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Issues in Implementation of Vertical Greenery System on Existing Government Building in Malaysia

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Abstract : There are various types of vertical greenery system (VGS) in Malaysia, but none is installed at government buildings, although the government is looking into energy efficient building design. This is due to lack of technical information that focus on the maintenance and care, issues, and challenges face by vertical greenery system under tropical climate conditions. This research aim to identify issues in implementation of vertical greenery system on existing government building in Malaysia. The methodology used are literature reviews (desktop study), observation on sites, and case studies. Initial findings indicates that design and maintenance issues of vertical greenery system are the main challenges faced mainly by designer, especially those who involved in decision-making process. It can be concluded that orientation, openings, maintenance, performance, longevity, structural load, access, wind resistance, design failure, system failure, and lack of maintenance foresight are the main factors that need to be considered. These factors should be holistically aligned towards the economic cost, effective time, and quality design in implementation of vertical greenery system on existing government building. A comprehensive implementation of vertical greenery system will lead to greater sustainable investment for government buildings and responsive action to climate change.

Keywords : issues, government building, maintenance, vertical greenery system
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