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TEKNOLOGI
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**THE DEVELOPMENT OF TIMBER
DEFECTS INSPECTION CHECKLIST
FOR RUMAH KUTAI**

NAJAT AFFENDY BIN DZULKIFLY

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ABSTRACT

The threat of the extinction of Rumah Kutai is becoming a concern. To date, it is estimated that no more than 50 houses remain. Even so, less than 30 are still intact. The rest are in deplorable condition. The high maintenance cost of timber houses has caused damage after damage ignored by the occupants for a long time. Amongst issues, Rumah Kutai is privately owned and not subject to a heritage body to concern. Maintenance expenses need to be borne by the building owners who live below the poverty line on average. These are the problems being faced. Despite the scenario, something needs to be done to prevent the iconic heritage house from becoming extinct. Periodic inspections need to be executed on Rumah Kutai that are still intact to identify early damage to avoid high repair costs due to major repairs. The research aims to develop an appropriate checklist to conduct timber defect inspection for Rumah Kutai. Three research objectives have been established: (i) to identify the type of defect for timber building, (ii) to analyze the inspection process for timber building defect, and (iii) to develop the timber defect inspection checklist for Rumah Kutai. Data obtained from literature review, document analysis of two official manuals; Building Condition Assessment Rating System (BCARS) by JKR, and Code of Practice by Royal Institute of Surveyors Malaysia (RISM), plus semi-structured interviews with experts who conduct timber building surveys and conservation work. Research finding shows that a proper defect inspection checklist can improve current inspection practice. The impact of the study will be beneficial towards the sustainability of heritage asset management in Malaysia, especially timber houses.

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CHAPTER ONE

INTRODUCTION

1.1 Research Background

"Heritage" refers to a trait of a society's culture, such as a tradition, language, or structure, that was created in the past and had historical value. The expression of a way of life produced by society and passed down from generation to generation, encompassing habits, practises, places, items, artistic expressions, and values, are referred to as "cultural heritage." Intangible and tangible cultural heritage is frequently used to describe cultural heritage (Mason et al., 2002). Folklore, traditions, and oral history are examples of intangible heritage. Cuisine, clothes, traditional martial arts, cultural ceremonies, dance, and skills reflect this value. The following characteristics identify tangible cultural heritage:

- i) Built-up environment (buildings, city views, archaeological remains)
- ii) Natural environment (rural landscapes, beaches and coastlines, agricultural heritage)
- iii) Artifacts (books & documents / manuscripts, objects, pictures)

Designated authorities and the historical conservation committee in the area where the building is located construct heritage buildings. It possesses architectural, artistic, historical, or cultural characteristics. These structures or buildings have a significant historical significance in the region and require regular care. Half of them are threatened with extinction. Some buildings or structures need to be reinforced, while others need to be maintained. Heritage is critical to the country's progress. Heritage structures and sites have a significant positive impact on community development. People can learn about and appreciate history by visiting heritage sites. The historical context is vital in producing a 'sense of place' for society, as S. Rashid (2015) referenced Arkoun (1989: 27) because it adds to the personality and privilege. Malay heritage architecture can be divided into Malay architecture, colonial influence architecture, and Chinese and Indian immigrant influence architecture. Three domains impacted Malay architecture, according to S.Rashid (2015): belief in Islam, Malay customs, and