Building Information Modelling (BIM) For Existing Building: Proposed Methodologies To Assess Thermal Mass In Existing Reinforced Concrete Buildings

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The research focus to identify suitable BIM-based methodologies for documenting, analysing, and assessing existing concrete buildings, with a focus on their thermal mass performance to be integrated into building energy simulation. The aim is to develop a BIM methodologies for comprehensive assessment of the thermal mass in these buildings, and to identify especially which interventions are needed based on multi-objective optimization. Research begins with literature review analysis on existing application of BIM to address issues on thermal comfort in existing buildings, followed with development of a BIM optimization framework and case studies.

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