

Assessing structural damages of a heritage building

ABSTRACT

This paper presents an intensive structural survey work on an industrial heritage structure. This study identified the decay mechanism and material characteristics of the historic structure, including material homogeneity, material strength, structural failures with crack pattern, and deteriorated surface. The damages in the building include decay in timber and stones, dampness problem and incompatible structural assemblage. The lack of a long-term maintenance is one of the potential causes which aggravate the decay mechanism. The findings permitted to appraise the structural safety and to depict some recommendations for better treatment of the structural cracks to restore this industrial heritage structure. These proposals would be useful in the conservation management plan of the city.

Keyword: Cultural heritage; Decay mechanism; Structural cracks; Visual evaluation