



New design offers solution to floods

QUEENSLAND design practice Dion Seminar Architecture has taken top honours in a competition for designs for flood-resistant homes which drew 12 entries.

The competition was sponsored by LJ Hooker, The Future Housing Taskforce and Archicentre, the advisory arm of the Australian Institute of Architects, and the concepts submitted for it are expected to inform design for buildings in flood-prone areas of Queensland.

Ian Agnew, Archicentre's Queensland state manager, said the competition highlighted the role of architects and innovative design in solving problems that climate posed for communities.

"We believe the competition provided valuable opportunities to look at safer and better ways to rebuild homes in flood-prone areas," he said.

LJ Hooker chief executive L Janusz Hooker said the competitors had set new standards in flood-safe home design.

The need for effective design solutions is highlighted by the magnitude of the potential for flooding in Australia.

Residential buildings worth

up to \$63 billion, including 247,600 individual buildings, are potentially at risk of inundation in Australia this century, according to Climate Change Risks to Australia's Coast, published by the Department of Climate Change.

The winning concept home is to be built in a controlled environment by Ken Mitchell, of Queensland Lifestyle Development Group.

The home will be transported to site in two parts and connected along the centre.

Archicentre says the system enables mass construction and greater control of building and costs.

Winning architect Dion Seminar said the design aimed to provide for an easy clean-up after flood and multi-purpose use of the ground level for vehicles or storage.

The concept home has a flood clearance level of 4.5m to the first floor.

"This zone features materials and finishes which can be hosed down without damage," said Mr Seminar.

"Water can flow through the building without placing pressure on the structure.

"The concept home is built

on posts, making it suitable for sloping sites, and can be expanded through interlocking pavilion extensions."

Mr Seminar said the design features lightweight building materials and the concept home fits into both the urban and bush environment.

Mr Agnew said all entries were of a high quality, integrating flood-resistant, energy-efficient and sustainable design.

Other design criteria set for the competition included:

- Meet or provide a well-substantiated challenge to requirements set by Building Code of Australia and local and statutory authorities.
- Provide three bedrooms and not to exceed 220sqm in size.
- Provide under cover accommodation for two cars.
- Be able to be constructed on a site with up to a 1:4 slope.
- Be built from 80 per cent lightweight materials.
- Have a construction budget not exceeding \$200,000, excluding consultants' and authorities' fees and permits, site preparation costs, service connections, site allowances and landscaping.



Dion Seminara Architecture's winning design - it is lightweight and environment-friendly