

ID 418

Evaluating the Energy Performance of Green Roofs and Their Potential for Reducing Building Energy Demands

NS Dikkumburage^{1#}

¹Faculty of Technology, General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

#dikkumburagens@kdu.ac.lk

Abstract

The article aims to evaluate the energy performance of green roofs and explore their potential for reducing building energy demands. By examining existing research and case studies, it will analyze the key factors that influence the effectiveness of green roofs in different climates and building types. The findings of this study will provide valuable perceptions for architects, urban planners, and policymakers interested in incorporating green roofs as an effective strategy for sustainable building design and energy conservation. It has to be driven to the future as a modern technological strategy in responsible research and innovations.

Keywords: Green roofs, Energy performance, Building energy demands, Energy consumption, Energy savings