

AIICS MULTI-PURPOSE HALL

STEEL CLAD STRUCTURES BUILDING DESIGN AWARD 2010 (QLD - NT)

Richard Kirk Architect



Architectural merit

The AIICS Multi Purpose Hall and extension to the amenities building is the continuation of new building work as part of RKA's long term masterplan and staging strategy for the Aboriginal and Islander Independent Community School.

The Multi Purpose Hall is located on the northern side of the school grounds and is the first building encountered when approaching from the main pedestrian axis through the school. The materiality and structural concept is in keeping with the previous school buildings at AIICS by RKA, with the primary steel structure expressed to reveal its careful detailing and structural efficiency.

The structure is deliberately simple and repetitive, supporting a large mono-pitched roof. This large skillion roof is a large rainwater catchment area which leads to rainwater tanks that provide landscape irrigation to the entire school.

Two entry structures are defined by steel portals to the west. The diminished scale of the entry portals is complemented by the extensive use of timber and natural materials to provide a sensitive treatment to the entry sequence and illuminated display cabinets.

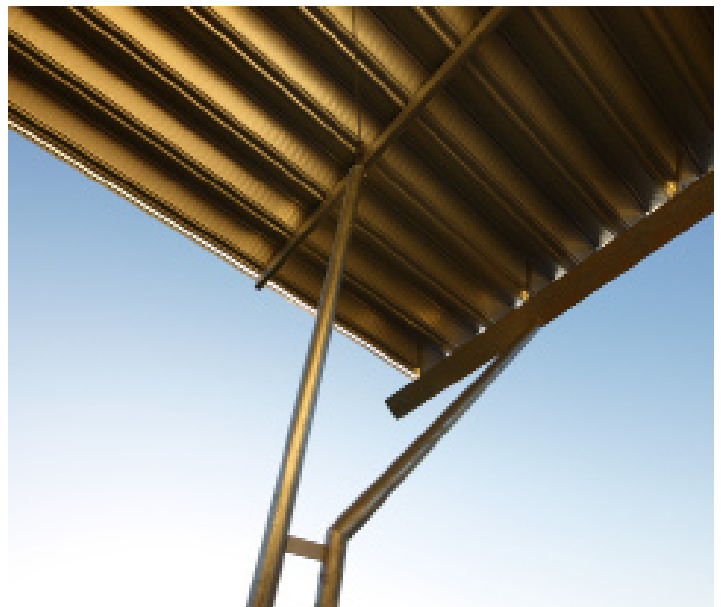
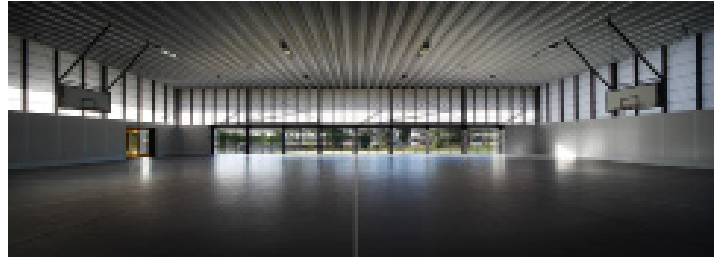
Innovation in the use of steel

To the north of the Multi Purpose Hall, paired steel downpipes align with the structural grid and splay outwardly to support the

bespoke eaves gutter fabricated from plate steel.

Aramax roof sheeting was selected for its spanning capacity and unique aesthetic. Its deep profile enables the roof sheeting to span unsupported between steel portals, therefore eliminating the need for roof purlins.

The cantilevering roof overhangs provide shelter to the external spaces surrounding the Multi Purpose Hall and presents a fine edge to the most prominent part of the building. Perforated Aramax sheeting is used internally on the ceiling to provide consistent finish overhead and acoustic attenuation.



Sustainability

Large cantilevered overhangs made possible by the structural properties of Aramax sheeting provide shading to every facade, whilst bi-fold openings allow for cross ventilation. Provision for rainwater collection is integrated into the structure and material selection.

Summary

A simple structural system was used to create a clean aesthetic based on the properties of the profiled steel roof, which simultaneously acts as shelter from weather and shading, and as a rainwater collection mechanism.

Project team

Architect: Richard Kirk Architect
Structural Engineer: NJA Consulting
Building Contractor: Northbuild Construction
Steel Fabricator: City Steel

