

전기통신설비를 위한 옥내외 겸용 면진테이블 설계
Design of a Seismic Isolation Table for both indoor and outdoor
Electrical Communication Equipment

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ABSTRACT

The safety of cultural properties, medical treatment and electrical communication equipments in a building was hardly considered against the earthquake induced vibration, while the integrity of the building structure has been taken into account through the resistant earthquake design. This paper presents design of a seismic isolation table for both indoor and outdoor electrical communication equipment. First of all, artificial earthquake waves compatible with floor and ground response spectra for electrical communication equipments are generated using previously recorded seismic waves. Two kinds of one-degree-of-freedom seismic isolation table systems: spring-linear damper and spring-friction damper systems are considered and their responses to artificial earthquake waves are simulated. Design parameter study for two seismic isolation tables are performed through simulations and a seismic isolation table for both indoor and outdoor electrical communication equipment is designed considering the simulation results.

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