

The Japanese 5-Story Full Scale Reinforced Concrete Masonry Test – Design and Construction of the Test Specimen

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Abstract:

The Japanese 5-story full scale reinforced masonry building test at the Building Research Institute (B.R.I.) in Tsukuba City, Japan, is a key component of the U.S.-Japan Joint Cooperative Research Program on Masonry Buildings under Seismic Loads. The full scale test building was designed following the new Japanese guidelines for medium rise reinforced masonry buildings. The key features of this new limit state based design standard are summarized, and the design of the test specimen is discussed.

The test building was constructed with a newly developed bonding system which utilizes open-ended standard units for a complete modular, fully grouted, reinforced, running bond system. The construction of the test specimen is described and quality control data and material properties are summarized.

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