

116

NOVEMBER 2013
ARCHITECTURAL
INNOVATION

S PROFILE

**TAG ARCHITECTS AND IREDALE PEDERSEN HOOK
ARCHITECTS IN ASSOCIATION**
WEST KIMBERLEY REGIONAL PRISON

JOHNSON PILTON WALKER
WHITE BAY CRUISE TERMINAL

IN PROFILE:
KATHRIN ASTE

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COVER PROJECT
West Kimberley Regional Prison
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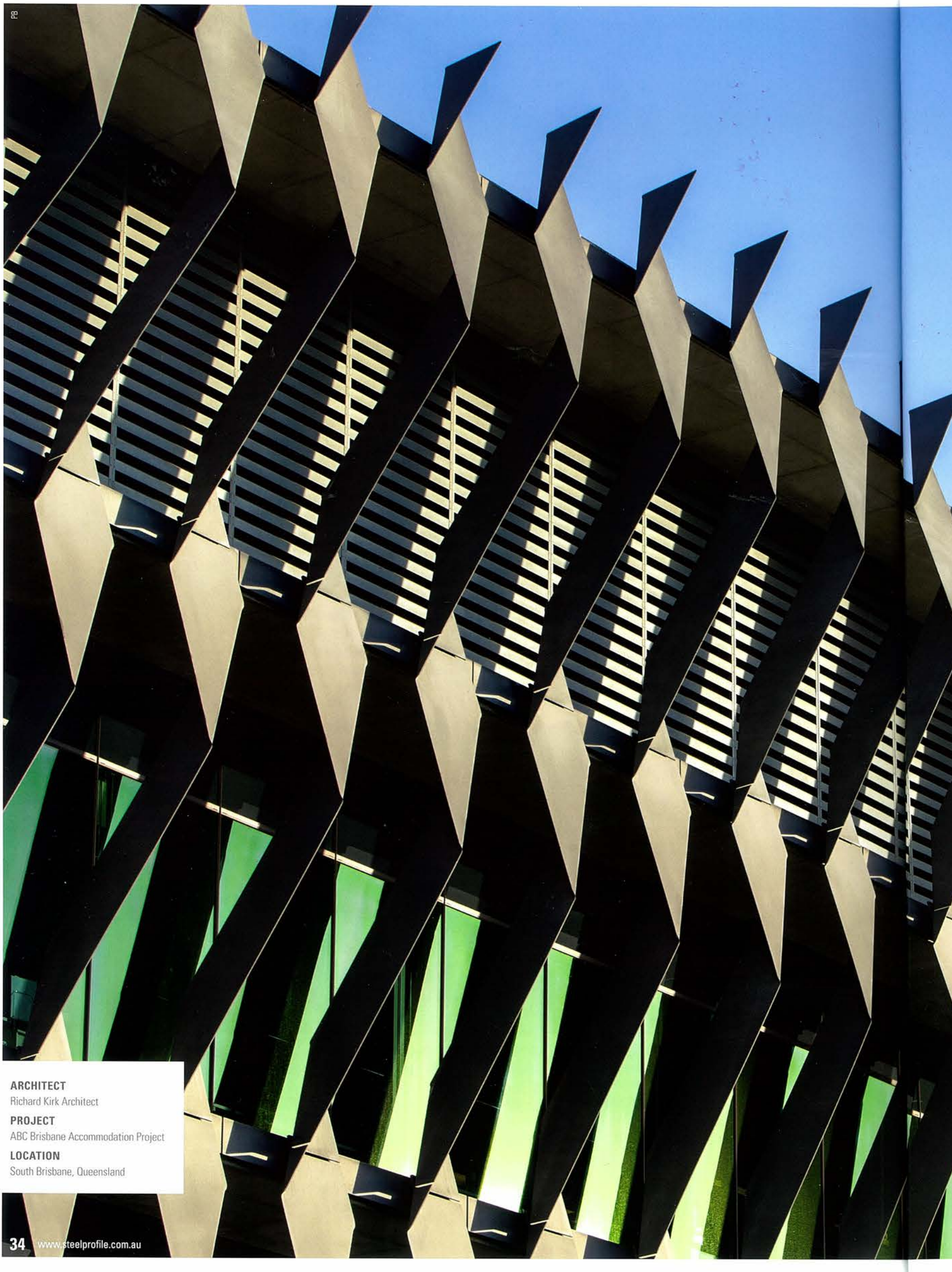
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**ARCHITECT**


Richard Kirk Architect

PROJECT

ABC Brisbane Accommodation Project

LOCATION

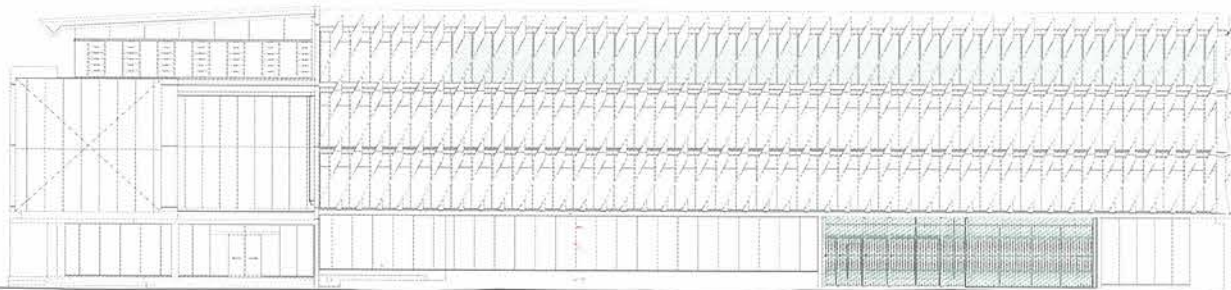
South Brisbane, Queensland



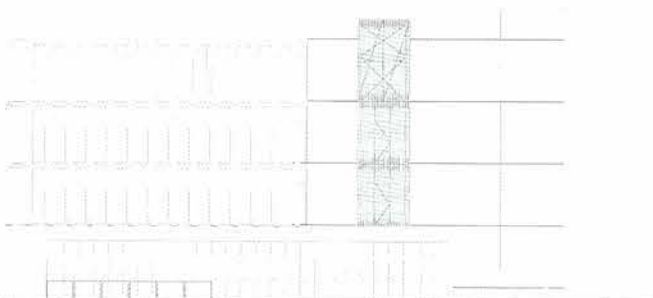
With distinctive steel cladding that dances its way along the building's northern and western facades, it appears that 'Aunty' is young once again.

Words **Margie Fraser** Photography **Paul Bradshaw**,
Christopher Frederick Jones

GOOD VIBRATIONS



NORTH ELEVATION



WEST ELEVATION

ABOVE: Broadcasting studios have a prime view of South Bank Parklands from the cantilevered glass boxes

RIGHT: Steel blades ripple across the ABC building's northern and western facades





When we meet at the new Australian Broadcasting Commission building in Brisbane's South Bank, architect Richard Kirk is fresh off an overnight flight from Kuala Lumpur. Fresh is probably a misnomer, given the sleep deprivation common to red-eye travel, but winging in from Asia reinforces an important link to Kirk's design of the national broadcaster's premises. The distinctive steel cladding that dances its way along the northern and western facades of the building is part of the language of layered shading that is common parlance in tropical architecture, and which Kirk's practice embraces in projects in Australia, Malaysia and Singapore.

Deeply carved reveals, open atriums, generous overhangs and a series of operable skins salute the simplicity and pragmatism of a design ethos that viscerally responds to the environment. "Our buildings are about the climate," says Kirk.

His firm won the nationally advertised project from a shortlist of eight, he explains, through its recognition of the local context as well as its credentials in designing technologically advanced buildings for the film and television industry. Part of that roll-call includes the Brisbane headquarters for Cutting Edge and its eight subsidiary national studios.

The four-storey ABC building sits on a pivotal corner site at the intersection of the playground that is South Bank and the city's cultural precinct: a cluster of concrete buildings designed by architect Robin Gibson in the 1970s and '80s. To add heft to the cultural quotient, The

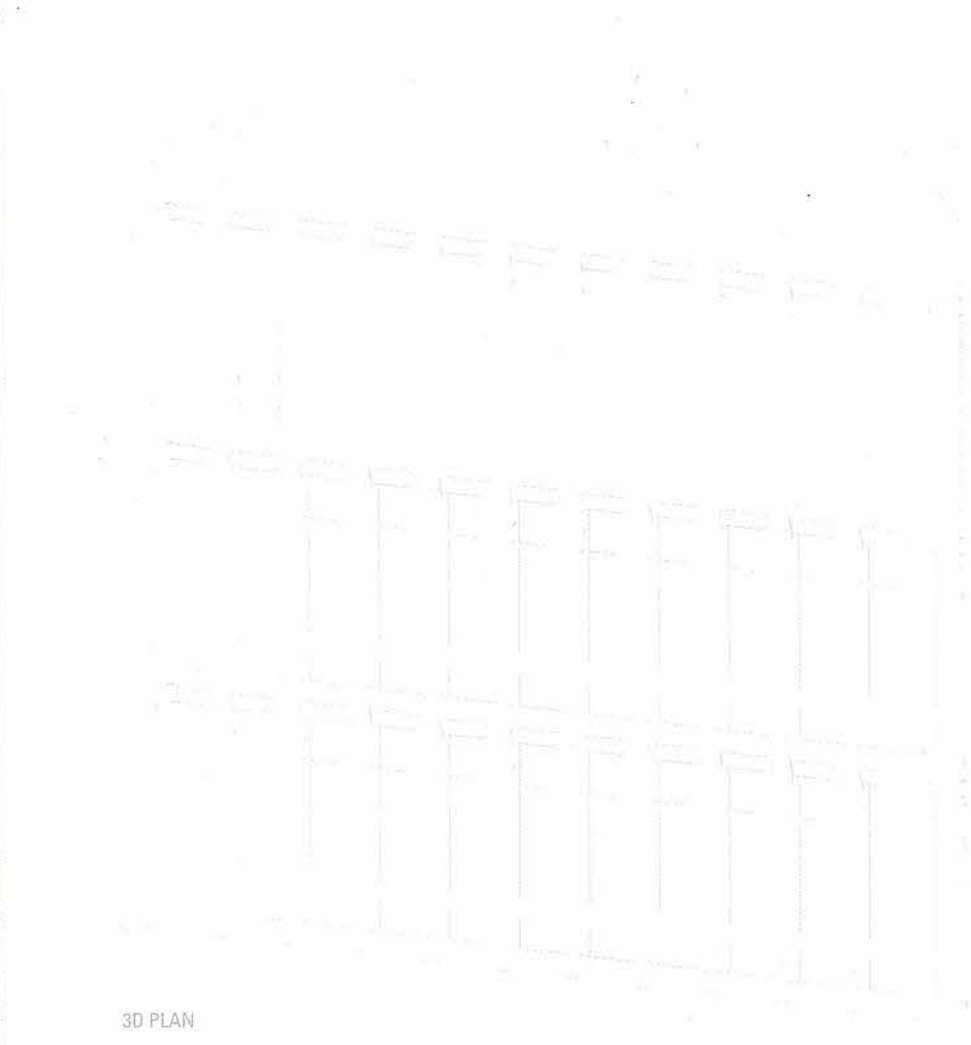
Queensland Conservatorium Griffith University nudges against the ABC's southern side, while the Queensland College of Art sits uphill a little further south. A bougainvillea-encrusted arbour that snakes its way along South Bank begins (or ends) at the ABC's front door on the eastern, riverside edge, where a sightseeing ferris wheel leaves no doubts as to the precinct's tourist branding.

The key siting was established by the former Bligh state government. Between the State's treasure houses of theatres, concert halls, museums, art galleries, university campuses, and the popular, democratic South Bank strip of leisure en plein air, the position underlines the function and mandate of the national broadcaster as a service for the people, belonging to the people. It also physically and symbolically cements its position within the visual and performing arts which form so much of its programming. But while the siting is clearly public, the brief was more "hardnosed commercial and sensitive to public opinion", says Kirk, than the sort of brief an architect might expect of a public building rich with meaning and importance.

"It was important the building appear as affordable and as modest as the budget dictated," explains Kirk. "It is a sedate building that doesn't dominate its surrounds, but rather defers to the Parklands setting. We wanted to let the arbour live."

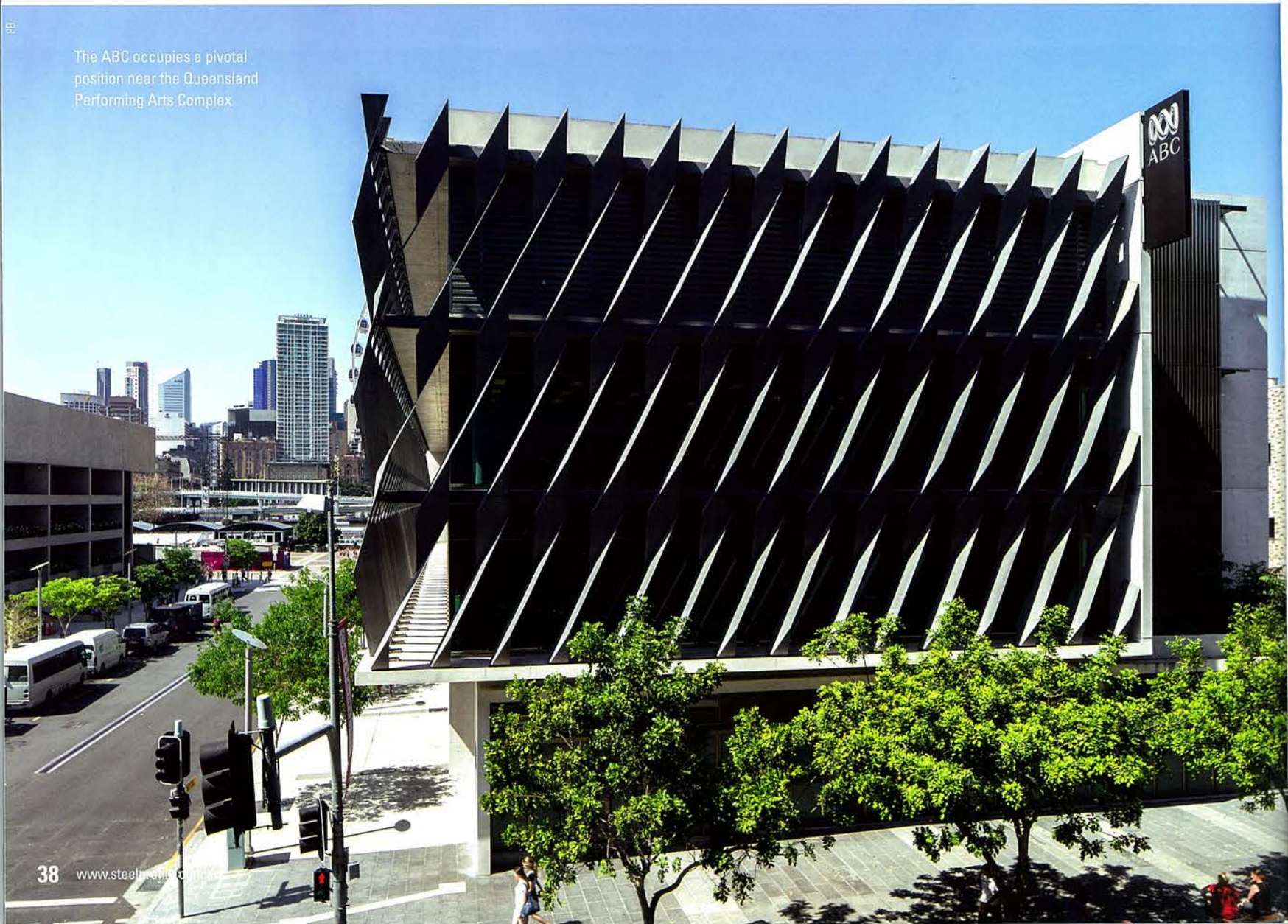
Part of the act of deference involved taking it to four floors instead of the allowable five, to establish a pleasing scale and conversation with the Gibson QPAC building across the way to the north, and to





3D PLAN

The ABC occupies a pivotal position near the Queensland Performing Arts Complex



A striking pattern of blades made from BlueScope steel plate give the building its strong identity and have inspired its nickname

the triangulated glazing, and continues along the southern elevation. Reminiscent of the roll-down timber blinds of domestic Queenslanders, they adjust to prevent glare on the myriad television and computer screens in use inside.

Along the northern and western elevations – the “second” street address – a striking pattern of blades made from 10mm high-tensile grade 350 BlueScope steel plate give the building its strong identity and have inspired its nickname: the “Alessi cheese grater”. The moniker, true to a characteristic Australian humour that combines slegging with perspicacity, aptly tags their practical application as much as their stylish elegance.

The blades, which recall the bends and tilts of the many surfaces in the building designed to deflect sound, also act practically as sunshades.

In-situ post-tensioned concrete floor slabs project beyond the facade to assist in shading, and provide the bases for attaching the blades.

The “service layer” surrounding most of the building allows for much of the screening attachment, while the concrete slab plays an important role in harnessing the thermal load.

Kirk initially designed the blades in weathering steel, but the clients preferred a thicker profile in the high-tensile grade 350 steel.

Kirk continued his weathering steel experiments elsewhere in the form of the Fitzgibbon Community Centre project (see *Steel Profile* 114), where the blades were painted with an iron oxide paint from Dulux, Micaceous Mio, that is also used on the Sydney Harbour Bridge.

The steel sheets from which the blades are made measure 600mm wide by 4.5 metres long, so zero wastage was achieved in slicing three columns from each of the nine-metre sheets. Like the sheets used at Fitzgibbon, the grade 350 steel is folded through the simple mechanics of being fed through a brake press. Besides the astounding economy, Kirk enjoys the “legibility of the material, and its primal quality. The facade moves as you walk along the street – it is static, but the shadows move.”

Fixings are made from 12, 16 and 20mm plate, requiring much tolerance for the movement of the building. Kirk praises the ingenuity of steel fabricator ACLAD’s shop drawings process which determined the tolerance factor. At Kirk’s practice, the folds were experimented with more manually, by hand-folding paper card. The thinness of the material is crucial, and an origami crispness was achieved in the pattern. “We had to be careful about harmonics too,” says Kirk, “and make sure the blades were rigid enough not to cause vibrations. And another satisfying outcome was that steel was proven to be the most cost-effective material to achieve the desired results.”

The sheer blade of the LYSAGHT TRIMDEK® profile roof responds to the simple elegance of the elevations. Made from COLORBOND® steel in the colour Windspray®, the 0.48mm-thick roof slice folds its way over deeply recessed gardens and verandah spaces on the top level. It is an elegant lid to a discrete building. ↗

retain views from the Convention Centre to the west. The building houses both the ABC and the Queensland Symphony Orchestra (as a tenant). Kirk’s first scheme made it a dual complex, with the two institutions on either side of a wide, permeable, central atrium. The void was conceived as a tribute to, and metaphorical extension of, the watermill promenade in the nearby Queensland Art Gallery – an iconic volume that Kirk admires. When the equal tenancy concept was somewhat modified and further budgetary restraints came into play, the generosity of the void was scaled down. The entry void is now an intriguing intersecting geometry of staircases that allows visitors or passersby to observe activity of the staff within their secure zone. A series of lightwells punctures the roof and floods the space with rays of natural light.

The chiseled-out entry foyer is a pivot between two street addresses. The different treatments of the external facades emphasise the two addresses and functions. “The fabric of the building is conceived in two parts,” says Kirk. “The blades are the urban side, and the transparent glazing faces the Parklands.”

The three tiers of east-facing office space are visible from the Parklands through floor-to-ceiling glass. A cantilevered corner projects beyond the rigid rectangle of the building and houses two levels of broadcasting studios; one for the local radio station 612 4QR and one for RN 792 (Radio National). The prow-like projection makes these spaces a voyeur’s delight, enjoying a transparency uncommon to the genre. A layer of adjustable aluminium blinds that automatically tracks the sun drapes over



PANEL SAYS

Like the Fitzgibbon Community Centre that we featured in *Steel Profile* 114, this project by Richard Kirk Architects boasts a striking facade that demonstrates how steel can be used in truly innovative ways. This inventive use of folded steel plate to form a series of fin-like blades is entirely specific to the material, with the twisting effect offering many functional and aesthetic advantages to the building’s north-eastern and north-western elevations. These include shading the offices within, breaking down the mass of the building at street level, and imparting a beautiful, sculptural quality to the object. It is remarkable that something so unconventional as ‘twisted’ steel plate can produce such a delightful and tactile result.

ABOVE: Blades made from 10mm high-tensile grade 350 BlueScope steel plate deflect sound and double as sunscreens





The recent history of the ABC accommodation is a chequered one. When a cancer cluster was confirmed in the former studios in Toowong in 2007, the entire 300 staff were shifted to eight different premises around town. Besides the need to heal a wounded workplace culture, the new building was also required to urgently and properly accommodate new digital technology, and address the consequently changed nature of journalism. Previous silo arrangements were no longer functional. Staff efficiencies demanded one workplace and the decision was made to make Brisbane the online hub for Australian operations.

The new floor plan puts the entire production staff within shouting distance of one another for the first time. Work stations occupy the edges and enjoy the outward views, while recording studios and executive offices take up the core. The newsroom

is a reflection of increased automation, occupying a single height-space and significantly reduced floor area than its earlier cousins, with all cameras operated robotically.

The Multi Production Studio (MPS) is a unique facility on the ground floor that is shared with the QSO and is able to morph between a full recital hall and an acoustically 'dead' television studio, according to needs. The 14-metre-high ceiling supports sound treatments that tilt and move up and down, as well as accommodating a 250-strong audience.

The ability to cater to one soloist or to a full orchestra, then adapt to a recording of Q&A is emblematic of this gymnastically responsive building. It appears that Aunty is young once again. SP

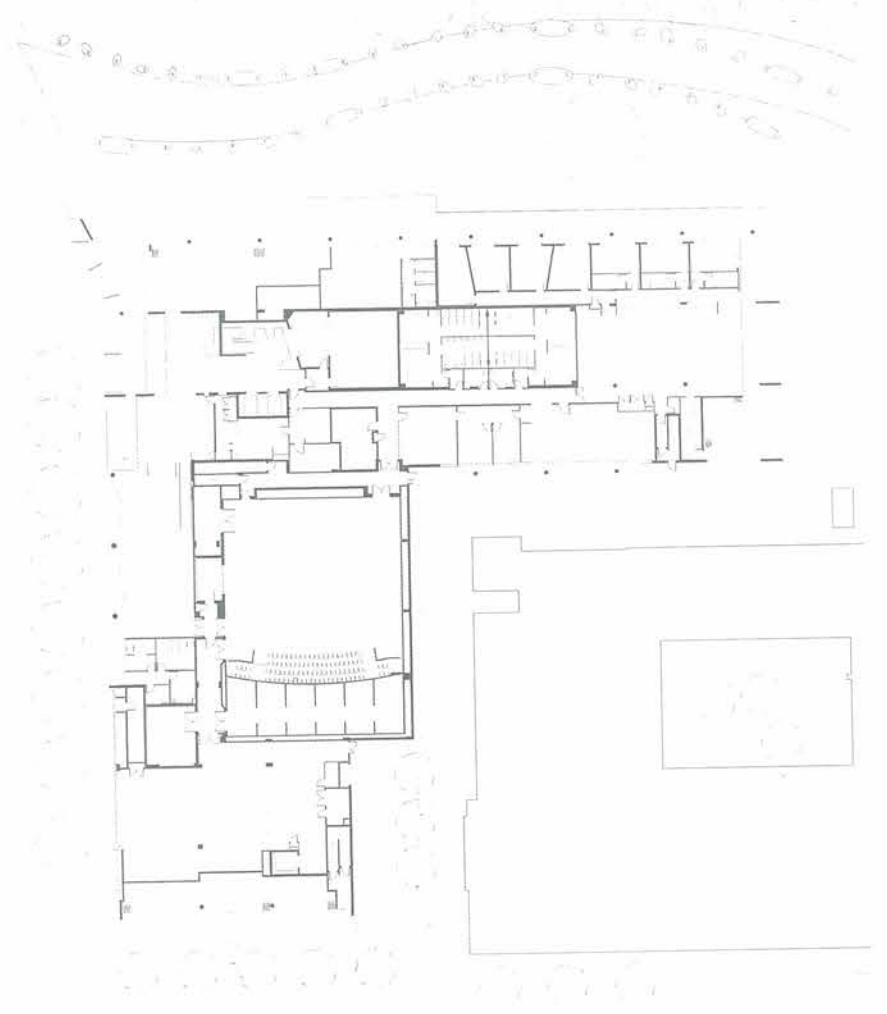
A video of this project is available at steel.com.au/showcase

TOP: Occupants enjoy a prime view of the Arbour Walk, which winds through the Southbank Parklands and features overlapping 'trees' fabricated from XLERPLATE® steel

ABOVE LEFT-TO-RIGHT: A layer of aluminium operable screens filters light for the interiors and multiple work stations

Entry foyer and reception, with access to the Multi Purpose Studio located rear left

Broadcasting in action, from the glass box visible to passersby



GROUND FLOOR PLAN



TOP LEFT: A stairwell void acts as a highly visible circulation route between floors and activates the entry foyer

LEFT: Light penetrates the floors through floor-to-ceiling glazing

BELOW: The MPS hosts full orchestral recitals and sound-'dead' television recordings



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Walk, which winds through the
arklands and features overlapping
ated from XLERPLATE® steel

TO-RIGHT: A layer of aluminium
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pose Studio located rear left

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passersby

PROJECT ABC Brisbane Accommodation Project **CLIENT** Australian Broadcasting Corporation (ABC) **ARCHITECT** Richard Kirk Architect **PROJECT TEAM** Richard Kirk, Karl Eckermann, Paul Chang, Jonathon Ward, Matthew Mahoney, Sam Clegg, Fedor Medek, Grace Egstorf, Justine Drummond, Glen Millar, Joe Adsett, Tess Martin, Shane Willmet, Tian Li, Richard Nicholls, Brendan Pointon, Wes Kelder **STRUCTURAL & CIVIL ENGINEER** Cardno **ELECTRICAL ENGINEER** Aurecon **FIRE ENGINEER** Aecom **HYDRAULIC & MECHANICAL ENGINEER** WSP Group **ESD CONSULTANT** Cundall **ACOUSTIC AND THEATRE CONSULTANT** Arup **ACCESS CONSULTANT** Access All Ways **BUILDING CERTIFIER** Certis Group **BUILDER** Leighton **STEEL FABRICATOR AND CLADDING CONTRACTOR** ACLAD **SHOP DRAWING CONTRACTOR** Eaton Industrial Imaging **LANDSCAPE ARCHITECTS** Gamble McKinnon Green **PRINCIPAL STEEL COMPONENTS** Folded blades: made from 10mm high-tensile grade 350 BlueScope steel plate; Roofing: LYSAGHT TRIMDEK™ profile made from COLORBOND™ steel in the colour Windspray™; Custom brackets and connections: made from 12mm, 16mm and 20mm steel plate **PROJECT TIMEFRAME** 2009-2012 **AWARDS** Australian Institute of Architects Brisbane Regional Commendation for Commercial Architecture **BUILDING SIZE** 15,000m² GFA **TOTAL PROJECT COST** \$70 million