

**Characteristic of Repaired Columns
of RC Rigid-frame Viaducts Damaged by Earthquakes**

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In this paper, we studied the characteristic of repaired columns of RC rigid-frame viaducts affected by damage due to bending caused by earthquakes. Based on the horizontal cyclic loading tests using real size RC columns, we confirmed the followings. Firstly, in the case of damage without buckling of axial reinforcement, the characteristic of repaired columns by shrinkage-free mortars has no difference from that of sound columns. Secondly, in the case of damage accompanied with buckling of axial reinforcement, the characteristic of repaired columns by shrinkage-free mortars is inferior to that of sound columns. Thirdly, in the case of damage accompanied with buckling of axial reinforcement, the effective repaired methods of damaged columns are steel jackets and resin mortars.