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**MAINTENANCE OF INTENSIVE ROOF GARDEN IN  
KLANG VALLEY**

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## **ABSTRACT**

Intensive roof garden system still not widely applied in our construction industry. But, the demands from the building occupants nowadays to implement this system is increasing that make the system become one of the important element need to be provided when the construction projects is carried out especially for the residential housing development. Malaysian government also supports the idea on implementing intensive roof garden system because it will increase the growth of sustainable buildings in Malaysia. Besides that, lot of benefits that provided by the intensive roof garden regarding on environmental, economic, amenity and aesthetic also one of the reasons to implement this system. That why many countries across the world are being established with intensive roof garden, followed by the Asia countries to started to green their buildings.

Eventhough intensive roof garden provides lot of benefits, there still a problems regarding on this system. People are refuse to see the effectiveness and success of this system to applied on our country due to the different surrounding environment and whether compare to Europe countries. Malaysia is known as hot and rainfall climate country and the suitability of the plants to apply in the system are limited. Basically, an understanding of the way people see and observe intensive roof garden is the important key to the potential of green roofs in Malaysia. The experiences gathered by the building or facilities manager in managing intensive roof garden is important to make as reference guidelines for the future implementation of intensive roof garden. The exact maintenance work programmed for intensive roof garden and appropriate maintenance works based on the schedule planned for the building will ensure the success of the system. The objectives of this research are to identify the problems that related to the maintenance of intensive roof garden system, maintenance practice of intensive roof garden applied on the buildings and discover maintenance cost of the system.

Literature review on intensive roof garden is the first steps to carry out for the research, followed by observations and interviews. There are four case studies that have been selected for observations and interviews. The new project of intensive roof garden in the future can be successful construct by avoiding the mistakes and failure of the previous

projects through the identification and recognition the main problems of the previous projects. Therefore, interviews were carried out with the building manager of respective buildings to identified the problems, maintenance practice and maintenance cost for the intensive roof garden. Based on the observation that carried out by the author, there are several problems regarding on technical problems, arise toward the intensive roof garden such as cracks and dampness on planters box, failure membrane of waterproofing, water stained, algae and fungus growth and others. From the interviews, basically maintenance practice applied on the respective building is planned maintenance that comprises combination of preventive and corrective maintenance.

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