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Otterbein University's STEAM Innovation Center - Case Study

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EXTECH Case Study: Otterbein University's STEAM Innovation Center

www.glassonweb.com/news/extech-case-study-otterbein-universitys-steam-innovation-center

extechinc.com

Project: Otterbein University's STEAM Innovation Center

Location: Westerville, OH

Architect: Moody Nolan

General Contractor: Corna Kokosing

System: LIGHTWALL 3000

In a world where factory jobs are being replaced with smart technology and



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globalization has made the manufacturing industry increasingly competitive, Otterbein University saw an opportunity.

The plan was to partner with leading organizations from the private and public sectors in central Ohio to build a hands-on curriculum focused on teaching – and innovating – cutting-edge skills in engineering, technology, science, and math.

To achieve this, a laboratory that fostered experimentation and possessed state-of-the-art tools was necessary. To further complement the innovative facility, a state-of-the-art architectural design was developed.

The decision was made to renovate an older campus building in time for the 2016 fall semester, and with groundbreaking delayed into early 2016, the project timeline would be tight.

Moody Nolan architects had a unique design in mind — a multi-paneled, geometric façade that would deliver daylighting with minimized solar heat gain and glare.

Their plan was to use a curtain wall that could incorporate metal,



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polycarbonate, and glass that delivered diffused daylight with visual clarity in key locations.

EXTECH's LIGHTWALL 3000 series curtain wall system was selected for the project because it is one of the few that properly accommodates both polycarbonate and glass glazing within the same system.

This is accomplished by using deep glazing pockets and low friction gaskets that allow for the thermal movement of polycarbonate, while still providing superior water and air infiltration performance.

To create Moody Nolan's distinctive geometric design, EXTECH fabricated a new horizontal mullion that allowed for the inclusion of non-continuous vertical framing members.

The new mullion "flushed out" the interior surface of the system and allowed it to span up to 8 feet between vertical mullions – typical span lengths are only 4-5 feet. It also allowed for the application of point loads from vertical framing members without additional structural reinforcing - horizontals typically deliver their loads to verticals.

The STEAM Innovation Center's "wire-cutting" (a technology pun on "ribbon-cutting") was just in time for Otterbein's fall semester.

All told, the center is a 61,000 square foot building that provides classes and training in areas such as 3D printing, advanced electronics, metal and machinery, and also provides office space for lease.



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