

BUILDING STRENGTH MONITORING USING WSN

ABSTRACT

Structural Health Monitoring (SHM) plays an important role during environmental hazards like earth quake, fire, etc. The building safety analysis is important factors that need to continuously monitor using sensors. In the traditional method of analysis limitation is overcomes based on proposed method. The proposed system is an effective way to analyze the structure behavior under vibration using wireless sensor network (WSN). The development of the system includes a frame structure connected with Zigbee/ long distance sensor that can send the signal to remote controller. A manual vibration shaker is used to make vibration in the developed frame structure in x- y direction at different conditions like normal to fully collapsing state. The controller is connected to a graph generating software like MATLAB to simulate the corresponding plots of the building structure motions. The graphs are used to analyze the damage level of the building structure. Therefore, it helps in building risk diagnosis.