Insurance Council of Australia

Building Resilience Rating Tool

2012
ICA BRRT

Initial Project Objective

A prototype tool which is:

a. effective in providing users with **resilience and adaptation guidance**,

b. **demonstrates leadership** for industry and government towards establishing resilient communities for Australia and

c. provides a proven **platform for development** across more hazards, material types, building designs and climatic locations.
Resilience Rating Tool

Address Information  Location Map - Google Maps
Queensland
2 Picnic Point Esplanade
Maroondah 4558

House Design Information
Select your choices and click

Building Element  Material Element
Air Conditioning  Electronics
Blinds/Curtains  Synthetic/Plastics
Ceiling  Composite (Steel, Concrete)
Chimney  Clay Bricks
Doors/External  Plywood (Waterproofed)

Choose All

Ceiling Resilience Information
Material Guide
Information on the resilience of ceilings...

Hazard Amplifier

Resilience Rating

Inundation
Tropical Cyclone
Bushfire
Severe Rain
Haliform

Still Freshwater
Still Wastewater
Moving Water (with Saltwater Table)
Action of Waves

Powered by
Overview of ICA BRRT

Data Collection
- Building Product Information Templates
- Building Archetypes Data
- Failure Mode Data
- National Flood Data

Data Processing
- Property Element Database
- Building Information
- Co-Dependency Determination
- Geographic Information System

Computation
- National Climate Adaptation Analysis for Buildings

User Interface
- Resilience Rating Tool
Project Linkages and Relationships

NCCARF web-based tools survey
Housing Condition Survey
Sun Shine Coast Council Testing
BRANZ

Scoping  Pilot  Beta Testing  Stakeholder Engagement  Other Hazards  A Resilient Built Environment

National Implementation Model
_CSR House
Archetypes

‘polished’ and user friendly web based interface


Building Resilience Rating Tool Project  Related Projects
Sequence of Work & Progress

Current:

- **Stakeholder Engagement** (Edge Environment, ICA) March – June 2012
- **BRRT tested** in Sunshine Coast Council area (partners DCCEE, SCC, ICA) March – April 2012
- **BRRT develops intelligence** through logging damage through events (Emergency Architects Australia and Uni of Newcastle) March – September 2012
- **Storm hazard component** being developed (SCC and ICA) March – May 2012 – (research materials being provide to Green Cross, Harden Up)
Sequence of Work & Progress

Scheduled:

• **Align “Archetypes”** for Australian Houses to NatHERS (DCCEE and ICA) **April – August 2012**

• **“Wiki” Property Element Database (PED)** developed in cross Tasman project, with back end testing and certification of materials (BRANZ and Edge Environment) **April – December 2012**

• **Further development** of BRRT across all hazards, climate zones and property types
Summary

- The Building Resilience Rating Tool (BRRT) is live and developing sophistication as component projects are delivered.
- BRRT is developing a chain of information about the resilience/durability of property elements, products and materials and is stimulating the Built Environment Supply Chain to innovate for greater resilience.
- BRRT is founded on rigorous information and building science to provide informed recommendations to increase resilience.
- BRRT is engaging with stakeholders who share similar goal of a resilient built environment.