GLASS & METAL ALLIANCE

THOMAS A. BRUDER, JR. LIFE CENTER
NEUMANN UNIVERSITY | ASTON, PA

Glazing and collaboration star in a new TV building.

By: Amanda Gibney Weko

CASE STUDY

GMA Glaziers

Synergy Glass & Door Service
Collingdale, PA - Installation

Advanced Glass and Metal, LLC
Palm, PA - Fabrication

Team

Architect: Spiezle, Media, PA
General Contractor: John S. McManus, Inc., Chester Heights, PA

Completion

May 2016

Scope

21 windows and 7 entrances

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STATE-OF-THE-ART-STUDIOS

Neumann University is a private, Catholic, co-educational university of approximately 3,000 students. The school's growing communication and digital media majors are bolstered by a new $5 million production and digital broadcasting facility for television and radio. The studios were part of the Thomas A. Bruder, Jr. Life Center Expansion, completed in May.

The 10,000-square-foot expansion included technically advanced radio and television studios, editing and control rooms, a communication lab, a green room, storage, and a 140-seat meeting room. Sound attenuation was a priority. The Bruder Life Center sits at the center of campus, along a busy road and parking area. General contractor John S. McManus, Inc., brought on Synergy Glass & Door Service for the company's expertise to achieve the project's glazing and sound transmission goals.

Project Manager Rob Zeigler of Synergy explained that close coordination and collaboration were keys to project success. Material was purchased from YKK-AP America and shipped to Advanced Glass and Metal, who performed all of the fabrication. Then, Synergy's team installed and glazed everything.

"Extensive thought went into this project, especially for sound attenuation," said Tim O'Connell, superintendent for McManus. "Rob and I spent a lot of time working together to make sure things were done in the right sequence. We all took pride and did our jobs well - and the glass fit like a glove."

GLAZING SCOPE

Framing was fabricated of YKK-AP aluminum 750XT high performance curtain wall in two depths based on the glass thickness. The Guardian SN-62 Low-e glass, manufactured by JE Berkowitz, varied from 1-inch insulated glass to 1.75-inch triple pane units.

YKK-AP's MegaTherm® double-bridged, thermally broken aluminum framing system made this possible. The system includes

Both vision and spandrel glass was installed; the green-tinted spandrel glazing permits a regular fenestration pattern while masking production equipment and interior walls. Special posts were fabricated for where glazing connects at the building corner and entry.

nylon polyamide glass fiber reinforced pressure extruded bars that join two separate extrusions into a single thermally broken frame. The solution achieved desired STC ratings with a product that reduces both energy and condensation. Wide-stile exterior doors with concealed midrail exit devices required coordination to ensure the electronic hardware would work in conjunction with card-access operators at every opening.

CLOSE QUARTERS

Installation took place during January and February. In order for the masons to perform their stonework during the cold months, the building was wrapped in tarps. While the atypical warm environment was a welcome change for the glaziers, the large seven- and eight-man lites were difficult to move into place within the confines of the tarped areas.

The stone work had very tight tolerances and hold sizes. The building also has waterproofing elements that had to be coordinated with the sealant used on the frame perimeters. Between the excellent fabrication and teamwork in the field, everything was "100 percent right and good," according to Zeigler. "No glass was rejected for any reason. Everything came together as expected."

Between production studios, windows are hollow metal with 0.25-inch laminated glass.

SOUNDS GOOD

A satisfied client and exemplary teamwork characterized the project execution. However, the real test was whether the glazing achieved the Sound Transmission Class (STC) ratings desired. An assessment was recently performed and everything - frames, glass, walls, and interior doors - passed and met the desired specifications.