

Grocon homes in on timber

PUBLISHED: 28 Feb 2011 12:06:45 PRINT EDITION: 28 Feb 2011

Nick Lenaghan

Grocon will begin construction of Australia's first multi-level wooden residential tower at its \$600 million project on the Carlton and United Breweries site in central Melbourne later this year.

The 50-apartment Delta building will have 10 storeys, one level higher than the tallest structure of its type, in London.

Built entirely of timber, Delta will incorporate the "passive house" design principles now adopted in Europe. The construction techniques are new to Australia. They involve the use of thick cross-laminated timber pieces, similar to plywood, giving structural strength to the walls and floors.

Grocon's general manager for the site, David Waldren, said Delta's timber structure and cladding would not transmit heat as metal and brick did. A passive house design made a building effectively airtight, minimising the energy needed to maintain a temperature inside, Mr Waldren said.

The building's energy needs will be met through an on-site gasifier, generating energy through gassing waste wood.

The timber used in such buildings is typically softwood, such as radiata pine. Because the material for Delta is not yet available in Australia, it is likely it will be imported from Europe, where such structures are becoming more common.

Mr Waldren said Grocon hoped the project would spur local development of the technology, which could be used to build residential housing much more rapidly and sustainably.

"Upping the amount of timber that we use, in a sustainable way, means that we are actually building into the building something that has sucked carbon out of the environment in the first place," he said. "The other technologies – steel, concrete, bricks – all generate carbon in their creation."

The 50 apartments, with price tags of around \$1 million, will be up to 90 square metres – a little larger than those in many new buildings.

The Delta building, with an end value of \$90 million to \$100 million, will include two levels built of concrete for shops, below the timber tower. These levels will be atop a heritage bluestone building.

The bluestone building once housed CUB's fire brigade.

Mr Waldren said the new timber building would be safe in a fire because the thick wooden panels charred rather than caught fire. In contrast, metal would tend to melt and collapse.

The building will be part of a residential and retail development taking shape on the central Melbourne site.

The Delta project's design team includes studio 505 architects Dylan Brady and Dirk Zimmermann, Grocon design manager Beatrix Lehnert and sustainability consultancy Umow Lai. The announcement of the Delta project coincides with the Green Cities conference in Melbourne this week.

The Australian Financial Review

Related News

Topics [Environment](#), [Construction & Engineering/Housing Construction](#)



An impression of the timber tower, centre, above a bluestone building.

KEY POINTS

- At 10 storeys, the Delta building will be the tallest structure of its kind.
- The timber structure and cladding is said to be energy-efficient.
- The timber will not catch fire.