

May Newsletter 2011

Thanks for subscribing to our monthly newsletter! This month we are featuring an article about a project that was done with one of our strategic partners, Duo-gard Industries. The product used was the LEXAN™ 40mm THERMOCLICK tongue and groove polycarbonate panel.

UC Davis

Architect Raises a Toast to Translucent Daylighting Technology

Set in the heart of the Central Valley near Sacramento, the University of California's campus at Davis is now home to the world's first LEED Platinum winery, brewery and food-processing pilot plant. Opened officially on January 28, 2011, the 34,000-square-foot facility at UC Davis is a teaching and research laboratory for furthering the art and science of wine making, beer brewing and food processing.



The structure combines architecture reminiscent of the area's agricultural heritage with today's most sophisticated technology in sustainability, including rainwater re-use, photovoltaics, carbon dioxide capture, recycled glass and, of course, daylighting. The daylighting includes glass for LEED's required views to the outside plus a 4,500-square-foot clerestory system engineered by Duo-Gard Industries Inc. The system incorporates translucent multiwall polycarbonate glazing by AmeriLux International.

Collaboration between Duo-Gard and AmeriLux created a diffused daylighting strategy that answered the architect's call for a combination of aesthetics, performance and thermal values.

"The clerestory was an essential part of the effort to meet LEED criteria for daylighting and energy conservation," says Stevens Williams, AIA LEED AP, principal of Flad Architects in San Francisco. "It was a key contributor to aesthetics as well. By visually separating the roof from the lower walls, the building gained a quality of lightness. The translucent polycarbonate material used here provides great filtered light at the interior and a soft glow on the exterior."

Williams claims "an intense interest in innovative materials" and calls the multiwall polycarbonate selected "a terrifically important material," citing the thermal protection and the quality of light provided, as well as competitive pricing.

The WBF facility's clerestory features Duo-Gard's Series 3000 BPC System, which includes an aluminum base plate and pressure plate plus a cap that conceals the fasteners, enhancing the high-profile aesthetics. The glazing is AmeriLux's Thermoclick tongue-and-groove sheet, a 4-wall X-structure material that provides R-4.02 / U-0.248 thermal values with 59% diffused light transmission in the clear tint the architect chose. The glazing's co-extruded UV protection guards against discoloration.

Thermoclick's tongue-and-groove engineering provides another advantage demanded by the architect's design: it requires no aluminum mullions to visually disrupt the flowing band of the clerestory. Presenting a unique challenge, the architect's demand also extended to the corners where the gable ends and clerestory meet. Duo-Gard engineered a clear polycarbonate U-channel corner that integrated the glazing in the clerestory with the glazing in the gable end. "This challenge was beautifully resolved," says architect Williams.

Best Regards,

AmeriLux International

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