



Cluster: Project:



Australian Government Department of Industry, Innovation and Science **Business** Cooperative Research Centres Programme

DESIGN GUIDE FOR EARTHQUAKE RETROFIT

What is it, who is it for, and why will it matter?

(WHAT is it) A manual for the building industry providing guidance on options for the retrofit of reinforced concrete and unreinforced masonry buildings (WHO is it for) The building industry

(Why will it matter) It will lead to a safer built environment, fewer lives lost, lower insurance premiums.

Key Research Milestones (activities already part of project research plans)

- * Review of existing mitigation options
 - * Building retrofit cost benefit analysis

* Unreinforced masonry field testing program (legacy housing) completed

*Reinforced concrete retrofit experimental program (laboratory) completed

* URM retrofitting experimental (laboratory) program completed

* Peer review / publication of research results

Key Utilisation Activities (some activities already part of current plans, plus *identification of other necessary activities for successful utilisation)* * Stakeholder briefing on aims of project

- * Workshops and report writing and briefings on
 - Cost benefit analysis
 - Design guidelines

* Development and review of guidelines

* Promotion of guidelines

Key Utilisation Milestones (the key outputs of utilisation specific activities and when

they should be completed) Workshop on cost benefit studies

* Industry report on reinforced concrete and URM experimentation

* Draft design developed

* Workshop on draft design guidelines

* Guidelines released to industry

2015 2016 2017 2018 2019 2020 Version 0.1 - March 6 2016

Who is doing it? (Researchers and End Users)

- University of Adelaide
- _ Swinburne University
- University of Melbourne
- Geoscience Australia

Who needs to be involved? (Includes stakeholders who need to be part of the process, even if they are not formal partners of the BNHCRC)

- ABCB, Planning Inst of Australia
- AFAC Built Environment TG _
- Cement and Concrete Association _
- **Concrete Masonry Association** -
- Insurance Council of Australia
- Insurance industry

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What are the key challenges? (What are the challenges to be overcome if the product is to be successfully deployed)

- Acceptance by industry
- Insurance industry support -
- Acceptance by public

What are the key opportunities? (Are there other opportunities outside the normal sphere of influence?)

- Lowering of insurance premiums based on building risk
- Market creation for retrofit techniques

What will it cost?

TBA

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