

Designing with Daylighting Zones and Viewing Zones

Owner:

Virtua Health, Marlton, NJ

Architect:

HGA, WI

General Contractor:

Gilbane Bldg. Co. Philadelphia, PA

CPI Rep:

CBG Associates



Photo: Don Pearce

Virtua Health and Wellness Center employs the long span capabilities of CPI Daylighting's UniQuad® to bring high quality diffused light into multiple interior spaces

No one doubts the critical role that the sun and Vitamin D play in healing. But, the patients and community members at the Virtua Health and Wellness Center of Washington Township, New Jersey, know it first hand.

“The cancer patients that come in here for chemo will sometimes just sit in the lobby and bathe in the light that comes through the daylight wall. It makes everyone feel better,” said Terry Rodgers, building manager, Virtua Health and Wellness Center. “The wall light is very conducive to relaxation. It’s both physiologic and psychologic.”

With imaging and lab services, a cardiac rehab and ambulatory surgery facilities, doctors’ offices, healthy food options and an exercise club with a pool, the 250,000-sq.-ft. Center aims to be Washington Township’s one stop shop for health and wellness.

Before specifying 6,700-sq.-ft. of CPI Daylighting’s UniQuad® for the facility’s front entrance and large scale, pool side façade, designer Paul Widlarz of HGA Architects, Milwaukee, WI, did “a ton of research” to find the right daylighting system. Widlarz chose CPI’s UniQuad panels in Clear over Clear Matte to achieve what Virtua was looking for – high quality diffused light without glare and visibility from the outside.

“The UniQuad lets in a ton of natural light, and didn’t have some of the thermal performance issues we would have had with any other material,” said Widlarz. “It fit the bill from a number of different perspectives, from getting

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Virtua Health and Wellness Center

the light in but maintaining the privacy the client wanted and also a high performing glazing system in a harsh, humid environment.”



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Constructed of two independent translucent insulated panels, joined by a mechanically interlocking structural connection that eliminates the need for vulnerable wet seal and adhesives, the UniQuad is the only daylight system that can span as long as 12 ft. between purlins or structural supports. Providing indefinite building envelope protection with its advanced Removable Skin Technology (RST) that allows the exterior panel to be replaced as needed, UniQuad is available with up to .22 U-value and 50% light transmission - the best light to insulation ratio in the industry. Scalable, the UniQuad can be configured with additional insulation, Class A fire-rated assembly, sound reduction, dynamic shading, additional structural performance and military forced entry resistance.

The UniQuad system allows for the creation of daylighting zones mixed with Viewing zones, as can be seen on Virtua's 25-ft.-long poolside façade where CPI incorporated vision glass along with the UniQuad panels (shown in picture above). Together, the two zones create a level of transparency that is controlled where desired, while satisfying a LEED requirement as well.

“Comparing it to curtainwall and other materials, we found that with CPI we were able to get a much more dynamic material at a smaller cost,” said Widlarz. “It gave us the best of both worlds and was very well received.”

CPI Daylighting pioneered the use of polycarbonate translucent panel systems for architectural use in 1980. Today, CPI continues to offer new and innovative daylighting products, including skylights, wall lights and canopies for any commercial, industrial and institutional application, with complete services from manufacturing to design and installation. CPI products enhance the sustainability of any high-performance building project through daylight transmission levels, optimized insulation values, thermal performance and recycled content.