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# BUILDING DEFECTS ON EXTENDED LOW COST TERRACE HOUSE (CASE STUDY: SECTION 18 AND 20, SHAH ALAM, SELANGOR DARUL EHSAN)

This dissertation is prepared to fulfill part of the requirements for honoring of Bachelor (Hons.) Building Surveying

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## ABSTRACT

Low cost house was built with a limited space, design and materials. This housing is referred to houses with minimum area of 60-meter square with 3 bedrooms, one living, one kitchen, one toilet and one bathroom. Nowadays, there are norm for the owners to extend their low cost house due to the limited space in their house and numbers of occupant increased. Extension defined as increasing the floor area of a building, whether vertically by increasing height or horizontally by increasing plan area. This mean there are two types of extension, which are lateral extension and vertical extension.

It is suggested that the extension of house could give some effect or damage to the existing and the new structure that had been extended, but how far the damage done is still questionable. The case study is focused on a survey of Low Cost Housing at Section 18 and 20, developed by PKNS in early 1983 and 1996. The respondents of 25 numbers of houses of each section were selected for the case study. The analysis of the data collected based on the questionnaires and condition survey to stipulate the results and findings.

Besides that, it is also suggested that, the extension work effects the condition of the house. The common defects occurred in extended single-storey and double-storey low cost houses are wall-dampness, wall-cracks, finishes-decorations, roof-ceilings, finishes-tiling to walls, slab-cracks (double-storey extension), and finishes-termites attack. Only a few defects detected on floors-cracks, floors-dampness, floor-tiles, plumbing, and sanitary fittings. There are no defects found at slab-dampness. The defects will occur if the material selected not suitable with the existing building and extension. In the other hand, poor workmanship of extension construction also affects the occurrence of defects.

Based on this study, it is recommended that the guidelines should be improved by local authority for low cost terrace house extension. The guidelines can be put forward to improve the design and the selection of materials for low cost terraced house, so it will be ready to be extended without bring along any significance defects.