



Mataki O’Goshi
Lim & Natasha Di
Ciano from NXT
TEC; opposite
page, examples of
construction using
the technology.
Picture: Ross
Swanborough



FOUR DAYS TO LOCK-UP

Game-changing WA technology offers accelerated hope to

overly slow building times

KIM MACDONALD

A game-changing new WA building technology, which has secured patents across the globe, takes only four to 10 days to build a concrete and steel home from slab to lock-up.

Canning Vale-based NXT TEC reduces building time and costs by utilising locally sourced materials to erect prefabricated homes and commercial buildings using its 13 pieces of patented technology which lock together like a giant Lego set.

The company has this week signed its first licence agreement after 10 years in product design and accreditation, with Common Sense Property and Finance to use the technology in an affordable housing range called NXT Residential.

NXT TEC director Natasha Di Ciano said the first of the range’s 400 homes

will be in Ellenbrook, Wellard, Anketell and Wandl, for prices starting at \$300,000 for a three-bedroom, two-bathroom house.

The company also has a range of flat-pack units and granny flats — which can be erected in a day — and which start from \$60,000 for a 25sqm one-bedroom unit with kitchen, bathroom and laundry.

The company claims total time from contract to moving in is six months, including time for building approvals and finance, which is well below the two to three-year build times in the current market.

The NXT Technology will also be used to build a DA-approved, 10-level luxury hotel in Rivervale, to be operated by Resort Management by Wyndham after completion in 2025.

The project is waiting on a building permit.

The technology was invented by registered Perth builder and architect Mataki O’Goshi Lim, who left the industry a dozen years ago, frustrated by a system broken by inefficiency, disjointed trade schedules and tradie no-shows.

“Every day, a new building technology is invented, but there is no system to bring it all together,” Mr O’Goshi Lim said.

“People learn how to use one tool or one piece of technology and then they call themselves an expert, but it does not fit together well.

“There is a lot of wastage.”

The technology — which has patents all over the world including the coveted US market — includes a unique blade piling system, which differs from tradition-

al piling because it does not remove earth in the process, allowing for a tighter grip and increased load bearing.

The unique concrete wall panels include internal insulation, helping the structures attain a 7-star NatHERS energy rating.

The flooring system in multistorey towers include specially designed, air-filled plastic balls, which grip metal sheeting, reducing the amount of costly concrete and reducing the floor thickness.

The prefabricated footing and flooring creates extra design efficiencies by allowing an extra level in an eight-storey tower, without compromising ceiling height. It also removes the need for onsite concrete pours, which typically involve a three-week curing process and substantial concrete waste.

Mr O’Goshi Lim admits critics had, over the years, claimed the technology would not sustain multistorey developments.

But the technology has been tested by authorities such as CSIRO and Griffith University, and has been accredited for meeting the National Construction Code, Building Codes of Australia and Australian Standards requirements.

The upcoming Rivervale complex is the first hotel in the world to get Environmental Product Declaration, an international certification that quantifies the environmental sustainability of the hotel over its life cycle, from sourcing of materials to operation.

NXT TEC was the first building technologies company to get an Accelerating Commercialisation grant from the Federal Government in 2017.

Ms Di Ciano said cost-cutting came from reduced material waste through the factory-made precision of its prefabricated walls and floors, which is as high as 15 per cent of that on a traditional site.

It also prevented lost work days in the traditional system, which is subject to inclement weather and tradie no-shows.

Ms Di Ciano said the company was keen to help address WA’s chronic housing shortage and tight rental market.

“We are committed to delivering high quality, accessible, and fast housing solutions to homebuyers,” she said.

Director of Common Sense, David Williams, said he was acutely aware of the struggle many people faced to secure housing. “Homebuyers can . . . receive a key to the door in less than six months,” he said.