



APEX 41 | LOMBARD, ILLINOIS

Commercial Windows & Doors
Project Profile

REHAU Fits the Bill for Luxury Apartments' Large Windows

The term “luxury” is often used too liberally when marketing new apartments in competitive metropolitan locations, but in the case of Apex 41, a 181-unit luxury apartment building in Lombard, Illinois completed in 2017, the complex definitely comes as advertised. Both the living space and community areas feature large windows that provide ample natural light, says Takemasa Okugawa of Chicago-based architectural firm Stephen Rankin Associates.

By working closely during the design phase with general contractor McShane Construction and fabricator Newtec Windows & Doors, Inc., the architect was able to develop plans that use cost-effective, energy-efficient vinyl windows in large openings that typically call for aluminum windows. “They brought us in early, and it made a difference,” says Newtec Vice President of Sales Stephen Reist.

For example, plans originally called for large 10x12 ft. windows on the upper four floors to be aluminum due to the size, but were switched to REHAU uPVC windows when Reist informed the architect it could be done. “When we gave them a vinyl option that was less costly and offered better thermal performance, they were really impressed. We manufactured each window in one piece, shipped it to the job site and hoisted it into place with a crane,” he says. The architect also was happy to discover REHAU uPVC windows could be used for several 8x10 ft. openings that also originally called for aluminum windows.

REHAU profiles generally have thicker walls, which naturally makes for stronger shapes. The systems' internal walls are designed and positioned within the profiles to aid in additional structural stability. In addition, all REHAU frame, sash and mullion profiles are designed to accept galvanized steel or aluminum to provide higher inertial structural strength when needed, allowing unit sizes beyond the maximum ranges of many vinyl windows and doors.

“That appears to be bread and butter to Newtec and REHAU, but for us it was new having vinyl windows of that size,” says Aaron Trulley, project manager for McShane Construction, the contractor. In addition to REHAU windows, each apartment has a REHAU System 2100 sliding patio door to provide access to the private aluminum balcony that comes with each unit.

“It was a unique building from the standpoint of how many different products were used,” says Reist. “Instead of being a cookie-cutter design with one window that gets used repeatedly a lot of different products went into it, which makes it really distinct.”

That mix of many different styles of windows means contractor McShane Construction had to be on top of its game. Trulley says Newtec and REHAU representatives were on site when his crew completed trial installations of the windows on multiple occasions. “That was an opportunity to critique the installation and use what we learned for the rest of the work. It was very helpful to get those things ironed out early.”



Trulley also lauds the flexibility that both REHAU and Newtec brought to the project. The apartment complex features two wings that were built in separate phases. Trulley says his crews had finished framing the east wing and were preparing to frame and build the west wing when the owner requested a change to about 15 windows planned for the top floor. “Within hours of the request, we had gotten the answer from them that it could be done, so we were able to proceed,” Trulley says. “We appreciated the customer service that REHAU and Newtec provided. They were always available to answer our questions on short notice.”

Project: Apex 41 | 181-unit luxury apartment complex in Lombard, IL

Type of Construction: Multi-family new construction, opened in 2016

Scope of Project: 1,263 windows and doors

Manufacturer: Newtec Windows & Doors, Inc.

REHAU Systems Used: System 600 single-hung and fixed window, System 1400 casement window, System 4500 fixed/hopper window; System 2100 patio door