

PRESS RELEASE, Jan 15, 2004

RASTRA BUILDING WITHSTANDS REAL SIZE EARTH QUAKE TESTING

An intensive test program has been conducted by the China Academy of Building Research in Beijing, Peoples Republic of China. Various Rastra wall assemblies have been tested under dynamic loads to qualify for multistory buildings in tremor areas. The program was overseen by the staff of Rastra – Casia office in all its phases.



After numerous verification tests and finite element modeling

of a real size test set up, a 3 story house with a total height of 8.68m (28-6ft) and a projected area of 8mx5m (27ftx16.5ft) has been erected in the test hall of the Institute and hundreds of probes have been connected to 3 computer systems. The building has been loaded in each floor and on top with an additional total weight of 128 tons (281,600 lbs) to simulate the weight – and inertia – of 3 more stories inclusive live loads.

Verification tests have shown that Rastra adds strength and ductility to the concrete structure. The test structure has been tested to an equivalent of number 8 earthquakes without any measurable or visual damage. In fact, the test has been continued far beyond this strength.

The results confirmed that Rastra can be used for 6 story buildings and withstand earthquakes of a magnitude 8+.

The design of the concrete grid structure developed and improved over 30 years by Rastra, once more proved its strength.

We thank the engineers of the China Academy and the staff of our Beijing office for their outstanding work and efforts!

