Investigation on Rubber Isolator as Earthquake Resistance System for Single Storey Building in Seremban, Negeri Sembilan

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ABSTRACT

The title of this final year project is investigation on rubber isolator as earthquake resistance system for single storey building in Seremban, Negeri Sembilan. The main purpose of this research as it needs to find out the behavior of rubber isolator of the house as an earthquake resistance. And from those behaviors of the rubber isolator, these behaviors can be tested through experimental analysis and finite element analysis. In this research, there are 3 samples are tested. The dimensions of 3 samples are 100mm*100mm*40mm, 200mm*200mm*40mm and 300mm*300mm*40mm. Most earthquakes occur along the fault lines when the plates slide past each other or collide against each other. The effects of earthquake which is harmful for human being such as landslides or hillslides, tsunamis, fires, floods caused by the collapse of dam walls, falling electricity lines, damage of man-made structure, liquefaction, spill of hazardous chemicals, radioactivity from damaged nuclear power plants and etc. By installing the base isolator, it can resist the horizontal load and vertical load which the loads come from earthquake. This is the main purpose to research in this title.