عنوان مقاله:

Dynamic Envelope and Control Shading Pattern for Office Buildings Visual Comfort in Tehran

محل انتشار:

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خلاصه مقاله:

This work reviews the effect of parametric programming on visual performance, daylighting and shading in office buildings in Tehran-Iran and studies their influences that help not only to reduce the glare but also to promote useful daylight illuminance through promoting visual comfort. It starts by establishing a review of the effective parameters on visual comfort indices, glare indices, and daylight metrics. The aim of the study was to characterize the impact of innovative, dynamic envelope design strategy to control shading pattern. The method used in this research is computer configuration and simulation. To parametric modeling and analysis used Rhinoceros, Grasshopper and its plug-in ladybug, honeybee, honeybee plus and daylight performance on visual comfort, as well as the impact on the best dynamic envelope option for a three-occupant office. The results show that the dynamic responsive to sun envelope often very efficiently effect on the occupants visual comfort indices than the static envelope. They further show that this efficient envelope minimizes the percentage of upper useful daylight illuminance (UDI) and minimize .the discomfort glare probability (DGP) for keeping an indoor glare-free environment

کلمات کلیدی:

Control Shading Pattern, Dynamic Envelope, Visual Comfort, Office Building, Tehran