

Cool Day Lighting

"In practice the result can be soaring costs, blocked windows, and frustrated humans groping in the dark for solutions."

"Most current day lighting has passive solar gain with no glare control," explains Energy Center program manager Abby Vogen. "It gets hot and the cooling bills go through the roof, taking away whatever savings you're getting from using natural light--so you're not saving money and not doing much good for people."

"Simply having lots of windows isn't effective day lighting. Cool day lighting is designed to decrease solar gain over that of conventional construction."

Ternoey says glass technology has come a long way from unpopular "tinted" windows; today's low-transmittance glass is color-neutral, so once people's eyes adjust to indoor light levels they hardly notice it.

"Clear glass is definitely wrong," Ternoey says.

Day lighting is a great concept developed to provide more content and productive students and employees but reality is teaching us that the day lighting we are striving for is not being achieved and the effort is bringing about added costs and comfort issues. Planning needs to be rethought and buildings that are not delivering the benefits sought should be retrofitted. A very good option for those buildings and for new building planning is window insulators. See through radiant barrier window insulators are a good option to consider. They provide a natural light view with less solar gain, radiant heat, infiltration, and glare.

Cool day lighting is a concept that should be part of "clear stories" and day lighting planning. Let's try to make certain that the added windows in design plans are not covered up or are not pushing up operational costs without the expected benefits.

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The research has been out for years and verified over time. Employees and students are more productive when they get natural light.

<http://www.cbsnews.com/stories/1999/06/29/health/main49055.shtml>

But very often the well planned buildings with more windows become a problem as drapes and blinds are added to deal with glare and heat. There is a change in thinking-

<http://www.ecomall.com/greeshopping/light.htm>