



## Partners Fact Sheet

We partnered with some of Australia's most knowledgeable and leading minds on natural disasters, home resilience, environmental and architectural best practice.

The results of this collaboration, research and testing enabled us to qualify specific design principles and demonstrate how clever use of design and material selection can dramatically increase the resilience of a home.

### CSIRO Bushfire Urban Design

The Commonwealth Scientific and Industrial Research Organisation (CSIRO) is Australia's national science agency, solving the greatest challenges through innovative science and technology. For almost 70 years CSIRO has been working collaboratively in bushfire research, from understanding and modelling impact of bushfires on the environment to post-fire assessments and improving infrastructure design.

Using the NSW Rural Fire Services Hot Test Fire Facility in southern NSW, the CSIRO research team performed a

bushfire resilience test on a One House prototype measuring the impacts at different burnover levels using specialised simulated bushfire flame fronts.

#### *Justin Leonard, Research Leader – Bushfire Adaptation*

Justin has dedicated the past 24 of his 27-year research career to the understanding of how bushfire risk to life and infrastructure can be managed.

### James Cook University Cyclone Testing Station

Operating within the School of Engineering at James Cook University (JCU), the Cyclone Testing Station is an independent research and testing authority looking at the performance of buildings and infrastructure in response to cyclones and other wind events in Australia.

The Station undertook a number of demonstrations as part of the One House research:

- Wind-driven debris test and a roof section pressure test, simulating the effects of cyclonic wind
- A water ingress test to highlight the vulnerable aspects of standard windows and doors in the event of wind driven rain

#### *David Henderson, Chief Research Engineer of the Cyclone Testing Station at James Cook University.*

David is a research engineer with over 30 years' experience at the CTS. He has broken everything from screws to complete houses. He consults to industry on vulnerability and resilience issues and is on a number of Standards Australia committees.

#### *John Doolan, Director and Business Development Manager, Cyclone Testing Station*

John has held executive and board positions across a range of industries, energy infrastructure, manufacturing and business consulting. A North Queensland by birth, he knows well the need for increasingly resilient infrastructure.

### Room11 Architects

Room11 Architects creates environmentally responsible projects and encourages progressive design processes. They are extending the field of architecture via research and the generation of public discourse.

Room11 Architects led the design of One House – developing the architectural concept incorporating pioneering ideas and sustainable building innovations. This blueprint was evolved into a final design that took inspiration from a quintessential 'Queenslander' home, reimagining it into a modern and aspirational home.

#### *Thomas Bailey, Director / Architect*

Founded by Thomas, Room11 Architects is a highly awarded architecture practice with a reputation for creating inspiring and environmentally sensitive architecture designing and managing for the Australian context.

#### *Kate Phillips, Associate Director*

Kate's experience includes progressive Architectural projects across all scales of construction.

