Conserving Concrete Dome in the Tropic

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Abstracts

Building structures need protection from the environment. Waterproofing is identified as one of the treatments of a surface or a structure to prevent the penetration of water under hydrostatic pressure. Waterproofing is extremely important in humid tropical climate region like Malaysia. The choice of waterproofing system is base on the use of the area, the form, the budget and its exposure to rain water. Conserving the heritage domes in the tropic is very challenging. The paper discussed on the three main waterproofing materials that has been chosen and used to repair the leakage concrete dome of a landmark building complex. The reparative task to ensure the series of products used been able to overcome the typical problems of having concrete dome as a main building feature or icon for the country as what been thinking by the colonial designer architect. Also proper choice of waterproofing material chosen for conserving the five domes of this important historical building in Kuala Lumpur, Malaysia can let these structures stand even further in time just to ensure the domes are to be enjoyed by the visiting tourist now and in the future.

Keywords: concrete dome; tropical dome; dome waterproofing; heritage dome; conserving dome.