CHAPTER 1

INTRODUCTION

1.1 Introduction

Everyone must have the perfect place to do daily activities and get rest after a day of work. The house is a basic requirement for all people nowadays. Any house has physical facilities and must be managed and maintained efficiently and effectively so it can maintain the strength and delay the process of damage the facilities and building. Building maintenance are very important to reduce the interruption of building. Failures of building maintenance and physical facilities will cause defect to the houses.

Building defect will occurs to new or old building. Defect of new buildings is maybe not following the Building Code and published acceptable tolerances and standards (Nurul Nadia and Md Azree, 2013). For the older buildings, or out of warranty time, maybe not follw the standards but must be judged the standards at the time of construction or refurbishment.

Usually, defect and deterioration are ordinary problems in any building structure especially in old structure (Ransom, 1981). According to BS 3811 (Code of Practice, British Standard 1984) defect are determine as the deterioration of the characteristics of building and services to unsatisfactory quality level user requirements.

Common type of building defect include structural defect such as crack or collapse, defective of electrical wiring or lighting, defective of plumbing, drainage system, cooling or heating system, sound proofing and also fire protection system. Damage caused by land movement or earth settlement are also can causes building defect. It is clear that the defect of building commonly requires the hiring and testimony of highly trained and experienced expert such as engineer or architect that be able to determine the construction problem involved due to the result of improper design, material, or workmanship.

1.2 Problem Statement

Building defect is one of the main components building that needed attention. We must immediately look for answer when the building fails to perform as it should. Is the problem is causes from someone fail to install the building properly? Or the problem of natural act? Maybe the building do not get the proper maintenance so that the building not perform as it should ? All these answer always depend of some factor which is the age of the affected the building component, the true nature of the problem, the mistake of human error or maybe the combination of all three factor.

According to the Roslan and Mohd Zailan (2015), internal defects generally cused by inadequacies in design, poor workmanship, building usage not suitable with design and also lack of maintenance. The main reasons can operate singly or in combination and result in defects indicated by changes in composition of the material, in the construction or simply in appearances.

The study found the common building defect detected in a new house through visual inspection of 72 new terrace house located in Bangi, Selangor. This prove that defect are mainly caused by poor workmanship. (Ishan, Adi and Mohd Zulhanif, 2015). A survey was manage to 310 residents of three type of housing, which is terrace, flat and detached house, located in four different region in Klang Valley. This affordable housing or low cost housing has always been criticised for poor quality building. The most commonly defect in these house are from piping system, structural defect and water supply system (Hamzah, Chen Wang, Lincoln and You Min, 2012). According to Ringker (2008), the affordable housing issues also related with poor design and insufficient maintenance.

Because building not only a product but rather a collection of individual parts and components that often put together by different contractors, and because materials used often need regular maintenance to maintain their service life and because of acts of nature always test the resistance of buildings, leakage and damage to materials, it usually never exactly clear why a particular building defect occur.

1.3 Objective

The objectives have been identify in this study are:

- 1. To identify the common types of building defect occur in housing.
- 2. To identify the causes of building defect occur in housing.
- 3. To analyze the building defect occur type of housing.

1.4 Scope Of Study

The scope of research is focus on the defect occur in housing in Malaysia. In relation with the objectives of study, the scope of study are:

- a) The study will be conducted at all type of housing which is terraced house, semi-detached house, bungalow, apartment and condominium and others in Malaysia.
- b) The study will be carried out the data on building defect at housing area.
- c) Questionnaire will be prepared and distribute to the owner at all type of housing stated.