BUSINESS SCHOOL RENOVATION | VILLANOVA, PA.

Phased interior renovations bring new glazing and a modern appearance to Bartley Hall

CASE STUDY

AGI Glazier

Allglass Systems, LLC | Penndel, Pa.

Team

Architect - Phase I: Granum A/I
Architect - Phase II: CICADA
Architecture Planning, Inc.
Construction Manager: gBuild

Suppliers

McGrory Glass
Trulite
C.R. Laurence Co., Inc. | US Aluminum
DORMA

Timeline

Summer 2014 | Summer 2015

All photos © Joseph Garvin

A FRESH INTERIOR

The Villanova University School of Business is a leader in business education, ranked #24 in the nation by *Bloomberg Businessweek*. Bartley Hall, constructed in 1958, houses the business school's administrative and faculty offices, classrooms, dining facilities, and a print center. In two projects over the summers of 2014 and 2015, the building's interiors were refreshed. New glazing figured prominently in the Bartley Hall enhancements.

The two projects involved removing existing concrete block interior walls and replacing them with glass partitions, doors, and a sliding glass wall system. The renovations aimed not only to create a refreshed interior but also to improve transparency and allow more natural sunlight to reach the building interior.

EVALUATING THE TASK

Allglass Systems, LLC performed glazing work for both projects. Allglass Vice President of Operations Glenn Christie evaluated the original architect's design and identified potential concerns about soundproofing. "A lot of times we're up against a situation where there's a look an architect wants that may not meet performance criteria." In this case, Christie was concerned about the Sound Transmission Class (STC) rating for how well interior partitions attenuate airborne sound. In a busy academic building, it is important to provide adequate acoustic separation between classrooms and meeting spaces and adjacent hallways and common areas. Although there was not a specific STC rating provided, Christie partnered with the architect to obtain a more acoustically beneficial result than could normally be delivered with standard interior glass partitions.

In 2014, prototype rooms were created by replacing concrete walls with a panelized glass wall system. Similar to a demountable partition system, an arrangement of glass panels was installed on either side of an air pocket. The double wall of glass was an uncommon application. Larger than a typical insulated unit, the system requires more space in between the panels of laminated glass to ensure better sound deadening. The design process wasn't simple.

GETTING CREATIVE

As glaziers are generally the last crews onto a renovation job site, the Allglass team knew they might be crunched for time in the already-compressed summer work schedule. The inherent problems of an older building – floors out of level or walls not plumb – were considerations that prompted a creative solution. The team spent extra effort researching and designing a system that would work without impacting time.

"We didn't want to rely on a product with a long lead time that might impact the summer schedule," Christie says. Instead, he and project manager Brian Peoples designed a solution based on a standard extrusion of a C.R. Laurence product, combined in a way to achieve the architect's desired aesthetic and Villanova's desired acoustics. Overall, the system needed to match up with standard 4.5-inch framing surrounding the doors. The architect wanted the metal trim to be visible on the inside of the room, but not to project out from the glass on the corridor side.

Allglass job foremen Bob Peoples and Charles Walter were instrumental in executing the creative solutions outlined above. Their knowledge and expertise enabled completion within schedule and before the return of students for the fall semester.

CLEAR IMPROVEMENTS

In the large meeting room, a full sliding and stackable DORMA interior glass wall system opens and folds flush against the side walls, enabling the room to become part of the common space for events. In the classrooms, the glass combines with laminated McGrory white board panels for additional writing surface. Additional white boards wrap the walls of the room for sleek and highly functional walls.

Areas opening onto the main Nydick Family Commons space were also updated. Eight new pairs of Herculite frameless glass doors provided by Trulite and fitted with Bloomcraft panic bars replaced existing hollow-core metal doors. Additional doors leading to the dean's suite were fitted with new glass doors and side lites.

CONTINUING SERVICE

Villanova liked the solution – and the glaziers' ingenuity – so much that Allglass was engaged for the next phase of work. Summer 2015 saw the renovation of three classrooms on Bartley's second floor with designs inspired by the prototypes completed in 2014. US Aluminum wide stile doors with classroom security locks (a featuring becoming increasingly common) complement the glass and white board partitions.

Clockwise from top: glass logo detail; conference room with stackable wall; classroom; dual-glass wall detail; hallway view; classroom door with glass and white board panels