# Issues in Facilities Management and Maintenance Malaysian Perspective





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## ISSUES IN FACILITIES MANAGEMENT AND MAINTENANCE A MALAYSIAN PERSPECTIVE

#### MASARAH ALI PUTERI SHIREEN JAHNKASSIM



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### DEFECTS AND DETERIORATION OF MULTI-STOREY BUILDING FACADES: ISSUES AND CHALLENGES

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#### 1.1 INTRODUCTION

A major component of building maintenance costs is the maintenance and repair of building façades. Defects on concrete façades of large buildings require a process of correct diagnosis and an adequate understanding of the extent of the defects, and the appropriate repair materials and methods. Factors causing such defects are poor workmanship, inadequate design and maintenance, inappropriate use of materials and the action of environmental agents. Typical problems resulting from these factors are cracking, water penetration, misalignment, sealant failures, discolouration, staining, efflorescence, corrosion and tile delamination.

The effectiveness of the building façade maintenance depends on the accessibility for best future maintenance of the building. The lack of maintenance often results in levels of deterioration which may lead to the point of collapse or to demolition (Nor Haniza Ishak, 2007). Unfortunately, common building defects and difficulties in carrying out maintenance tasks continue to persist. One of the reasons contributing to poor maintenance of concrete buildings is the lack of manpower when needed to conduct systematic checks of the safety of structures (Lee, 2004). Furthermore, the implication of design faults in the process of maintenance in buildings has resulted from improper material selection and poor building design for the purpose of adequate access for maintenance measures (Gibson, 1979).

As maintenance budgets escalate day by day, efforts to reduce overall building maintenance expenditure will necessitate efforts to minimize total maintenance costs incurred during the lifetime of the building while adhering to the specified performance requirements simultaneously (Evelyn Ai Lin Teo, 2005). Another way to reduce such expenditures is to