NEW BUILD 15

A pretty fab way to build



Prefabricated homes are no longer considered just a temporary or holiday solution, writes **Natasha Perera**

HESE days, if you look at a traditionally built home and a prefabricated home, you might be hard pressed to tell the difference. In fact, the biggest

difference is largely unseen, according to Craig Chatman, founder and director of Melbourne company ARKit, which specialises in architect-

designed prefabricated new builds and renovations. It's the innovation that comes from constructing offsite, in a factory. building is well designed to suit the landscape, just the same as an architect would."

MODULAR CONSTRUCTION

Modular construction is probably the form of prefabricated housing most people are familiar with. It involves constructing the whole

It involves constructing the whole building offsite, including fittings and finishes, such as tiling. The home is pre-wired, pre-plumbed and painted.

"The aim is to minimise onsite work time as much as possible, which also helps keep the overall cost down," Mr Chatman said. process takes on a more traditional approach, where we would come back and put in the things like the kitchen and bathroom."

Although quicker than traditional house construction, panelised design does take longer than modular.

However, Mr Chatman added, a panelised approach would be the go over modular for sites with narrow laneways, right-of-ways or overhead powerlines that would restrict setting up a crane at the other end to deposit the house on the block.



Photos: Alessandro Cerruti (main, above left and above middle) and Tobias Titz (above). Photos supplied by ARKit.

with plantation and sustainably managed and forested timbers.

THE CHALLENGES A prefabricated home used would usually take about 12 to 14 weeks to build a house offsite, with another three to four weeks of onsite work. ARKit's custom-designed new homes are priced from \$400,000 to

"Being able to work in these controlled conditions provides us with greater opportunity to innovate and allows us to push design boundaries more easily," Mr Chatman said.

"We can problem-solve onsite straight away and use new industry materials, prototyping and testing. The process is also safer and cleaner and the houses are quicker to produce."

In the past, people have largely considered prefabricated design for holiday homes, but convenience, cost and improved quality have made it a more desirable alternative for suburban housing, too.

"A home that's built offsite is not a lightweight, temporary solution; it's a permanent home," Mr Chatman said. "We work very hard to make sure each

PANELISED CONSTRUCTION

With panelised construction, everything is broken down into elements. So, rather than a fully built house being transported on the back of a truck, your home is delivered as components and assembled on site.

Mr Chatman said this method offered a quicker way to do an onsite build.

"A three-bedroom house, for instance, would be delivered in large, prefinished floor, wall and roof components and stitched together onsite," he said.

"It would take just three to four days to get to lockup stage and then the

ECO-WISE DESIGN

Mr Chatman said prefabricated homes offered plenty of sustainable benefits, including reduced construction waste, compared to a traditional build.

His company also used passivehouse principles to create homes that required up to 90 per cent less energy to heat and cool.

"Prefab design makes it easier to do offsite testing, so we can pressurise a building to determine where any air leaks are while the home is under construction in the factory," Mr Chatman said.

"In the end, you'll get a home that's well sealed and has good insulation and thermal properties."

ARKit also specialises in building

conventional construction methods and materials, so the building process was nothing out of the ordinary, Mr Chatman said. "Whatever a designer or builder can achieve on a particular site, we can as well, so the shape and type of block and location is generally not a problem," he said.

Masonry construction involving brickwork or blockwork walls was the only thing Mr Chatman highlighted couldn't be done offsite, as these types of walls were rather tricky to transport.

"We'll use some site-based trades for this part of the project," he said.

COSTS AND TIMING

Prefabricated design is definitely a quicker way to produce a house, according to Mr Chatman. He said it \$2.2 million and include architectural design services, technical and consultancy fees, authority costs and turnkey construction, including site works, services, delivery, warranties and insurance (price excludes land).

Mr Chatman said if renovating, you could expect to pay \$3000-\$3500 a square metre, excluding site costs and depending on fittings and finishes.

"With prefabricated design, there's a low risk of changes happening along the way, which helps to avoid any budget blowouts," he said.

"For renovators, this building choice also reduces the amount of time they have to move out, so it will be less disruptive on their lives."

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