

# Structural testing that may be valuable for industry

Commentary provided by



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# Building Assessment

- Building assessment of existing steel MRFs performance - We traditionally assess with  $\mu = 1.25$  but we are led (by various expert opinions) to think that there is heaps more ductility in steel systems than what is normally adopted. Dependant of course on connection design etc, but it would be good to raise the commonly utilised assessment ductility to 2 or above. System wide testing may help validate this?
- Building assessment – performance of shell beam construction at potential plastic hinge zones, where shell beams are not tied in to the insitu beam but also support precast flooring. How do we validate reliable precast floor system support?

# Building Performance

- Performance of column tie-in requirements - What is really needed to restrain columns from out of plane bending/dislocation from a diaphragm?
- Slab performance above and adjacent to EBF active links - What is the appropriate slab detailing to cope with the dislocation and push/pulls at the active link?

# Building Performance - Hollowcore

- Diaphragm strengthening - Use of supplemental FRP on topping slabs as drag elements and the effects of consequential strain incompatibility (delamination) of FRP at cracking locations in areas of negative moment - What are the appropriate detailing measures?

Thank you!

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