

---

## Tests on RC Columns and Steel Beam Frames with a Steel Brace

Taku TABATA, Toshiro MAKITA, Takayuki ITO and Kouichi UCHIDA

---

To improve earthquake-resistant performance, using a steel brace is standard practice in mixed structures composed of reinforced concrete columns and steel beams. The steel brace reduces the shear stress of the beam-column joint. However, eccentric moment by the steel brace is a factor in promoting failure of the lever mechanism. Partial frame tests were carried out on a mixed structure with a steel brace. The results obtained suggest that the influence of eccentric moment on promoting failure in the structure was small, so long as the cross point of the steel brace and the steel beam is delivered to the range of the column depth. The equations proposed by AIJ for the failure strength of the lever mechanism evaluated the test results enough safely.