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METHODS FOR REDUCING SEISMIC FORCES ACTING ON BUILDINGS AND STRUCTURES

Egamberdiyev B.O*

*PhD Student, Ferghana polytechnic institute, UZBEKISTAN

ABSTRACT

This article examines, analyzes, and develops recommendations for reducing seismic forces affecting buildings and structures. Various devices have been developed and put into practice by scientists. The advantage of these devices is that their use in dynamic structures allows to reduce the seismic forces acting on buildings and structures. In viscous and dry friction dampers, the friction work decreases sharply with decreasing vibration amplitude, while it is advisable to keep the damper energy distribution level unchanged to maintain efficiency, which also requires the system to maintain the vibration amplitude unchanged. The introduction of damping allows to significantly expand the effective frequency range of vibration dampers. Despite measures to prevent vibration (vibration), including the use of vibration isolations, vibration of a particular structure in the excitation harmonic series is still common.

KEYWORDS: Active, Passive, Base, Damper, Friction Damper.

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