

A TRUE SUCCESS OF EPIC PROPORTIONS CASE STUDY

ALDEN PARK
PHILADELPHIA, PA



GRAHAM
ARCHITECTURAL PRODUCTS



“Graboyes’ work with Graham Architectural Products resulted in a visually striking historic restoration that not only dramatically improved interior conditions and energy efficiency, but also restored window operability – a true success of epic proportions.”

Lyle Suess, AIA, LEED AP, Senior Project Manager, BartonPartners

+ A TRUE SUCCESS OF EPIC PROPORTIONS

At one time, Alden Park was one of Philadelphia’s most exclusive addresses.

Built on a 38-acre, park-like setting in 1926, the three-building, six-tower complex sits high on a hill where it commands views of center city and Fairmont Park.

Its beauty and location made it an address of distinction and, at certain points in time, it was home to both legendary baseball manager Connie Mack and the famous family of actress-turned-princess Grace Kelly.

But time took its toll. Then in 2015, new ownership committed \$60 million to restoring the property and replacing its nearly 7,000 steel windows.

Because it is listed on both the National and Philadelphia Registers of Historic Places, all work would require National Park Service (NPS) approvals, including the historic replication windows. And because the windows are such an important part of the Alden Park allure, the project could have been a difficult experience.

Instead, says Bill Steedle, chief estimator for Graboyes Commercial Window Company, “I’ve never seen a job go as well as this, and I’ve worked in retrofit windows for 40 years.”

Determining the right approach

Still, the job was a challenge.

For one thing, project participants had to agree upon an approach that would satisfy both ownership and the historic authorities.

Doing so was tricky. The National Park Service wants new window sightlines to match original sightlines. But if you leave the old frames in, the new windows have to fit over top of them. By definition, sightlines get bigger. Adding thicker insulating glass and asking aluminum to do the work of steel makes them bigger still.

On the other hand, the original frames were embedded into the masonry. Tearing them out would have caused damage to the exterior façade and been messy, costly, and especially difficult given these were occupied apartments.

The road to resolution included separate tests of each approach. Pre-production went on to include extensive research, followed by submissions and rejections. It included designs, NPS rejection, redesigns and a face-to-face meeting between the various members of the Alden Park team and NPS representatives.

Nevertheless, installation not only wrapped up four months ahead of time, the entire project was a resounding success.

In addition to receiving the 2018 Best in American Living™ award by the National Association of Home Builders, it captured a 2018 Grand Jury Award by the Preservation Alliance for Greater Philadelphia in recognition of its excellence and dedication to historic preservation.

The right solution: Graham’s SR6700

After the team agreed to meet the challenge of leaving the original frames in, the second hurdle awaited. Although the three buildings looked identical, the team had to match the two different windows with two different profiles.

Graham’s engineering group worked hand and hand with the architect (BartonPartners), historic consultant (Powers & Company), and Graboyes’ team to design a window system that could satisfy historic scrutiny, while also delivering thermal performance.

Ultimately, Graham took the window it developed for Starrett Lehigh and modified its frame to create a casement window. For the second profile, Graham took that casement and evolved it further, matching unique profiles and incorporating a drip cap into the design.

The National Park Service, which is extremely rigorous about matching the design and profiles of the windows being replaced, approved the new designs relatively quickly and with only a handful of revisions.

Says Steedle, “Graham’s reputation with the National Park Service for delivering the best historic replica possible, along with their flexibility in modifying frame designs, contributed greatly to the final design approval.”

Making It Work Through Teamwork

In some ways, Alden Park was like every job. The owner wanted results. Fast. The team faced hurdles. Emails flew back and forth. People jumped through hoops, tweaking this, changing that.

Success required high-pressure collaboration between Graham and Graboyes, Historic Consultant Bob Powers, Façade Restoration Engineer Joel Darras of O'Donnell & Naccarato and Architect Lyle Suess, AIA, LEED AP, senior project manager for BartonPartners.

Yet, in a very important way, this job was unlike any other.

Says Graham Project Manager Ben Pettit, “Looking back, it is incredible how this project progressed seemingly without encountering a hiccup. Extraordinary planning, coordination, and execution by everyone involved turned an otherwise challenging project – relative to size and design – into one of unmatched performance. It was thoroughly enjoyable and rewarding to be a part of the Alden Park renovation project.”

Bill Wilder, Graham’s director of technical sales agrees, saying, “It was truly a joint effort between every participant in the process. It was remarkable, really.”

And adds Lyle Suess, “Graboyes’ work with Graham Architectural Products resulted in a visually striking historic restoration that not only dramatically improved interior conditions and energy efficiency, but also restored window operability – a true success of epic proportions.”

+ PROJECT SNAPSHOT

- Owner/Developer/Contractor
L3C
- Installer
Graboyes Commercial Window Company
- Architect
BartonPartners
- Historic Consultant
Powers & Company
- Graham Product
SR6700
- Assignment
Supply nearly 7,000 historically accurate replacement windows for a very large housing complex.

+ CHALLENGE

Satisfying both the building owners and the historic authorities with a window solution that restored the original aesthetics with a minimal amount of demolition for installation.



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