



PPL CENTER | ALLENTOWN, PA.  
Unitized curtain wall highlights the \$180 million hockey arena credited with revitalizing downtown Allentown.

# CASE STUDY

## AGI Glazier

Hutt's Glass Co., Inc.  
Bechtelsville, Pa.

## Team

Architects: USA Architects (interior)  
and Sink Combs Dethlefs (exterior)

CM: Alvin H. Butz, Inc.

DM: Hammes Co. Sports Development

## Timeline

September 2013 - October 2014

## Scope

Unitized curtain wall; aluminum storefront; traditional stick-built curtain wall and entrances



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## ANCHOR FOR REBIRTH

Cited as an anchor for the rebirth of downtown Allentown, Pa., the commonwealth's third-largest city, the \$282 million PPL Center complex includes a new 8,500-seat arena and parking structure along with a connecting office building, hotel, and banquet facility. Comprising 5.3 acres on two city blocks, the project has ushered in a new era of entertainment and recreation for Allentown.

The \$180 million PPL Center Arena is home to the American Hockey League's Lehigh Valley Phantoms, the primary minor league affiliate of the Philadelphia Flyers. Called one of the nation's best minor league hockey arenas, the project was also one of the most complex to build. A downtown site, integration with existing and historic structures, and construction during one of the worst winters in history combined for a perfect storm of logistical challenges.

Development managers Hammes Co. Sports Development of Madison, Wis., and construction managers Alvin H. Butz, Inc. of Allentown managed the project. Two architects were involved:

USA Architects of Easton, Pa., designed the interiors and Denver-based Sink Combs Dethlefs was responsible for the exterior.

An extensive glazing scope of work was performed by Hutt's Glass Co., Inc. of Bechtelsville, Pa. Hutt's Vice President Todd Eddy speaks highly of the team collaboration, citing good drawings and strong logistics coordination with longtime client Butz.

"Early on, we met with the architects and design team," Eddy explained. "We tried to be creative using as many standard products as possible."

With glaziers on site for a full year of construction, using standard products made sense. Efficiency was critical to meet the complicated project's budget and schedule. Eddy credits estimator John Borchers, project manager Patrick Boyle, and field foreman Dennis Dougherty with their teamwork and advance planning to ensure the job went well.

*"It's the anchor for the rebirth of the whole downtown . . . We got a 'wow' showpiece."*

*- Sy Traub, Chairman, Allentown Neighborhood Improvement Zone Development Authority*



*Clockwise from left: main entry with view into WFMZ-TV studio; The Morning Call Club entry; bar area; main entry view from interior*

## GLAZING SCOPE

Hutt's glazing scope of work included all of the exterior glass and a significant portion of the interior, excluding the arena bowl glass. The project entailed a high-performance unitized curtain wall, aluminum storefront, and traditional stick-built curtain wall and entrances.

## EXTERIOR EFFORT

It was the first sizable unitized project for Hutt's, but the team dove in, collaborating with the supplier to achieve the desired design with mostly standard components. Erie Architectural Products' Enviro I Facades™ unitized system was used for about 65 percent of the exterior glazing. The structurally glazed, factory fabricated system was shipped assembled for fast installation.

Tubelite aluminum storefront comprised another 20 percent of the job. Hutt's fabricated the remainder of the exterior as traditional stick-built using a YKK system and Erie components. Deep covers on the curtain wall presented challenges to install because of their large size.

The main entrance is a segmented wall set on a chord across large banks of doors. The design required careful layout to ensure the doors were on the correct plane with the floor conditions.

The construction scope included preservation and integration of the Dime Savings Bank Building, which is listed on the National Register of Historic Places. Structural concerns with the brick caused delays that impacted the glazing schedule. When combined with severe winter weather, the already tight schedule was compressed further. A coordinated effort among the GC and subs included daily communication to keep the project on track.



## INTERIOR CHALLENGES

Complexity didn't let up on the arena's interior. Just inside the main entrance, a TV studio is encased in additional curtain wall. Tie-ins were particularly challenging since the enclosure does not have a single right angle. The entry to the club section features a 10-foot high elliptical screen of opaque glass with a set of eight-foot doors. Set on a segmented oval pattern, the glass required integration with several trades to avoid conflict with soffits or the sprinkler system. Additional interior scope included some glass elements in the suites and custom glass with inset LED lighting behind the bar.

## TAKE A TOUR

Interested in learning more about the PPL Center? The facility conducts tours for groups of 15 or more. Behind-the-scenes access includes how the ice is made and how concert stages are constructed. For more information, visit [www.pplcenter.com](http://www.pplcenter.com).