ABSTRACT

Singapore has an equatorial climatic condition with high humidity (85%) and abundant rainfall (2100mm) throughout the year. Building design and maintainability play vital role in such climatic conditions. Due to some discontinuity between design and maintainability in the building industry, the buildings tend to deteriorate faster resulting in the loss of assets.

An external facade is an outer skin of the building, which has direct contact with weather. Design of the external facades plays an important role in providing a protective umbrella and raincoat to all types of buildings. Very often a building faces several maintenance problems either due to poor workmanship, design features or incorrect detailing.

This study shows that the building design has an important influence on building geometry, accessibility and maintainability of the facades. The contributing factors to the design faults are examined and solutions to the achievement of efficient building design requiring less maintenance are suggested.

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