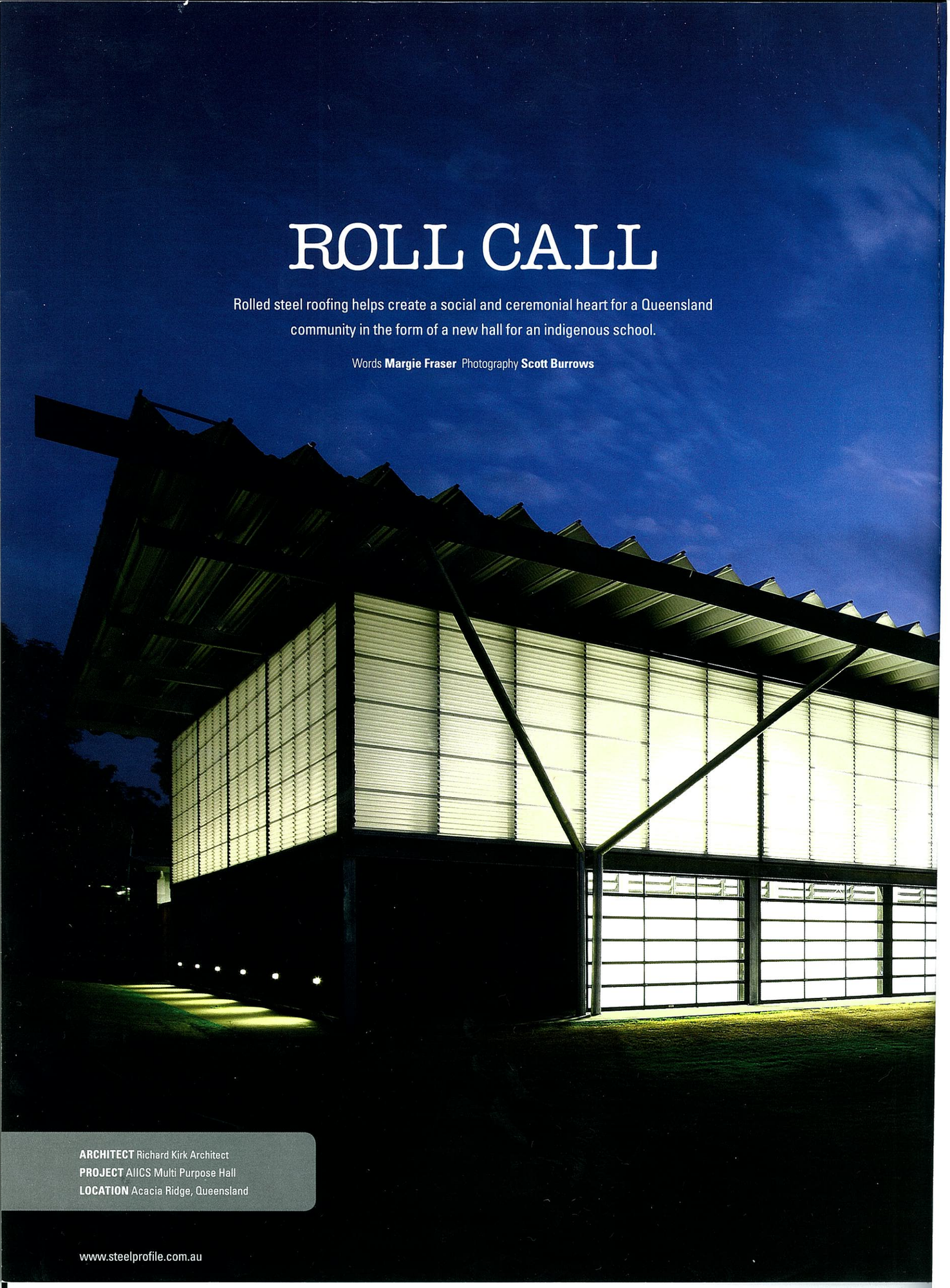
ROLL CALL

Rolled steel roofing helps create a social and ceremonial heart for a Queensland community in the form of a new hall for an indigenous school.

Words **Margie Fraser** Photography **Scott Burrows**



ARCHITECT Richard Kirk Architect
PROJECT AIICS Multi Purpose Hall
LOCATION Acacia Ridge, Queensland

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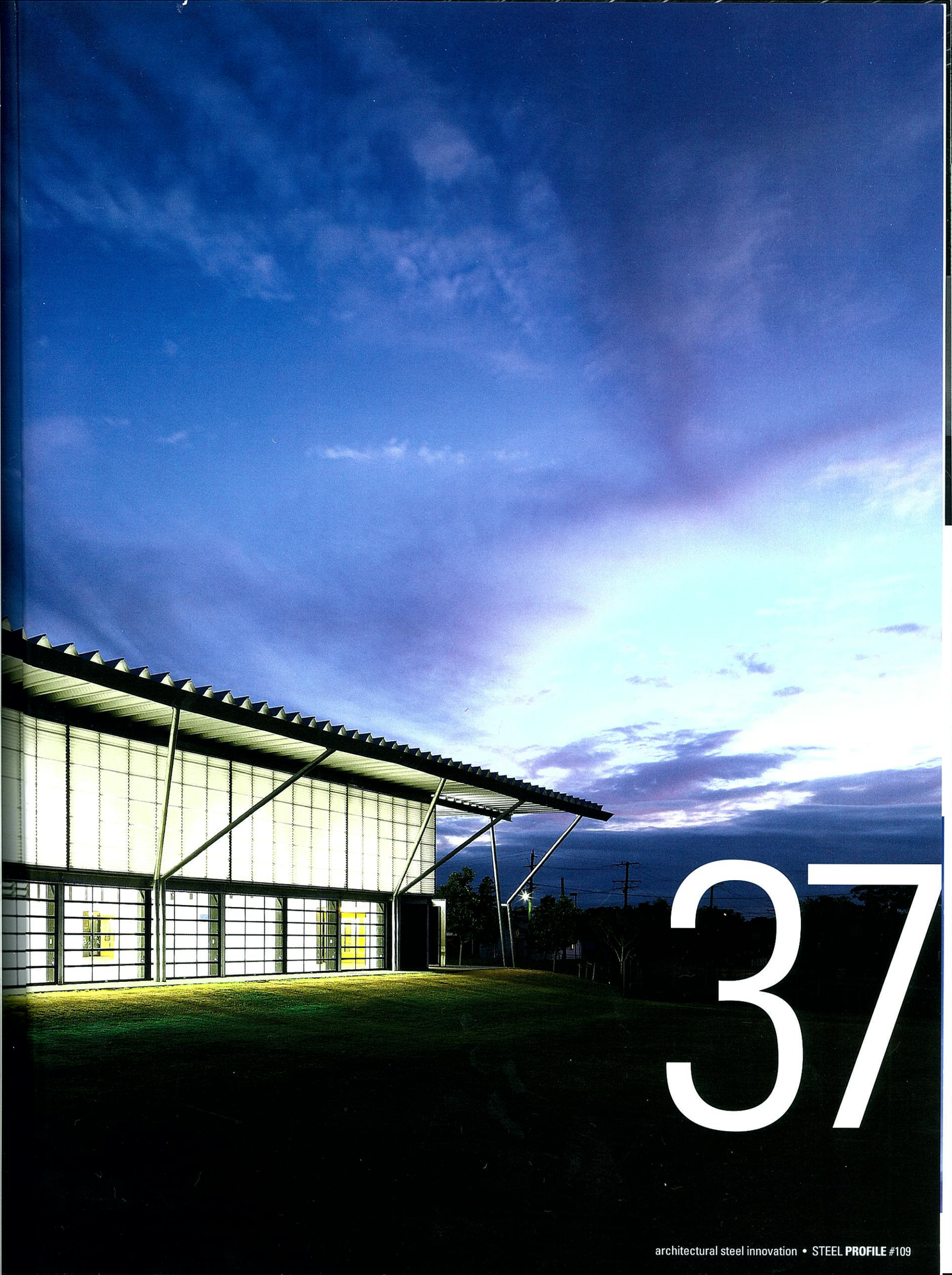

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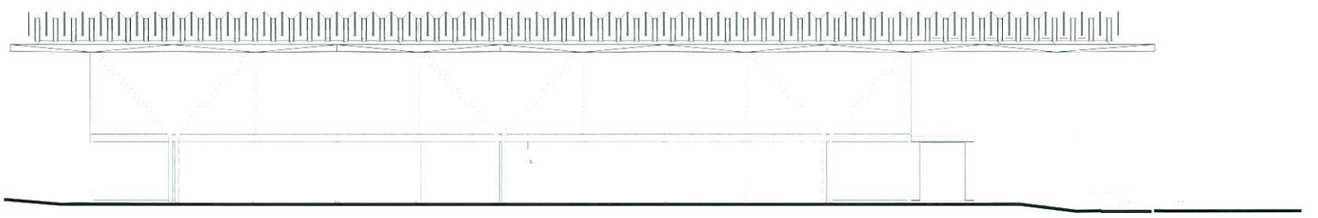
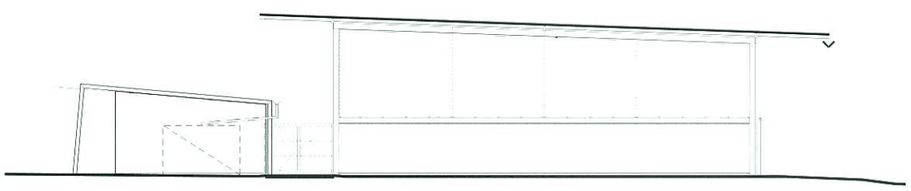


NORTH ELEVATION



EAST ELEVATION

ABOVE: Further gathering spaces that relate to the landscape, an avenue of Teckeroo trees are erected under the eaves

RIGHT: A generous skillion overhang protects the compressed entry foyer boxes on the western side

he Aboriginal and Islander Independent Community School (AIICS), aka the Murri School, is Queensland's only school owned and run by indigenous people, for indigenous students. It was established 25 years ago by visionary members of Brisbane's indigenous community who were concerned that standard education systems disadvantaged their children. Programs to improve literacy and numeracy, self-esteem and nutrition, and to counter the stumbling blocks of education costs and impairments to attendance were put in place for children from preschool through to primary ages. During the last 10 years the net has widened to include secondary school students through to Year 12.

In 1998 the Murri School moved from leased premises to its current location at Acacia Ridge, in Brisbane's outer west. The ready-made site was previously a state government primary school, with a cluster of utilitarian buildings situated near a busy arterial road. Under Richard Kirk Architects' (RKA's) masterplan, the old buildings have gradually been demolished and replaced by new, purpose-built spaces that relate to one another and to the landscape.

RKA was commissioned to design a new multi-purpose hall on campus that could serve both the 240-strong school population and the broader community. The range of activities and functions it accommodates underscores the educational philosophy of embracing culture. Performances, meetings, sporting events, speech nights and wet weather classes are all on the agenda. At 900 square metres, the hall caters for an Olympic-sized basketball court and indoor netball games. A large commercial kitchen in the annex services the canteen. Toilet facilities and change and storage rooms are also included. Taking into account undercover spaces, the useable area stretches to 1280 square metres.

A gently sloping tract of cleared grassland slopes away from the original building cluster in the south-east corner to the quieter, residential back streets on the northern and western edges. The main entry to the campus is through an unassuming garden gate on the north-western corner, via bus stops and a small drop-off zone.

The new multi-purpose hall assumes a commanding presence in the arrival sequence. On approach, visitors first encounter the generous undercroft of its western elevation. The impressively scaled skillion roof tilts northwards, and is anchored at the corner by a single steel pillar. A pivotal view of the building and its location on the site is gained from the corner position near the pillar. Looking south, along a pleasant avenue of tuckeroo trees, there's a view into the campus that provides a snapshot of the whole scheme. The elegant striations of a steel and timber colonnade that links the hall to its neighbours guides the eye into the heart of the campus. Looking eastward, along the hall's grand northern elevation, the impressive cantilever continues. The expressive sailing roof form and the openable northern wall allow the hall to operate as outdoor-like space.

RKA director Richard Kirk wished to completely avoid a "cold internal hall", as the school generally aims to de-institutionalise its built forms. Opening onto a natural amphitheatre in the landscape extends the sense of space even further.

For Kirk, the decision to specify Aramax made from ZINCALUME® steel for the new building's roof was an easy one. "The Aramax roof sheeting allows for huge roof spans with no purlins," he says. "We found it was the only product that could give us these important structural qualities at the same time as fitting into a tight budget."

The fact that ZINCALUME® steel is easily transported and can be roll-formed on site is another advantage for projects involving short construction timeframes and tight budgets.

"The structural strength of Aramax with its eight- or nine-metre spans is so important here," says Kirk, "but the grain of the folds also suited this building. It gives the interiors a wonderful textural quality."

Another advantage of the product is its capacity for ventilation and insulation in both the ceiling and the wall linings. Applied to the ceiling underside, a second layer gives added heat and sound insulation. Also, Kirk notes, with the deep 700mm ceiling profile, waterproofing is highly effective.

Rainwater is captured off the roof, stored in large underground tanks and used to irrigate the school grounds. The gutters suspended from the four-metre northern overhang are self-supporting.

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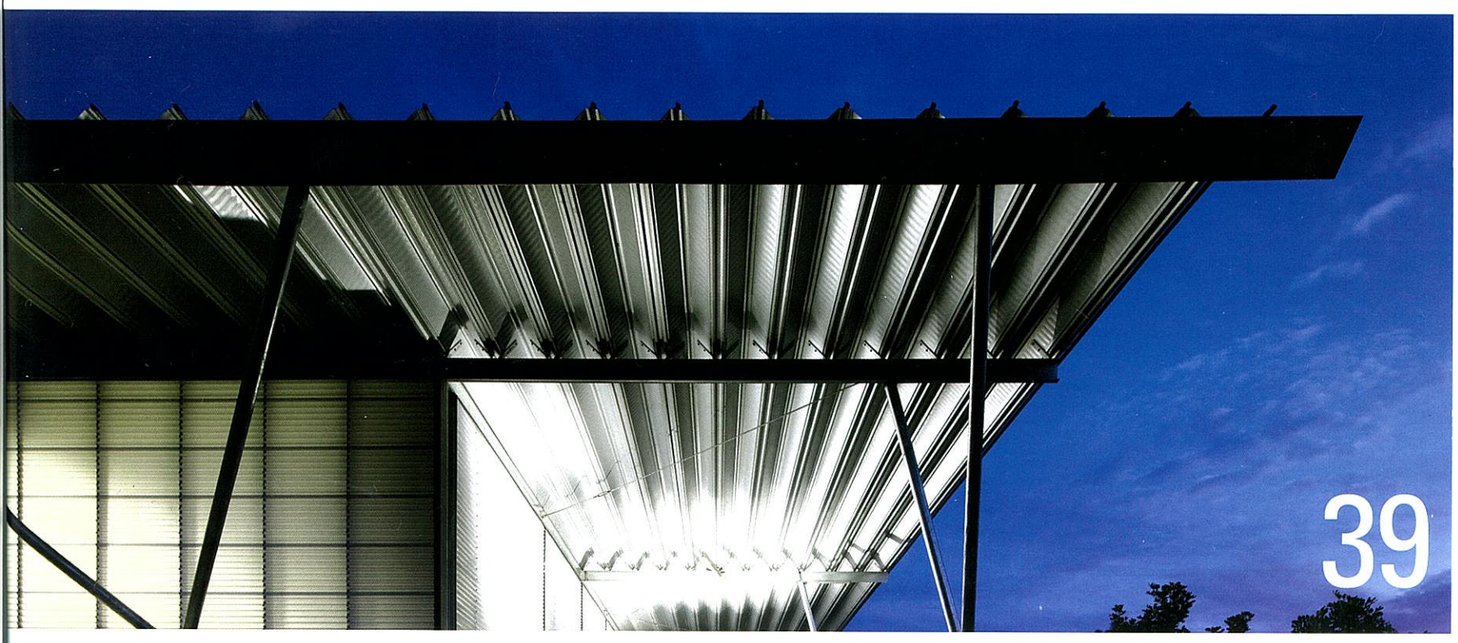

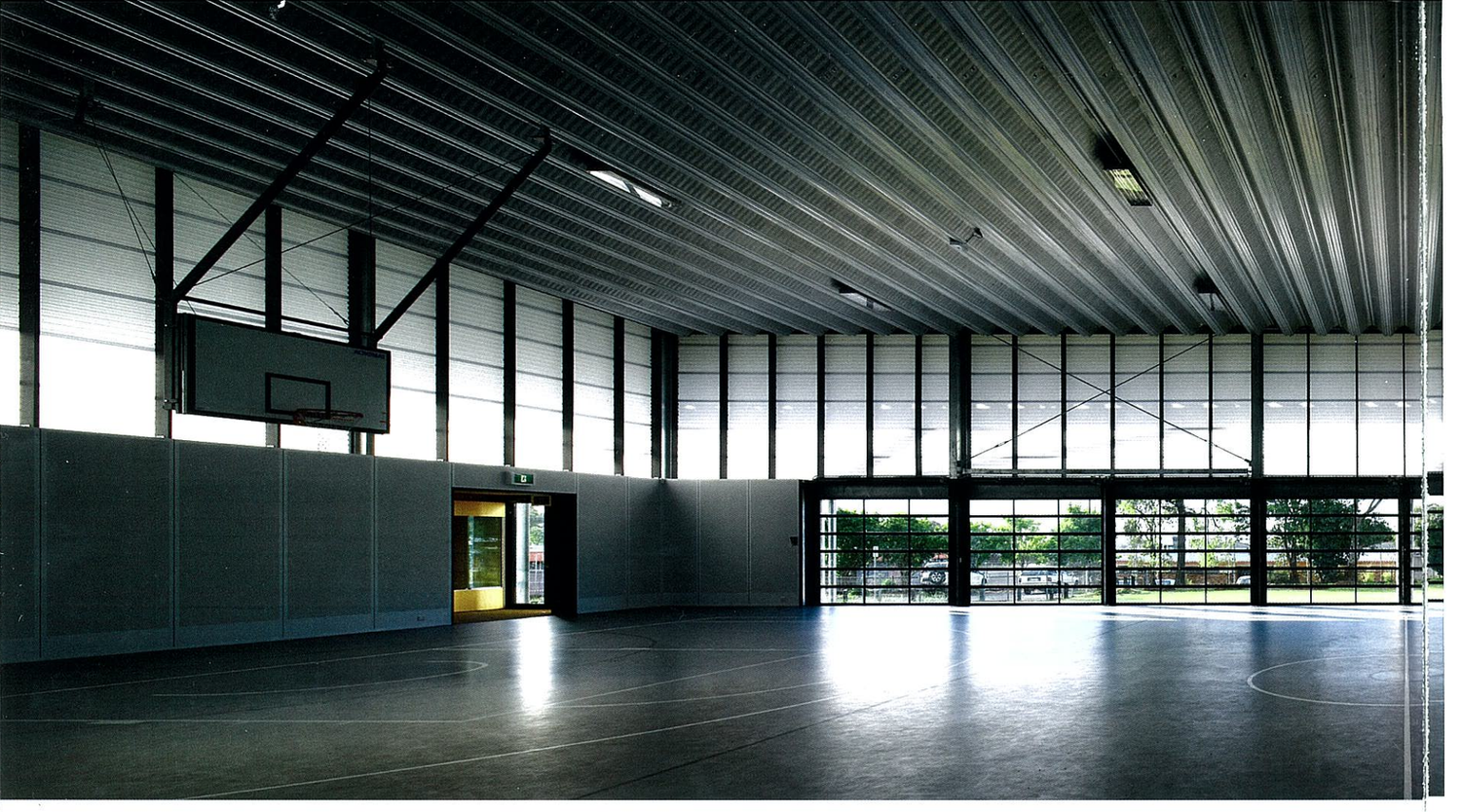

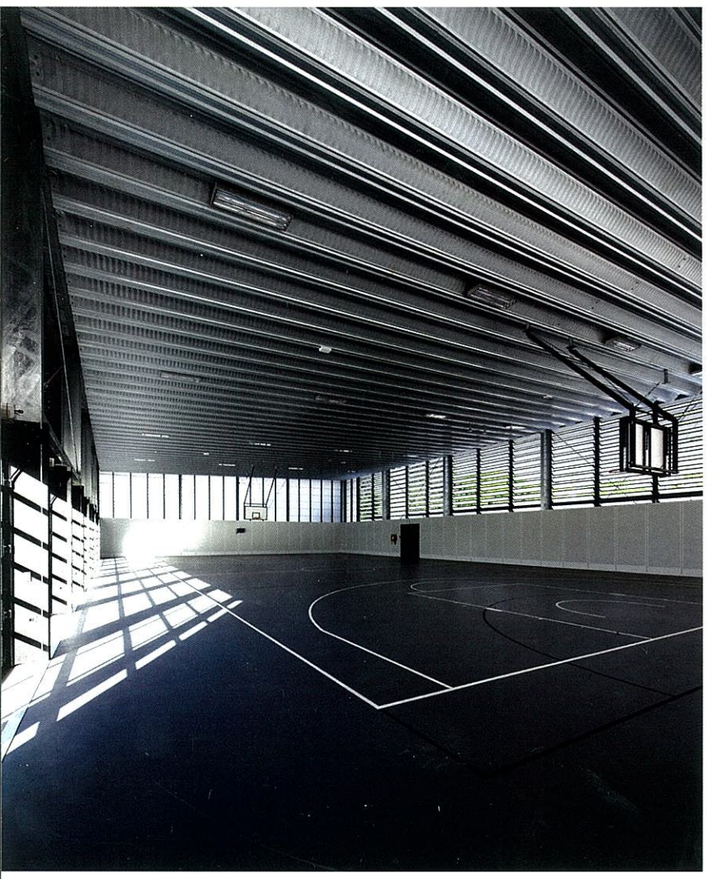

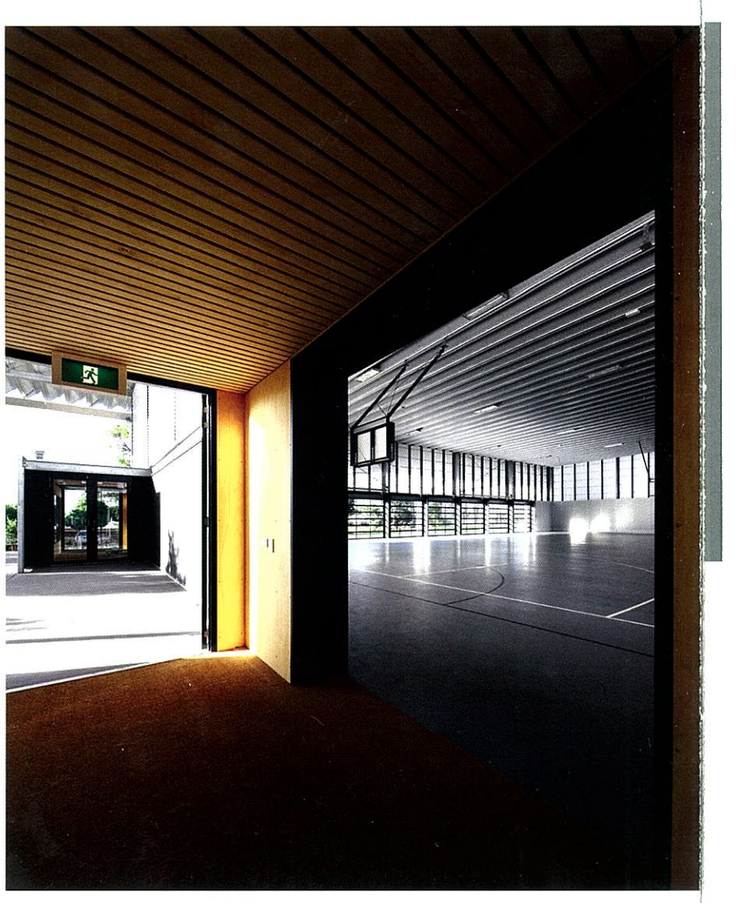

TOP: The light-filled interior space is devoid of pillars RIGHT: An annexe right of the main hall houses a kitchen, tuckshop, lavatories and storage spaces

PANEL SAYS

The directness of this steel shed – a multi-purpose hall for an indigenous college in Queensland – appeals to us immensely. There is nothing artificial or tricked-up about the soaring, cantilevered roof and the massive box below. The use of galvanised steel for the structure and ZINCALUME® Steel for the roof and ceiling lining adds to the building's robust and knock-about aesthetic. Internally, the hall features a clear span that is very effective in its simplicity, and it has a straightforward and legible plan, making this a building that is sure to serve its users – students, staff and the wider community – well into the future.

The structural elements use hot-dipped galvanised steel, which is largely expressed. Perimeter pillars are wrapped in ply on their interior faces to reduce the risk of collision injuries while also enhancing the building's sparse, streamlined qualities. Painted or applied finishes were generally avoided, and the reliability and robustness of galvanised steel was essential for such a well-used and knockabout space. In awarding a High Commendation to RKA for the Australian Steel Institute Awards in 2010, the jury panel noted:

"The materiality and structural concept of … the primary steel structure [is] expressed to reveal its careful detailing and structural efficiency. The skillion roof is a large rainwater catchment area, which leads to tanks that irrigate the entire school landscape. To the north of the hall, paired steel downpipes align with the structural grid and splay outwardly to support the bespoke eaves."

The form of the building is not overt. Its grid-like repetition and soaring skillion make it aesthetically pleasing, but its more important qualities lie in the nuanced tempering of daylight and its vital connection to the landscape. The blade walls of the two entry foyers consist of large steel portal frames lined with blackened ply sheeting. The compressed spaces are multi-functional: acting as trophy cupboards, ticket booths or catering and service spaces as needs require. They are a nice foil to the light-filled, overscaled volume of the main hall and the shade of the overhangs.

Kirk recognises the hall is in fact the "social and ceremonial heart" of the school. His practice completed a masterplan for the entire campus a decade earlier, and has since created a number of other buildings in two stages. The hall comprises Stage 3 of the plan, and when the Federal Government's Building the Education Revolution scheme took effect, this was one of the first buildings to be actioned.

All in all, the school is a feel-good success story. Each day, five school-owned buses collect children from across the city. Breakfast and lunch are provided, with parents and hospitality students helping in the kitchen. The independent school receives significant support from local Rotary Clubs, the indigenous radio station (FM 98.9), and a variety of businesses. Medical testing and health programs run by the Aboriginal and Torres Strait Islander Community Health Service assists students who might otherwise fall through the health care net. Community involvement has been integral to promoting a sense of belonging, not only from within the student body but also from the broader community. Initial resistance to the school's presence in the area has been overcome partly through the establishment of adult education classes and increased employment opportunities.

Crucially, the multi-purpose hall has helped create strong ties between the school and the community. School Principal Philomena Downey says students have benefited enormously from the interchange and activities the hall facilitates. "The hall has been absolutely terrific for us," she says. "The students have much more of a sense of belonging and of value because of it and the involvement with the community it encourages."

PROJECT AIICS Multi Purpose Hall **CLIENT** Aboriginal and Islander Independent Community School **ARCHITECT** Richard Kirk Architect **PROJECT TEAM** Richard Kirk, Yee Jien, Sam Clegg, Brendan Pointon **STRUCTURAL & CIVIL ENGINEER** NJA Consulting **BUILDER** Northbuild Construction **STEEL FABRICATOR** City Steel Engineering **SHOP DRAWING CONTRACTOR** City Steel Engineering **PRINCIPAL STEEL COMPONENTS** 460UB portal frame (hot-dip galvanised finish) Roofing: Aramax made from ZINCALUME® steel; Trims and flashings made from COLORBOND® steel; Structural steel: hot-dip galvanised **PROJECT TIMEFRAME** Design and documentation: three months; Construction: six months **AWARDS** Australian Steel Institute Steel Awards 2010: Steel Clad Structures Building Design Award **BUILDING SIZE** 900m² **TOTAL PROJECT COST** $1.8 million