



QuakeCoRE
NZ Centre for Earthquake Resilience

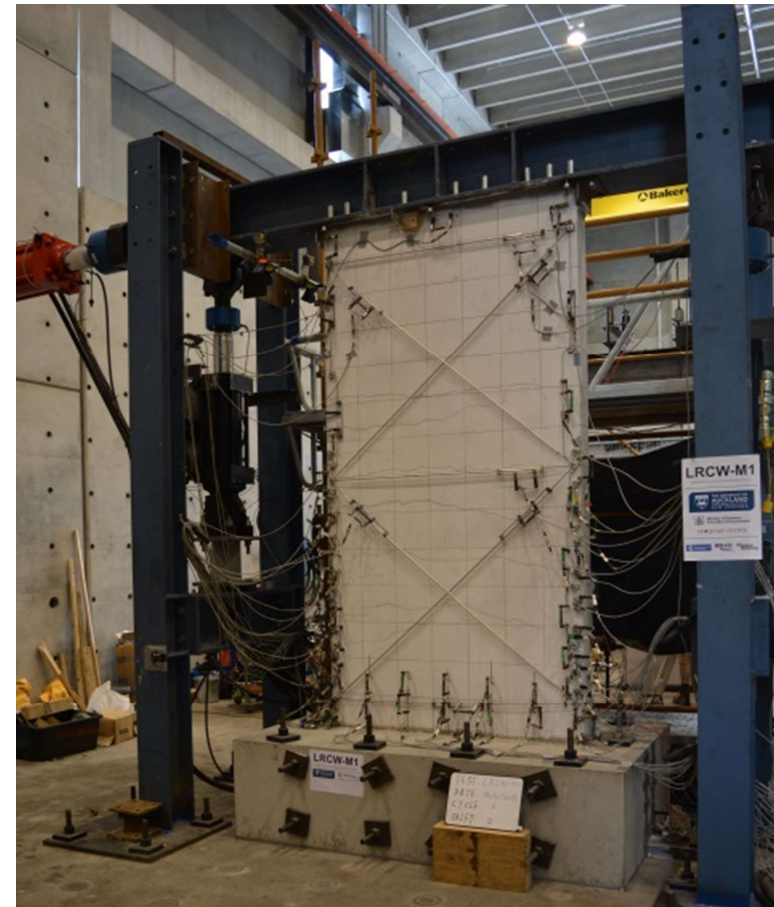
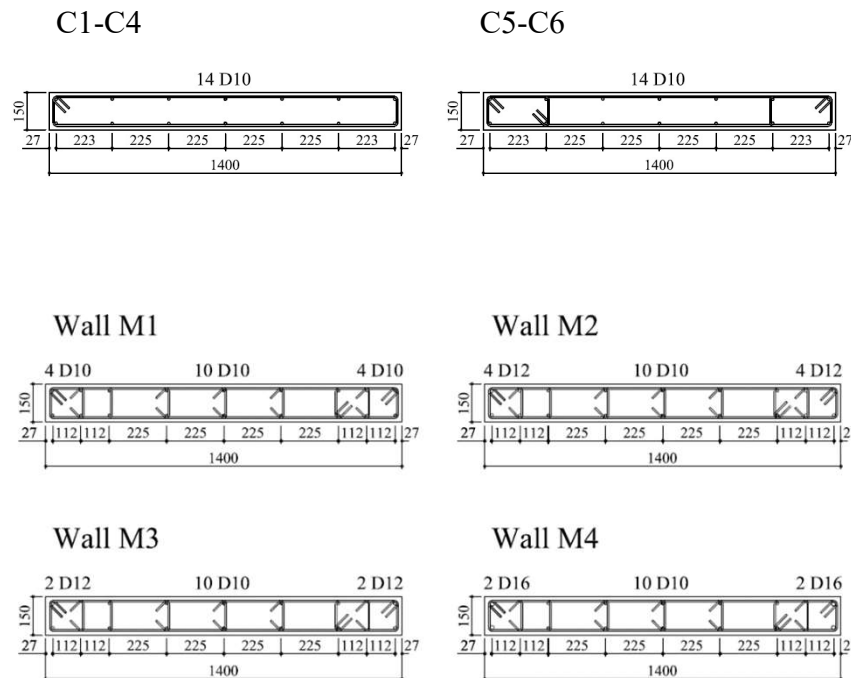
RC Wall Residual Capacity and Repair

QuakeCoRE FP4 project



Lu et al. Tests (2014-2015)

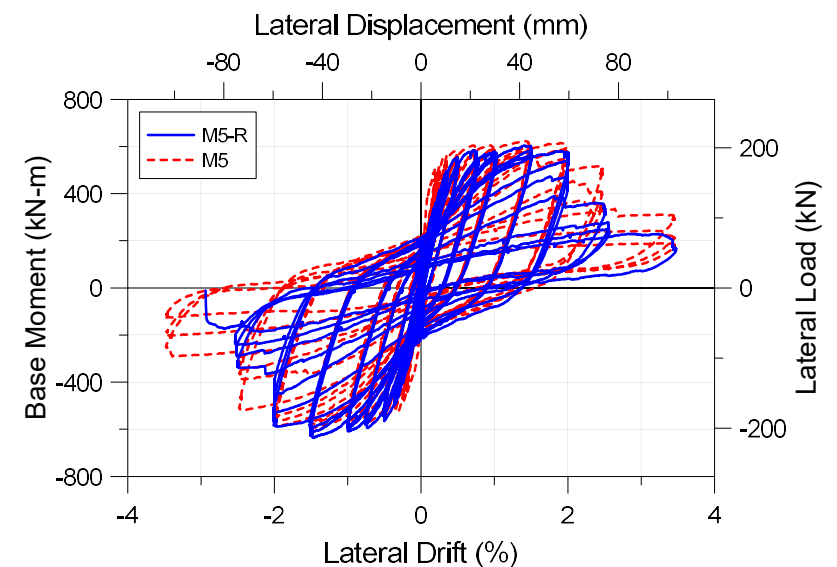
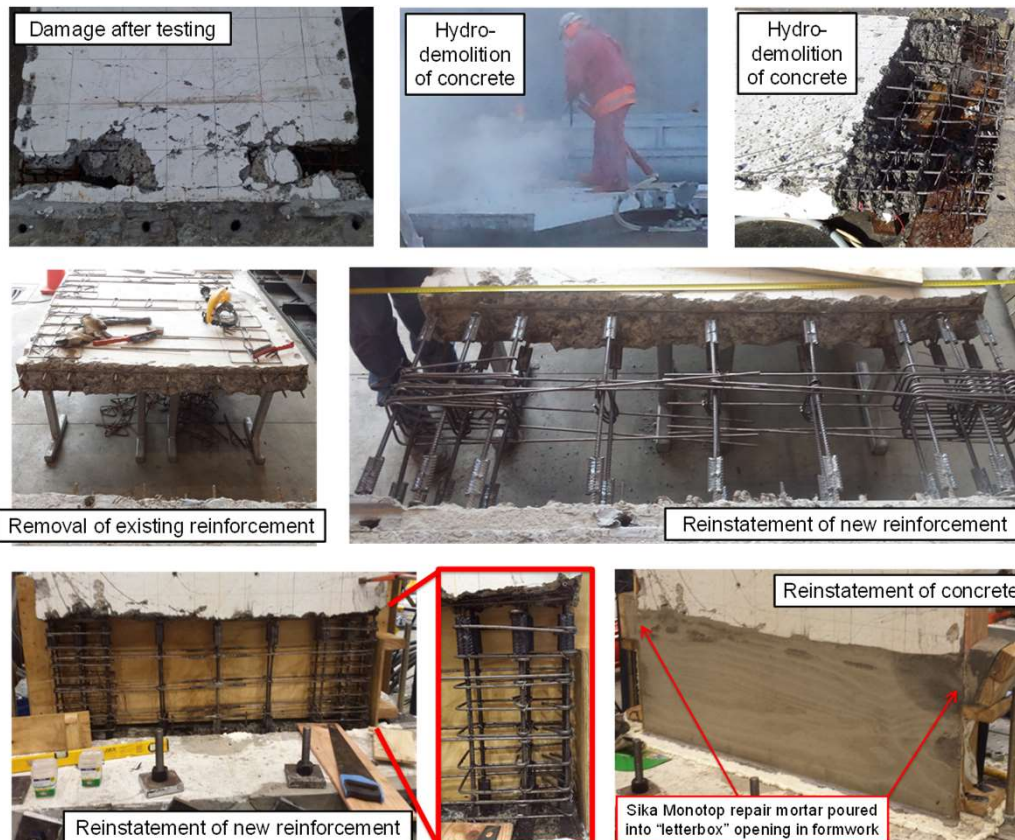
- Minimum vertical reinforcement limits
 - C walls – NZS 3101:2006 A2
 - M walls - NZS 3101:2006 A3



Motter et al. Repair Tests (2016)



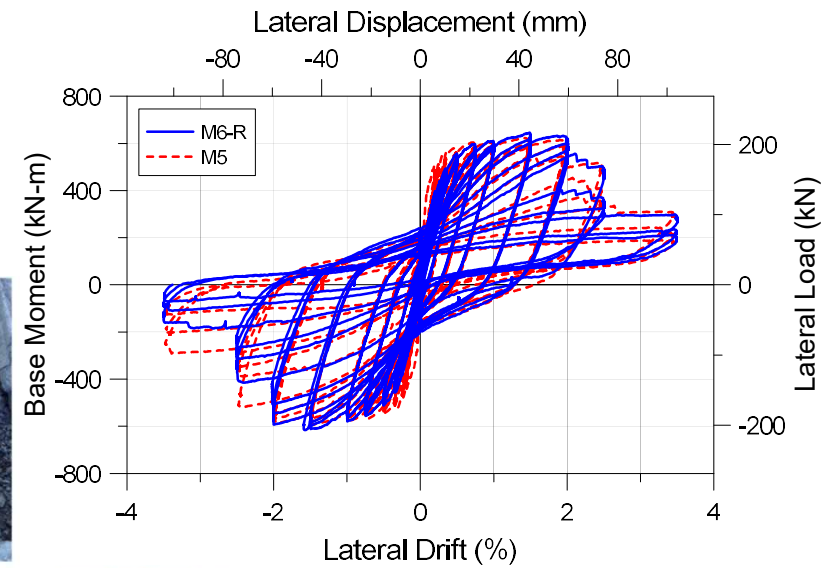
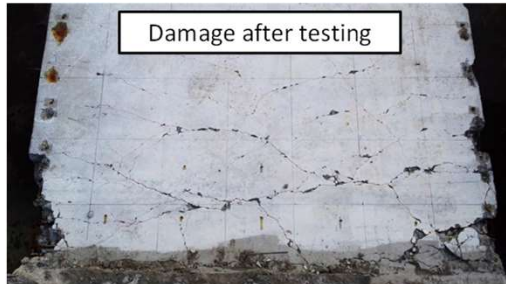
- Repair of M walls
 - Heavily damaged



Motter et al. Repair Tests (2016)



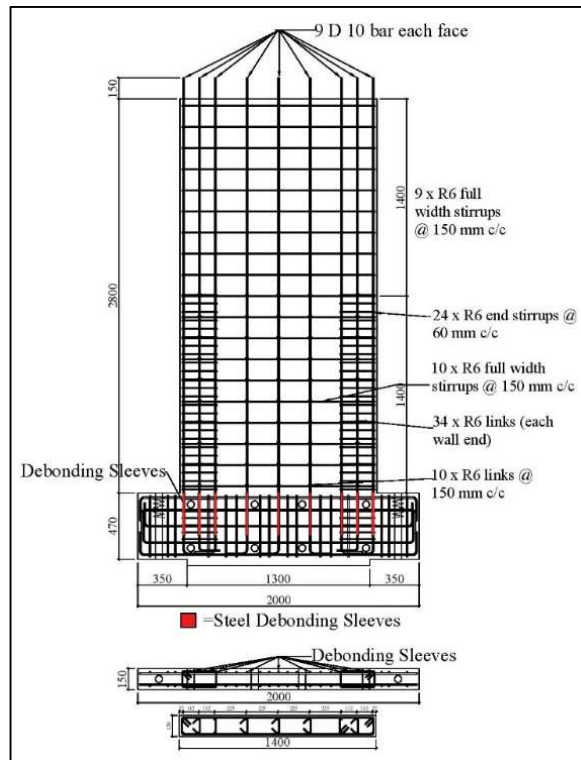
- Repair of M walls
 - Moderately damaged



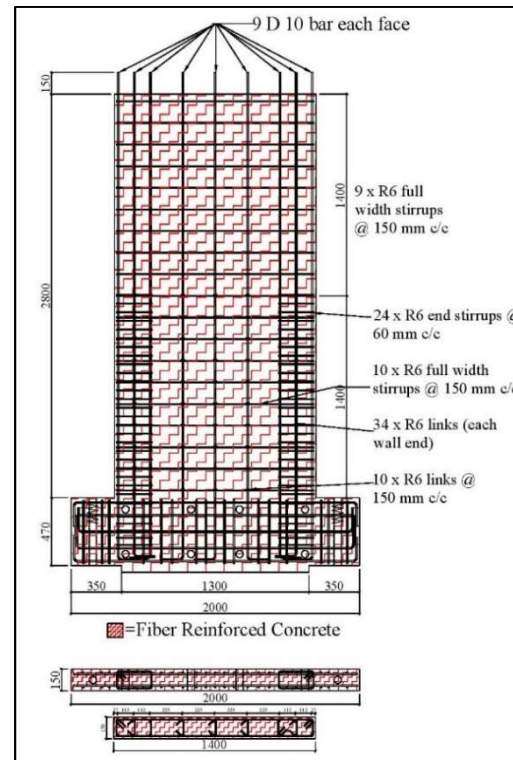
Blount et al. Modifications (2017)



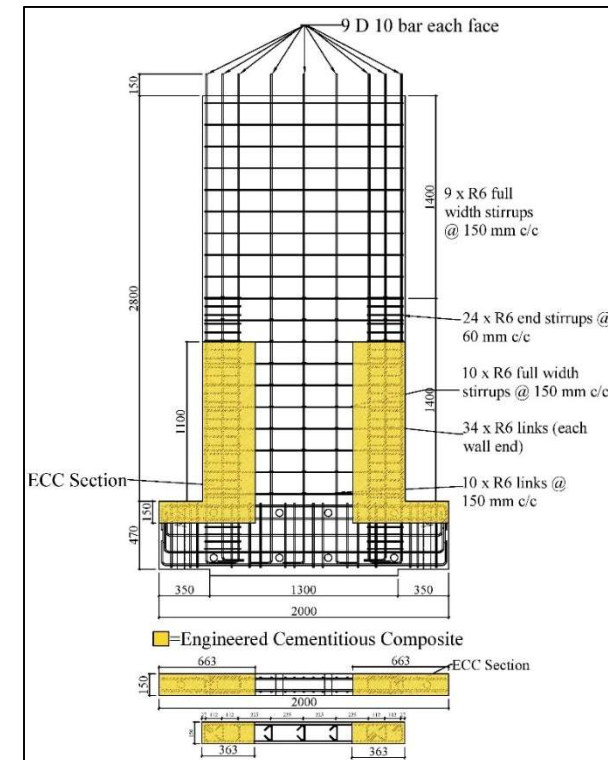
- Modify M wall design to improve reparability



Debonding



FRC

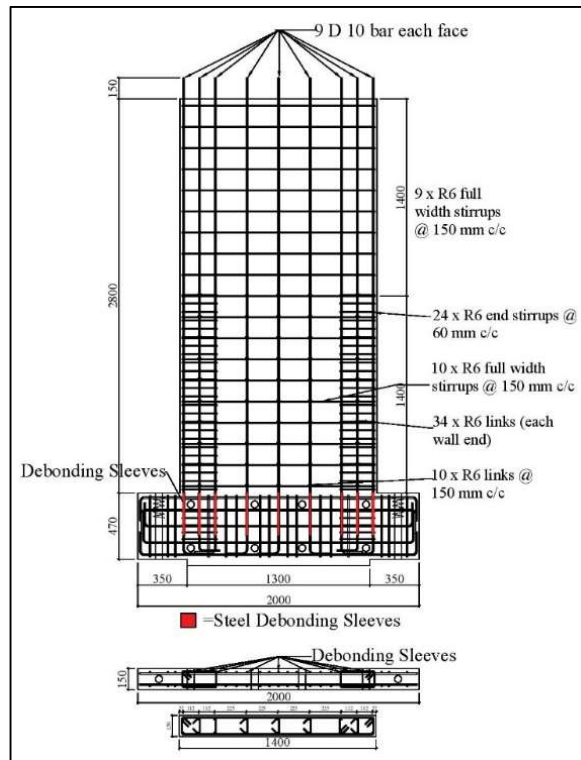


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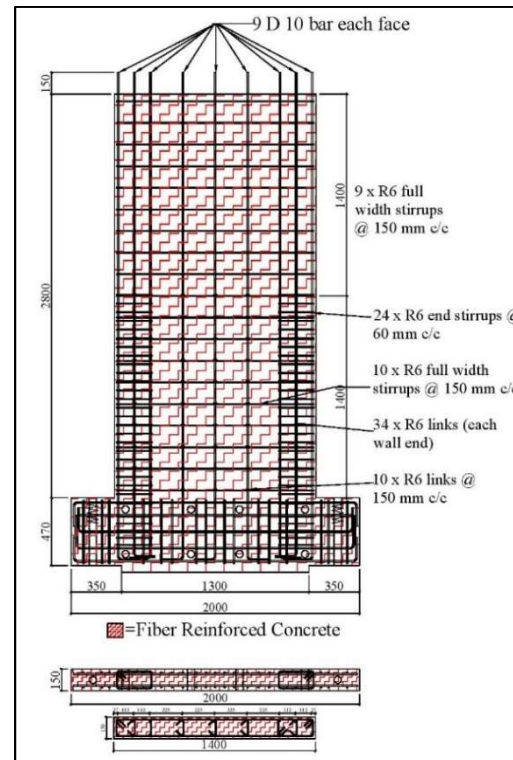
Blount et al. Modifications (2017)



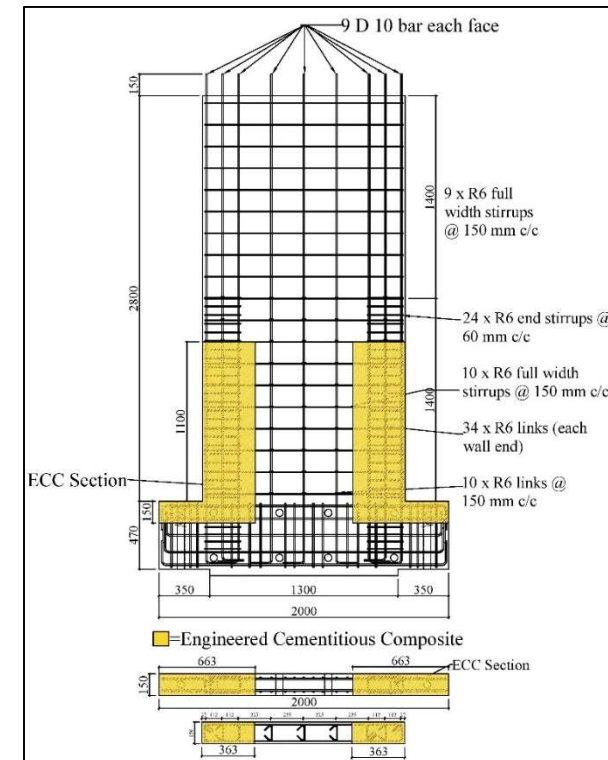
- Modify M wall design to improve reparability



Debonding



FRC



ECC

Next steps (2018-2020)

- PhD student Gonzalo Munoz
- Objectives:
 - Residual capacity of RC walls (different behaviour and levels of damage)
 - Repair of RC walls with light/moderate damage
 - Refine modifications to reduce damage and improve reparability