

Assessment of Causes of Building Collapse in Nigeria

Authors : Olufemi Oyedele

Abstract : Building collapse (BC) in Nigeria is becoming a regular occurrence, each recording great casualties in the number of lives and materials lost. Building collapse is a situation where building which has been completed and occupied, completed but not occupied or under construction, collapses on its own due to action or inaction of man or due to natural event like earthquake, storm, flooding, tsunami or wildfire. It is different from building demolition. There are various causes of building collapse and each case requires expert judgment to decide the cause of its collapse. Rate of building collapse is a reflection of the level of organization and control of building activities and degree of sophistication of the construction professionals in a country. This study explored the use of case study by examining the causes of six (6) collapsed buildings (CB) across Nigeria. Samples of materials from the sites of the collapsed buildings were taken for testing and analysis, while critical observations were made at the sites to note the conditions of the ground (building base). The study found out that majority of the building collapses in Nigeria were due to poor workmanship, sub-standard building materials, followed by bad building base and poor design. The National Building Code 2006 is not effective due to lack of enforcement and the Physical Development Departments of states and Federal Capital Territory are just mere agents of corruption allowing all types of construction without building approvals.

Keywords : building collapse, concrete tests, differential settlement, integrity test, quality control

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