

عنوان مقاله:

(Measuring The Quality of Natural Lighting in A Building with Double Skin Façade (DSF

محل انتشار:

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خلاصه مقاله:

Lately, a double skin façade (DSF) has been increasingly popular as an aesthetic and shading device. A façade with a secondary skin is employed in buildings to let natural light flow into the building without glare and heat. The purpose of this study is to examine the performance of secondary skin in buildings and to investigate the level of natural lighting in buildings that meets visual comfort standards according to the function of space in buildings. The object of this research is the Henricus Constant building of Soegijapranata Catholic University Semarang Indonesia. The research method used is descriptive quantitative. The authors assessed the level of natural lighting in the building by analyzing the results of field measurement data with luxmeter measuring devices and model simulations regarding natural shadows and lighting levels with Sketchup software and dialux. The results of this study suggest that secondary skins in the Henricus Constant building manage to create shade in the building's interior, but the natural lighting level is only 30 lux, less than the standard lighting level of the classroom at 250 lux. Without the secondary skin, the average light intensity is 310 lux; thus, it causes glare and becomes visually uncomfortable.

کلمات کلیدی:

Secondary Skin Façade, Natural Lighting, Computer Simulation

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