# DARWIN CONVENTION CENTRE







he Darwin Convention and Exhibition Centre is an integral part of the city's new \$1.1 billion dollar waterfront area which is set to transform the area into a drawcard for locals, business travellers and tourists.

Laing O'Rourke, in joint venture with Siztler Bros, undertook the design and construct contract for the centre, which was completed a couple of months early.

Construction Manager Steve Shenfield attributed the team's success to a building design that permitted works to continue despite wet weather.

"Making extensive use of structural steel and installing a Kingflor significantly reduced this impact," Steve said.

The convention centre, which is located on

reclaimed land on the eastern edge of the waterfront development, features a 1500-seat tiered plenary hall, seven meeting rooms and 4000 square meters of exhibition space.

One of the centre's distinctive design features is the impressive floor to ceiling glass walls that offer panoramic views of the wave lagoon, parklands and the harbour.

The four-storey building, with a total floor space of 29,650m<sup>2</sup>, has a structural steel frame with composite in-situ and precast concrete floors.

The external walls comprise an amalgam of glazing, precast concrete, deep profile metal cladding and metal sun-shading louvres to the west façade.

The roof area is approximately 8500m², and

consists of a deep profiled metal deck roofing material to counter Darwin's annual rainfall.

Of the contracts awarded, in excess of 95 per cent were awarded to local companies with work opportunities for more than 1100 people.

The Laing O'Rourke project team was a member of the Darwin Cove Consortium, a PPP arrangement that comprised the Northern Territory Government, Laing O'Rourke, ABN Amro, Toga and Sitzler Bros.

The joint venture team was recently awarded the President's Award at the Territory Construction Awards.

#### Laing O'Rourke

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### SPANNING A JEWEL IN THE CROWN

he jewel in the crown of the \$1 billion Darwin Waterfront Redevelopment is without doubt the Darwin Convention and Exhibition Centre and its striking architectural form. Designed to withstand the extremes of weather that present themselves throughout the year in Darwin, the Convention Centre was also required to maintain aesthetic honesty in keeping with the architect's original vision. Integral to achieving both these aims was Fielders and their advanced roofing system.

Fielders has been in operation for over 100 years. The company's range of innovative steel roofing and flooring products, developed for the construction industry, has ensured that they have maintained a strong market presence throughout this time. Technological

advances initiated by Fielders have delivered a range of products that are second to none in their manufacture, installation and ease of application. Fielders has been involved in many of Australia's most prestigious developments. It is now one of Australia's largest steel manufacturers with a presence in all states throughout the country.

The design of the Convention Centre was inspired by the convex form of a shell. This has particular meaning not only for the indigenous inhabitants of the area, but also for the non-indigenous residents and Darwin's history of pearls and pearling. It is also intended to capture the 'Top-Ends' natural affinity with the ocean and outdoors. The unique curved structure of the \$100 million plus project

lent itself ideally to Fielders highly specialised Concealed Fix Roofing Profiles.

To bring the design to life, large expanses of roofing were required that could withstand the extremes of cyclonic winds, monsoonal rains, heat and yet still maintain their appearance and structural integrity. After a rigorous two year selection process Fielders HiKlip® 630 was chosen by the developers for its outstanding characteristics and the fact that it was the only roofing solution that could be rolled on site in lengths of over 40m. On-site rolling was provided by Fielders mobile rolling platforms that can produce lengths of up to 100 metres.

HiKlip® 630 is the strongest Concealed Fix Roofing Profile in the Fielders stable. The 66mm rib height of the HiKlip® 630 ensures incredible strength and resistance to damage. The patented double action clip provides the very best in security and durability. The stronger rib of the HiKlip® 630 delivers wider purlin spacing and as a result provides significant savings with an allowable spacing of up to 4m. The greater strength provided by the rib also ensures the product can withstand the high wind and rainfall loads associated with cyclonic conditions of the 'Top End.'

Fielders also supplied 4,000 m² of their KingFlor® flooring profile KF70®. One of the greatest successes of Fielders continous product development was the introduction of the KingFlor® range of composite steel formwork. Now seen as the industry

benchmark and recently updated with the addition of KF40® profile, these products form the biggest selling steel formwork range in Australia. KF70® was chosen in part due to its longer unpropped spanning capacity and considerable concrete cost savings, but also due to its two recent innovations incorporated in to the product- SquashCut™ Ends and the new Off-Set lap.

Fielders HiKlip® 630 Roofing Profile and the KingFlor® Flooring Profiles have proved ideally suited to the demands and aesthetics of this prestigious project. Quite naturally the company is delighted to have been able to assist in the creation of what is sure to become one of the Top Ends iconic structures.

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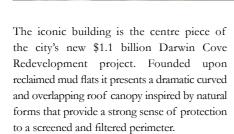


## ICONIC BUILDING A NEW CULTURE CENTRE

he pearl of it's tropical harbour, the Darwin Convention Centre lies within eyesight of the capital city, and is nestled into the coastline of the Arafura sea within the borders of aboriginal tribal land held by the Larrakia people. "You have come by way of the Larrakia Land. You will hear the voice of Larrakia ancestors. When you leave, the Larrakia message will stay with you." States Reverend Walter Fejo, one of the tribes Elders.

Nature, architecture and technology converge in this waterfront venue to provide not only the finest facilities but also to create the ideal environment for successful and memorable events.

The Centre was designed in chief by the international architectural firm HASSELL in association with Crawford Architects. HASSELL was founded in 1938 by Colin Hassell who worked in Europe prior to the opening of the practice. John Morphett who joined the Practice in 1962 had previously been responsible for running the Walter Gropius office in Rome. John later became Chairman of the Firm and brought with him the cultural legacy of the Bauhaus and a manifested belief in collaboration as a powerful design methodology. It is this vision that has assisted in the design and development of the Darwin Convention Centre which spans a total floor area of 22,900 square metres offering a wide selection of conference, exhibition and function facilities from 10 to 4,000 delegates.



Opening in mid 2008, the centre already has a rich program of bookings for its 1500 seat auditorium and 4000 sqm of adaptable exhibition space. It is designed to host a range of "conventions, conferences, concerts and exhibitions from meetings of a dozen people to basketball games, major events and multi-hall



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