



Photo Courtesy of SVSU

Sporting Life is Brighter at Michigan's Saginaw Valley State University

Student athletes at Michigan's Saginaw Valley State University are reaping the benefits of a new indoor training facility. Connecting to the existing Ryder Center, the facility features a 300-meter track and "an interior environment that's very different," according to Jonathan Disbrow AIA, lead designer for the project by ROSSETTI, an architectural design and planning firm headquartered in Detroit.

He says often such huge facilities end up resembling caves, not the effect he wanted. "One of the major design objectives was natural light. We wanted a bright interior environment without relying on artificial lighting," Disbrow says. "We wanted a translucent glazing material that not only allowed natural light, but was also cost effective and had a decent U-value and a low solar heat gain coefficient."

He achieved all this with a 14,995-square-foot daylighting system engineered by Duo-Gard Industries. The system, designed for vertical glazing applications, integrates 40mm tongue-and-groove multiwall polycarbonate in specially engineered aluminum framing. According to the National Fenestration Rating Council, this Duo-Gard system, with glazing in the opal tint chosen, allows 30% visible light transmittance; it carries a U-value 0.29 and SHGC 0.39.

"A major challenge was dealing with a budget while trying to achieve these objectives," Disbrow says. "The polycarbonate was a good solution, much more cost effective than glass alternatives. And we preferred the clean, contemporary aesthetic of the polycarbonate over other translucent options."

He adds that the polycarbonate sheets enabled him to achieve tall spans without mullions. The facility's east elevation contains 140 panels, each 30 feet high by 19.685 inches wide. At the entrance, 106 panels range from 12 feet to 30 feet tall. The tongue-and-groove system is available with metal stabilizing clips. The architect says the fact that Duo-Gard is a Michigan-based company with products that meet Made in America guidelines was also a plus.

Disbrow has previously integrated polycarbonate in his projects. He says there were some concerns. "Polycarbonate is susceptible to scratching. So we tried to position it out of reach for people. And durability is important in a material for a sports facility, especially where there's no intermediate framing involved." He says the Duo-Gard system addressed this concern.

"Everyone is very happy with the product. I've heard only positive reactions," says the architect. "We're currently considering it for other facilities."