



One Jackson Square



Left and above The undulating facade of the building softens the shape created by an unusual site.

An undulating curtain wall brings kaleidoscope eyes to the West Village.

CONTEXTUALITY DOESN'T ALWAYS mean what it seems. "Contextuality oftentimes involves mimicry—but sometimes contextuality can be more successfully achieved by juxtaposition," says Bill Pedersen, design partner of Kohn Pedersen Fox Associates.

The issue was central in his firm's design of One Jackson Square, a new 68,000-square-foot condo building in Manhattan's West Village. Its location at Greenwich and 8th Avenues lies within the Greenwich Village Historic District, so the architects needed to gain the approval of the NYC Landmarks Preservation Commission (LPC). Brick would have been an obvious choice for a neighborhood dominated by historic masonry architecture, yet the site's peculiar shape—a sort of distorted parallelogram—didn't lend itself to using much of the material. Furthermore, the site falls within two different zoning areas, so one section of the building could rise as high as eleven stories, but the rest could only be seven stories tall. The client, international real

estate developer Hines, naturally wanted to use all the available space, but "the shape of the zoning diagram was so unusual that we wondered how in the world we'd make a building out of it," Pedersen recalls.

The architects looked to the beauty of nature for inspiration. They envisioned the zoning volume as a rock, with an aluminum and glass curtain wall as a stream that flows over it, softening its strange, hard edges. In the final design, the band of windows along each story ripples with its own unique curves, creating a facade that's dynamic and complex enough to invite lingering looks.

One Jackson Square might not fit in exactly among the neighboring buildings, but that's all for the best, Pedersen told the LPC: "My argument was that Greenwich Village also has a large number of rather unusual exceptions to the fabric of the city... The idiosyncratic quality of the Village is the charm and character of the Village." Another key part of his argument was that the facade, in fact, pays homage to its architectural surroundings by reflecting them in an intriguing kaleidoscopic pattern. KPF's arguments proved persuasive, and the design won the LPC's approval.

With that challenge surmounted, another lay on the horizon: how to bring this vision to reality. While the curtain wall's charm

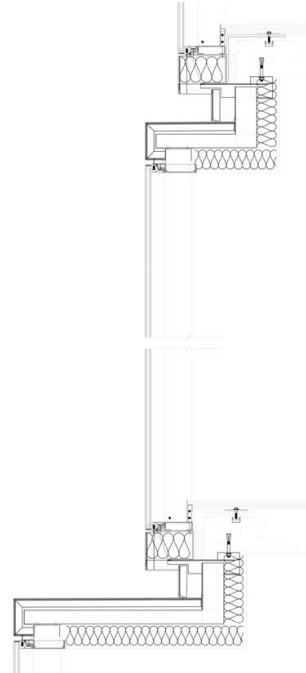


Facing, left Each mullion was custom-bent in the fabrication shop before installation.
Facing, right Curved floor slabs are irregular and vary between floors.
Facing, below Aluminum mullions range from 9 1/2 to 10 feet in length; mullions and slab-edge covers are coated in dark bronze Duranar XL paint to harmonize with the brown hues of masonry buildings nearby.
Right Most windows are 18, 36, or 48 inches wide and are arranged in a random pattern across the length of the building.
Below A detail drawing of the second-floor fixed windows.



Previous spread: Paul Rivera; this page: Kohn Pedersen Fox Associates

Top: Kohn Pedersen Fox Associates; right: Metal Teck, Inc.



lies in its free-form appearance, creating it required an exacting level of precision. The building team turned to American Architectural (Metal Teck, Inc.)—an ornamental metal and glass company with a history of tackling unusual projects—to engineer, fabricate, and install the unconventional curtain wall. Gilsanz Murray Steficek served as the curtain-wall consultant.

The design consists of hundreds of windows in various sizes, mostly 18, 36, or 48 inches wide. Windows of different widths are interspersed in a random order across the facade, creating a visually interesting pattern of mullions that emphasizes the horizontal lines of the building. The random pattern also allowed for easy changes if the units' sizes shifted during the design process, said Trent Tesch, senior associate principal at KPFF. The windows all run from floor to ceiling in the building, which includes 32 condos and retail space on the ground floor. The aluminum mullions are 4 inches wide and 8 inches deep, and range from 9 1/2 to 10 feet long. The mullions and slab-edge covers are coated with Duranar XL paint in a dark bronze color, to harmonize with the brown hues of masonry buildings nearby.

While the facade is shaped like a wave, the individual windows are flat, placed at angles to one another to follow the overall curvatures. Because the curves are irregular and vary floor to floor, the mullions each needed a transition bend that was painstakingly custom-formed in American Architectural's facility. "Out of approximately 700 windows on the job, there are only maybe four or five bends that are exactly

alike," says John Melching, the company's CEO and resident architectural engineer.

Creating the steel slab-edge covers was a challenging process, too. American Architectural started out with numerous lengths that were each only as long as the width of a window. The workers welded these lengths together by hand and ground the welds smooth to create 12- to 15-foot-long segments, which would be easier to install during construction. They enclosed the low-iron, mildly reflective Viracon windows in aluminum cassette frames and did a trial run of installing the entire curtain wall, at least two stories at a time, at their Pennsylvania facility to make sure everything fit properly. Since the curtain wall was designed to a tolerance of only 1/16 inch, fabricating and installing it required a level of precision that Melching compares to a Swiss watch. After the use of computer modeling, "old-world technology took over, and it was all hand-fitted," he says.

The hybridized installation process drew upon elements of a curtain-wall system, a strip-window system, and stick system, Melching says. The facade is like a curtain wall in that the entire system passes in front of the slab edges. It resembles a strip-window system in that the workers put on the slab-edge covers and then installed the glass windows horizontally. And it resembles a stick system because, after putting in the slab covers, they put in the mullions before installing the glass.

One of the biggest engineering challenges was presented by the building's two double-height duplexes. With no slab



Above In American Architectural's facility, pieces were welded together in 12- to 15-foot-long segments and tested installation of the walls in the shop before moving the pieces to the site. The curtain wall is designed to a tolerance of only 1/16 inch.

Facing Windows for the condominium's double-height duplexes are supported without a slab by a system of steel tubes bridging between a column to the slab edge.



at the exterior wall to support them, the design team came up with a system of hollow steel sections that attached to and spanned between columns at the exterior wall, carefully welding the sections together to create the faceted shape needed to support the glass windows.

In keeping with the Village's iconoclastic spirit, the carefully crafted facade is truly one of a kind. Pedestrians walking by the recently completed building can be seen gazing at its reflective windows, which might evoke strips of celluloid film displaying successions of images of the surroundings. Along Greenwich Avenue, the building reflects back the stately forms of brick buildings on Horatio Street across the way, creating an echo of the neighborhood's architectural past, and a vision of its future. **M**

While the curtain wall's charm lies in its free-form appearance, creating it required an exacting level of precision.

ONE JACKSON SQUARE

Location: 122 Greenwich Avenue, New York, NY

Owners: Hines, New York, NY;

RFR Realty LLC, New York, NY

Developer: Hines, New York, NY

Design Architect: Kohn Pedersen Fox Associates, New York, NY

Architect of Record: SLCE Architects, New York, NY

Structural Engineer: Gilsanz Murray Stefecek, New York, NY

Mechanical Engineer: WSP Flack + Kurtz, New York, NY

General Contractor: Hunter Roberts Construction Group, New York, NY

Curtain Wall Consultant: Gilsanz Murray Stefecek, New York, NY

Miscellaneous Iron Erector:

Burgess Steel Products Corp., Englewood, NJ

Architectural and Ornamental Metal Erector:

Champion Metal & Glass, Inc., Deer Park, NY

Curtain Wall Fabricator and Erector:

Metal Teck, Inc., Bensalem, PA

This page: Kohn Pedersen Fox Associates; facing: Paul Rivera

