## Seismic Testing of Anchor Failures on Unreinforced Masonry Buildings

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7/20/2012

## Recent Progress

- This week's progress was mainly concerned with testing the collected samples from Whanganui
- In total, about 20 brick samples were compressed in the lab to test their strength. First capped with plaster, the half bricks were placed under loading at about a 60kn pace.
- Mortar samples from Whanganui were also tested and results were then compared using a capacity value found from the h/r ratio of each specimen.
- Data was then analyzed and roughly graphed to show the overall patterns from the anchor testing
- We had a meeting at the end of the week to discuss the next steps in this project as well as possible extensions of this topic that involve further testing in different sites.

## **Future Goals**

Discussed this week were plans to continue our progress on the Whanganui research project; this would involve:

- Extensive data analysis of our results from Whanganui
- •Presenting this as well as data from past testing in 2011 in a clear, concise manner, to reveal the comparisons of different anchor installations and materials
- Plan to test existing anchors in another building in Auckland (2 day work)

Another project has also been proposed which would deal with working on the future journal publication for the Christchurch earthquake research. For this project we will be reviewing the photos and data collected from the visits of these destroyed sites, organizing a method in which the severity, cause, and location of these failures can be observed. As this is an extensive project, it will be completed in stages alongside the project previously described.



## ACKNOWLEDGEMENTS

University of Auckland, New Zealand

Dr. Liam Wotherspoon - New Zealand Mentor

Dr. Jason Ingham

University of California, San Diego

Dr. Lelli Van Den Einde - UCSD Mentor

Gabrielle Wienhausen, Ph.D.

Peter Arzberger, Ph.D

Teri Simas

National Science Foundation (IOSE-0710726)

Thank you so much for all you have done!!