

Implementation of Solution to Solve Deterioration of Concrete Buildings in Coastal Areas in Malaysia

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ABSTRACT

This study is to identify the preventions and remediation that implemented in Malaysia in order to minimize the phenomenon of concrete deterioration at the coastal area. Deterioration is a process of aging of concrete caused by continual usage of natural phenomena or human activities. For example, long exposure to salt condition would have higher chances of corroding the surface of concrete structures. Some symptoms might be occurred due to default in design or poor workmanship during the construction.

The research method I used is Qualitative Method in this study. The respondents selected were contractors and directors of concrete repairing company. They have commented that there are several ways to solve and to encounter the different causes of concrete deterioration. Different condition of location leads to different implementation carried out by the contractors in Malaysia in terms of material, machinery and repairing methods used. Besides that, they agreed that coastal area has an additional effect to accelerate the aggressiveness of concrete deterioration.

Throughout the research, I have identified that the causes of concrete deterioration which also inter-related with the characteristics of the concrete structures. From my research, the concrete deterioration can be occurred at any time and it is also an unforeseen risk to the residents. Besides that, 100% of my respondents preferred assessment work such as testing would be a better choice before carrying out any other repairing works. Thus, the industry should emphasise the effects of concrete deterioration and promote some basic preventions because we are depending so much on the concrete structures in current construction field.