# Behavior of Clay Brick Confined Masonry Walls Under Cyclic Loads

**Behrang Sarrafi[1] and Sassan Eshghi[2]**

**Abstract:**

The seismic behavior of confined masonry buildings depends largely on material properties, construction methods, and the workers' skill level. This study reports and discusses the results of testing on seven confined masonry walls. The walls are designed according to the Iranian Seismic Code, which represents a typical qualitative code for masonry structures (similar to the Chilean and Turkish codes). The walls, all parts of which (including the bricks) are assigned a scale of 1:2, are subjected to lateral cyclic loading. The effect of the head joints, central window opening, and vertical loading on the seismic behavior of such confined masonry walls is investigated. The results indicate that minor changes in the construction of confined masonry walls will considerably affect their behavior under cyclic loads.



**DOI: 10.70803/001c.138230**

[1] Ph.D. Student, International Institute of Earthquake Engineering and Seismology (IIEES), Tehran, Iran, b.sarrafi@iiees.ac.ir, bsarrafi@yahoo.com

[2] Associate Professor, International Institute of Earthquake Engineering and Seismology (IIEES), Tehran, Iran, s.eshghi@iiees.ac.ir