**APPLICATION OF BASE ISOLATION FOR RETROFITTING OF EDUCATIONAL BUILDING WITH MASONRY WALLS IN PERU**

**DOI 10.37153/2686-7974-2019-16-734-734**

SIMBORT E.[[1]](#footnote-1)

**ABSTRACT**

Seismic isolation of structures in Peru is becoming a common method of providing protection from earthquake damage. By reducing the seismic forces transmitted into the structures, seismic isolation protects the main structure and the most important the safety of occupants as well as the contents and secondary structural elements. The rehabilitation of existing structures by the implementation of seismic isolation at ground level has been carried out into hospitals, historic buildings of all around the world, but in Peru it is a new technology. In this research, the seismic behavior of an educational building with masonry walls designed according to the conventional approach is evaluated for the implementation of seismic isolation. The results show an important improvement of the behavior of the structure against the traditional approach. This improvement is considerable, achieving a level of performance of immediate occupation under a MCE.

The retrofitting technique using base isolation has great potential for rehabilitation of educational structures that have been constructed without taking into account the new technologies or approaches of seismic design.

1. Ph.D., Universidad Católica San Pablo [↑](#footnote-ref-1)