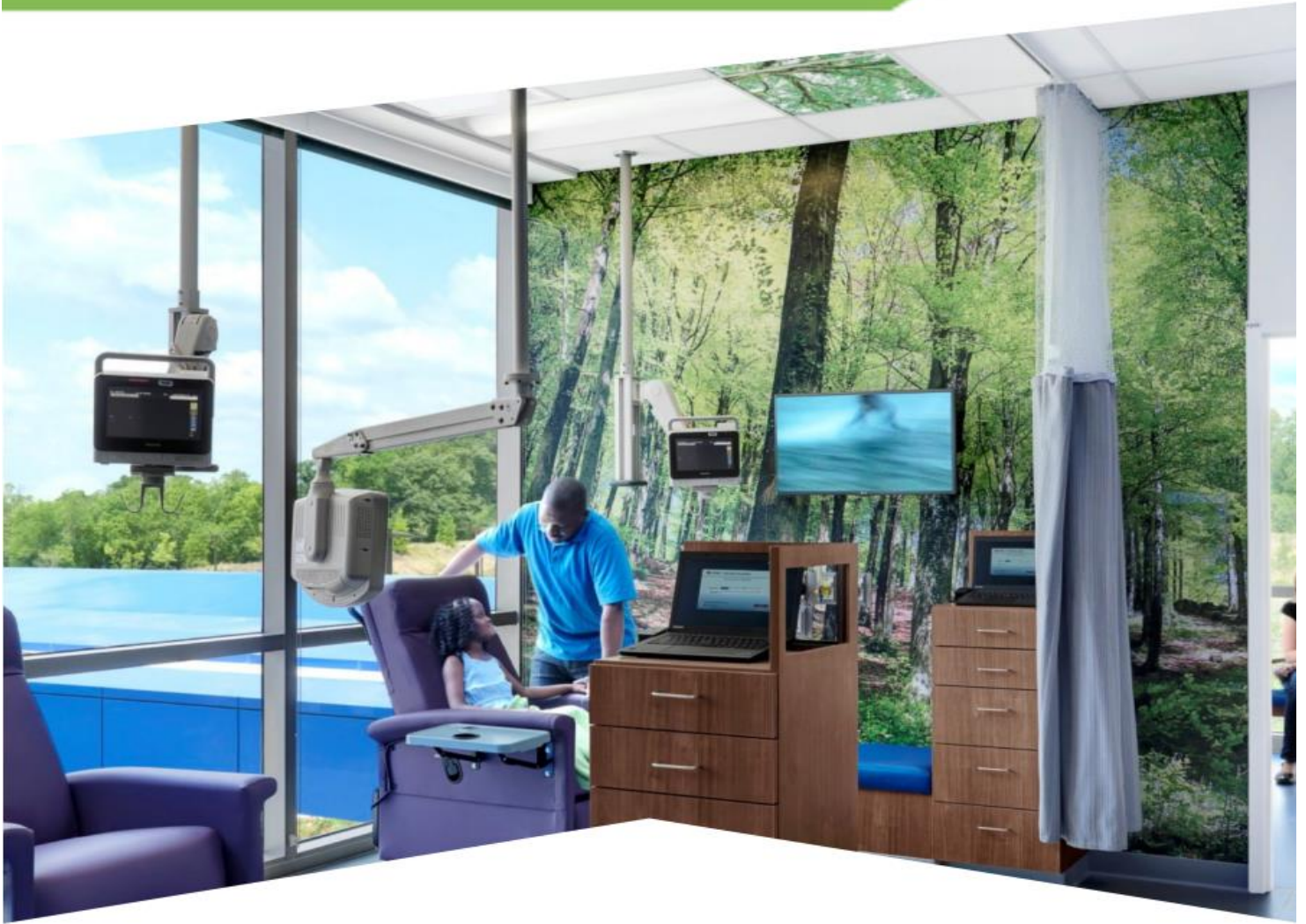


# Healthy Architecture in 2020: The Design Power of Proper Daylighting



Today, it is well understood that natural light in healthcare facilities can greatly enhance the well-being of patients and medical staff, and also to minimize operating costs. But most healthcare facilities do not effectively utilize natural light. Why are we foregoing those benefits?

The reason is simple – traditional approaches make it very difficult to incorporate effective natural light into new construction. Vision glass has been used as the source of natural light, but this always results in uncontrolled glare. The designer must then try to deal with this, typically by adding shades, awnings, blinds, coatings, or frit. But these solutions end up blocking most of the light, and today's status quo is artificial lights operating behind closed blinds. In addition, vision glass cannot provide the insulation value necessary to create an efficient façade that meets today's new building code requirements.

If we do not come up with solutions that enable designers to properly daylight buildings, they will be faced with trying to meet energy code requirements using less window to wall ratio, resulting in buildings that resemble dark concrete boxes.

But there are ways to design a win for both sides of the equation, achieving proper natural daylight and thermal performance.

The solution to integrating daylighting in your design is simple – engineered light diffusion. Light redirecting glazings direct the light upwards and penetrate it deeper into the space. By redirecting light, you not only eliminate glare and hot spots, you're also keeping daylight in your space without the additional costs of bolt-on approaches.

Using a light redirecting glass product with high thermal performance for daylighting can create a significant difference to the building owner's operational costs by cutting your energy usage by

40% by adding natural light to your next space.<sup>1</sup>

By targeting your healthcare design to incorporate natural light, a free resource, your next project can become a returning investment that keeps the building owner saving on energy costs year after year.



The benefits of natural daylight are also recognized as important design elements in certifications such as [LEED](#) and [BREEAM](#).

Why should designers in health care be interested in the inclusion of proper natural daylight in their designs? Studies have shown that daylighting can make a critical difference in patient recovery. A 2012 study showing patients recovering in rooms and spaces with natural light shorten their hospital stay length by 16%-41%.<sup>2</sup>

So how can you properly include daylight in your next project? Consider glass light redirecting products like [Solera](#)® and [SoleraWall](#)®, which will provide engineered light diffusion coupled with thermal performance ranging from R2.2 to R25.

[Advanced Glazings Ltd.](#) delivers full design assistance including resources for illumination and daylight modeling for healthcare facility designers globally to incorporate daylighting into their projects.



Photo credits:

- St. Louis Children's Specialty Care Center, St. Louis, MO (Cannon Design)
- The University of Minnesota's new clinics & surgery center and Texas Children's Hospital Legacy Tower, Houston, TX (Cannon Design)

Sources:

1. <https://www.pge.com/includes/docs/pdfs/shared/edusafety/training/pec/daylight/RetailCondensed820.pdf?fbclid=IwAR1hT8ZddrJf3HNjCd3DpwlQSTe1gjf8jrxck35PF7C926pNqWm1AZlVhFw>
2. [https://www.designingbuildings.co.uk/wiki/Daylight\\_benefits\\_in\\_healthcare\\_buildings](https://www.designingbuildings.co.uk/wiki/Daylight_benefits_in_healthcare_buildings)



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