

**Seismic Response Characteristics and Seismic Design Method of the Platform
Shed Constructed on Viaduct**

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Seismic responses of the sheds covering platforms constructed on viaducts are amplified coupled with the vibration of the viaducts. However, we do not have any rules such as a seismic design method that considers influence of viaducts, so seismic performance of sheds is not standardized. Therefore, firstly we grasped design criteria of sheds. Then, we clarified the vibration characteristics of an actual elevated station with microtremor measurements. Furthermore, we found out the influence of constructions and structure specifications of sheds on their response characteristics by earthquake response analysis. Based on the above-mentioned results, we suggested a new structural design method of sheds constructed on viaducts.