عنوان مقاله:

INCREASE PRODUCTIVITY OF NATURAL LIGHT THROUGHOUT DAY IN BUILDING BY LIGHT SHELF AND THE PERFORMANCE SIMULATION

محل انتشار:

دومین کنفرانس بین المللی رویکردهای نوین در نگهداشت انرژی (سال: 1391)

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خلاصه مقاله:

By reducing the need for electric light, day lighting can substantially lower home energy use. However, excessive day lighting can increase both heating and cooling loads. A balanced approach to day lighting involves completely building design starting with the location and orientation of a home and continuing with proper room location and design, window sizing and placement, and selection of room finishes. In addition to reducing the need for electric lighting, day lighting offers many less tangible health and productivity benefits. Studies have shown that high quality light elevates moods, reduces depression, and improves performance of human in each where. The review of this research gives the author an opportunity to observe as a guideline through its experimental and design process, as well as its evaluating methods. The successful results in this paper have proven the concept of reflective duct to be a promising way for transporting daylight into a building.

کلمات کلیدی:

day lighting, light shelf, efficacy of Light, overhang, shade, glare