

2. Experimental Study on the Temporary Supporting Method for Seismic Isolation Retrofit

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A method of construction was developed in which reinforced concrete columns developed by placing additional concrete to existing columns were used as temporary supports for axial forces of columns required during the installation of laminated rubber bearings in seismic isolation retrofit work. The reinforced concrete columns developed by placing additional concrete were integrated with existing columns by stressing using high-strength steel bars, and subjected to structural tests to verify the load bearing capacity. Construction tests were also conducted to verify the construction safety.

Key words: seismic isolation retrofit, mid-story isolated buildings, temporary supporting, high-strength steel bars, prestressed joints