

Experimental Study on the Floor Vibration Evaluation of Concrete Slab for Existing Buildings

Authors : Yong-Taeg Lee, Jun-Ho Na, Seung-Hun Kim, Seong-Uk Hong

Abstract : Damages from noise and vibration are increasing every year, most of which are noises between floors in deteriorated building caused by floor impact sound. In this study, the concrete slab measured vibration impact sound for evaluation floor vibration of deteriorated buildings that fails to satisfy with the minimum thickness. In this experimental study, the vibration scale by impact sound was calibrated and compared with ISO and AIJ standard for vibration. The results show that vibration in slab with thickness used in existing building reach human perception levels.

Keywords : vibration, frequency, accelerometer, concrete slab

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