

## RESEARCH ON THE SEISMIC PERFORMANCE OF TRADITIONAL BUILDINGS

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### ABSTRACT

It exists in several regions in the world, of numerous historic monuments, buildings and housing environment, built in traditional ways which survive for earthquakes, even in zones where the seismic risk is particularly raised. These constructions, stemming from vernacular architecture, allow, through their resistances in the time earthquakes, to identify the various sismo-resistant "local" techniques.

Through the examples and the experiences presented, the remark which can be made, is that in the traditional built, two major principles in a way opposite, govern the constructions in earthquake-resistant. It is about the very big flexibility, whom answer very light constructions, like the Japanese wooden constructions, Turkish and even Chinese; that of the very big rigidity to which correspond constructions in masonry in particular stone, more or less heavy and massive, which we meet in particular in the Mediterranean Basin.

In it is added sensible and well reflected techniques of construction, of which the use of the humble materials such as the earth and the adobe. The ancient communities were able to face the seismic risks, thanks to them know-how reflected in their intelligently designed constructions, testifying of a local seismic culture.

**KEYWORDS:** Construction, Earthquake, Resistance, Techniques, Traditional