

## SLENDER HIGH STRENGTH CONCRETE WALL BEHAVIOR PREDICTED BY FINITE ELEMENT ANALYSIS

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### ABSTRACT

*Slender concrete wall behavior subjected axially loading with eccentricity can be accurately predicted using non-leaner analysis application program FEA modeled on the experimental test procedure. Existing codes and research results are investigated to valid the analyzed results. Comparisons of the numerical results to established formula for the walls with opening reveals to be validated the accuracy of the FEA predictions; ultimate axial strength, load versus deflection curve, and failure made. The relationships of high strength concrete up to 150 Mpa and height to thickness until 50 with ultimate axial strength of slender walls are investigated using the FEA model.*

**KEYWORDS:** *Slender High Strength Concrete walls, Axial Loaded with Eccentricity, Finite Element Analysis, Height to Thickness*

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