

**Development of a Beam-Column-Pile Joint of Rigid Frame Viaduct
Using Steel Fiber Reinforced Concrete**

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In the beam-column-pile joint of rigid frame viaduct, the amount of reinforcement tends to increase with an increase of earthquake load in seismic design. Accordingly, assembling of reinforcement bars and filling of concrete become difficult in course of construction. Therefore, in this study, we have developed the beam-column-pile joint structure using steel fiber reinforced concrete that is easy to construct. Further, we have proposed a design method of the joint based on the quantitative evaluation of stiffening effect of steel fiber. Moreover, we verified appropriateness of the design method of the joint by carrying out the reversed cyclic loading test with the specimens of the joint of rigid frame viaduct.