



apogee**renovation**
enhancing looks | improving value | saving energy

Energy-efficient, glass-clad exterior

Franklin Tower Residences

Philadelphia, Pennsylvania





Franklin Tower Residences' modern, energy-efficient, glass-clad exterior repurposes and revitalizes former concrete office tower

Franklin Tower Residences updates the Philadelphia skyline with 550 luxury apartments fashioned from the previous headquarters for GlaxoSmithKline. The former 1980's concrete, office tower has been converted into a premier, modern, glass-clad residential property.

The 24-story building encompasses more than 607,000 square feet consisting of one- and two-bedroom luxury apartments offering generously sized floor plans, high ceilings, expansive window views and ample natural light with floor-to-ceiling windows by Wausau Window and Wall Systems.

Building owner PMC Property Group relied on Gensler to design the renovated residential tower and transform the original architecture of Geddes Brecher Qualls & Cunningham (GBQC). General contractor Fastrack Construction managed the retrofit project for an on-time, on-budget delivery. Apogee Renovation assisted with energy-efficient, cost-effective recommendations to upgrade the building envelope.

Re-envisioning and revitalizing with retrofit

"When Gensler was approached by PMC Property Group to re-envision One Franklin Tower and to replace its existing façade, we saw our challenge as more than just replacing the skin on an aging building," explained Gensler Principal Robert Fuller, AIA. "Our approach was to ask a question critical to today's cities: How can we continue to revitalize and reposition buildings that are no longer responding to the needs of their

owners and tenants? Our challenge was to create a building that could enliven the public realm at street level, modernize and improve the functionality of its floor plates, and accommodate new homes for a growing downtown population."

To do this, Gensler looked at developing an adaptive façade to replace the outdated precast, single-glazed strip-window façade. "While that exterior was built for a single use, the rhythm of the new façade allows for a variety of programmatic uses," said Fuller. "The recessed channels at the vertical columns and horizontal spandrels express the structural module of the building, while the floor-to-ceiling glass creates a lighter façade that connects the interior spaces to views of the city beyond."



Prior to its transformation, the building served as an office tower since the 1980s with an aging facade of precast concrete and single-glazed strip windows.

At ground level, Gensler also increased both the transparency and the scale of the spaces by bringing the new storefront out to the sidewalk edge, eliminating the dark arcades that previously existed and better connecting the building to the surrounding community.

Fuller added, "Buildings built in the late '70s through the mid-'80s are beginning to age out of their highest and best use as our cities have changed into highly condensed urban centers that blur the lines between 'live, work and play.' One Franklin Tower offers a proposal to re-engage those buildings and bring them and the areas around them new life."

Collaboration through design-assistance

Apogee's Renovation Team – in conjunction with Wausau, Tubelite, Viracon, Linetec and its other businesses – assists building owners and property managers in evaluating the benefits of window renovation and upgrades. These include improving the appearance of the building, saving energy, downsizing HVAC loading, reducing maintenance, lowering vacancy rates, increasing rental rates and enhancing the value of the building.

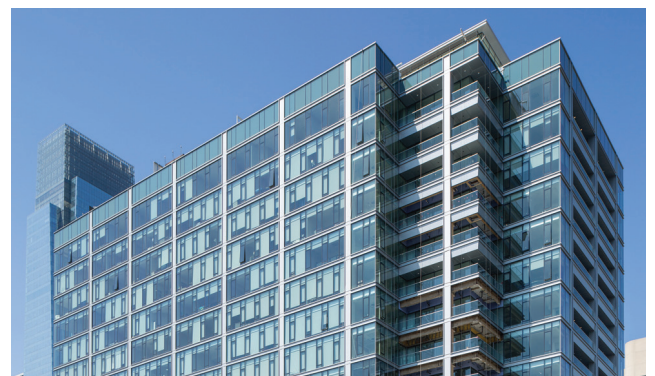
For Franklin Tower Residences, Apogee Renovation worked with Wausau's associates to provide PMC Property Group with design-assist and product selection services for high-performance window, curtainwall and entrance systems. Wausau facilitated a two-day retreat at its manufacturing center in Wisconsin with representatives from the owner, architect and contractors.

Wausau's design-assist process can eliminate time-consuming resubmittals by working through issues before submission shop drawings are prepared. Clear scope definition minimizes change orders and surprises, while offering ample opportunity for value engineering, to focus all stakeholders on the most important design priorities.

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Robert Fuller, AIA, Principal, Gensler

"PMC and Gensler worked together to imagine the ideal design, and brought it to us to make it a reality. Everyone came to the table at once to determine the best approach for improving and installing the building envelope," explained Jason Green, Wausau's architectural sales representative. "Based on a good working relationship and four pages of schematic design, the team was able to complete construction within six months of the owner's approval."



With a collaborative team, high-performance glazing system and the owner's approval, Franklin Tower transformed from concrete offices to an attractive, glass-clad, energy-efficient residential high-rise in six months.



Single solution, multiple glazing systems

Meeting the specified performance and desired aesthetic for Franklin Tower Residences, Wausau supplied Reilly Glazing with the window wall, operable vents and doors. Tubelite Inc. supplied the entrance systems. These factory-assembled, factory-glazed systems also incorporate Linetec's finishing and thermal improvement services, and Viracon's glass.

Residents and visitors to Franklin Tower are welcomed through two distinct, ground floor lobbies. The high-rise elevator lobby is on the south side of the building and has its own entrance off of Race Street, while the second lobby has an entrance on 16th Street and includes the low-rise and mid-rise elevator banks.

Reilly Glazing installed Tubelite's standard, narrow stile entrances at ground level along with Wausau's 9250i-UW INvision™ unitized curtainwall. Both feature a simulated European Cherry wood grain finish applied by Linetec to the aluminum framing members. The environmentally responsible process starts with powder coat then utilizes a heat transfer sublimation process, and produces no VOCs.

From the second floor to the rooftop, Wausau supplied approximately 200,000 square feet of 7250i HRX INvision window wall with more 700 zero-sightline operable vents and 166 terrace doors. Wausau's CrossTrak™ sliding doors and Tubelite Inc.'s Therml=Block® entrances also complement the rooftop deck and lounge, presenting panoramic views.

Enhanced appearance, optimized performance

The majority of Franklin Tower Residences' window, curtainwall and entrance systems were finished by Linetec in a Bright Silver color using a metallic Duranar® XL 70% PVDF resin-based architectural coating and four-coat, two-bake process. A two-coat mica Duranar Sunstorm also was applied in

a Shanghi Silver color. Class I black anodize was selected for visual accents and industry-leading durability.

Along with improving the building's appearance and expansive views, the window wall and entrance systems also contribute to a more energy-efficient, comfortable interior. Viracon's VE-2M 1-inch insulating glass was specified in a soft gray color with low-e coatings for improved thermal performance.

Combined with high-performance Viracon glass, Wausau's HRX system can achieve thermal performance of 0.33 U-value, and Condensation Resistance Factor of CRFf 76/CRFg 72. The window wall also meets the American Architectural Manufacturers Association's AAMA-1503 stringent test requirements for air, water and structural integrity.

Within the window wall, the operable vents allow for natural light and views, as well as for easy accessibility to natural ventilation. Along with fresh air, this offers a seasonal opportunity to reduce HVAC loads and associated energy consumption. The operable vents also are engineered and tested in accordance with AAMA 513, and in compliance with the Americans with Disabilities Act (ADA) criteria per ANSI A117.1.

Accelerated installation, dependable results

"Wausau's products performed effortlessly," said Dan Reilly of Reilly Glazing, "Their materials shipped as scheduled, and were labeled and sequenced correctly. With some window units weighing up to 800 pounds, we found them simple to install with the proper equipment."

"We were able to complete about a floor per week, to meet that fast-track schedule," agreed Reilly. "We couldn't have planned it any better. From engineering through installation, the entire project ran seamlessly. The client is extremely happy. It's a beautiful building."

Featured products and services

Wausau Window and Wall Systems:

- 9250i-UW INvision Thermal Unitized Curtainwall
- 7250i-HRX INvision High Thermal Window Wall
- 4250-z Zero Sightline Insert Vents
- TD 4250-i Terrace Doors
- 5250i-XLT CrossTrak Sliding Glass Doors

Viracon:

- VE-2M

Tubelite Inc.:

- Standard Narrow Stile Entrances
- Thermal=Block Entrances

Linetec:

- European Cherry wood grain powder-coated, sublimated finishes
- Four-coat metallic and two-coat mica silver 70% PVDF painted finishes
- Class I black anodize finish
- Thermal improvement services



Franklin Tower Residences, 200 North 16th Street, Philadelphia, PA 19102

<https://franklin-tower.com>

- **Owner:** PMC Property Group; Philadelphia; <https://franklin-tower.com>
- **Original architect (1979):** Geddes Brecher Qualls & Cunningham
- **Architect:** Gensler; Philadelphia; <https://www.gensler.com/offices/philadelphia>
- **General contractor:** Fastrack Construction; Fort Washington, Pennsylvania
- **Glazing system – contractor:** Reilly Glazing; Norristown, Pennsylvania
- **Glazing system – window wall, vents, terrace doors and sliding doors manufacturer:** Wausau Window and Wall Systems, an Apogee Enterprises company; Wausau, Wisconsin; <http://www.wausauwindow.com>
- **Glazing system – entrance doors manufacturer:** Tubelite Inc., an Apogee Enterprises company; Walker, Michigan; <https://www.tubeliteinc.com>
- **Glazing systems – glass fabricator:** Viracon, Inc., an Apogee Enterprises company; Owatonna, Minnesota; <http://www.viracon.com>
- **Glazing systems – aluminum finisher:** Linetec, an Apogee Enterprises company; Wausau, Wisconsin; <https://linetec.com>
- **Photos by:** Greg Benson Photo
- **Video – virtual tours:** <https://franklin-tower.com/virtual-tours>

WE CAN HELP.

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resources

architectural glass

Viracon | The leading North American fabricator of high-performance, custom-coated architectural glass for global markets

architectural framing systems

Alumicor | A Canadian-based supplier of architectural aluminum building envelope products

EFCO | A leading manufacturer of architectural aluminum window, curtainwall, storefront and entrance systems

Linetec | A leading architectural finishing company, offering high-performance paint and anodize finishes for aluminum

Sotawall | A full-service designer, manufacturer and installer of proprietary high-performance unitized curtainwall systems

Tubelite | A leader in eco-efficient aluminum storefront, curtainwall and entrance systems

Wausau Window and Wall Systems | A leading designer and manufacturer of energy-efficient, custom aluminum window and curtainwall systems

architectural services

Harmon | One of the largest U.S. full-service building glass and curtainwall installation companies

services

building survey

Determine conditions, perform thermographic inspection, recommend upgrades

energy modeling tool

Utility-grade, whole-building energy modeling

specification assistance

Review performance requirements

detail assistance

Architectural drawings of window and curtainwall products

budgeting

Provide installed options

network of installers

Recommend quality, authorized installers across North America

renderings

Visual representation of retrofit

INTERESTED IN LEARNING MORE?

Apogee Renovation provides high-performance glass, aluminum framing and window system solutions to optimize energy efficiency and enhance aesthetics of commercial properties.

With these solutions, building owners and developers can reduce energy costs, increase tenant satisfaction and improve overall value of their buildings.

To learn more, please contact Kevin Robbins, Director of Apogee Renovation, at krobbins@apog.com or 715-409-0821 or visit www.apogee renovation.com.



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