

Seismic Design for the Improvement Construction Method of the Ceiling of Existing Stations

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The ceiling of stations has support - structural types different from those which the ceiling of general buildings has. For example, the case where the ceiling is hanged from the waterproof folded plate to prevent water leakage as is often the case with elevated stations, and the case where the ceiling is hanged from horizontal structural members such as the channel steel as is often the case with over - track buildings can be cited. For the evaluation of the seismic performance of the ceiling of stations, it is required that the structural performance of the support part of the ceiling is grasped. And it is required that the load acting on the ceiling during earthquakes is adequately evaluated. Shaking table tests and analytical studies of the suspended ceiling in consideration of the support part of existing stations are conducted. Seismic design for the improvement construction method of the ceiling of existing stations is proposed.