WOHA

Architects Richard Hassell (left) and Wong Mun Summ (right) established WOHA in Singapore in 1994

An Australian architect and his Singaporean business partner are creating a new architectural typology in South East Asia with a series of sustainable buildings that are winning international acclaim. Words **Rachael Bernstone** Photography **Patrick Bingham-Hall (portrait and renderings by WOHA)**

The architecture firm WOHA – named for the first two letters of its directors' surnames – may be relatively young, but it has already built iconic buildings in Singapore and other Asian locations that have earned global recognition.

Perth-born and educated architect Richard Hassell met his Singaporean counterpart Wong Mun Summ in 1989, when they both worked as graduates in the Singapore office of Australian architect Kerry Hill. "We really enjoyed working together, we had very similar ideas about architecture, and in fact had very similar educations despite the fact that we studied in different countries," Hassell says.

When they established WOHA in 1994, each brought different cultural approaches and skills to the partnership. "Mun Summ is Singaporean, and was originally much more confident in the value of big architecture, big development," Hassell explains. "It's an attitude from a young country which sees the future as something very positive.

"As an Australian, there is a certain scepticism about change and outcomes, which can make the architectural approach more tentative and often times self-censored to what we imagine the client can tolerate," he adds. "Over time, I have come to enjoy the belief that architecture should be bold and confident, and seen that clients love it when you exceed their expectations – they love participating in a challenging project."

In the 16 years since the firm was founded, there have been plenty of those. In the early days of their venture, Singapore wasn't known for its strong design values – although government initiatives to promote creative industries have led to positive changes in this regard. "We actually used to use the example of Melbourne as a culture where the public recognises design," Hassell recalls. "But Singapore has changed a lot over the last 20 years, so I think now it is quite similar in the public appreciation of design. Singapore – and Asia in general – is a little more focused on the positive outcomes of innovation, rather than on the liability and value engineering issues."

As a result, the architects have been able to develop and extend their ideas about tropically responsive architecture with each new challenge, to the point where three of their recently completed projects received multiple awards in 2010 from juries in Singapore, Australia and Germany, and at the World Architecture Festival.

The mostly highly lauded project was The Met – a high-rise apartment complex in Bangkok, Thailand (undertaken in collaboration with Tandem Architects) – which won the AIA's Jorn Utzon Award for International Architecture among many other prizes. A single podium at ground level provides access to six 66-storey towers with staggered plans, which make the most of views, cross-ventilation and solar penetration. Gaps between the towers are filled with verdant 'skygardens', and each apartment boasts a private balcony with a full-sized frangipani tree.

The building and its predecessors – 1 Moulmein Rise and Newton Suites, both in Singapore – have their genesis in a competition that WOHA won in 2002 for a high-rise public housing project called Duxton Plain. Although it wasn't built, its aspirations have since been realised in several projects.

LEFT: The Met in Bangkok is the most recent addition to WOHA's series of high-rise buildings, which are redefining tropical modernism

RIGHT: WOHA's winning scheme for the Duxton Plain high-rise public housing project wasn't built, but its design aspirations have since been realised in other projects

Duxton Plain aimed to foster a strong sense of community among residents by using circulation paths to promote social contact and visibility over privacy. The architects hoped to create a village-type atmosphere for neighbouring residents by including 'skygardens' at every fifth level, as well as communal recreation facilities and public spaces at ground and podium levels.

WOHA's pursuit of this new building type – the tropically responsive skyscraper – has led to imitators in the region, which Wong believes is a positive outcome. "There are a lot of people doing this now – we did not invent the concepts, of course – but what we did was find ways to make them practical and integrated in ordinary commercial development, which has given others the confidence to do the same," he says. "We are very pleased: we think that cities of the future should be verdant and filled with life."

Some of these design principles were incorporated into WOHA's only Australian project to date, The Hyde apartment tower in Sydney, completed

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The WOHA studio occupies a former shop-house with new roof terraces and a gallery, which also acts as an experimental ground for ongoing research and development of green wall systems

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in 2010. "In the Hyde, we were able to combine both passive solutions such as sunshading, vertical greenery, natural light and ventilation with active ones such as co-generation of power, which was a first for us," Hassell says. "In Australia the more active, technical strategies are easier to achieve, as facilities management is at a higher skill level."

Another of WOHA's highly lauded projects last year was the Alila Villas at Uluwatu in Bali, which combines residential and hotel suites on a cliff-top site. It was built using local materials and craft techniques that promote the island's rich cultural and built heritage instead of importing expensive products and methods.

Now WOHA is designing another resort at Bintan, an Indonesian island near Singapore. "We are only working on our second Alila Villas now, so it is not really a huge part of our portfolio," Hassell says, "but it is a very good working relationship and we are great friends with the developer of the resorts, who is also a shareholder of the operations company.

The final multi-award winning project of 2010 was the Stadium Mass Rapid Transit Station in Singapore, one of two public transport projects that WOHA won in competition in 2000, and which opened in April 2010. The design for Stadium MRT addresses the problems of surge crowds – following events at the nearby Singapore Sports Hub – by placing the unpaid areas and a public plaza at ground level. The subterranean station platforms are accessed via direct circulation paths and are naturally lit, thanks to skylights and louvred walls.

Hassell says that steel would feature more prominently in its projects if skilled contractors such as facade specialists were more in supply. Stadium MRT, however, is one of the firm's projects in which steel is featured extensively.

LEFT: With its tropical foliage and 'monsoon' windows that improve ventilation while excluding rain, Newton Suites is one of WOHA's new tropical high rise exemplars

The entire above-ground structure of Stadium MRT is steel framed, with large deep trusses that span 11m around each bay

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"The entire above-ground structure is steel framed, with large deep trusses that span 11m around each bay," he explains. "These were prefabricated in transportable sections and bolted together on site. We also have stainless steel cladding, framing and brackets that support the aluminium louvres and cladding.

"For this project, steel was perfect as it could give us the large spans and low weight that we required, because much of it is cantilevered over the platform."

Hassell says WOHA continues to use steel in "a bold, crude way" – such as the large rusted panels that feature in internal spiral staircases of some apartment buildings, or to produce "extremely thin, fine sections" using mild and stainless steel in custom furniture.

In Sydney, the prevalence of different construction methods meant it was possible to incorporate steel into The Hyde's facade, where steel brackets support the aluminium grating. Steel was also essential for the roof-top feature, a slender steel frame that creates a canopy over the penthouse pool decks. "Steel is the only material that can do such elegant, long spans," Hassell says.

Having generated so much praise and recognition last year, the architects intend to continue to challenge themselves in Singapore and across Asia more widely: they are currently working on a large housing development in Mumbai in India, high-rise towers in Taiwan, and a vertical park hotel at home.

In fact, much of their joy arises from investigating new techniques and methodologies, and combining their knowledge of what's possible with what's practical in the diverse places they work. "Every country has a different construction practice with its own economics, skills, regulations, its own constraints and opportunities," Hassell says. "Finding out what these are is part of the design process: we never see ourselves as importing our superior preconceived solutions, rather we try and find creative ways to optimise the local situation. Applying a different mindset to the same ingredients can stimulate new proposals."

The main challenge associated with their far-reaching approach, according to Wong, is the speed at which they can acquire the local knowledge. "Often people tell you what they think you want to know," he says, "so you get a sanitised version of the local conditions. Nothing beats being there and seeing the situation on the ground, and then working with local knowledge and skills to achieve something new."

It's an approach that has already produced remarkable results for this practice, which undoubtedly has a promising future. Writing in the WOHA monograph published in 2009, Anna Johnson suggests that the firm's evolution coincides with the emergence of Singapore as a template for developing cities, placing these architects in an enviable position as the world grapples with the impact of global warming.

"Their work is, at one level, a return to very tactile traditional architectural ideas, yet their ideas and processes go beyond the normative response of South East Asian architecture and literally into the *genius loci*: the spirit of the place." **SP**