The Japanese 5-Story Full Scale Reinforced Concrete Masonry Test – Loading and Instrumentation of the Test Building

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Abstract:

The overall test plan for the 5-story reinforced concrete masonry research building investigated at the reaction wall facility of the Building Research Institute (B.R.I.) in Tsukuba City, Japan, is presented. The three main phases of the test program, the static (cyclic) loading tests, the forced vibration tests, and the pseudo dynamic test are summarized together with the loading history and test sequence. The servo controlled hydraulic loading system is described and the individual actuator control modes for the various test phases are discussed. A detailed assessment of the external reference instrumentation and the individual component instrumentation is presented, together with an outline of the data acquisition and monitoring systems, in order to assist in the interpretation of the test data.

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