs around,' says Holliday.

Visitors are also encouraged to wade into the less than 300mm deep pool. Made from stainless steel with an acrylic liner, it's a construction system the creative directors were familiar with. While at Neeson Murcutt Architects, they worked on the award-winning Prince Alfred Park Pool in Sydney, which also features in the exhibition. P.26 Timber decking and
Elliat Rich's Anerle-aneme chair

a collaboration between Elliat

and the Centre for Appropriate
Technology's Enterprise Workshop.
P.27 Paul Kelly is one of eight
Australians featured in the exhibition, who share their experiences of architecture and culture.

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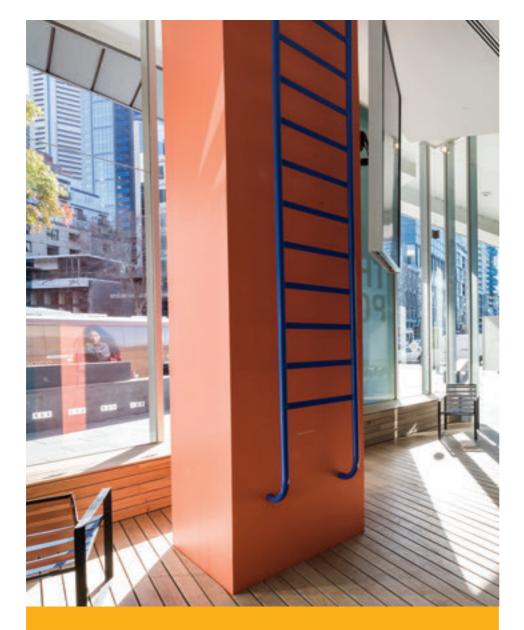
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That experience prompted the idea for the exhibition. 'We were interested in a piece of architecture that people of different generations can engage with,' says Holliday. Indeed, in Venice, the pool proved universally popular. During the opening three days of the notoriously hot vernissage, Holliday remembers board members from the Guggenheim Museum cooling off in the pool. 'Very elegant ladies and gentlemen, as well as young kids, were taking off their shoes and wading,' she says.

'The decking was really important because we wanted people to feel comfortable taking off their shoes. The prefinished timber allows water to drain off easily and avoid footprints. It's also a system that clicks in and clicks out so we were able to maintain access to the floor underneath.'

While much of the exhibition's structure and content is essentially the same, in the move from Venice to Melbourne the layout has been altered to fit the narrower space. The case studies focus largely on startling Victorian projects. Not that the exhibition design short-changes viewers. If the turquoise walls in the front room are suggestive of being underwater, the entry to the second room accentuates it. Here we walk through a giant image of Villa Marittima's pool. It's a nice touch. Simultaneously, the effect recreates the St Andrews beach house's spectacular subterranean viewing room, where swimmers can be seen frolicking. What we see are slowmotion projections of landmark pools, including the Bondi Icebergs, Villa Marittima and Kennedy Nolan's Fairfield house pool, emulating the natural filtration of a billabong.

Similar to the front room, we view these pools from timber bleachers that wrap around the edge of the pool. 'It emulates the grandstand seating around coastal and municipal pools,' explains Holliday.



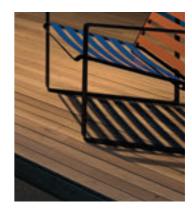
The edge itself is an important aspect to the pool. 'The pool is a space that speaks to the natural and manmade edge—whether that be a coastal pool, which we have a lot of in Sydney, or the municipal pool with its hard concrete,' says Holliday. 'It exists in lots of different forms. The edge is a place where architects engage with and help define. It's also a reminder for architects that great places that really resonate with people aren't always highly designed spaces.'

The edge is also a place where we keep vigil. Indeed, as the creative directors' research discovered, municipalities built pools as safe options away from the dangers of vast oceans, chaotic rivers and dams. Still, we seem fearful. A video segment identifies the plethora of warning signs around pools, including Fitzroy's famous Aqua Profonda. Watching becomes a precautionary measure.

As Australian swimming legend Ian Thorpe reminded the audience in his opening speech in Venice: 'Swimming is the only sport that starts with survival.'

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'The decking was really important because we wanted people to feel comfortable taking off their shoes. The prefinished timber [Auswest Timbers Silvertop Ash] allows water to drain off easily and avoid footprints. It's also a system that clicks in and clicks out so we were able to maintain access to the floor underneath,' says Amelia Holliday, curator. For more information on Auswest Timbers Silvertop Ash, go to page 104.



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A brick veil

AUSTRALIAN EMBASSY COMPLEX

Architect BVN Landscape architect The Beaumont Partnership Location Bangkok, Thailand Year of completion 2017

P.30 Brick became the lead material in the Australian Embassy Complex.







Brick is the hero material in **BVN Architecture's** Australian Embassy Complex in Thailand, in a design that blends materials and architectural and landscape characteristics from both Australia and the embassy's host nation.

In his book *Deep Veils*, Singaporebased architect Erik L'Heureux describes the evolution of western 20th-century buildings in the equatorial zone and the region's impact on the way building envelopes are conceived and built.

In this, he identifies the tension between the early modernist attitude to reveal the interior through compositions of taut glass facades that enclose air-conditioned open office plans, which also symbolise progress and global prominence in developing urban contexts, and the need to mitigate the harsh climate of the tropics, which is characterised by intense sunlight, heat and humidity. L'Heureux writes: 'the temperate is the pushing of the interior as close to the exterior envelope as possible, then tropical architecture is the reverse. It pulls the interior deep within, creating a depth such that shade is paramount, the sun is hidden from view, and breezes are amplified rather than blocked. What results is a deep envelope, a deep veil where shadow, concealment, and veiling are prioritised over transparency, revelation, and honesty.'

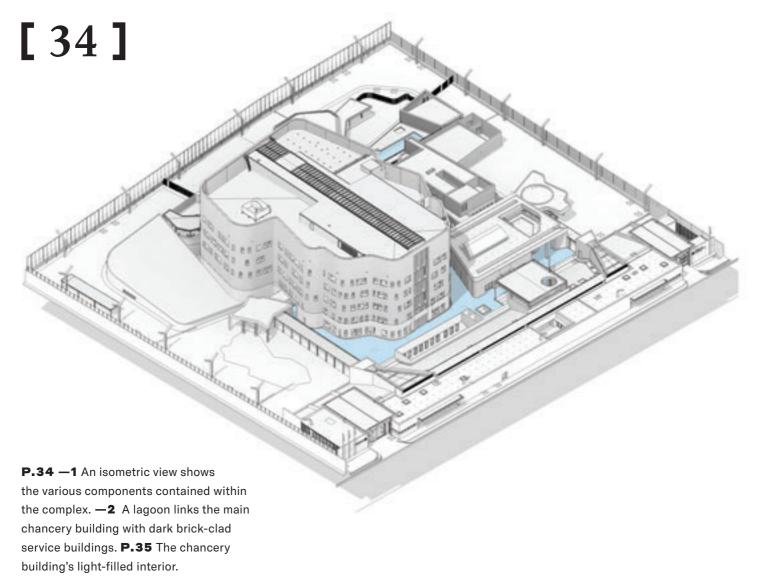
Layered on top of environmental considerations, architecture of diplomacy makes the aspects of concealment and veiling, versus revelation and 'honest' transparency, particularly compelling.

In the new Australian Embassy Complex in Bangkok, we are presented with the combination of these possibilities, which are presumably driven not only by the climate, but also by politics and ideology. An ambassadorial posture could certainly be one of openness translated literally, yet, in the post-9/11 era the embassy is also a highly regimented enclave of securitised zones. Furthermore, it is the task of the embassy to broadcast an image of the nation in its host context.

Brick features most prominently in the Australian Embassy Complex as the vehicle to carry out these responsibilities. The architects, BVN in collaboration with landscape architect The Beaumont Partnership, describe a desire to combine the 'modern' sensibilities of both Australia and Thailand in this new complex.

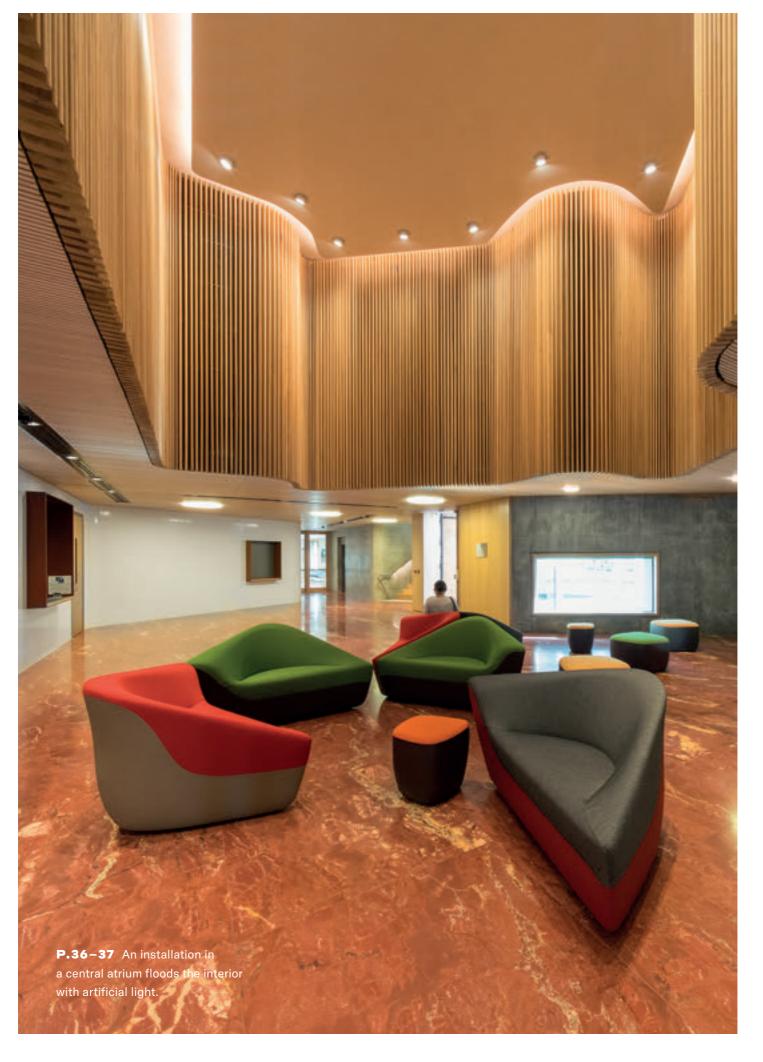


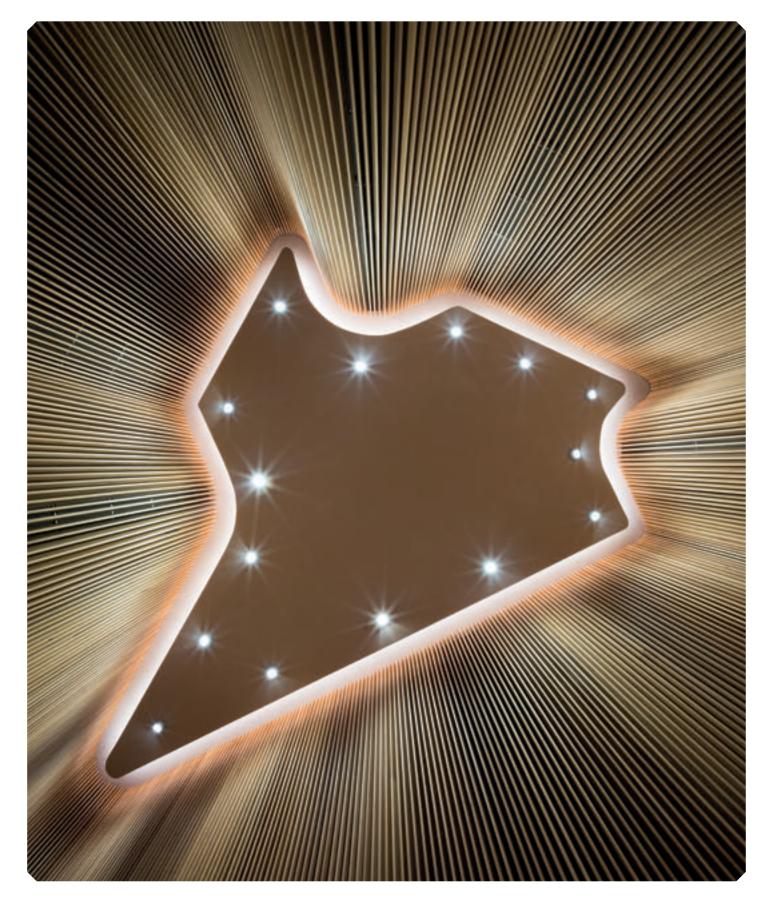
P.32 Aerial view of the complex.**P.33** The main chancery building recalls a red clay continent.











Here, the role of brick is elevated to the role of diplomat itself, casting and projecting to viewers of the embassy an image of a red clay continent.

• Using the analogy of Australian desert geomorphology, BVN presents the main chancery building as a mini-Uluru, where 'deeply recessed windows mimic the erosion across the surface' of the red brick form, set in a lagoon that refers to Thai *khlongs* (canals and smaller rivers) and is surrounded by lower scale, dark brick-clad service buildings.

Here, the humble Australian brick is elevated to the role of diplomat itself, casting and projecting to viewers of the embassy an image of a red clay continent—one whose history is intimately connected to the earliest stages of colonisation and brick manufacture—as well as to signify the pre-European, indigenous and geological history that once saw Australia as a landform connected with Asia.

In reading this project through its image as an object in the city, as well as through the lens of architectural expression, we see a much more complex and intellectually generous assemblage than conveyed in the architect's description of symbolic representations. Returning to the question of the envelope and the tropical veil, the architect's choice of veneer brick over an in-situ concrete structure is key to the project. The flowing, curvilinear form of the enclosure is readily achieved through the aggregation of the unitised brick, but it is this curvaceousness and also the overall scale of the volume that supresses the brick's legibility. The determined manner in which the brick is enfolded to create the deep window openings, combined with a surface absent of crisp edges in plan, results in a homogenous and almost plastic, immaterial quality, where the form dominates. This is both a brick building and a geological form of mute red clay.

Architects practicing in the equatorial band during the middle-to-end of the last century experimented with a range of 'deep veil' possibilities. In some cases, this is achieved with the deep concrete overhanging modules of Paul Rudolph's Colonnade Housing tower (1986) in Singapore, or with more interlaced masonry over the top of a glass curtainwall, as in the case of James Ferrie and Partners' AXA Insurance Building in Singapore, to work of similar nature in Honolulu by Vladimir Ossipoff. The Australian Embassy Complex in Bangkok references an altogether different precedent: the Parliament Building at Dhaka, Bangladesh by Louis Kahn (1961-82). Kahn used the brick as a local emblem, rather than an importation, but here we see brick used to create a monolithic, monumental quality, with crisp geometric openings revealing deep shadows to cool interior spaces.

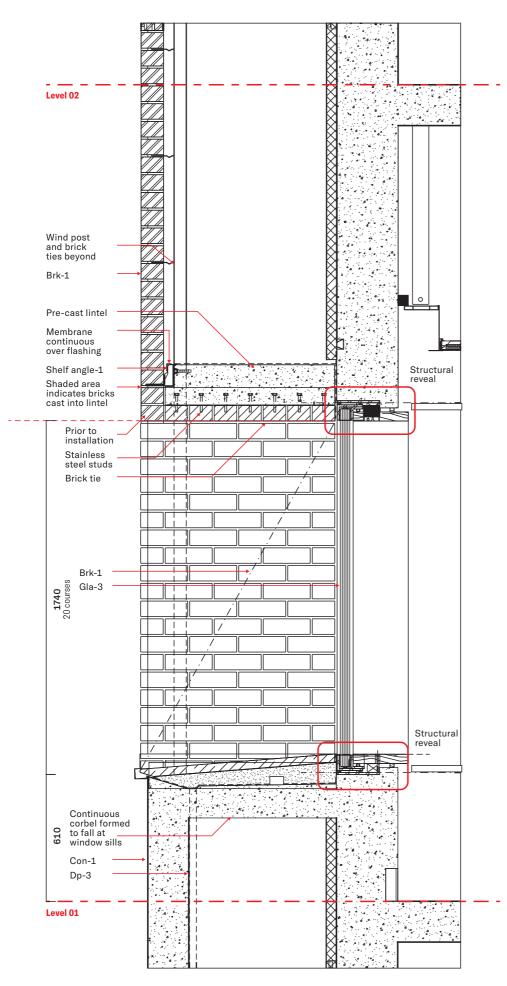
Similarly, the Australian Embassy Complex's version of the deep facade is one bearing penetrations in the brick, which reveal substantial depth—this is a building that is actively shading its glazed openingsand this results in a visual robustness that borders on feeling fortress-like. The walls are more than 1200mm deep. The project successfully projects an air of Australian casualness while conveying the substantial weight of geological time. What the facade does not do is tell us about the contents within. The result is less veil and more mask, which conceals identity and function. Seen in the round, the envelope's porosity varies across the extent of the project and this mask-like quality intensifies.

If there is any delayed gratification caused by the play between the open and closed character of the embassy's exterior, the occupant is rewarded on entering the interior of the complex of the chancery building.

Here, the stroke of an axial and orthogonal courtyard rises to full height from a linear reflecting pool at ground level, providing a sense of volume, diffuse light and clarity of organisation. This move provides an anchor and counterpoint to the curving language of the exterior and principle gathering spaces contained in the plan, and its qualities are enhanced by translucent glass and light casting from above. To the flanks of the atrium, communal spaces are emphasised by detailed timber joinery and are composed to echo the curving language of the exterior brick shell.

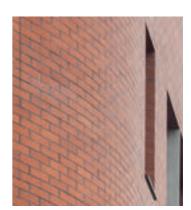
The importance of choosing brick as the primary material here cannot be overstated. Indeed, as emphasised by Alejandro Zaera-Polo, 'The building envelope is possibly the oldest and most primitive architectural element. It materialises the separation of the inside and outside, natural and artificial, and it demarcates private property and land ownership (one of the most primitive political acts). When it becomes a facade, the envelope operates also as a representational device in addition to its crucial environmental and territorial roles. The building envelope forms the border, the frontier, the edge, the enclosure and the joint.' (2008) BVN's use of brick to achieve these functions is excellent, an adaptation of the deep veil that is successful technically, politically and climatically.

P.39 Section showing the windows puncturing the building's exterior.

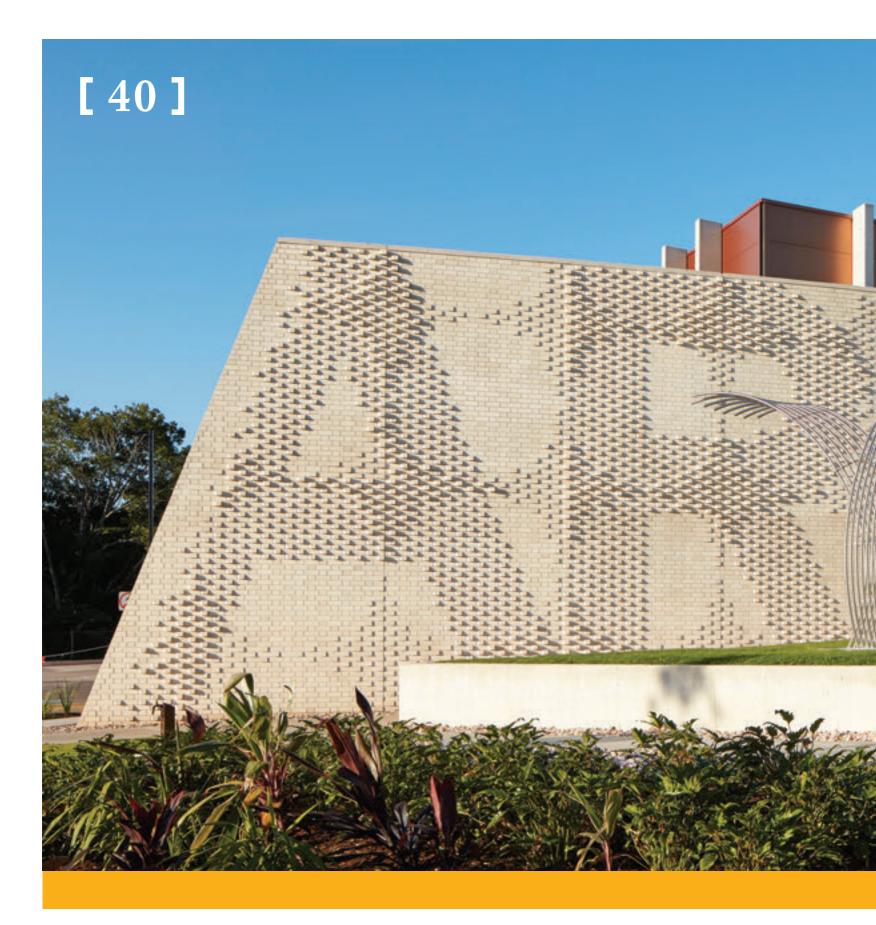


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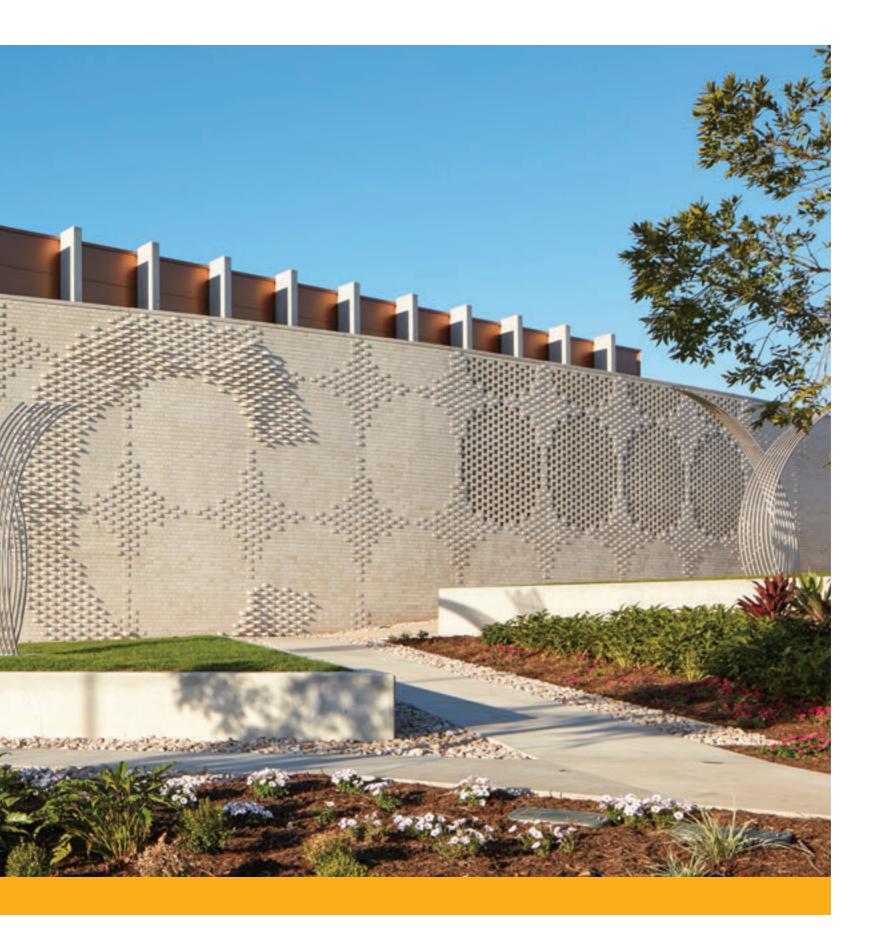
The project design reflects a blend of modern Australia and modern Thailand, comprising three major buildings. Three brick colours have been chosen to signify the different functions of the buildings-the guard house is a dark earth coloured brick, which contrasts with the chancery terracotta and the blue-black brick of the ambassador's residence. For more information on Bowral Bricks, go to page 98.



Typical Window Section Level 1



Civic landmark



GYMPIE AQUATIC RECREATION CENTRE

Architect Liquid Blu Architects Location Gympie, Queensland Year of completion 2017 **P.40** Initials for the Gympie 'Aquatic Recreation Centre' are sewn into the centre's brick facade.

Gympie ARC is a careful assembly of public buildings and water spaces, designed by *Liquid Blu* using conventional materials in new and innovative ways.



P.42 A curved masonry facade screens the the indoor pool building.
P.43 Doors and windows can be opened to passively control air movement.

[42]

It was James Nash's discovery of gold near the Mary River in 1867 that secured the financial future of the Queensland colony and transformed the township of Gympie. The rapid change that followed is still clear in the urban fabric today, with an impressive collection of masonry buildings—architectural artefacts of the 19th-century gold rush.

One hundred and fifty years after Gympie's foundation, a new civic landmark has surfaced at the city's fringe. The Gympie Aquatic Recreation Centre (Gympie ARC), designed by Brisbane practice Liquid Blu Architects, is a public waterpark that celebrates the historic foundations of Gympie. Creative director, Yuri Dillon, and project architect, Jason Bird, seized the opportunity to assign the acronym ARC during early design stages. The succinct threeletter word simplified a protracted name and conjured alternative meanings. ARC resonated at an architectural level, hinting at radial, circular motifs, which, as the project evolved, proved integral in translating the conceptual and visual brand.

Curvilinear forms were introduced early on. A road realignment setting out the curved boundary at the southern end, echoes the sweeping facades of two gateway buildings, housing the administrative and support facilities of the complex. Beyond these, pools and pavilions are arranged either side of a central street, aligned to a north-south axis. A 25-metre indoor pool and waterpark are positioned to the south, with a 50-metre outdoor pool and slide park to the north. An overland flow path and landscaped gully visually separate these facilities, allowing the complex to operate in summer and winter modes, with the outdoor pool and slide park closed during the colder months.

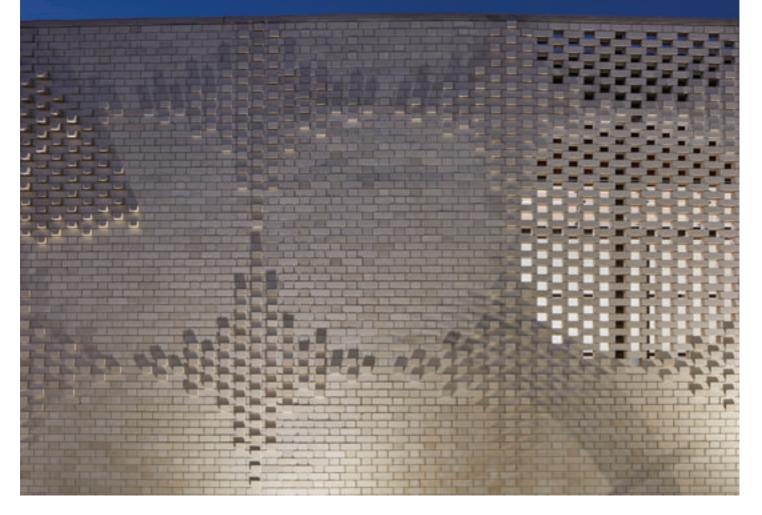
The strong moves made at the scale of the master plan cement a visual presence that is clear across the neighbourhood. Although extensive, the waterpark nestles gently into the hillside and cleverly manipulates landscape and built form to soften its visual bulk. Arrival into the complex is fluid, with pathways reaching their logical terminus at the entry gate.

Sculptural landmarks arranged at the entry plaza add interest to the journey, with blooms delivering a seasonal flush of colour. The backdrop to the forecourt comes in the form of a curved masonry facade that screens the indoor pool building beyond. Unmissable is the acronym ARC, inscribed against a circular pattern, which is sewn in brick.

. . .



P.44 Diagrams explaining the intricacies of the brickwork.





Flemish screen with missing half bricks

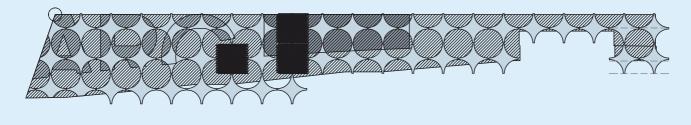


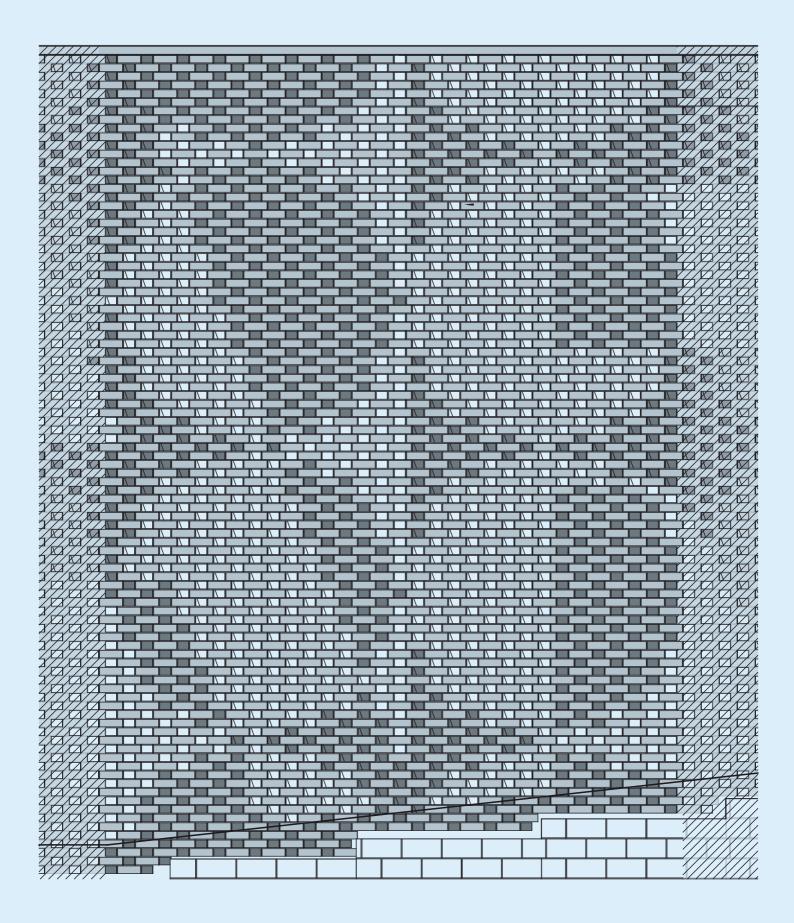
Flemish screen with turned full bricks

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Std flemish with cut half bricks - expressed cut

Std flemish with cut half bricks





The backdrop to the forecourt comes in the form of a curved masonry facade. Unmissable is the acronym ARC, which is sewn in brick.





P.46 The translucent roof floods the interior with natural light.
P.47 -1 The interior has a sculptural beauty. -2 The surrounding landscape contrasts with the deep blue hues of the pool.



- •
- The masonry facade is memorable.

Its composition is achieved through the patternation of dry-pressed brick in Flemish bond—headers and stretchers laid alternately in every course. Headers are pulled proud to articulate a circular motif that is stamped across the smooth masonry surface. Within select circles, headers are removed to allow light and air to flow naturally through to spaces beyond the facade. To create the subtle variance that allows the super-graphic, ARC, to materialise, a more elaborate set of rules is overlaid.

Two types of cant headers are introduced from which corners are struck at 70 degrees to create a sculpted taper to expressed brick faces. On a sunny day the fine grain of this elaborate tapestry appears as silent animation, played out in slow-motion shadow.

The large-scale circular motif returns in ceiling format inside the 25-metre pool building. Here, the pattern is expressed through 144 acrylic drums, which are held in place by means of a bespoke and concealed frame. Across the 12 x 12 drum grid an invisible concave dome is imprinted, articulated by the subtle curvature of each individual circular form. The translucent roof floods the interior with natural light and gives the impression of giant solar tubes held against the black acoustic ceiling. The resulting heat gain is harnessed to maintain warm indoor temperatures, which support the consistent 31-degree pool.

In summer, doors and windows can be opened to passively control air movement. Meanwhile, the complex mechanical and filtration systems demanded by the facility are all cleverly concealed, so that focus is brought to the sculptural and material beauty of the interior space.

In contrast to the deep blue hues of its recreational pools, shades of ochre and copper set against an impressive rolling landscape complement the larger centre. Masonry, concrete, zinc and ceramic emphasise the civic sensibility of such a public facility. The mastery of the material palette comes not just in its clever curation, but in the way that conventional materials are used in so many new and innovative ways. Brought together, they tell a wonderful story that adds to the rich history of this special place founded on precious metal.



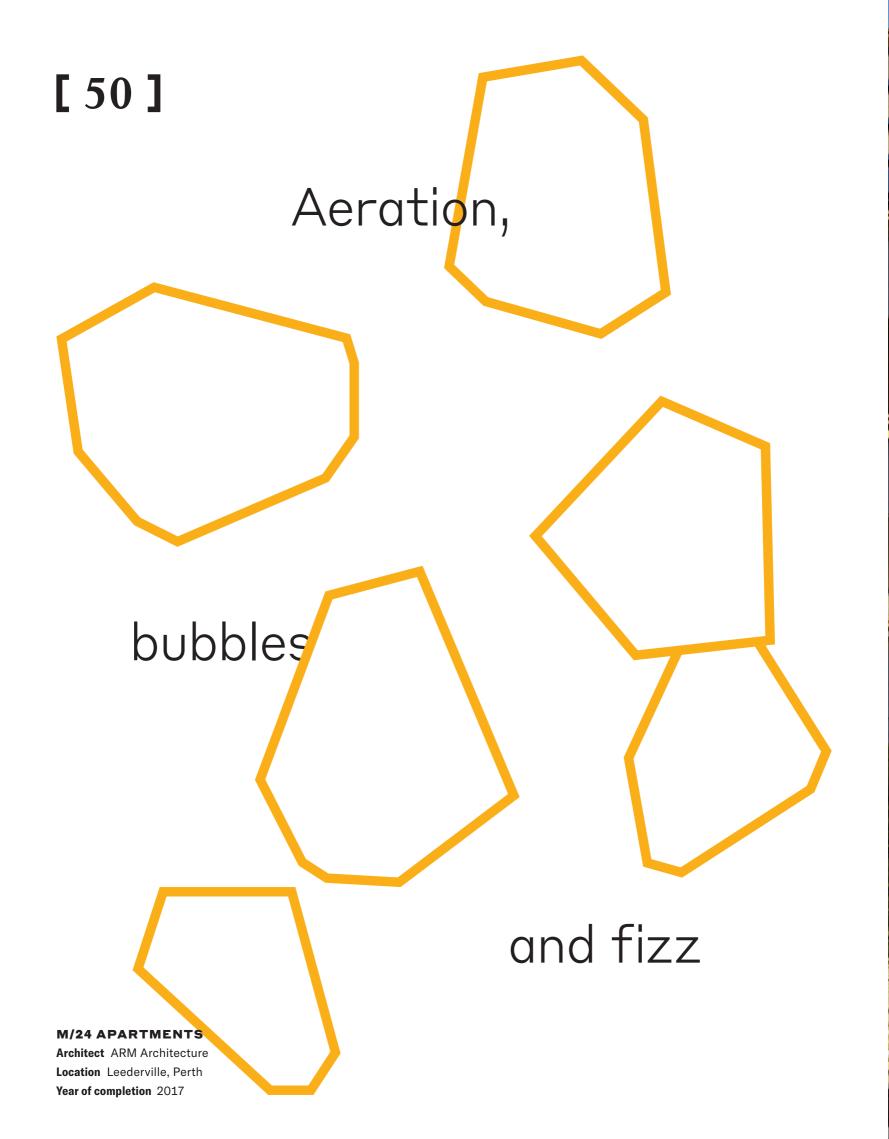


The Gympie Aquatic **Recreation Centre's** masonry facade is created through the patternation of drypressed Bowral Bricks (Chillingham White) in Flemish bond-headers and stretchers laid alternately in every course. Headers are used to articulate a circular motif that is stamped across the smooth masonry surface-key to the design and branding of the centre. For more information on Bowral Bricks, go to page 98.

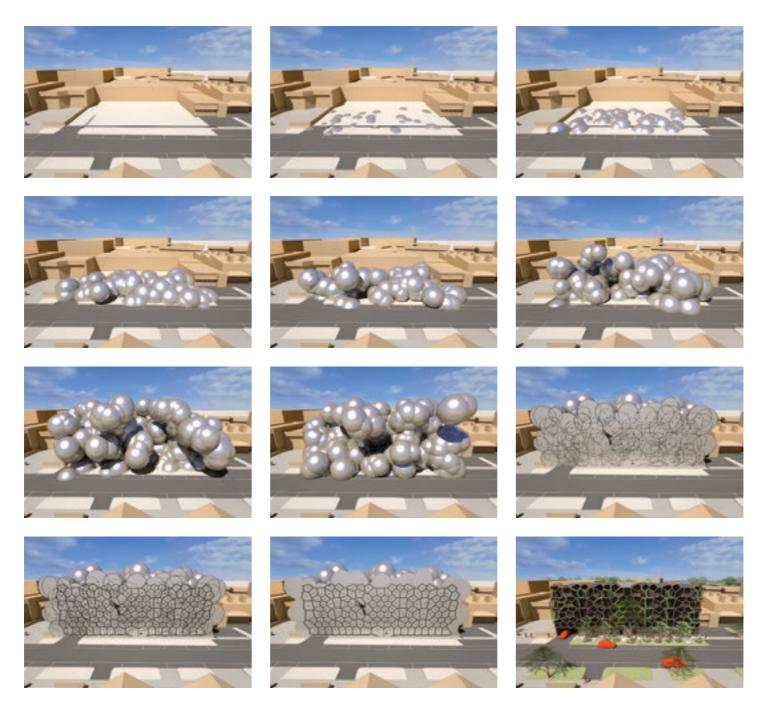


[49]

P.48 The main amenities building.**P.49** The masonry facade takes on the appearance of an elaborate tapestry.







Known for its creative and innovative work, **ARM Architecture** has looked to the past for inspiration, with the site's original occupants, Golden West Aerated Water Company, remembered in the apartment design's striking, bubble facade.



The inner-Perth suburb of Leederville boasts a young social scene of bars and cafes, a mix of new and established restaurants, edgy boutiques, super-markets, playgrounds and small public spaces. Situated in the thick of this lively hub is property company M Group's first innercity development, a dynamic, mixed-use project that responds to Leederville's planning strategy to attract higher-density living.

With this project, M Group is seeking to deliver place-specific apartments in the market, while attracting young owner-occupiers. ARM Architecture, a practice known for its creative and innovative work, designed the project, which delivers 39 apartments over three storeys, with four boutique retail spaces at street level, inspired by the culture, environment and history of Leederville.

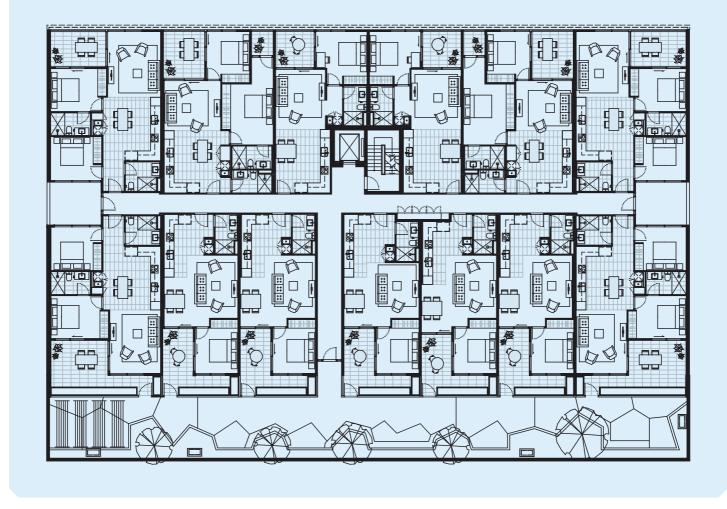
Although four light-industrial factory units were built on the site in the 1970s, ARM suspects that the Golden West Aerated Water Company, later known as Gest, established in 1902, originally occupied the site. P.52 Initial concept animations show bubbles coming up from the site, which are sliced through to create the pattern of the facade screen.
P.53 A floating-bubble artwork by Jon Denaro and Bec Juniper has been integrated with the architecture via a percent-for-art scheme, taking inspiration from the Golden West Aerated Water Company's branding.

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P.54. The side elevations, which use Austral Precast PermaTint, contribute to the building's strong street presence.

the building's strong street presence. **P.55** Sample floorplan for the building. is achieved.



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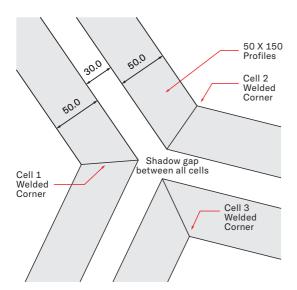
After demolition, relics of Golden West's recognisable clay bottles were found across the site, encouraging the architects to delve into this piece of Perth history. As iconic producers of carbonated beverages in the mid-1900s, Golden West's history inspired ARM to explore ideas around aeration, bubbles and fizz in the architecture.

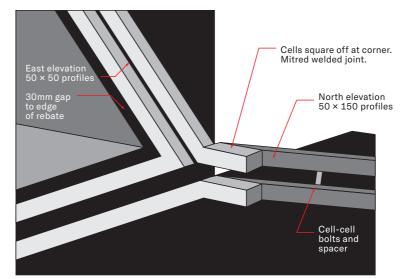
The design team developed 3D animations of bubbly, sparkling liquids to draw from. A representation of bubbles intersecting that formed a cellular network informed M/24's striking Voronoi facade pattern, which became the foundation for the project's design narrative. ARM uses Voronoi diagrams in several projects – they symbolise the active nature of life and living, which here seems particularly appropriate for apartments. True to ARM's interest in creating bespoke solutions using conventional building methods, the screen structure is fabricated from standard aluminium extrusions, allowing for simple manufacture and ease of assemblage.

Despite the constrained site and narrow interface to the street, the Voronoi screen creates an illusion of depth, while effectively hiding the modularity of the apartment block beyond. This is achieved not only through the strength of the screen's form, but by its golden, anodised finish and integrated lighting that allows the screen to punch to the foreground, while the apartment's grey CFC cladding recedes. The screen doubles as a garden trellis which, over time, will soften the angular forms with green foliage.

Approached from the busy Oxford Street strip or the cul-de-sac end of Carr Street, the building's side elevations have a strong presence and have been carefully considered by ARM. A continuation of the Voronoi pattern is sandblasted into Austral Precast PermaTint panels to expose the aggregate. The wall appears to zigzag in and out—giving the illusion that the bubbles are the ends of long horizontal tubes.

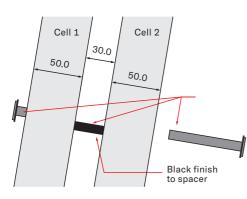
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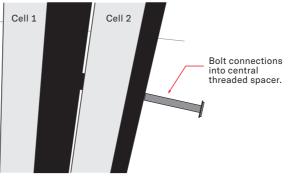


Elevation — Cell Knuckle — 1:2

Perspective - North/east Corner



Elevation — Cell Joint — 1:2



Perspective - Cell Joint





- A floating-bubble artwork by
- artists Jon Denaro and Bec Juniper,
 - at the carpark entry, has been harmoniously integrated with the architecture via a percent-for-art scheme. The artwork's circular plates represent bottle caps filled with vintage Golden West soft drink branding, while the steel gate below gradates shapes from circular to cellular, fusing with the facade screen and setting the tone for further conceptual nuances throughout the project.

Internally, the apartments are thoughtfully configured to maximise natural light and air into the bedrooms, while the living spaces connect directly to balconies to encourage outdoor dwelling and planting. The building's internal structure creates two distinct living environments: one with an active street-front outlook to delight in the inner-city atmosphere; and another facing the communal courtyard, offering a less public experience and views towards the Perth skyline.

The apartments draw on a refined palette of finishes, inspired by lemonade and kola tones, to deliver spaces that are simple, light and open. Bursts of colour to the apartment corridors embody fruity, soda pop themes, inspired by Gest's orange aid and green apple flavour varieties. A series of playful statements continue the bubble theme in the apartment's communal spaces; a golden, kola-syrup tessellated wallpaper enlivens the lobby space, while tessellating paving shapes and intersecting bubbleshaped lighting provides a sense of theatre within the courtyard.

Architect Jenny Watson says that ARM's conceptual method 'turns into buildings, but starts as simple ideas...' ARM's design process of ideation and experimentation is palpable in M/24 apartments, which successfully distils the site's history into a series of unique design state-ments with a playful edge. Each design element is cohesively rendered to produce an engaging public face to the private dwellings beyond, while the distinctive architectural details and unique material palette create a compelling design story and an effective selling point for M Group.





The side elevations -in Austral Precast PermaTint-contribute to the building's strong street presence, which has been carefully considered by ARM to ensure medium density living is seen as an attractive option for potential inhabitants. For more information on **Austral Precast** PermaTint panels, go to page 103.

[58]

High-rise culture



SPIRE RESIDENCES

Architect John Wardle Architects Location Brisbane, Queensland Year of completion 2017

P.59 The Spire Residences tower sits on a striking brick podium.





[61]

John Wardle Architects' residential tower design is rich in materials and details, creating a visually interesting and thoughtful connection at street level.

Non-Brisbane residents may not get this, but Brisbane does have a cultural affinity with high-rise buildings. Its central business district sits on a peninsula formed by the snaking Brisbane River, which contains the city almost as though it were an island. The surrounding topography creates an amphitheatre around the island-like city centre.

After World War II, the Brisbane city skyline was that of a large country town, with City Hall and Parliament House the only vertical landmarks. Its formative years coincided with the development of 20th-century city structure, which promoted things such as suburban estates, industrial estates, light industrial estates, shopping centres and CBDs.

So, since the 1970s Brisbanites have been watching from the surrounding hills as their city grows upwards. In the 1980s, architects such as Peddle Thorpe and Harvey, Robin Gibson, Kisho Kurokawa and Harry Seidler contributed to the skyline. Their buildings not only had beautifully considered towers, but also accessible public environments at street level.

More recent towers by architects such as Donovan Hill, BVN Donovan Hill, Cox Rayner and DCM built upon this history of exemplary tower design, with towers that take their contributions to the public realm to the next level. Brisbane has come to recognise and expect quality CBD buildings.

Lately, though, investmentdriven development has sprouted a significant number of 'D-grade' residential towers seemingly overnight. Buildings are a barometer -of culture, of the economy, of the city. Does this then mean Brisbane is in an economic or cultural decline?

The Spire Residences designed by John Wardle Architects (JWA) is a much-anticipated reminder of how a great high-rise building looks and feels. The developer, Consolidated Properties, is a local development group with a folio of exemplary buildings. For a developer to show a continued sense of civic responsibility in delivering such a worthwhile building is admirable and appreciated.

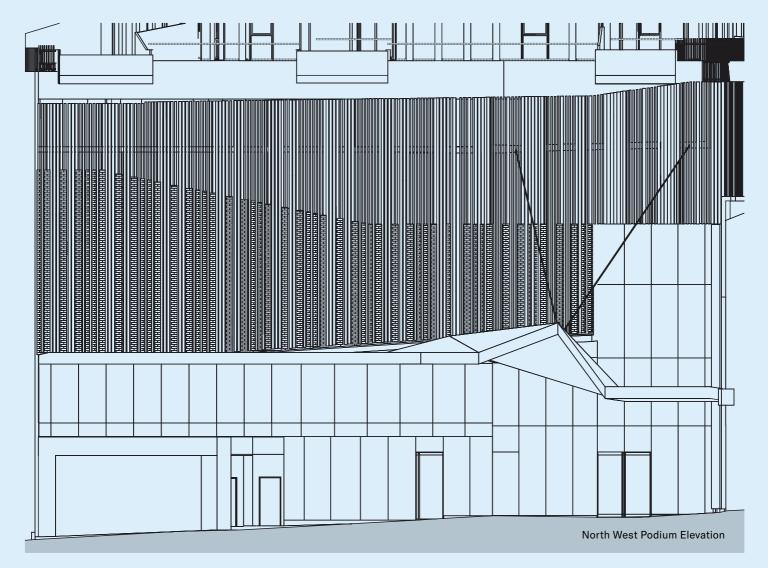
The Spire Residences sits on steep topography, on a site that was surely once the eastern foot of the cliff face on which St John's Cathedral sits. It is on the edge of the city centre in a precinct called Petrie Bight, a pocket once occupied by wharves and the nearby Customs House building. As a result, the building has both challenging topography and a sensitive heritage context to deal with.

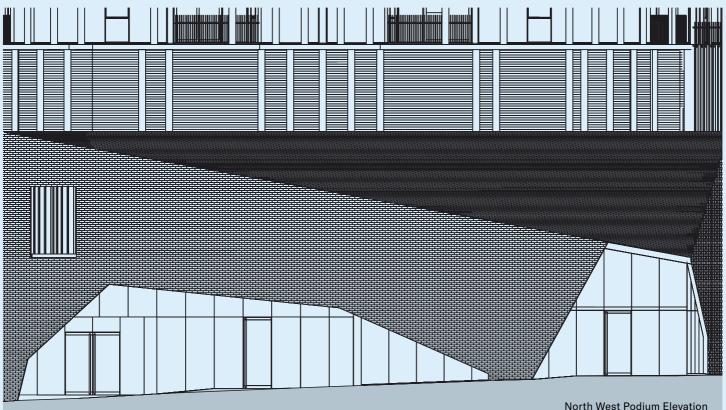
The tower sits on a striking brick podium, which adjusts its materiality and shape in accordance with the patterns of neighbouring buildings. This manoeuvre is a hallmark of JWA's work, generating beautiful abstraction influenced by familiar urban fabric.



P.60 Prefabricated brick 'mullions' and hanging vegetation defines the podium edge. P.61 John Wardle Architects' Spire Residences is a 'reminder of how a great high-rise building looks and feels'.

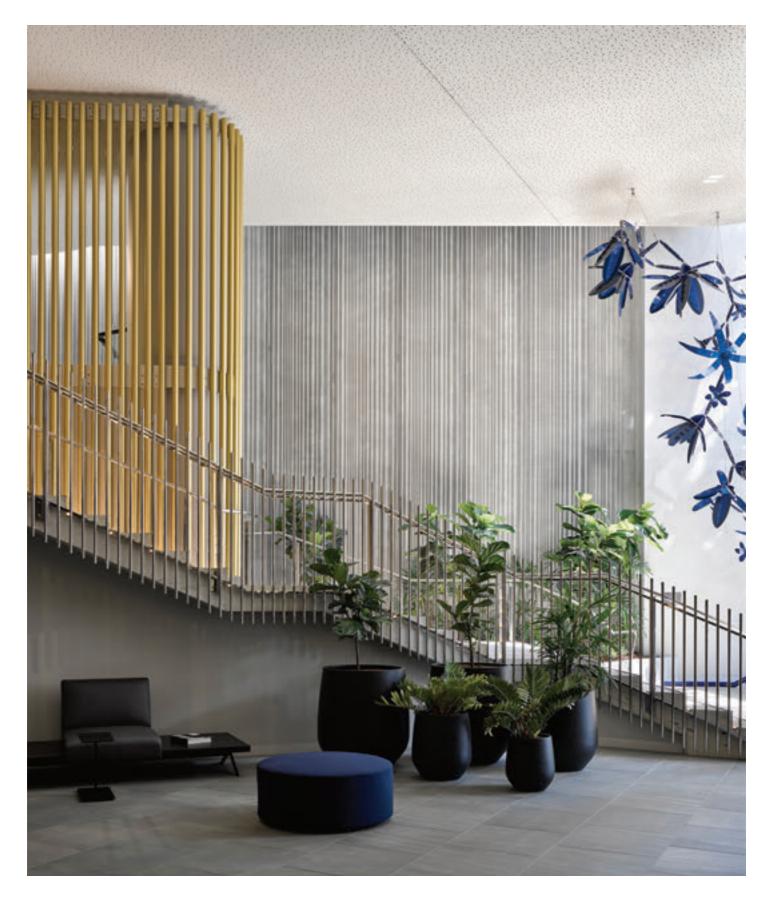
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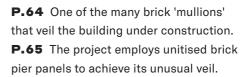
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North West Podium Elevation



P.62 Elevations display the play of pattern across the building's facade facilitated by the choice of brick.
P.63 The building's foyer provides a sense of comfort befitting a high-end residential project.

[63]





Building, which is part of the St John's Anglican Cathedral precinct. The Hotel Orient is a Flatiron-esque late 19th-century hotel designed by Richard Gailey. It has always been a welcoming corner landmark when approaching the city centre.

The site is wedged between the

Hotel Orient and the Schools

Although Spire Residences is not on a corner site, it appropriately shares the role of a corner landmark building with the Hotel Orient. The Schools Building was designed by Robin Dods as his first commission as part of the St John's Cathedral precinct. This building and the adjacent Church House, also designed by Dods, represent one of Queensland's most important arts and crafts street frontages. The new tower is a thoughtful response to the texture, scale and datum lines of its street context. JWA's building honours the existing neighbours by providing both space and background as necessary.

The form and large surface area of JWA's facade is reminiscent of the Edwardian arts and crafts houses of

Voysey and Lutyens. JWA's Ann Street facade unifies the Hotel Orient's classical-colonial face with the arts and crafts brick and shingle facade of Dods' School Building. JWA's brick facade has a tilting datum that conjoins the two heritage buildings. The brick facade also gives space to the Schools Building, providing a new bookend context while its brick texture adjusts along the facade in sympathy to its adjacent textures.

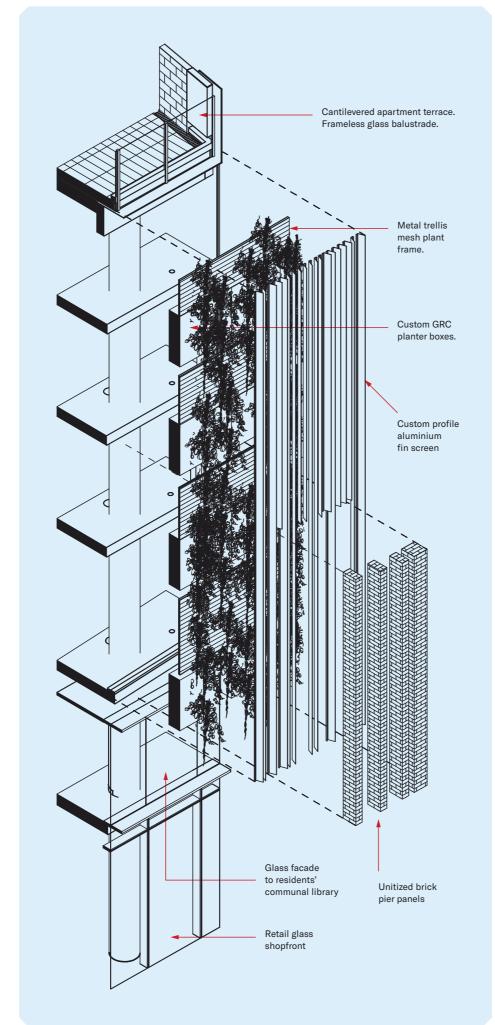
Amazingly, the new brick podium of the Spire Residences makes its heritage neighbours far more apparent than before, by providing a carefully abstracted brick context for them to be seen against. Although not directly on the riverfront, this building has a definite riparian feeling. JWA's podium creates a natural edge that embraces its river outlook.

The edge is of brick mullions and hanging vegetation, which creates a natural veil through which the building's public spaces engage with the urban river edge. A clever crosssection connects the formal, heritage precinct of Ann Street with the river precinct of Queen Street by virtue of a grand staircase. This lobby space is appropriately luxurious—large enough to afford inner-city solace. It is rich in beautifully crafted detail, with a sense of comfort befitting a luxury residential project.

The tower adopts a net-like facade with a smooth edge. This and the changing radii of its curves give the tower a natural shape. Its form of construction is smooth rather than that of a common apartment typology. The tower shows no evidence of standard off-the-shelf systems associated with balconies window systems, services, vents etc.

The quietness of the Spire's facade belies the hard-working floor plan behind, where residences are cleverly designed to embrace river and city outlooks. The tower mesh is compressed or expanded to frame views from the building or to modulate the effects of climate on the interior. JWA has executed this design with the same sympathy and sensitivity shown in its most bespoke projects, despite challenging commercial imperatives. The Brisbane skyline has a new addition and a new benchmark for tower design. •





The Spire Residences sit on a striking brick podium, using Bowral Bricks in a range of colours. The brick podium makes its heritage neighbours far more apparent than before by providing a carefully abstracted brick context for them to be seen against. For more information on Bowral Bricks, go to page 98.





Garden tower

5 SAM SING STREET

Architect Collins and Turner and Environa StudioLandscape architect Sue Barnsley DesignLocation Waterloo, SydneyYear of completion 2017



[68]



Seeking to establish a new apartment type for highdensity living in inner Sydney, *Collins and Turner* and *Environa Studio*, with *Sue Barnsley Design*, set out to design a garden tower.

Amid the cranes and hoarding around much of Waterloo, in Sydney's south, it's hard to get a sense of how this new precinct will shape up. Four kilometres from the CBD and five kilometres from the airport, this once industrial area is now one of Sydney's largest renewal sites, with thousands of apartments and a metro station being built here over the next five years.

As well as heritage items and public open spaces under adaptation, the area also has residential precincts being built from the ground up. Within one of these—the Lachlan Precinct—a newly completed apartment building on Sam Sing Street offers insight into how the planning controls are being interpreted by architects.

Number 5 Sam Sing Street is one of the first design competition projects for Sydney-based Chinese property developer, JQZ. Architects Collins and Turner and Environa Studio worked in collaboration, having won the commission for their design of a garden tower, with an original landscape scheme by Sue Barnsley Design. Their inspiration was the plant-infused housing of Swiss architects, Atelier 5.

The site boundary is Archibald Avenue to its north and, to its south, Hatbox Place, where a large warehouse will be demolished for apartments. The master plan and precinct controls called for a trio of buildings: a 20-storey tower (Building 2) bookended by two four-storey blocks—Building 1 (north) and Building 3 (south). Collectively, the development addresses the Rope Walk, a public landscape corridor through the precinct. Although the three buildings interconnect, they present different faces to the street in terms of form and materiality.

Building 1 has a ground-floor retail component. Its horizontal bands of concrete in contrasting tones are softened by greenery overhanging from planter boxes. Building 3 has the distinctly vertical rhythm of terrace housing, in off-white bricks with over-scaled black window boxes. 'City of Sydney's controls called for each of the buildings here to have its own identity,' explains architect Huw Turner. 'We gave each building its own material language from the street and tied them together in the central courtyard using a veil of aluminium mesh screening that's perforated, folded and powder-coated a deep bronze.'

This device evolved from an earlier Collins and Turner project, Garland apartments, on nearby Gadigal Avenue. 'It masks a range of conditions —different apartment modules, spandrels, fire corridors. It also unifies the buildings to appear as a single composition from the courtyard, where it transitions into the tower at level five. That's also where the buildings connect internally.'



P.67 Off-white Burlesque Bricks complement over-scaled black window boxes. **P.69** A high performance facade includes external perforated mesh sun shading in a varied colour palette.

The pale glazed bricks are intended to create a light, reflective and elegant interface with the street level and surrounding gardens.

- The tower's glass curtain wall is
- feathered with aluminium mesh fins

that perform the vital task of sunshading, as well as identifying the building graphically. The tonal variation of blades from green to white across the tower surfaces was computed by randomising software, but that's not the tower's big move, says Turner.

'We split the tower into two blocks one north-facing, one south, connected centrally through a series of east and west-facing open-air landscaped lobbies. As well as reducing the visual bulk, the lobbies help cross-ventilate all 173 apartments. Every fourth lobby terrace extends further out for deeper planting, like major and minor scales up the tower.'

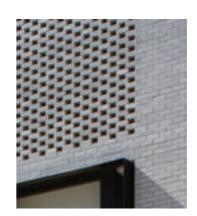
Building 3 faces south to a neighbour that's yet to be built along Hatbox Place. Its glazed Burlesque Bricks (Indulgent White) are used in a contemporary way, with slim dividing walls rising up to curved concrete soffits. The brick walls are inset with black steel window frames. In the western wall, the bricks are perforated into two screens, allowing afternoon light into the two end residences. The arrangement brings human scale and the handmade texture of bricks into play, making a micro-precinct on the quieter side of the tower.

'The pale glazed bricks are intended to create a light, reflective and elegant interface with the street level and surrounding gardens. We always hoped the buildings would become almost secondary to the landscape,' says architect Rory Toomey. He worked closely with Turner for Environa Studio, leaders in sustainable design. With so many apartments and big public projects like the Green Square Library (by Stewart Hollenstein with Colin Stewart Architects) and Gunyama Park Aquatic Centre (by Andrew Burges Architects with Grimshaw and landscape architects TCL) underway, has the push for 'unique identity' and 'visual interest' been overemphasised in fine-grain residential precincts such as this?

Turner and Toomey agree that while 'controls for greater consistency could engender a more cohesive environment at street level', the big picture is right in terms of environmental performance and liveability.

'In a development of 173 apartments, only eight units have south-facing living spaces,' says Toomey. 'Solar access and cross-ventilation here exceed requirements in every measure. And the naturally ventilated lobbies preclude the need for artificial ventilation or lighting during the day. All of that adds up to better environments for people living here.'

With all three rooftops programmed with amenities from veggie patches, barbecue areas and outdoor gym to kids' playground, sundecks and shaded seating, there's around 3000 square metres of accessible landscape in all. The centrepiece of this greenspace is undoubtedly the central courtyard at ground level, where Sue Barnsley's original vision for a paperbark grove has been more or less realised, and will become a real asset as it grows. This is encouraging because (at the urban scale) big buildings need visionary landscaping, partly to soften their scale, but also because gardens have a way of gathering communities around them.



Austral Burlesque Bricks in Indulgent White are used in a contemporary way, with slim dividing walls rising up to curved concrete soffits. The brick walls are inset with black steel window frames. In the western wall, brick walls have been perforated to create screens and allow natural light into the end residences. For more information on Austral Burlesque Bricks, go to page 100.

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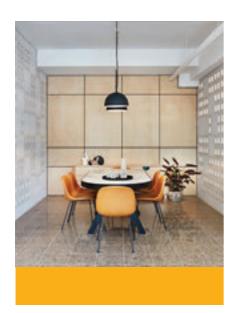
Raw refinement

MAKE VENTURES' HEADQUARTERS

Architect Tecture Location Windsor, Melbourne Year of completion 2018

[74]

'Bricks, plants, ply' was the brief put to studio *Tecture* for the design of property group, *Make Ventures*' new Melbourne headquarters. Tecture's response finds refinement in even the rawest of materials.



P.74 Inside a meeting area at Make Venture's new headquarters.**P.75** A pared-back material palette creates a simple, refined interior. 'If we've nailed one brief in our lifetime, we can say it was this one,' says Tecture's lead interior designer, Lauren Foy. Make Ventures was moving into a short-term office space in Windsor, Melbourne and, having worked with Tecture on previous projects, it was only natural they commission their architects to design their headquarters too.

The brief of 'bricks, plants, ply' gave Tecture a textural yet pared-back palette of materials to work with. Meanwhile, the compact site, previously a vintage furniture shop, demanded an inspired approach to floor plan and zoning. An existing pink granite tile floor and two street frontages with large windows provided a distinct framework within which Tecture was to design a functioning office space. Within the 110 square metres available, they needed to fit workspaces for an expanding team, a waiting area and boardroom.

Tecture applied a breeze block frame as a clever zoning device and, in doing so, introduced both a sense of transparency and privacy into the space. 'The two street frontages [receive a lot of] foot traffic. So we positioned the workstations away from the windows and added credenzas along that window line, to provide an extra barrier,' says Foy.

'Because of the nature of the site, a sense of layering was necessary. The breeze block frame was the main device we used to break up the floor plate and create privacy, while also allowing light to travel through the space and penetrate the various zones.'

Bringing an element of branding and individuality into the breeze block structure is a 'lightly fragmented' pattern that, on closer inspection, reveals itself to be the Make logo. Comprising a cross within a circle—'like the cross hairs of a target'—the logo is extrapolated into block-sized pixels, achieved through the clever flipping and rotating of a standard block.

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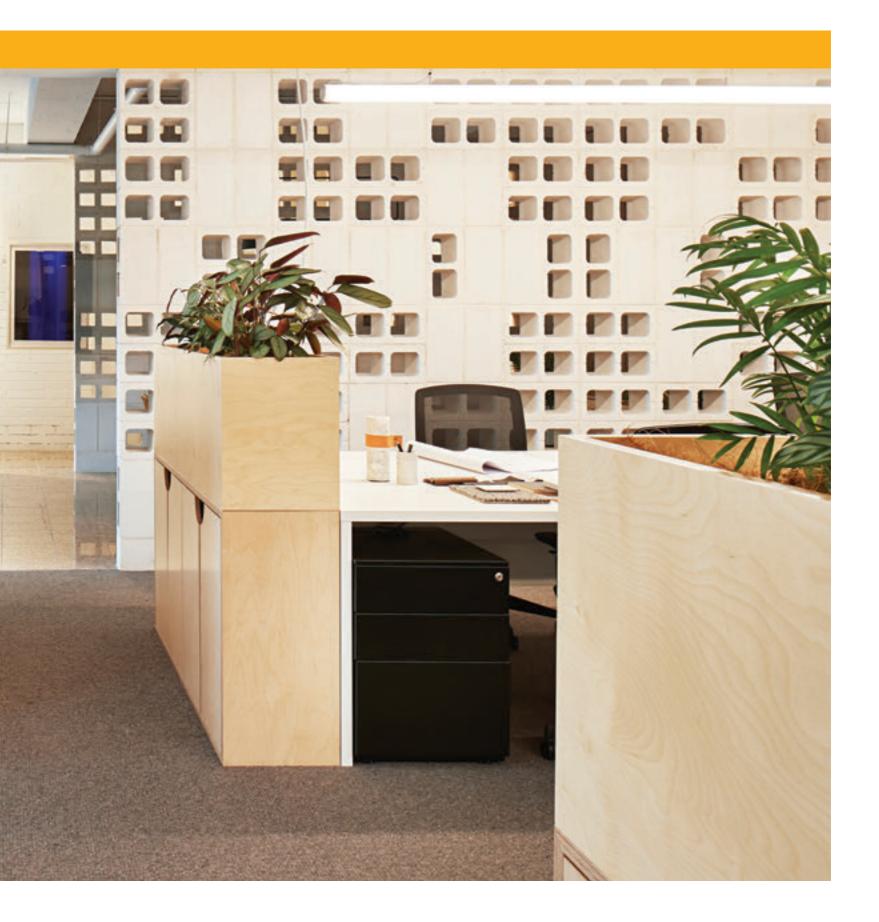


The breeze block frame breaks up the floor plate and creates privacy, while also allowing light to travel through the space.



P.76–77 Laying the block on its edge creates a breeze wall, acting as a clever zoning device.

[77]





P.78 The pre-existing pink granite floor provides a softly coloured contrast to the rawer blocks and ply.

[79]

- Adding an element of interest,
- Tecture chose to offset the logo,
- rather than perfectly reproduce it. 'So you never read it as a complete logo. It is a nice way to incorporate the Make identity into the space without heavily branding it,' she says.

As working environments continue to adopt agile working models, materiality and finishes are increasingly the tools by which a designer might shape a user's experience of a space. One's choice of materials and finishes can also speak volumes about a company's identity and contribute to the building of internal company culture.

'A simple change in materials completely changes the feel of a space,' Foy confirms, pointing out the significance of the brick in Make's brief. 'Their developments tend to be quite brick-heavy—and this is mirrored in their fit-out,' she notes. But there is also the sense of permanence and longevity associated with masonry—'built for decades to come'.

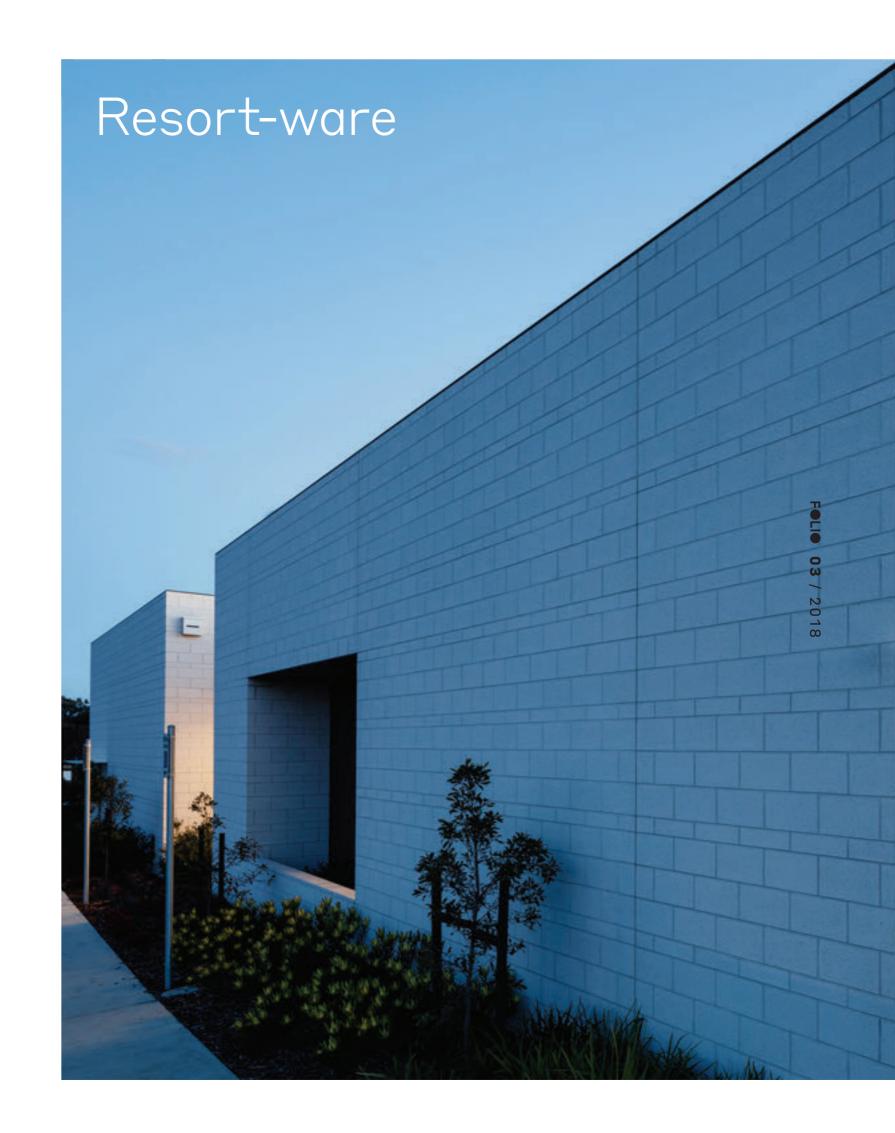
It's an interesting choice of material, given the fact the office is intended only for short-term use—an interim location for a youthful and dynamic company in rapid growth phase. 'The restraint of the materiality used in this space is the highlight,' says Tecture's Ben Robertson. 'The block work is so commanding; Make's presence, despite the incredibly compact space, is really felt.' The ply, alongside this, injects a sense of natural finish and softens the raw and industrial masonry.

In a nod to Make's fresh, energised brand culture, Tecture has injected a sense of lightheartedness into the space with bright neon signage; the requisite greenery, meanwhile, offers visual relief. Together, these thoughtful additions work to strike a balance between the elegant and the not-too-kitsch.

For Tecture, who work predominantly on residential design, Make's headquarters was like a breath of fresh air for the business. The size and scope of the project was, as they describe it, 'mini'. But the impact it had on the design team was significant. 'It was exciting to diversify and do something different from the norm,' says Robertson.

Pushing the limits of the brief in simple yet clever ways, Tecture has revealed just how transferable their skills are. And in doing so, prove a small space and simple material palette can offer up a bounty of design opportunity. 'Because of the nature of the site, a sense of layering was necessary. The creation of a breeze block frame was the main device we used to break up the floor plate and create privacy, while also allowing light to travel through the space and penetrate the various zones,' says Tecture's lead interior designer, Lauren Foy. This was achieved by laying the block on its edge, intermittently. For more information on GB Masonry Smooth Porcelain, go to page 102.





CLUB ARMSTRONG

Architect Hayball Location Mt Duneed, Victoria Year of completion 2016 **P.80** Polished blockwork houses the single-level gym. Image—Timothy Burgess

[81]

[82]

With help from *Hayball*, Villawood's most recent clubhouse project puts friends and family life at the centre of a new community hub.



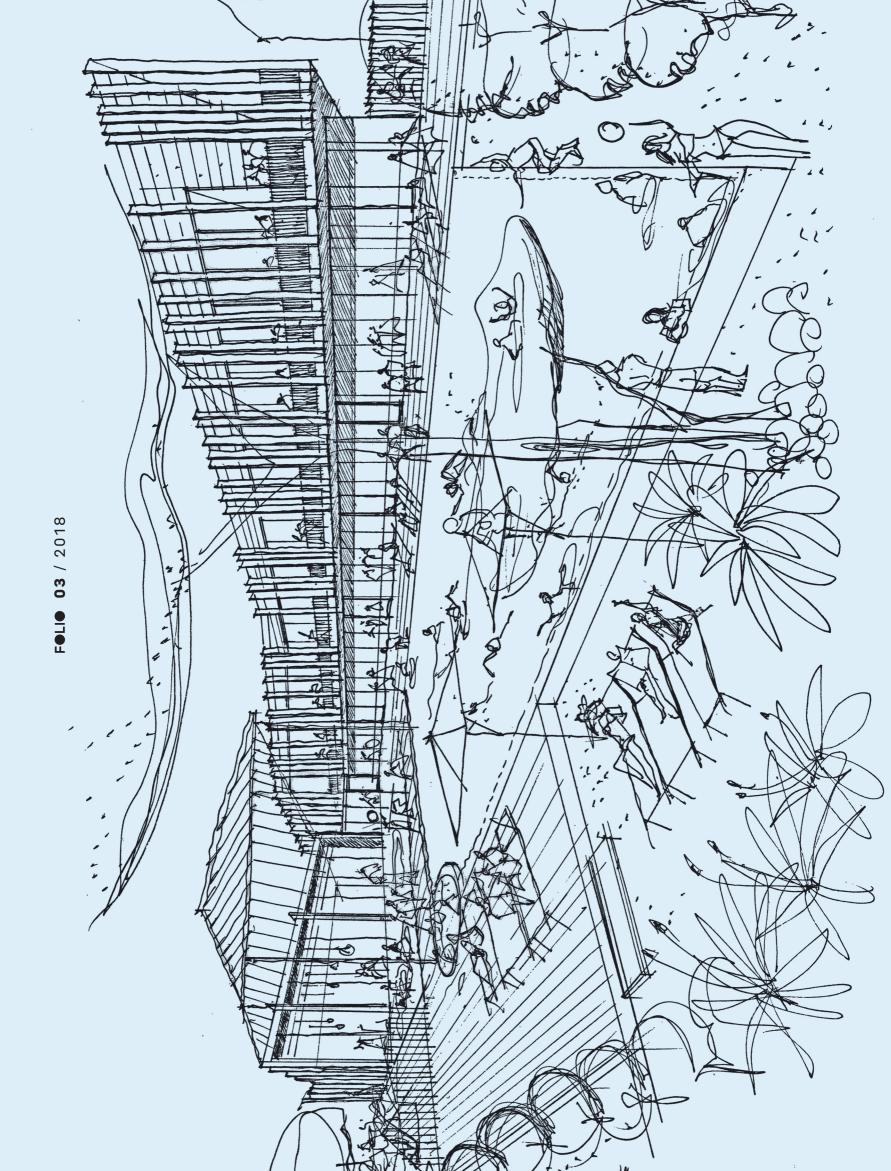
P.82 Club Armstrong has a club-house and resort feel, designed to bring people together.
Images—Gallant Lee Photography
P.83 An early concept sketch of this clubhouse project. On a former regional aerodrome, a new community has taken off. Equidistant from Torquay on Victoria's surf coast and the regional hub of Geelong is the new development of Armstrong. It caters to sea-changers who can't afford the sea. Predominantly, however, it attracts people from Geelong, just 11 minutes up the road. Of course, communities don't just land fully formed. They have to be built. And the engine of Armstrong's community is its club. Since 2005, developer Villawood has used the clubhouse model to create community. 'It's our job to try and get people together and form a new community,' says Rory Costelloe, executive director of Villawood. 'The biggest catalyst we've found to do that is our club model.'

Club Armstrong is Villawood's seventh clubhouse. Operating under an owner's corporation the facility provides tennis courts, gym, function room, parents' lounge, men's shed and café. As councils across Australia amalgamate they consolidate community services such as pools and tennis courts. While these can be impressive complexes, the downside is they're not in walking distance from many of the communities they service. 'We're basically fulfilling council's old design of providing the community hall, like the scout hall,' says Costelloe. 'It's negligible cost to residents [\$900 per year plus GST] and they can use it as they want, within reason. And people can walk to it.'

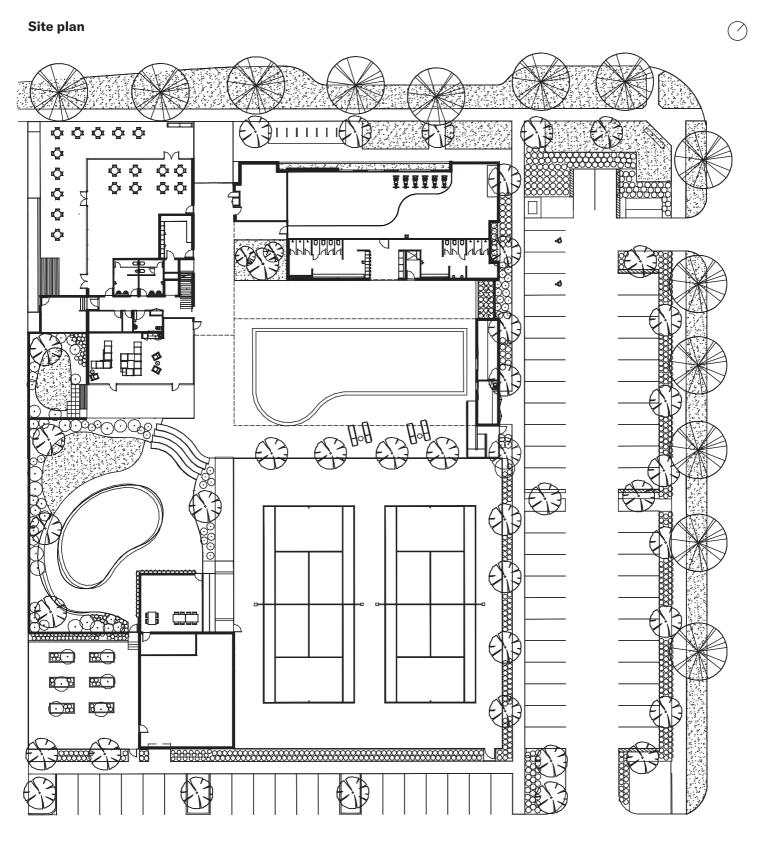
To distinguish Villawood's facility from the community centre with its kindergartens and health care facilities, Villawood needed a distinctive name. 'It is a centre for the community, but we didn't want to mix it up with a council-run building so it doesn't have the same connotations. This is like a clubhouse and has a resort feel.'

The majority of Armstrong's residents are owner-occupiers invested in the community. 'They all know they are part of the community and clubhouse,' says Costelloe. 'So they make far more effort to be community-minded and to talk to each other.' The clubhouse acts as the icebreaker. Once the main community group forms, residents establish clubs to share common interests: walking clubs, tennis, playgroups, reading groups. '[The club] becomes the nucleus of a new community,' says Costelloe.



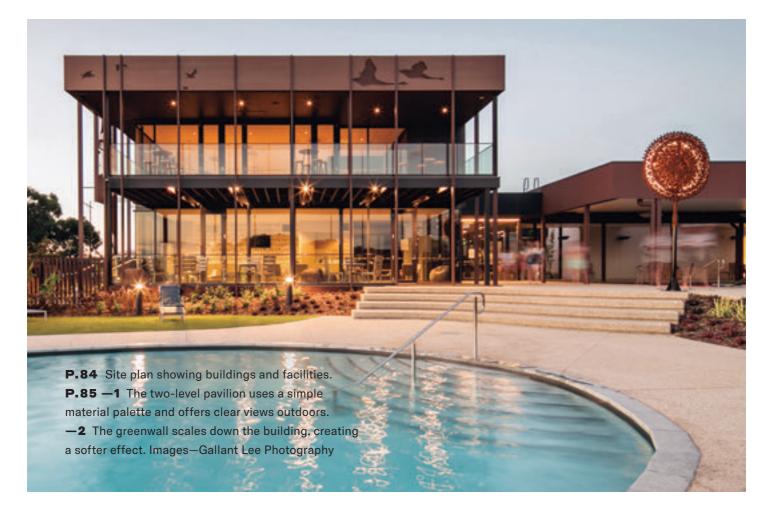


Community is the focus of the planning and layout, with recreation and social interaction at the core of its design.

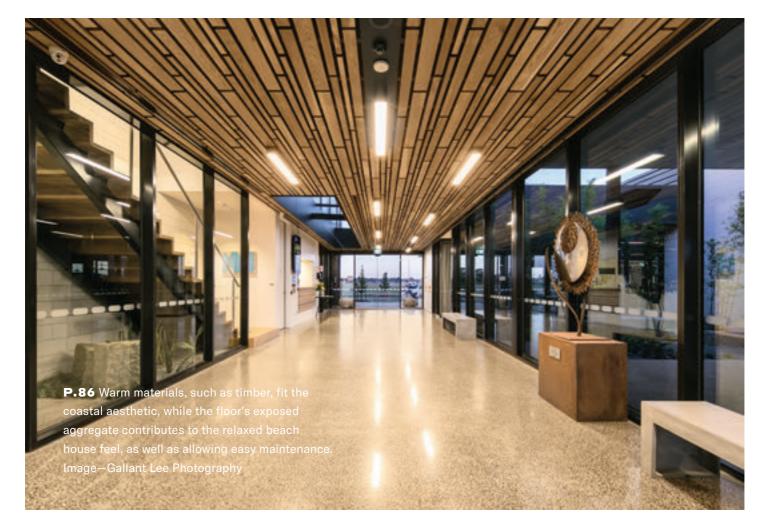


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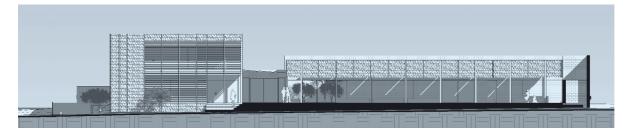
[84]



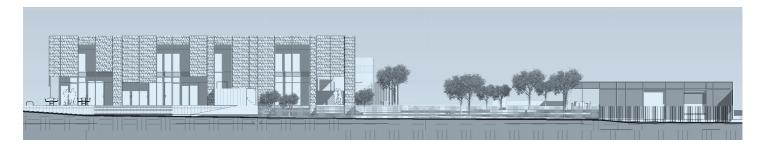




The design scheme and material selection take their cue from the coastal location, and evoke relaxed resort living.



South Elevation



$\bullet \bullet \bullet$

Villawood's brief to Hayball architects was well honed. 'Knowing kids are safe is a paramount part of our design,' says Costelloe. 'Having the parents' lounge in a location that parents can see their kids at all times in the pool or playing tennis or in the playground [is important]. It sounds simple...'

Hayball has a history of designing community buildings that provide multiple functions, particularly schools and public libraries, such as Library at the Dock in Melbourne's Docklands and the South Melbourne Primary School, which also includes an early childhood facility. 'It's about the organisation of buildings around communities,' says Bianca Hung, director of Hayball.

Club Armstrong's location on a main street corner recognises its importance to the community. The architects wanted to emphasise that presence, at the same time exuding accessibility and warmth. The two-level pavilion uses a simple material palette that Hayball's Bianca Hung describes as 'coastal'.

Polished blockwork houses the single-level gym. If the white brick facade suggests beach, a greenwall and mural (which will be replaced every few years with contributions from residents) further soften the relaxed effect. 'The greenwall scales down the building, creating a calmer backdrop,' says Hung.

Remnants of the site's former role as a regional airport can be seen in the clubhouse's perforated facade. It carries lasercut images of light aircraft, as well as other natural motifs, such as pelicans and swans adapted from Folko Kooper's six-to-12-metre sculptures scattered throughout the suburb. Kooper has worked with Villawood for 16 years. Corten steel is popular among contemporary coastal homes but the drawbacks to this dramatic metal are that it rusts and stains other materials. Instead, Hayball wrapped the pavillions in another metal to provide the same coastal association. 'We developed a powdercoated metal that gives the Corten effect without the problematic ongoing issues,' says Hung.

While Club Armstrong's glassed entrance might suggest corporate officiousness, navigation is the guiding principle. This open central spine allows visitors to see the main functional areas, such as the covered lap pool, cafe, parents' area and the kidney-shaped 'resort' pool. Glazing above the hallway reception not only allows light, but it orients visitors to the function space above, reinforcing the idea of indoor-outdoor. 'It's like a breezeway,' says Hung.

Above the 'breezeway', a timber ceiling extends and coheres with the facade's brick pattern motif of thick and thin lines. Black backing between the timber batons highlights the material, while also reinforcing the connection to the exterior brickwork, acting as a 'mortar' to the timber baton's 'brick'.

'Warm materials, such as timber, fit the coastal aesthetic and create a homely relaxed environment,' says Hung. Similarly, the floor of exposed aggregate contributes to the relaxed beach house feel, as well as allowing easy maintenance.

Club Armstrong combines thoughtful planning with a palette of resortware materials designed to forge relationships: between the relaxed beach house feel of indoor-outdoor living, and the cohesive spirit of a community clubhouse.



The two-level pavillion uses a simple material palette that Hayball's Bianca Hung describes as 'coastal'. **GB** Masonry, Honed in Porcelain, houses the single-level gym. The white brick facade suggests beach, with a greenwall and mural further softening the relaxed effect. For more information on GB Masonry, go to page 102.

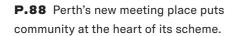
[87]



Songlines and waterlines

YAGAN SQUARE

Architect Lyons, IPH Architects, Aspect Studios Location Perth, Western Australia Year of completion 2018

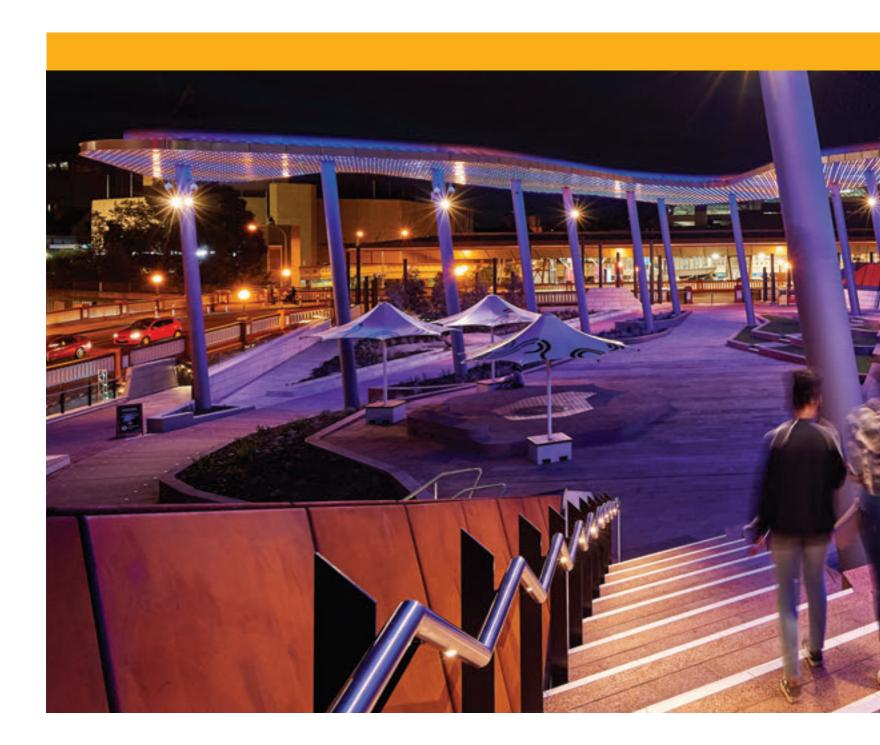


[89]

[90]

Perth's new city square required the collaboration of *Lyons* and *IPH Architects* with landscape architects *Aspect Studios* to balance recent and pre-colonial history in a new approach to urban design.

Article Rachael Bernstone Images Peter Bennetts

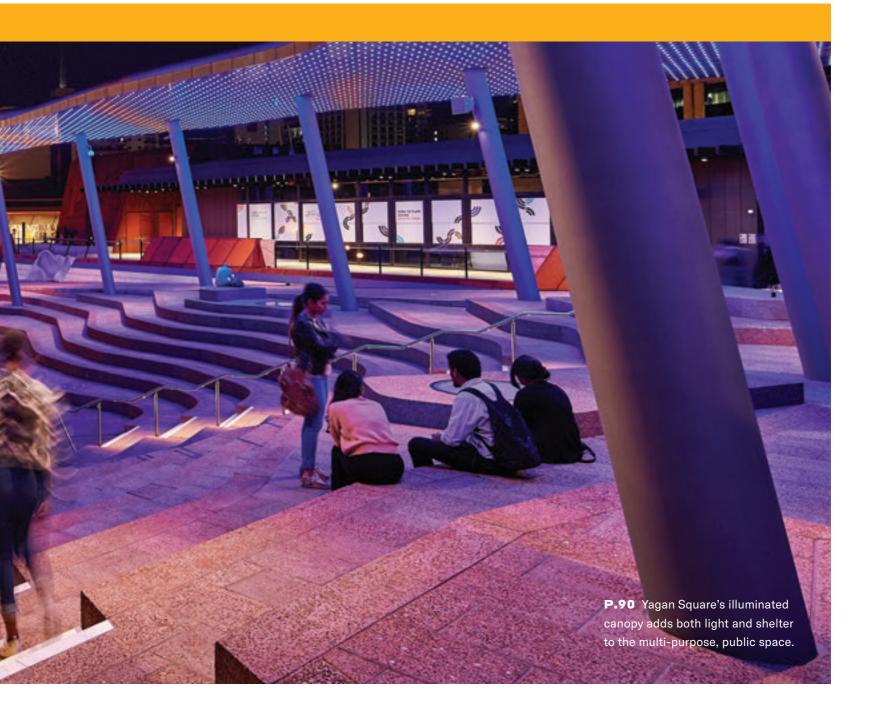


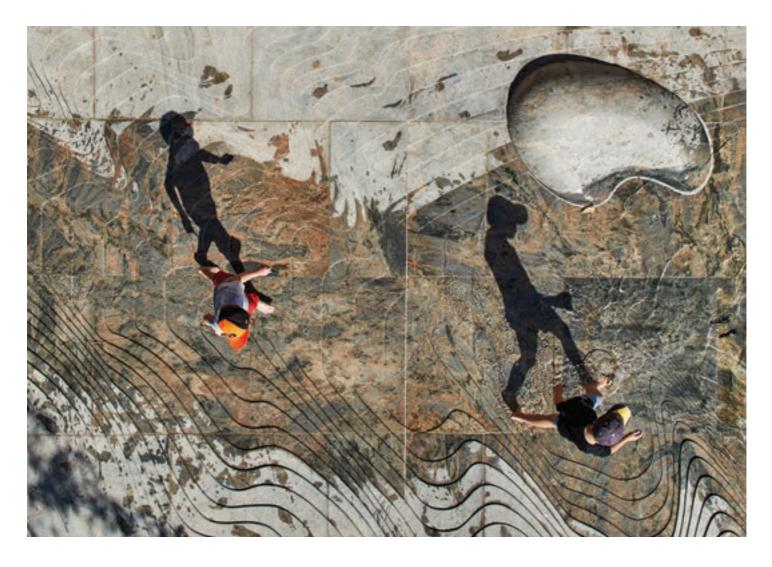
It feels like Yagan Square has always occupied the heart of Perth's CBD. Flanked at one end by the main railway station, at the other by a new bus port, and wrapped in the arms of the historic Horseshoe Bridge, it sits at the junction of many well-trodden paths.

But before it was transformed into Perth's new meeting place—with cafes, markets, playgrounds and an outdoor amphitheatre for events —this was a railway yard that divided the city in two. That's the landscape most people remember as they walk through Yagan Square —now a destination in its own right and a pleasant backdrop for journeys from A to B.

They may not realise, however, that before European colonisation this was a pivotal meeting point for the area's first inhabitants, the Whadjuk people of the Noongar nation. It was crisscrossed by walking tracks that provided access to and around a series of wetland lakes—an important source of food and fresh water. Capturing that earliest history, which stretches back about 38,000 years, was an integral part of the competition brief run by the Metropolitan Redevelopment Authority for Yagan Square. A consortium consisting of Lyons, IPH Architects and Aspect Studios won the competition with a proposal for an abstract canvas; one that interpreted historical events and provided a backdrop for the creation of new stories.







From the outset they aimed to seamlessly integrate buildings, landscape and artwork with references to local geology, natural resources, unusual topographies and plentiful flora and fauna, as well as the layering of meanings and memories that characterises the area's human occupation. Consultation with the Whadjuk working group through the South West Aboriginal Land and Sea Council informed the design and helped to subtly imbue the square with references to Aboriginal culture and songlines.

Rather than presenting that culture as a static entity from the past, the design aimed to create a fluid and changeable narrative that would continue to evolve. 'The Whadjuk working group told us they did not want this project to be a museum, they said it has to be a place where their culture could be created and they could continue to build the story,' says Neil Appleton, director at Lyons. 'So the whole square is a performance space; it seeks to continue to build narratives that don't stop with colonisation. We see it as part of a much more creative dialogue with indigenous groups around specific locations and creative actions, as opposed to just paying lip service.'

IPH Architects director, Adrian Iredale, says the team was surprised to discover there was little in the way of formal, written references about Whadjuk people. 'It was almost like a silent voice,' he says, comparing the experience to working with Aboriginal people in regional and remote communities. 'I think that's more of a problem in the city, because in the regions people have gone into sacred ground, where ancient culture is very visible. The mining industry has funded cultural facilities and created employment agreements with Aboriginal people, but that hasn't necessarily happened here in Perth.'

Kirsten Bauer, director at Aspect Studios, said the team began by trying to establish how history had impacted the site. 'Initially the schism between the two grids was probably a feature of the natural landscape—where a series of freshwater lakes provided a separation,' she says, 'and later the railway line formally split the city.'



To root the project in its local landscape, all but one of the five different types of stone used was sourced from the Noongar region.

P.92 Jon Tarry's *Waterline* artwork, made of granite from Bruce Rock, is playful and active.
P.93 The four local stone types form the base of buildings and paved pathways throughout the square, as well as Jon Tarry's *Waterline* artwork.



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• • •

The wetlands—which are now mostly filled in—once stretched from Claisebrook Cove on the banks of the Swan River to the city's north-west, where Herdsman Lake and Lake Monger still remain, albeit in altered forms. Early photos of Perth's new railway station from the 1880s depict it surrounded by swampland.

'In trying to reconnect with the history of this place, we found richer stories about site connections and site specificity, both colonial and indigenous,' Bauer says. 'We found ourselves drawn to the water stories and we started using them as a way of thinking about the project. We were not trying to represent an indigenous narrative per se, but to find a story to share with the Whadjuk people and listen to them share their stories with us.'

During the project, the Metropolitan Redevelopment Authority tested a pilot program developed by Dr Richard Walley called 'Kaart Koort Waarnginy' (Head, Heart, Talking), to foster real and significant cultural engagement with local indigenous stakeholders.

'We've found it useful to go to Aboriginal people with ideas, and then not only do they validate those, they enrich them with more ideas,' says Iredale. 'Or they were specific with their feedback about certain proposals. In the case of the digital tower (a major feature that is visible from most parts of the square and further afield), we asked if we should name the columns after the 14 Noongar nations, but they told us that some of the names are under debate, so it was better to leave them symbolic.

'The process helped to create a rich narrative that was then expanded upon, resulting in an outcome that was deliberately kept open and abstract, so that anyone visiting the square can bring their own stories to it,' he says.

In keeping with the Whadjuk working group's desire to root the project in its local landscape, all but one of the five different types of stone used was sourced from the Noongar region. 'When we wanted to use a red marble from the Pilbara, we went back to the Whadjuk group to seek special endorsement for that material,' Iredale says. **P.94** Sourced from south-western Australia, the choice of Jarrah for outdoor seating reflects the natural textures and landscape found within the state. Image—Brickworks

'That meant we were able to make very strong connections to the landscape,' Bauer adds. 'There were moments where value management came in and offered other types of stone, and in those cases we explained the meaning of the stone we'd selected, where it had been sourced from and why that was important to the ethos of the project.'

The four local stone types—limestone, sandstone and two shades of granite—form the base of buildings and paved pathways throughout the square, as well as the signature artwork within the project. Jon Tarry's Waterline sculpture has its headwaters in the playground at the square's highest point, flowing downhill by gravity over steps and cascades, along a creek bed, to a 'pool' beside the main William Street axis.

Tarry says the 200-metre long sculpture-made from 1049 individually crafted granite pieces -is not a decorative water feature, but a version of a natural landscape. 'We see the series of deep subterranean rivers when they pop up as lakes, but for the indigenous people that fresh water was vital to their survival and part of their culture,' Tarry says. 'I wanted to create something that wasn't so much a narrative as a literal representation of the way water flows under gravity and loops through the whole site. It has a meaning and logic to it and it references the way water shapes its environment, and stone, over time.'

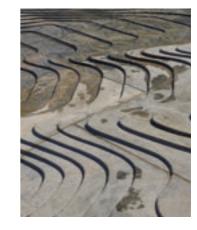
The artwork was made using granite from Bruce Rock (245 km east of Perth) supplied by UrbanStone, and it was initially conceived using Rhino and Revit 3D modelling tools, before being hand-carved to prepared templates. 'The sculpture is playful and active regardless of whether it's wet or dry,' Tarry says. 'Like the streams or rivers in Western Australia that come to life after rain, people can walk through this creek bed and play and interact with it. There's nothing ornamental about it and little kids don't need a guide book—they just take their shoes off and jump in—and adults can gaze on or join in.'

The fact that people—both young and older—are doing just that is a mark of its success, Tarry says. 'Artwork in a public space should be interacted with, and it was great to work with the architects and landscapers, and the indigenous Elders, who approved of what I was doing.'

For the design team, Tarry's artwork is just one example of the way stories are integrated throughout the square. 'There are so many different stories embedded and that is part of its beauty,' says Bauer. 'The Whadjuk people talk about 'waterline' in a different way to us and it has a different narrative for Jon Tarry; it's so pluralistic in the way people can respond to it.'

'That's a measure of success for any public precinct,' adds Iredale. 'It makes it more rewarding and a richer place to visit.'

With its focus on the unique qualities of this place—using raw materials, forms that resemble geology and topography, and subtle and overt references to animals and plants, not to mention the showcase of the region's food and wine offerings—Yagan Square celebrates its location and thousands of years of living culture.



The four stone types sourced from the Noongar regionlimestone, sandstone and two types of granite-give the project a strong connection to the local landscape. These form the base of buildings and paved pathways throughout the square, as well as the Waterline artwork created by Jon Tarry. For more information on UrbanStone, go to page 104.

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FolioElements 03 / 2018

Bowral Bricks

Beautifully crafted and supremely versatile, Bowral Bricks is the foundation shaping the future. Combining technology and tradition, our range not only offers exceptional structure and longevity, it gives you the ability to take on distinctive forms and create a defining moment. Bowral Bricks don't just help inspire your imagination, they build it.



	Bowral Blue		Bowral Brown		Brahman Granite	Capito Red		Chilling White	gham	Gertrue Brown	dis
								1			
length × width × height (mm)	230 × 110 × 76	230 × 110 × 50	230 × 110 × 76	230 × 110 × 50	230 × 110 × 76	230 × 110 × 76	230 × 110 × 50	230 × 110 × 76	230 × 110 × 50	230 × 110 × 76	230 × 110 × 50
Units per m2	48.5	69.5	48.5	69.5	48.5	48.5	69.5	48.5	69.5	48.5	70
e'Factor (mm/m)	< 1.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.8	< 0.5	< 1.0	< 1.0	< 0.5	< 0.5
Characteristic unconfined compressive strength (f'uc) (MPa)	> 15	> 20	> 12	> 15	> 15	> 8	> 12	> 10	> 10	> 12	> 12
Cold water absorption (%)	< 10	< 6	< 10	< 10	< 10	< 12	< 10	< 14	< 14	< 10	< 10
Initial rate of absorption (IRA) (kg/m2min)	2.0 - 8.0	3.0 - 6.0	3.0 - 8.0	3.0 - 6.0	3.0 - 8.0	3.0 - 8.0	3.0 - 6.0	3.0 - 8.0	3.0 - 8.0	3.0 - 8.0	3.0 - 6.0
Durability	Exp.		Exp.		Exp.	Exp.	·	Exp.	·	Exp.	·
Solar absorptance rating	Dark		Dark		Dark	Mediun	ı	Light		Dark	



Guernsey Tan	Limousin Gold	Murray Grey	,	Renova Gertru Brown		Shorth Mix	orn	Simme Silver	ntal	St Pauls Cream
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48.5	48.5	48.5	69.5	48.5	69.5	48.5	69.5	48.5	69.5	48.5
< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.6	< 0.5	< 1.0	< 0.5	< 0.5
> 10	> 8	> 12	> 15	> 12	> 15	> 12	> 15	> 12	> 12	> 10
< 10	< 10	< 10	< 10	< 10	< 10	< 12	< 12	< 10	< 10	< 12
3.0 - 6.0	3.0 - 8.0	3.0 - 6.0	3.0 - 6.0	3.0 - 8.0	3.0 - 6.0	3.0 - 8.0	3.0 - 6.0	3.0 - 6.0	3.0 - 6.0	3.0 - 6.0
Exp.	Exp.	Exp.		Exp. Exp.		Exp.		Exp.		
Medium	Dark	Mediun	n	Dark		Mediun	n	Mediun	n	Light

REFER

Australian Embassy Complex

BVN Folio 03, page 30 **Gympie Aquatic Recreation Centre** Liquid Blu Architects Folio 03, page 40

Spire Residences

John Wardle Architects Folio 03, page 58

Austral Bricks Burlesque

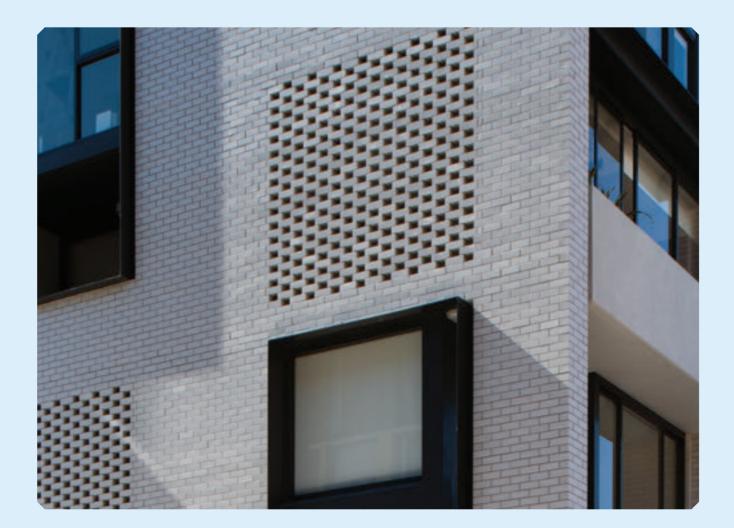
Turn a bold state of mind into a bold design statement with the eye-catching Burlesque range. Their high gloss finish means that even soft neutrals can speak volumes. Available in 13 standard colours, including jet black and fiery red, the Burlesque range is not for the faint of heart. Manufactured in NSW.

REFER

5 Sam Sing Street

Collins and Turner & Environa Studio Folio 03, page 66

	Brushed Leather	Bursting Orange	Charming Black	Cognac Illusion	Deepening Green	Enchanting Yellow			
length × width × height (mm)	230 × 110 × 76								
Units per m2	48.5								
e'Factor (mm/m)	< 1.2	< 1.2							
Characteristic unconfined compressive strength (f'uc) (MPa)	> 20								
Cold water absorption (%)	< 10								
Initial rate of absorption (IRA) (kg/m2min)	0.1 - 4.0	0.1 - 4.0							
Durability	Exposure class								
Solar absorptance rating	Medium	Medium	Dark	Medium	Medium	Medium			
Dimensional category	DW1								
Average weight / unit (kg)	2.8								
Core volume (%)	30-40								
Pack size	512								
Liability to effloresce	Nil to slight								
Lime pitting liability	Nil to slight								



Indulgent White	Karrington Silver	Luscious Red	Majestic Grey	Oyster Grey	Smashing Blue	Sublime Steel
Light	Light	Dark	Light	Dark	Dark	Dark

GB Masonry Smooth Porcelain



REFER

Make Ventures' Headquarters Tecture Folio 03, page 72 The GB Masonry Smooth Porcelain block has been designed to complement contemporary designs, with added benefits including good sound insulation, thermal mass, environmental impact, colours and finishes, ongoing maintenance and more. It has a finely textured finish created through the standard moulding process. It is available in a range of sizes to suit various applications.

Nominal dimensions— thickness × height × length (mm)	100 x 200 x 400
Actual dimensions— thickness × height × length (mm)	90 × 190 × 390
Core volume (% overall thickness)	< 30
Characteristic unconfined compressive strength (mpa)	> 15
Minimum face shell thickness (mm)	25
Average block weight (kg)	11.0
Average number per tonne	90
Number per pallet	180
Durability grade	General purpose

GB Masonry, Honed in Porcelain

Typical properties	90mm Honed standard veneer
Nominal dimensions— thickness × height × length (mm)	100 × 200 × 400
Actual dimensions— thickness × height × length (mm)	90 × 190 × 390
Core volume (% overall thickness)	< 30
Characteristic unconfined compressive strength (mpa)	> 15
Minimum face shell thickness (mm)	25
Average block weight (kg)	11.0
Average number per tonne	90
Number per pallet	180
Number per M2	12.5
Durability (to as 4456.10 —sodium sulphate and sodium chloride)	General purpose



REFER

Club Armstrong Hayball Folio 03, page 80

Austral Precast PermaTint



Austral Precast PermaTint offers endless colour options and finishes, from metallic, translucent, to natural stone. It is a unique colouring system that goes beyond paint and actually binds with the concrete panel to which its applied, creating a long lasting, deep finish that will never peel and is UV, mould, mildew and weather resistant. From substrate to surface PermaTint embeds itself in the panel for a finish with unmatched longevity, resistant to fading and cracking. Austral Precast is so confident in the longevity of the finish we offer an industry leading 25-year colour guarantee. The factory-applied PermaTint Solution is a long-lasting alternative to the on-site painting of precast panels.

HIGHLIGHTS

- 25-year guarantee on PermaTint colours
- Consistent finish
- Reduced ongoing maintenance
- Durable and fire-resistant
- Time and cost-efficient construction option
- Reduced environmental impact

REFER

M/24 Apartments, ARM Architecture, Folio 03, page 50

INEX board

INEX boards provide a range of high performing, lighter weight materials for the construction industry. INEX boards offer a superior, yet price competitive, environmentally friendly alternative to fibre cement and plasterboard products. The products are low carbon and high performing, while at the same time affordable, providing a safe and costeffective construction solution.

INEX RENDERBOARD

A great innovation that delivers a lightweight render substrate board suitable for multiple render coating applications. 16mm thick INEX>RENDERBOARD sheets are tongue and grooved to lock together and resist any render cracking over time. INEX>RENDERBOARD comes with a fire rating of FRL 60/60/60 and a busfire attack level BAL-FZ.

INEX WALLBOARD

INEX>WALLBOARD comes with both square and recessed edges to suit

different joint and settings. The smooth side of INEX>WALLBOARD provides a superior surface finish for paint applications. The reverse side of INEX>WALLBOARD has a textured surface designed for roll-on texture coating systems. Superior to compressed fibre cement sheeting, INEX>WALLBOARD can be finished in its beautiful raw form by applying a clear sealer.

REFER

Eatons Hill Hotel Complex

Cox Architecture Folio 03, page 14

Product name	INEX > Rende	rboard	INEX > Wallboard 12					
			Aris or Recessed edge					
Length × width (mm)	3000 × 600	2700 × 600	3000 × 600	3000 × 1200				
Thickness	16	16	12	12				
Kg/m²	20.7	20.7	15.9	15.9				
Kg/length	40	34	29	53				

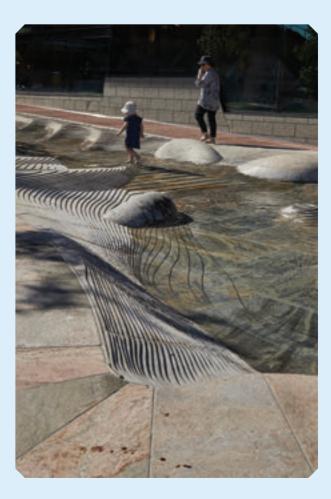
UrbanStone

UrbanStone is a unique paving and landscaping system suitable for residential and commercial markets. Combining natural stone with a highstrength, cement concrete matrix, UrbanStone creates products that are durable and also feature the natural beauty of real stone.

UrbanStone's wet cast manufacturing process is fully automated and computer controlled throughout the production process. Volumetric dosing of the wet-mixed concrete into UrbanStone's unique moulding system, together with high-frequency vibration systems, guarantees dimensional accuracy, outstanding colour consistency and generates an end product with exceptional density. Controlled curing, combined with a specialised storage system, enhances the quality of the end product.

REFER

Yagan Square, Lyons, iph Architects and Aspect Studios, Folio 03, page 88



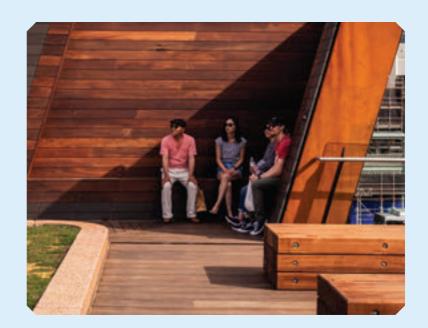
Auswest timbers

Silvertop Ash and Jarrah are two versatile species ideal for any external setting. Both species are durable, stable and offer a very attractive appearance to complement any architectural style and décor. Both timbers are expertly kiln dried and reconditioned. Their suitable for a range of decorative applications, from flooring and decking, to stair treads, to door and window frames to furniture pieces and beyond. Renowned for their strength and versatility, these timber's beauty will last a lifetime.

Silvertop Ash is a versatile timber exhibiting warm tones of light yellows and browns to light pinks. Jarrah is an extremely durable hardwood, with colours ranging from light pinks to deep reddish browns and is available in a range of sizes.

REFER

The Pool National Gallery of Victoria Folio 03, page 22 Yagan Square Lyons, IPH Architects & Aspect Studios Folio 03, page 88



Austral Precast PermaTint



Austral Precast PermaTint offers endless colour options and finishes, from metallic, translucent, to natural stone. It is a unique colouring system that goes beyond paint and actually binds with the concrete panel to which its applied, creating a long lasting, deep finish that will never peel and is UV, mould, mildew and weather resistant. From substrate to surface PermaTint embeds itself in the panel for a finish with unmatched longevity, resistant to fading and cracking. Austral Precast is so confident in the longevity of the finish we offer an industry leading 25-year colour guarantee. The factory-applied PermaTint Solution is a long-lasting alternative to the on-site painting of precast panels.

HIGHLIGHTS

- 25-year guarantee on PermaTint colours
- Consistent finish
- Reduced ongoing maintenance
- Durable and fire-resistant
- Time and cost-efficient construction option
- Reduced environmental impact

REFER

M/24 Apartments, ARM Architecture, Folio 03, page 50

INEX board

INEX boards provide a range of high performing, lighter weight materials for the construction industry. INEX boards offer a superior, yet price competitive, environmentally friendly alternative to fibre cement and plasterboard products. The products are low carbon and high performing, while at the same time affordable, providing a safe and costeffective construction solution.

INEX RENDERBOARD

A great innovation that delivers a lightweight render substrate board suitable for multiple render coating applications. 16mm thick INEX>RENDERBOARD sheets are tongue and grooved to lock together and resist any render cracking over time. INEX>RENDERBOARD comes with a fire rating of FRL 60/60/60 and a busfire attack level BAL-FZ.

INEX WALLBOARD

INEX>WALLBOARD comes with both square and recessed edges to suit

different joint and settings. The smooth side of INEX>WALLBOARD provides a superior surface finish for paint applications. The reverse side of INEX>WALLBOARD has a textured surface designed for roll-on texture coating systems. Superior to compressed fibre cement sheeting, INEX>WALLBOARD can be finished in its beautiful raw form by applying a clear sealer.

REFER

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Eatons Hill Hotel Complex

Cox Architecture Folio 03, page 14

Product name	INEX > Renderboard		INEX > Wallboard 12			
			Aris or Recessed edge			
Length × width (mm)	3000 × 600	2700 × 600	3000 × 600	3000 × 120		
Thickness	16	16	12	12		
Kg/m²	20.7	20.7	15.9	15.9		
Kg/length	40	34	29	53		



[#3]

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FOLIO

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