THE IMPACT OF CEILING HEIGHT ON HUMAN COMFORT (A COMPARATIVE STUDY ON RESIDENTIAL BUILDING IN SERI ISKANDAR, PERAK)

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CHAPTER 1 INTRODUCTION

1.0 Introduction

This study focuses on the impact of ceiling height on human comfort (A comparative study on residential building in Seri Iskandar, Perak). The residential building for case study are selected in Seri Iskandar based on different height of ceiling. Case study 1 at Persiaran Iskandar Perdana 31 and case study 2 at Pekeliling Iskandar Perdana 14 is located in Seri Iskandar, Perak. It is an education based society because of the high number of educational institutes situated in the area such as Universiti Teknologi Mara (UiTM) Kampus Seri Iskandar, Perak and Universiti Teknologi Petronas (UTP), Tronoh, Perak. At Pekeliling Iskandar Perdana 14 majority of terraces are low cost. This area provides poor facilities and maintenance services. Its construction ends around the year 2000. Pekeliling Iskandar 14 on the other hand is the middle cost terraces constructed at the year 2005. The facilities are better provided here and has a better and safer environment. The information about this study is able to guide the architects on awereness to design the house with suitable ceiling height based on the climate and surrounding environment.

1.1 Problem Statement

Ceiling height is one of the architectural details that should be take part in the design. The height of ceiling influences human comfort. Residential buildings around Seri Iskandar are experiencing draught and heat waves due to the global environmental issues happening recently. Ceiling height plays a very crucial in providing thermal comfort, ventilation and psychological effects on its human inhabitants. Besides saving space horizontally, the vertical expansion has greater potential to energy saving and reduce the urban explosion problem.

1.2 Research Question

There are two general questions will be answered in this research.

- What are the criteria to determine suitable ceiling height in the design of residential building in Seri Iskandar, Perak.
- How does the above factors affect users comfort?

1.3 Research Objective

This research is to investigate the impact of ceiling height on human comfort on residential building in Seri Iskandar, Perak.

The objective of the research are:

- To determine the appropriate ceiling height for the residential building in Seri Iskandar, Perak.
- To study on the comfort level of user in different type of ceiling height