

NAKANO LAB.

[Seismic Damage Estimation of RC Building Structure]

Department of Fundamental Engineering

<http://sismo.iis.u-tokyo.ac.jp/>

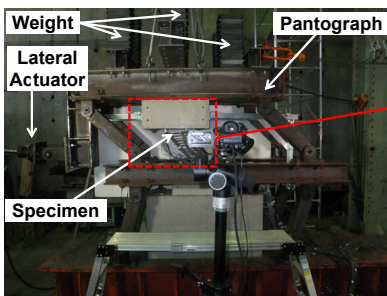
Earthquake Engineering / Structural Engineering

Faculty of Engineering,
Dept. of Architecture

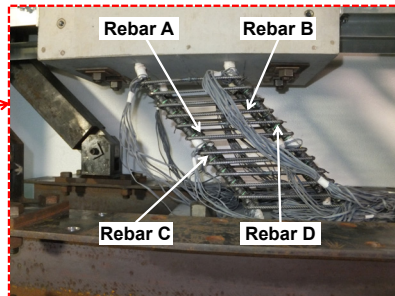
Damage Estimation of Reinforced Concrete Building Structures During Earthquakes

On the subject of STRUCTURAL ...

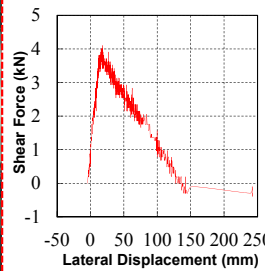
- MEMBER** : Evaluation of Axial Load Capacity of Shear Failure Type RC Columns
- FRAME** : Seismic Performance Evaluation of RC Frames with URM Infill
- SYSTEM** : Residual Seismic Capacity Evaluation for RC Buildings focusing on Failure Mechanism



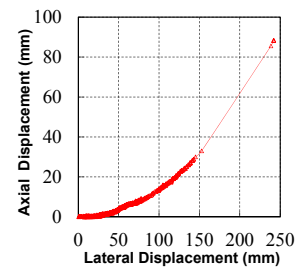
Test Setup (Front View)



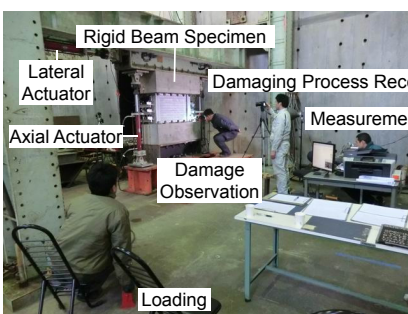
State of Specimen after Axial Failure



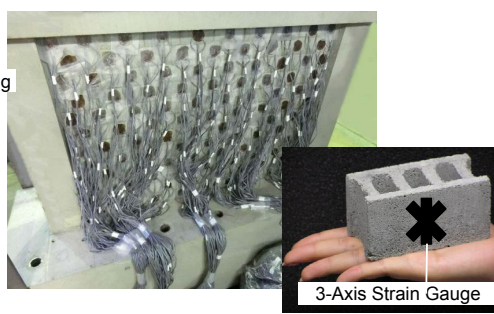
Shear Force vs. Displacement



Axial Displacement vs. Lateral Displacement

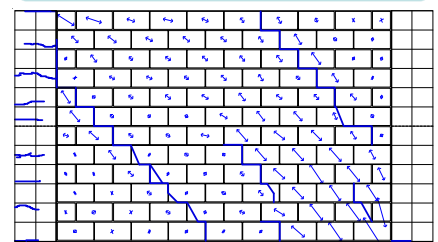


Test Setup

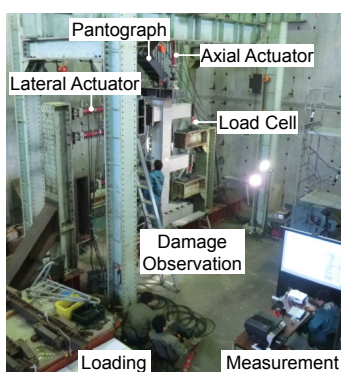


3-Axis Strain Gauges of CB Wall

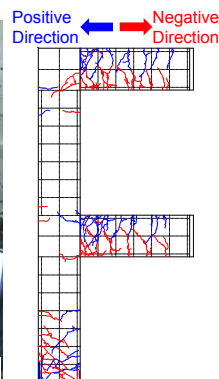
Investigation of seismic capacity (Diagonal strut mechanism · Shear strength)



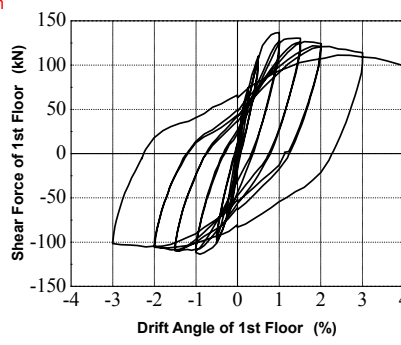
Principal Compressive Strain of CB Wall



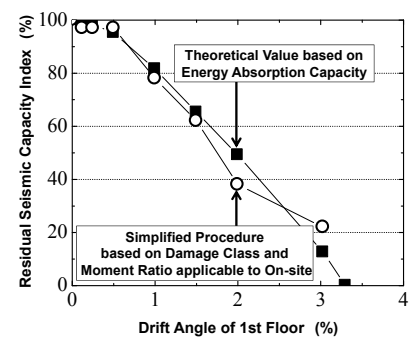
Test Setup



Damage State



Shear Force vs. Displacement



Residual Seismic Capacity Evaluation (Theoretical Value vs. Simplified Procedure)