

Seismic Testing of Anchor Failures on Unreinforced Masonry Buildings

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Recent Progress

- This week was spent finishing the photo analysis project, which mostly consisted of comparing the different parameters within our Christchurch results and graphing the observed trends.
 - Much was found in terms of the specific decade these buildings were constructed compared to the overall damage level as well as the wall-to-diaphragm through bolt connection plate types and sizes. These graphs were then attached to the original data and presented later in the week.
- We also reviewed past journal publications of the adhesive anchor testing and used this information to expand our database to include parameters such as mortar strength, brick sample strength, and mortar cohesive coefficients for each test site.

Future Goals

- For our last week here, we will mainly be focusing on finishing our database of test results and writing a final paper with our conclusions.
- Plans for our second testing trip in Whanganui will be solidified and as well as the equipment needed. The testing rig is in the process of being constructed at the machine shop and should be finished by the time of the trip.
- Overall, we will be drawing conclusions from the first Whanganui expedition, the data we analyzed from the Christchurch earthquake damage, and other various tests we have performed on historical URM buildings within Auckland in these past months, to form a better understanding of the main failure mode of adhesive anchors for URM buildings.

CULTURE!

- Underground rafting through the Waitomo caves!
- Weekend roadtrippppp 😊
- National chocolate day celebration
- Little shopping downtown on Queen Street
- Watched the New Zealand Rugby kickoff game!



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