

## **Evaluation of the effect of shear wall distribution in seismic response of precast framed structure**

### **Abstract**

In this research an attempt has been made to evaluate response of frame structure, subjected to lateral loads such as earthquake with different arrangement of Reinforced Concrete (RC) shear wall in structural plan. For this purpose a ten stories precast building skeletal frame of typical JKR (Public Work Department of Malaysia) quarters is considered and its behavior with different shear wall location under earthquake excitation is studied and comparison of performance has been made. Placement of shear wall did helps a lot in restraint the lateral displacement at tip node. Skeletal frame with original shear wall based on JKR quarters showed the best performance among all although there is only little different in term of shear forces and bending moments in beams.

**Keyword:** Precast concrete; Lateral load; Shear wall; Earthquake; Time history analysis