

Staggered Lap Splices in RC Walls

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FEBRUARY 2023

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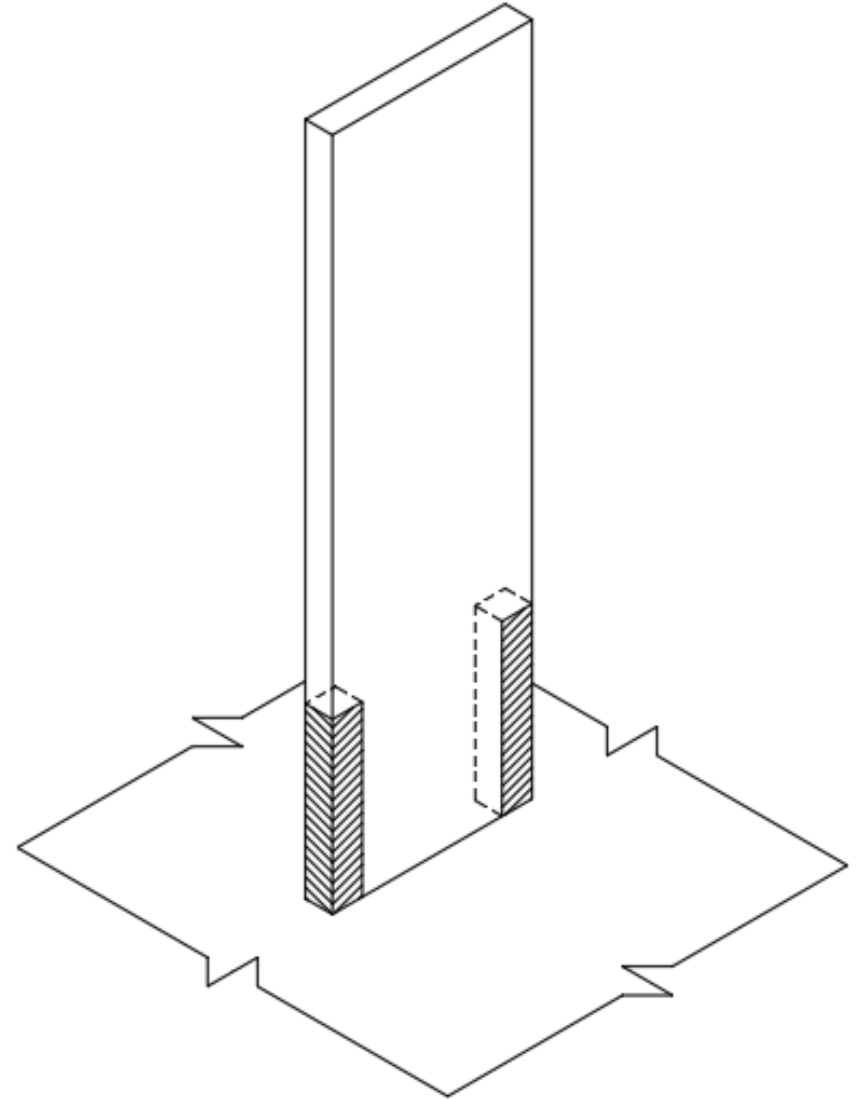
Terminology

Flexure-Dominated Walls

Lap Splices ...

- A) Near the Foundation
- B) In “Boundary Elements”

We don't put splices near critical sections of columns or beams!

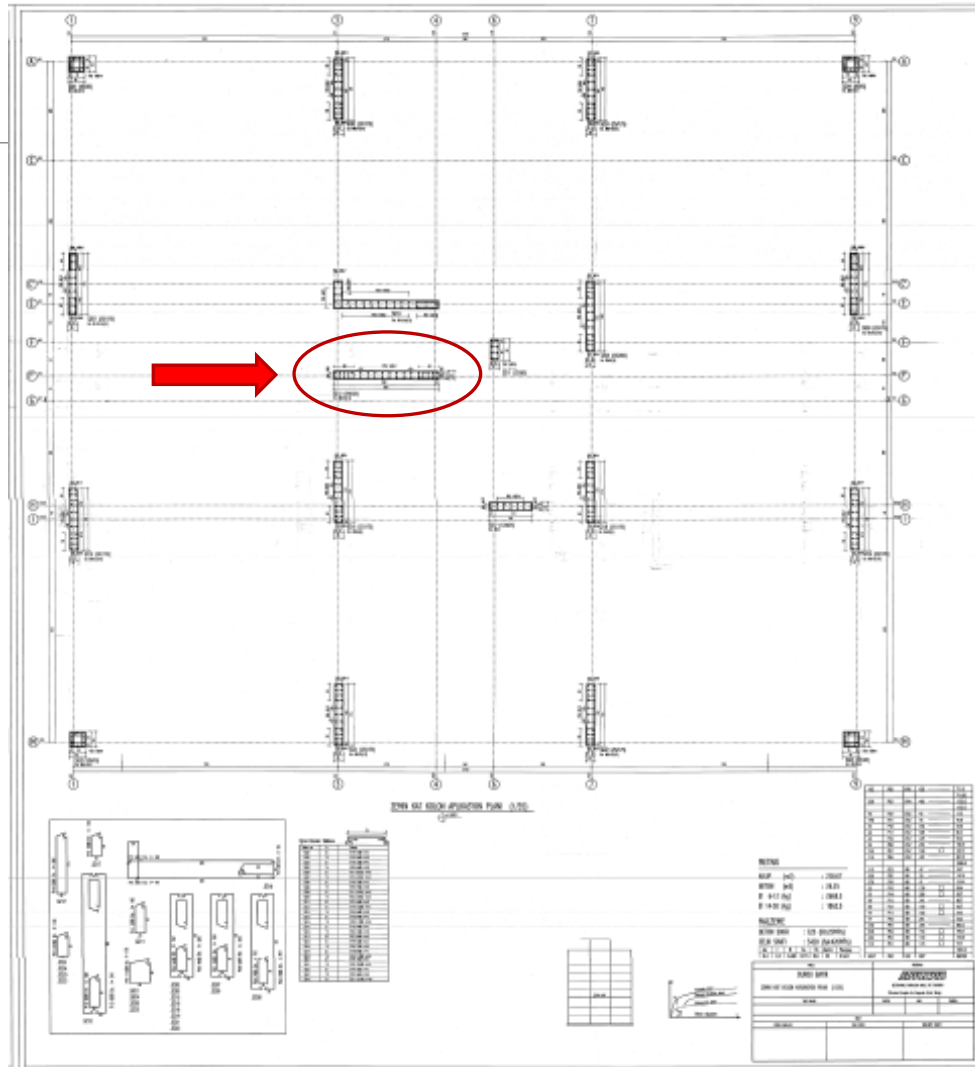


Observations and RC Standards



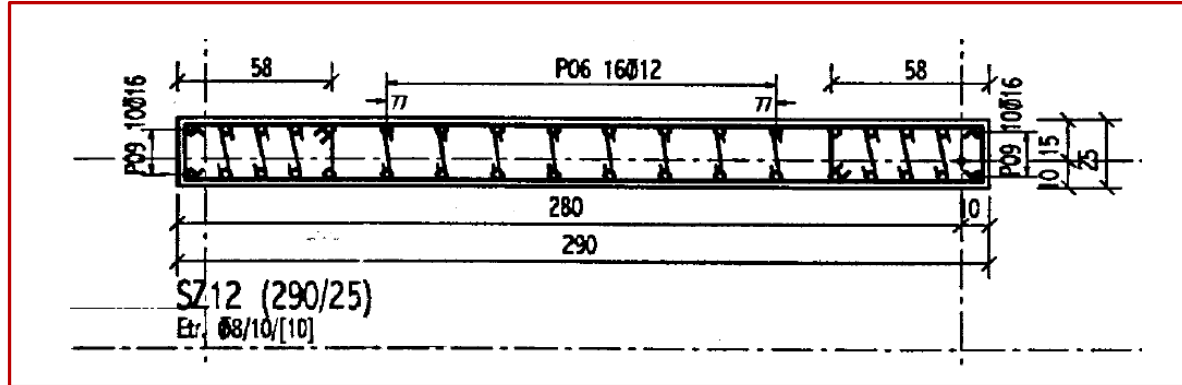
An Example from Turkey (2023)

CS15 - Building 1622-9 Wall SZ12



An Example from Turkey (2023)

CS15 - Building 1622-9 Wall SZ12



$\rho_{long} = 1.4\%$ (Boundary Element)

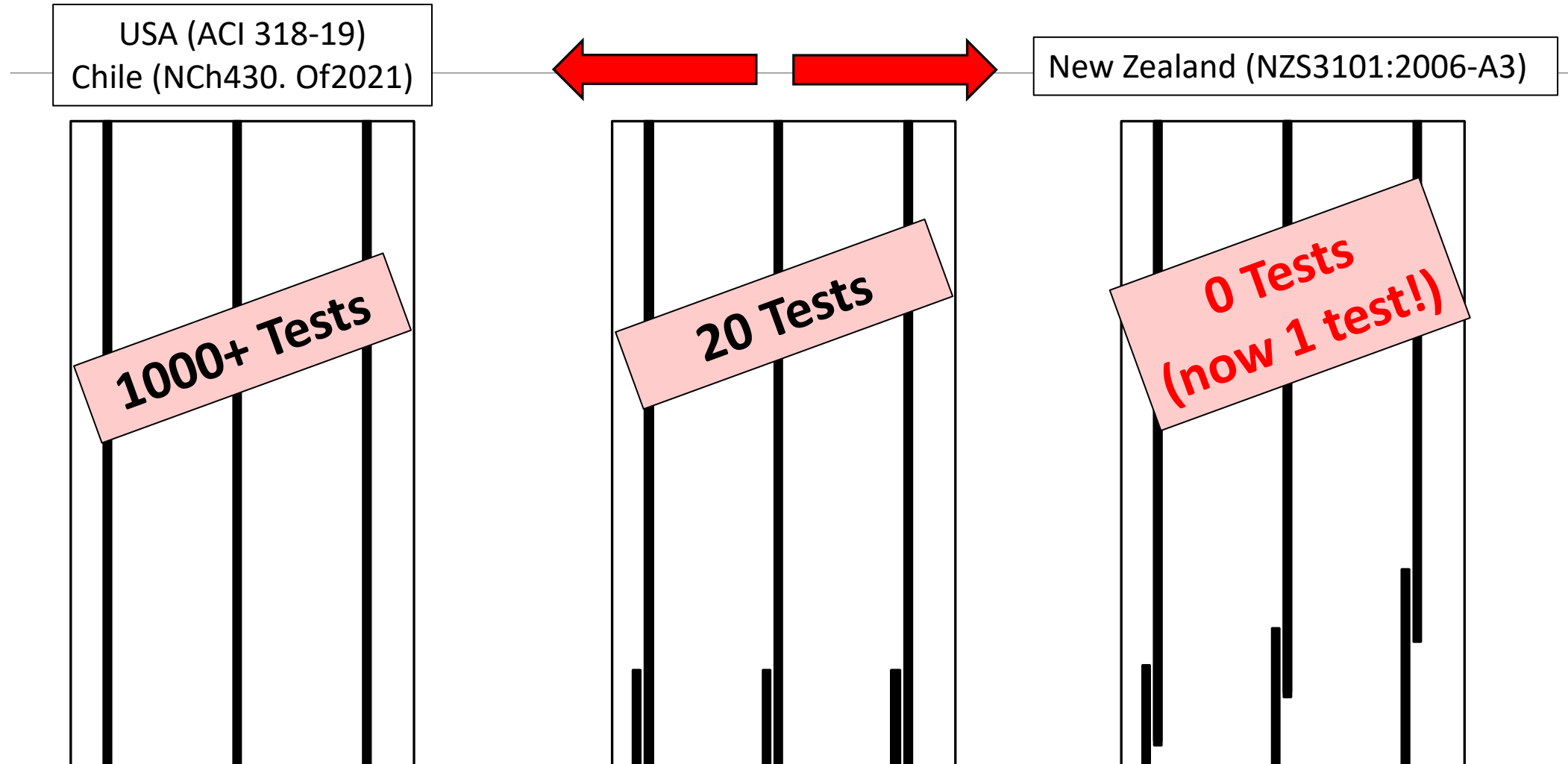
$\rho_{transverse} = 0.4\%$ to 1.0%

$L_{splice} \cong 60 * d_{bar}$

Non-staggered Splices



Lap Splices in RC Standards



Experiments (So Far)

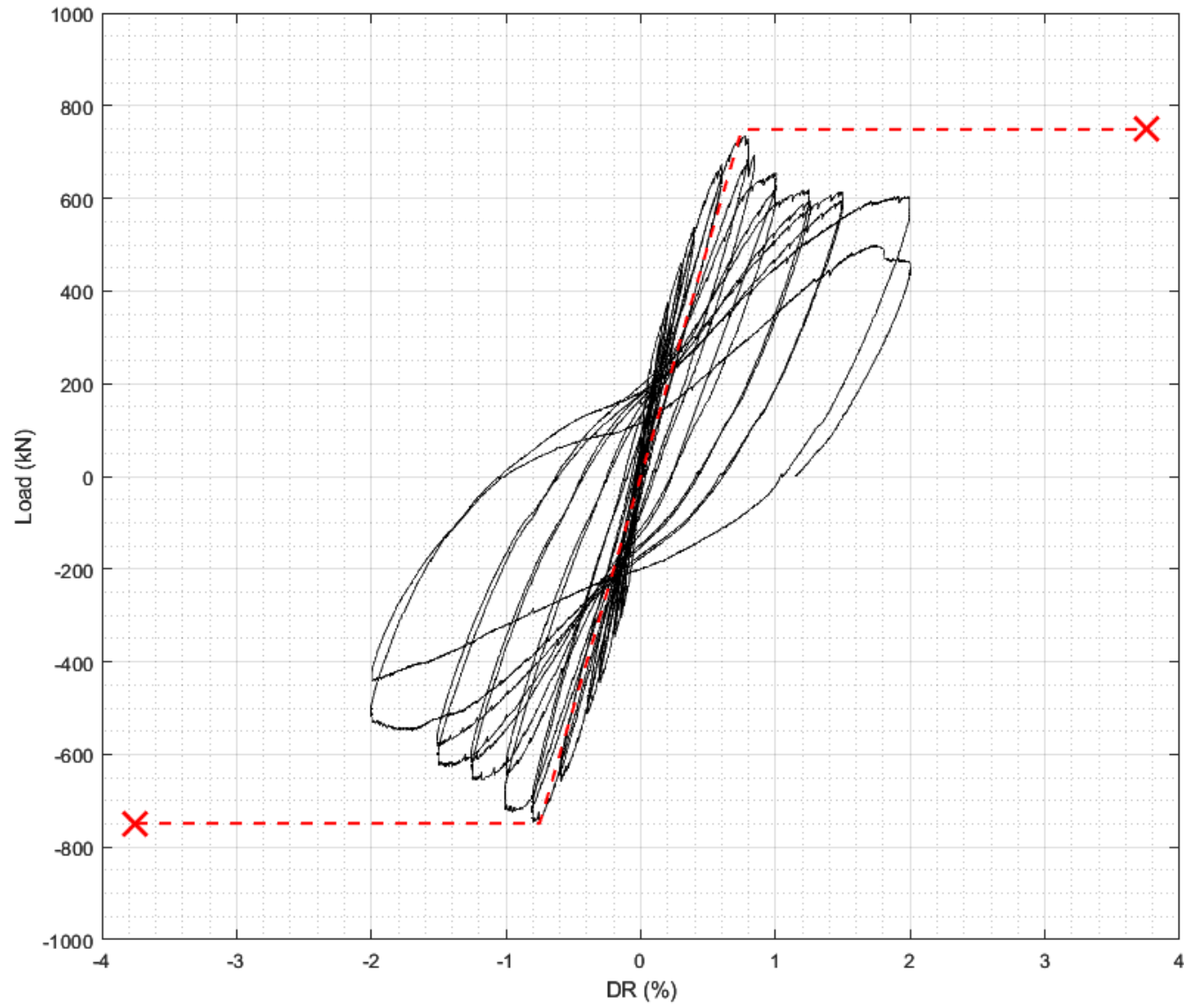


1.0 %

1.5 %

2.0 %





Application to large-scale shake table testing

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