

The Study of Groundcover for Heat Reduction

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Abstract : This research investigated groundcover on the roof (green roof) which can reduce the temperature and carbon monoxide. This study is divided into 3 main aspects: 1) Types of groundcover affecting heat reduction, 2) The efficiency on heat reduction of 3 types of groundcover, i.e. lawn, arachis pinto, and purslane, 3) Database for designing green roof. This study has been designed as an experimental research by simulating the 3 types of groundcover in 3 trays placed in the green house for recording the temperature change for 24 hours. The results showed that the groundcover with the highest heat reduction efficiency was lawn. The dense of the lawn can protect the heat transfer to the soil. For the further study, there should be a comparative study of the thickness and the types of soil to get more information for the suitable types of groundcover and the soil for designing the energy saving green roof.

Keywords : green roof, heat reduction, groundcover, energy saving

Conference Title : ICBAU 2014 : International Conference on Building, Architecture and Urbanism

Conference Location : Paris, France

Conference Dates : April 28-29, 2014