

UNIVERSITI TEKNOLOGI MARA

**DEFECT ASSESSMENT FORM FOR
PRESERVATION HERITAGE
BUILDINGS IN MALAYSIA**

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MSc

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AUTHOR'S DECLARATION

I declare that the work in this dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

Malaysia is a unique country with multi-racial society and rich with multi-layered of heritage buildings which have significance on the building design, architectural qualities, craftsmanship and others. In the construction industry, building defects is a common issue related with every type of building. The problem of defects need attention to make sure the sustainability of the buildings is long lasting and Defects Assessment Form have been developed for ordinary building but not for heritage building. This research is conducted to develop and validate the defects assessment form for the inspection of defects in heritage buildings in Malaysia. The first objective of this research is to identify the types of defects occur in heritage building. The second objective is to explore the current assessment technique by conservator in accessing defects for heritage building in Malaysia. Both objectives has been conducted through the literature review from the dilapidation reports, journals that related with the defects problem, conservation works, inspection works and government policy such as Public Work Department (PWD) and National Heritage Department (NHD). The defects were identified based on eight structure elements in heritage building which are column, floor, roof, staircase, wall, window, door and ceiling by using Atlas Ti software. Dilapidation report is the current assessment method used by conservator in accessing defects for heritage building in Malaysia. The third research objective is develop and validate the defect assessment form for heritage buildings in Malaysia. The form were created and validated by five experts in Heritage Buildings. The form created is valid to be use and may give benefits especially to the conservators, architects, engineer, builders, surveyors, contractors for inspection activities and by all those who concerned with the care of heritage buildings. The recommendation for future research is to conduct the research (tool testing) using the proposed defect assessment form on the heritage building and develop the assessment form of heritage building with ratings to classified the defect problem.

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