

Study on the Effect of Different Media on Green Roof Water Retention

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Abstract : Taiwan annual rainfall is global average of 2.5 times, plus city excessive development, green constantly to reduced, instead of is big area of artificial base disc, makes Taiwan rainy season during occurred of storm cannot timely of emissions, led to flood constantly, and rain also cannot was retained again using, led to city hydrological balance suffered damage, and to Regulation city of by brings of negative effect, increased green covered rate became most effective of method, and city land limited, so roof green gradually became a alternative program. Green roofs have become one of the Central and local government policy initiatives for urban development, in foreign countries, such as the United States, and Japan, and Singapore etc. Development of roof greening as an important policy, has become a trend of the times. In recent years, many experts and scholars are also on the roof greening all aspects of research, mostly for green roof for the environmental impact of benefits, such as: carbon reduction, cooling, thermostat, but research on the benefits of green roofs under water cut but it is rare. Therefore, this research literature from green roof in to view and analyze what kind of medium suitable for roof greening and use of green base plate combination simulated green roof structure, via different proportions of the medium with water retention plate and drainage board, experiment with different planting base plate combination of water conservation performance. Research will want to test the effect of roof planting base mix, promotion of relevant departments and agencies in future implementation of green roofs, prompted the development of green roofs, which in the end Taiwan achieve sustainable development of the urban environment help.

Keywords : thin-layer roof greening and planting medium, water efficiency

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