



500 WALNUT
PHILADELPHIA, PA.

Elegant glazing - from walls to slabs - clads a residential tower.

By: Amanda Gibney Weko

CASE STUDY

AGI Glazier

GMI Contractors, Inc. | Bristol, Pa.

Team

Developer: Scannapieco

Development Corp.

GC/CM: INTECH Construction

Architect: Cecil Baker + Partners

Scope

Unitized window wall glazing, doors, and terrace handrails for a 179,000-sf, 26-story residential tower in Old City, Philadelphia

Completion

2017-2018



500 Walnut pictured left center in relation to Independence Hall at lower right (all photos © Joe Garvin)

INTRODUCTION

The slender glass tower at 500 Walnut Street has been described by architect Cecil Baker as “a flagship of contemporary residential architecture that honors our city’s history yet celebrates its transformation and revitalization.” His firm Cecil Baker + Partners designed the 26-story building for Scannapieco Development Group. Sited behind Independence National Historical Park, the tower’s glassy exterior nestles carefully out of view of tourists looking from the Liberty Bell toward Independence Hall, while lending a dramatic modern presence to its corner of the city. Mayor Jim Kenney commented at the project’s 2017 opening, “We must continue this trend of both embracing the new and modern while still celebrating our history.”

ULTRA-MODERN

The tower houses 35 luxury condominiums, an automated below-ground parking garage, and multiple terraces to afford residents views of their historic neighborhood. The ultra-modern building’s

prismatic glass exterior would not have been possible without the skill and craftsmanship of AGI member GMI Contractors, Inc.

“This was a high-profile job,” explained GMI General Foreman Charles Lopuszanski. “The biggest challenge for GMI was the size. It was a very large project with many components, but with determination, we took it one floor at a time and made it work.”

GLASS FROM SLAB TO WALL

The design of 500 Walnut incorporates a floor-to-ceiling unitized window wall system from ESWindows. Where most window wall systems use aluminum slab covers, 500 Walnut features glazed glass slab covers developed specifically for the project. The ES-W725 unitized system comes pre-assembled, pre-glazed, and thermally broken. When used in combination with the glass slab cover, the result is a fully structurally glazed curtain wall appearance.

TIGHT TOLERANCES

Installation required positioning the windows, then adding the slab covers. Tolerances were reduced to one-eighth of an inch. "We had to be on the money," Lopuszanski described. "It was a challenge, but nothing we couldn't handle. We learned and are now teaching new guys." GMI is installing a similar system on a current project.

ADDITIONAL SCOPE

GMI also installed a thermally broken awning system and terrace and slider door systems, also from ESWindows. All of the glazing features Solarban 67 clear glass with Duranar Sunstorm Grey Velvet exterior finish and Duracron 100 White interior finish. Different coatings were applied to different sides of the building for optimum solar performance. GMI also installed laminated glass railings from C.R. Laurence.

DUAL FOREMAN

GMI utilized both Lopuszanski and Tim McDonald as dual foreman on the project. Sharing responsibilities provided a checks-and-balances for the glazing team. While McDonald oversaw system installation, Lopuszanski remained ahead of the installers, confirming each opening was prepared and waterproofed properly and then validating quality after each section was completed.

VALUABLE INPUT

After completion, Owners James McDonald, Stephen Gilchrist, and Mike Lopuszanski discussed GMI's installation experience with ESWindows and the manufacturer incorporated their feedback to avoid future problems. McDonald also contributed to design assist with ESWindows for the screen wall at the rooftop and the fourth and thirteenth floor terraces.

BUILDING A REPUTATION

GMI had previously worked with Cecil Baker + Partners on the 2110 Walnut residential development in Center City, Philadelphia. But as the first project to use the glass slab system, 500 Walnut marked a foray into more sophisticated high-rise glazing. "Every high-rise has its challenges," said Lopuszanski. "This job allowed GMI to be known as a company who could handle large size projects and to be very helpful with the design assist portion of the project as well."

Read more about the project on the ESWindows website: <https://eswindows.com/projects/500-walnut-6/> and ARCHITECT magazine online: <https://www.architectmagazine.com/project-gallery/500-walnut>.

