Maryland Heights Community Center

Maryland Heights Community Center Makes its Presence Known Across St. Louis with the UniQuad® Translucent Wall System

When the City of Maryland Heights, just outside of St. Louis, committed to replacing their original community center, a converted church from the 1970s, the city had big aspirations for the impact it would have on the community. A variety of design goals were specified for the new center, ranging from blocking unsightly views and reducing noise to finding a translucent facade that could meet the aesthetic needs of the building’s curved and tapered walls. The architect, CannonDesign, was able to meet, and go beyond, all of the design challenges with the help of UniQuad®, a translucent wall system developed by Kingspan Light + Air | CPI Daylighting.

A significant challenge for the project’s facade was that it required a product that would diminish unsightly views, glare, heat and noise, all without compromising the amount of daylight in the building. The center, sandwiched between one of the area’s busiest highways and a strip mall, was particularly concerned with noise levels around the facility.

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Being right next to highway 270, we had to take acoustics into consideration, but also wanted to fill the space with natural, diffused light. That’s why we chose Kingspan Light + Air’s UniQuad® wall light. “That’s why we chose [Kingspan Light + Air]’s UniQuad® wall light,” said architect William Schenck, AIA, LEED AP, Senior Associate, CannonDesign, St. Louis. The UniQuad panels were selected for the community center for their scalability and additional sound reduction capabilities. Specified with an STC acoustical interlayer for the center’s East facade, the UniQuad panels were a “critical component” to the project to mask the noise coming from the neighboring highway.

"The clear acoustical interlayer allowed us to increase the STC level on the east facade while maintaining a consistent aesthetic with the non-acoustically treated panels. This successfully resulted in a visually seamless transition around the building,” said Schenck.

The neighboring highway, in addition to being a noise source, was incredibly unsightly, so it was important for the community center to allow daylighting into the space while being able to control what aspects of the nearby landscape visitors can see from inside the facility. CannonDesign incorporated clear glass into the facade of the 90,000 sq. ft. center in conjunction with the 9,280 sq. ft. of UniQuad panels, specified in clear over white matte colors, to provide the appropriate views necessary to achieve this feat.

"The interior of the building creates a series of alternating experiences framed by transparent and translucent materials," said Schenck. "The UniQuad system provides a fantastic diffused light condition that strategically limits views to the outdoors and focuses attention to the activity within."

The overall building design was also a huge point of concern for the community center due to its curved and tapered walls. Our UniQuad system was able to meet the design needs of the facility, while boasting an impressive 10 ft. span, and integrated with the Kingspan range of insulated metal panels, creating an almost seamless transition between the two materials. This combined system allowed the architects to fuse performance and function for a unique building aesthetic. Another important component of the center’s design was that the city wanted the facility to have a real presence across the greater community. Early in the design process the city challenged CannonDesign to design a building that could be seen as a city landmark from all angles - specifically by those driving on the highway, even at night.

"Part of the thought process behind using the [UniQuad] panels was to have a glowing beacon and lantern, an entry point and symbol for the City of Maryland Heights, during the day and at night,” said Schenck.
To achieve this request, the building was designed to offer a similar aesthetic between the translucent system and metal panels during the day, while at night the facade is transformed by a glowing ribbon of translucent panels as they are backlit by the interior lighting. The resulting aesthetic is noticeably unique, and helps to establish the large presence within the community that the City of Maryland Heights was looking to accomplish.

"The new community center has become a source of pride for the community and exceeded Maryland Heights' goals for memberships and program participation," said Schenck. The community center earned CannonDesign the 2017 AIA St. Louis Honor Award.