Free Project Modularity

Report

STACK MODULAR PRESENTS TAILORED SOLUTIONS **TREES**TRANSFORMING AUSTRALIAN CONSTRUCTION PROCESSES

Since 2009, Stack Modular has pioneered the design, manufacture and delivery of structural steel volumetric modular building solutions, working towards its vision of a future where its modular solutions redefine industry standards and create a transformative legacy.

Stack's standardised building modules enable rapid assembly and ensure consistent quality and performance, significantly enhancing construction efficiency by reducing onsite labour and accelerating project timelines.

With over 15 years of experience, Stack has completed projects in 14 countries across three continents.

During this time, it has built strong relationships with architecture, engineering, and construction firms by adopting an integrated project delivery methodology.

Stuart Marshall, Director of Global Sales at Stack, told Build Australia that the company had identified a key growth market in the Australian modular and off-site industry over the last five years.

He pointed to both the rapid increase in in-country manufacturers and the uptake of pre-manufactured off-site materials, as well as the growth in modular activity more broadly across Australia.

He further noted that modular and off-site fabrication could help offset labour shortages.

Marshall said: "Our remit is to find developers that want to build modular, and work with head contractors so we have that local presence.

"Stack believes it is key to build those relationships and look for opportunities that fulfil the needs of the local area, whether it is a lack of labour or speed of installation.

"We saw an opportunity to add value to the marketplace and recognised that Australia is a significant growth market for us to enter".

Stack's innovative modular approach addresses challenges like labour shortages and supply chain disruptions.

Leveraging advanced technologies and a streamlined manufacturing process, the modular approach ensures efficient project delivery.

This delivery approach enables projects to be completed 30 per cent faster compared to a traditional building project, with the unique methodology allowing Stack to manufacture modules in parallel with onsite work, making the project more cost-effective.

Stack's modular units range in up to 4.5 metres wide and up to 22

metres long, with dimensions typically determined by the project's specific requirements.

The modules feature a distinct HSS steel frame that provides exceptional core strength, allowing them to be stacked up to seven floors without additional structural bracing and up to 40 floors when combined with a concrete core.

Stack's modular mid- to high-rise buildings are engineered for extreme weather resistance, capable of withstanding earthquakes and hurricanes.

Additionally, the steel modules offer a lower lifetime maintenance cost compared to wood.

Marshall said that Stack is currently pursuing several projects in Australia and would be presenting at the PrefabAUS Offsite 2025 conference in Brisbane this August.

Oueensland has been the primary focus for Stack, with a booming construction sector identified in the Sunshine State and significant infrastructure works planned or underway.

Marshall said: "The big one at the moment with a lot of growth seems to be Queensland, including all the construction for the Olympics.

"However, we won't ignore regions like Western Australia and its mining communities, where we can add a lot of value to their workforce."

As a global team, Stack has not only made its mark in North America but worldwide, with the impact of its solutions spanning diverse industries.

The company's design assist and modular delivery model allows its team to deliver a sustainable solution quickly and at scale.

Stack has provided its solutions to countries in Oceania, Africa, and the Americas, and is actively pursuing opportunities to enter additional markets.

Notably, Stack's solutions have reached particularly remote locations such as Vanuatu and Kiribati, and the company is currently exploring projects in both Guam and the Solomon Islands.

Stack's ability to deliver projects across the globe is a result of its innovative delivery model and worldwide reach, with three headquarters in Canada, the United States and China, and three modular steel factories near Shanghai containing a combined 120,000 square metres of manufacturing space.

Marshall said: "What is important to stress about modular is that there isn't a standard deliverable specification and finish for materials, but it is bespoke to what the project and the client require.

"If a client wants a specific level of finish we can satisfy that requirement and our first protocol is to find a price point that includes the most cost-effective finish that's suitable for the project whether it be budget or 5 star."