GLASS & METAL ALLIANCE

3535 MARKET STREET | PHILADELPHIA, PA

An insulated glass window replacement improves tenant comfort and aesthetics.

By: Amanda Gibney Weko

CASE STUDY

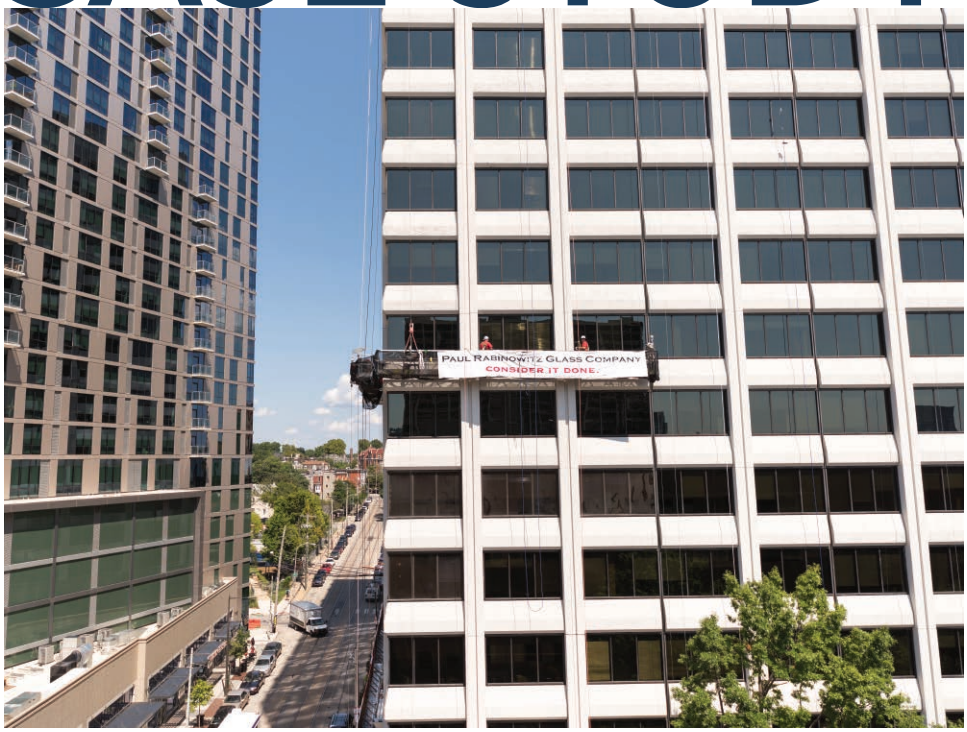
GMA Glazier
Paul Rabinowitz Glass Co., Inc.
Philadelphia, Pa.

Building Owner
HCP, Inc.

Building Manager
Lincoln Harris, CSG

Scope
Window replacement on 18-story medical office building; 2,496 lites of glass replaced.

Timeline
June - November 2017



Window replacement underway at 3535 Market (all photos © Paul Rabinowitz Glass Co., Inc.)

INTRODUCTION

Built in 1973, the former "Gateway" Building at 3535 Market Street was designed by architects Nowicki & Polillo. Over the last 40+ years, 3535 Market lost its gateway moniker and shifted from a corporate to a medical office building. Located on the campus of the University City Science Center with proximity to both the University of Pennsylvania and its hospital, the 18-story building is well-positioned to serve health professionals and their patients. Today, owners HCP, Inc. and building manager Lincoln Harris, CSG are overseeing a significant renovation to improve the building's appearance and performance. Updating the building's windows was an early phase of work.

3535 Market Street before window replacement or exterior painting.

DOUBLING DOWN

Paul Rabinowitz Glass Co., Inc. of Philadelphia, Pa., spent more than a decade providing glass replacement services at the building, working with longtime Senior Property Manager Lynne Williams, RPA. The existing single-pane glass featured a heavy solar film on the inside, but its age caused problems, and the highly reflective exterior looked dated. According to Williams, the windows were "always drafty" and the offices hot in summer and cold in winter.

Mark Rabinowitz, President of Paul Rabinowitz Glass, said his team regularly discussed the merits of insulated glazing with Williams. Also known as double glazing, insulated glass features two (or more) panes of glass hermetically sealed around a gas-filled space; the combination reduces energy transfer through the building envelope, contributing to HVAC system energy efficiency. Rabinowitz provided budgets and energy analyses every few years until February of 2017 when the new owner agreed to proceed with a full window replacement.

Left: old single-pane glazing and new insulated glazing side-by-side, showing the improved light transmission; right: Rabinowitz glaziers installing the new glass on the freshly painted façade.

THREE ADVANTAGES

Insulated glass provided three advantages at 3535 Market: an improved U-Value for better insulating quality, decreased reflectivity on the exterior for a contemporary appearance that complements the new building façade color, and greater visible light transmission and natural light in the building interior. J.E. Berkowitz fabricated the glass, which was manufactured by PPG.

CHALLENGES

Rabinowitz Glass had to contend with both an occupied building and a simultaneous exterior painting and masonry repair project. The window replacement timeline was also limited to six months, constrained by other phases of renovations.

"Rabinowitz did an amazing job with scheduling and working closely with the management staff and tenants during the entire project," said Williams. "Replacing windows is a challenging project in itself in an occupied building but given the fact that this is a medical office building posed a whole other set of challenges, especially planning around doctors' schedules and patient appointments."

Mark Rabinowitz explained the challenges included ensuring enough swing space (there were six swing scaffolds associated with the exterior projects) and coordinating manpower. Seven and a half of 18 floors were occupied, necessitating furniture removal and scheduling complexities. "Some days we had multiple swings on multiple floors," Rabinowitz said. "At any given time, with an inside crew and an outside crew, we had 18+ guys on the job."

Two foremen, John Dailey and Calvin Hoover, ensured the glass work was coordinated and executed professionally. Head of Field Operations Steven Weiner said he communicated with the tenants to confirm the best dates to work in their spaces. In the building's active public spaces inside and out, the Rabinowitz Glass team ensured ground protection and other safety precautions. "We've probably never had a job with this much safety equipment at one time," Weiner explained. But the extra effort paid off; there was not one injury on the job.

TEAMWORK

Rabinowitz mobilized his team in June 2017. Collaboration from Day 1 involved all parties. The building owner provided Rabinowitz Glass with office space for on-site manpower coordination and restrooms. The owner also allowed the air-conditioning to be left on, providing much-needed comfort during the summer months of the replacement. J.E. Berkowitz compensated for the limited site storage by warehousing the glass and making periodic, just-in-time deliveries. "It was a team effort and all parties worked extremely well with one another to make this project go as smooth as possible with the least disruption to our tenants," said Williams.

NOTICEABLE IMPROVEMENT

Rabinowitz Glass completed the window replacement in November 2017, just in time for winter. Building management saw a reduction in energy bills as a result of the project. Williams will continue to monitor usage over the next year to determine the exact savings. More importantly, climate control has improved, she said. "Tenant comfort is a priority to us, and we are happy that the new windows made a noticeable difference in the reduction of tenant temperature issues."