ARCHITECTURAL
RECOR

Building 337

Corporate Transparency: Rafael Viñoly reimagines the glass office building with a continuous workspace that wraps around a central atrium.

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serve as an external shading device and transfer wind loads.

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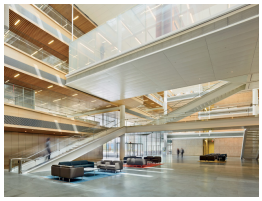
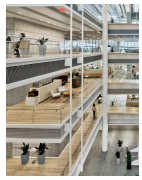
Rafael Viñoly Architects

Novartis Campus
East Hanover, New Jersey
The sloping floor is legible from the completely glazed exterior, whose fritted, 2-foot-deep glass f
shading device and transfer wind loads.
Photo © Bruce Damonte





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July 16, 2014

Josephine Minutillo

Rafael Viñoly Architects

Novartis Campus
East Hanover, New Jersey

To visit Building 337 on the Novartis campus in East Hanover, New Jersey, is to walk through it with awe, something akin to what visitors to Frank Lloyd Wright's Larkin Building must have felt a century ago. Just as Wright transformed the workspace with that long-demolished Buffalo, New York, icon, architect Rafael Viñoly has reimagined what has since become the ubiquitous glass-box office building with a light-filled, spatially innovative, and flawlessly executed structure whose spiraling interior invokes another Wright masterpiece, the Guggenheim Museum.

But the initial design was straightforward. “The concept is both extraordinarily simple and extraordinarily powerful,” explains project director David Rolland, a partner at Viñoly's New York–based firm. Responding to the need to create highly flexible and reconfigurable office space that accommodates work groups expanding and contracting over time, the architects did away with what Viñoly calls the “tyranny of the floor plate.” Instead, they conceived of the space as one long, continuous strip that hugs the perimeter of the building as it ascends from the ground to the roof, its striking pitch legible from outside the transparent form that contains it.

Though not quite a ramp, the spiral rises through five levels within the 75-foot-tall structure thanks to a generous 167-foot-by-333-foot footprint. The project would not have been possible in an urban location, since a smaller site would not have allowed for the gentle slope needed to wrap the

workplace as a continuous floor. The walkway-cum-workspace—which culminates in two rooftop gardens at opposite corners of the building—invites occupants to climb on foot to their workstations. Should one choose to take the elevator, buttons call out “neighborhoods” rather than floor numbers. Composed of 55-square-foot modules, for which the architects designed over 50 configurations of workstations and freestanding demountable conference rooms, each neighborhood is separated by three steps, and accompanied by an ADA-compliant ramp. Maple lines the floors and ceilings, adding warmth to work areas within an open structure dominated by clear glass, painted steel, and exposed concrete. While private offices were eliminated, individual workstations—developed in collaboration with Vitra—are luxurious by contemporary standards.

The largest of three recently completed office buildings for Novartis's oncology department on the campus's East Village Promenade (and connected to its two neighbors via the basement), the 286,000-square-foot structure accommodates 800 workstations for the development team. To facilitate the collaborative nature of that endeavor, three large conference rooms span the center of the building's atrium and are offset from each other at various levels. Suspended from solid steel rods hung from the roof structure, each is subdivided into a small and a large meeting room for up to 12 and 20 people respectively, and features electric privacy glass that switches from transparent to opaque when in use. The ground level includes a 300-person conference center flanked by smaller video conference rooms and pre-function spaces. At the opposite end of the floor, adjacent to the building entrance, is a casual employee restaurant with a slanting geometric ceiling—the building's one whimsical gesture.

Though it may appear that glass fins running along the height of the building are strictly an embellishment of the facade, in fact, the 2-foot-deep panels contain a subtle frit pattern and serve as an external shading device. Placed perpendicularly to the triple-glazed panels of the exterior walls, the fins are installed without steel mullions, their structural glass able to transfer lateral wind loads. By turning the corner at the roof rather than abruptly ending there, the glass facade takes on the appearance of blurring into infinity.

The interiors have an infinite feeling as well. Triple-glazed skylights span the entire roof, bringing daylight deep into the building's open core and allowing views up to the sky from ground level. A photovoltaic array on the roof provides 8.22 percent of the building's energy. Chilled beams provide heating and cooling, and air is distributed laterally through the skylight support steel.

Impeccably constructed and beautifully furnished, this building seems to be one in which no expense was spared—though not in an ostentatious way. According to Rolland, however, employing a simple palette and limiting finishes kept costs reasonable. He also points to Novartis's intelligent

management of the process. For example, the client built a full-scale facade mock-up right after schematic design rather than during the construction phase, so adjustments could be made before bidding to avoid change orders.

Viñoly has taken a lot of flak for his recent London office tower, dubbed the Walkie Talkie: the building generated enough glare and heat from the sun bouncing off its curved facade to melt the plastic parts and paintwork of cars parked nearby. But Building 337 seems to be beyond reproach. The architects credit Novartis as an extremely enlightened client that understands the design process, challenges the architect, and reaps the rewards of design innovation. The result is one of their best buildings. In Viñoly's words, “It is the very rare example of a pure design idea making it to reality uncompromised.”

Size: 286,000 square feet

Completion Date: June 2013

Architect: Rafael Viñoly Architects

People

Formal name of building:
Building 337

Location:
Novartis Campus, East Hanover, New Jersey

Completion Date:
June 2013

Gross square footage:
286,092 SF

Total project cost:
Withheld at the Client's Request

Total construction cost:
Withheld at the Client's Request

Client:
Novartis Pharmaceuticals Corporation

Owner:
Novartis Pharmaceuticals Corporation

Products

Structural system

List type, e.g. concrete or steel frame, wood, etc.:
Structural Steel frame with concrete slabs on elevated decks.
Cast-in-Place Architecturally Exposed Concrete Cores (Shear Walls)

Manufacturer of any structural components unique to this project: Steelfab, Inc. fabricated the structural steel framing for the building as well as the specialty structural steel for the long span staircases and the atrium glass boxes.

Nordic Contracting Inc. cast the exposed architectural concrete walls.

Exterior cladding

Stainless Steel and Glass Curtain wall +Metal Panels, : Gartner
Joseph Gartner GmbH

Architect's firm:
Rafael Vinoly Architects PC
50 Vandam Street
New York, New York 10013
T. 212-924-5060
F. 212-924-5858

Personnel in architect's firm who should receive special credit:
Lead Designer: Rafael Vinoly, FAIA, JIA, SCA, IntFRIBA
Project Administrator: Jay Bargmann, AIA, NCARB
Project Director: David Rolland, AIA, NCARB, JIA, LEED AP
Project Manager: Craig Bacheller, LEED AP

Project Team:
Gabriele Pascolini, RA, LEED AP
Kyung Chan Zoh, AIA
Vadit Suwatcharapinun
Orama Siamseranee
Jung-won Yoon, AIA LEED AP
Isabel Anton, LEED AP

Interior designer:
Rafael Vinoly Architects PC

Engineers (Structural):
Thornton Tomasetti, Structural Engineers
744 Broad Street
Newark, NJ 07102
T: +1 973 286 6100
F: +1 973 286 6101

Engineers (MEP / FP / Sustainability Engineers):
Cosentini Associates,
Two Pennsylvania Plaza
Garnerstrasse 20
D-89423 Gendelfingen

Roofing

Elastomeric: Custom Sarnafil roofing assembly created by Gartner

Glazing

Curtainwall Glass: Saint Gobain Triple Glazed Units (Double Insulated)
Structural Glass Fins and Lobby Insulated Glass Units by Beijing Northglass Safety Glass Co.

Skylights: Saint Gobain Triple Glazed Units (Double Insulated) with High-Performance E Coating

Other: Structurally Glazed Atrium Conference Rooms with Electrified Glass by Pulp Studios 'Switchlite' and installed by National Glass & Metal Co.

Interior glass panels (translucent) by VIVID Glass 'Vivichrome'
Interior Low Iron Glass by GGI General Glass International
Interior glass guardrails by JE Berkowitz glass and shoe by C.R.Laurence Architectural Products
Custom handrail bracket by C.R.Laurence Architectural Products

Doors

Entrances: All glass revolving doors by Blasi

Metal doors: L.I.F. Industries

Wood doors: Custom Solid Core Maple Doors by Legere

New York, NY 10121
USA
T: +1 212 615 3600
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Engineers (Structural Steel and Glass Engineers):
Yoshinori Nito Engineering and Design PC
212 West 22nd Street
New York, NY 10011
T. +646 515 4391

Consultant(s):

Code, Life Safety & Security Engineering:
Hughes Associates
3610 Commerce Drive
Suite 817
Baltimore, MD 21227
T: +1 410 737 8677
F: +1 410 737 8688

Vertical Transportation:
Van Deusen Associates
5 Regent Street, Suite 524
Livingston, NJ 07039
T: +1 973 994 9220
F: +1 973 994 2539

Acoustics, AV / IT, and Vibration:
Cerami & Associates
404 Fifth Avenue
New York, NY 10018
T: +1 212 370 1776

Waterproofing and Roofing:
Leavitt Associates
72 West Cedar Street

Fire-control doors, security grilles: Custom Automatically controlled + Insulated Stainless Steel Door Louvers in the Curtain wall as part of the Smoke Control System ' by Gartner.
Custom Exterior Loading Dock Coiling Door ' McKeon Door
Custom Interior Fire Shutter Doors ' McKeon Door
Custom Smoke Curtains at Atrium ' U.S. Smoke and Fire

Special doors (sound control, X-ray, etc.): Operable Acoustic Partition in Conference Center by Modernfold

Hardware

Locksets: Sargent

Closers: Dorma Norton Exit devices: Sargent

Pulls: Haefele

Security devices: Security Gates by Tansa Security

Other special hardware: Hafaele Rixson

Interior finishes

Acoustical ceilings: Acoustical Wood Grille Ceilings by Armstrong
Acoustical Metal Panel Ceilings by Armstrong

Suspension grid: Suspension grid by Armstrong

Demountable partitions: Adotta Demountable Partition meeting rooms

Cabinetwork and custom woodwork: Custom cabinetry and millwork by Legere Group, LTD

Boston, MA 02114
T: +1 617 823 3926
F: +1 617 649 8891

Food Service & Waste Management:
William Caruso & Associates
8055 East Tufts Ave.
Suite 1320
Denver, CO 80237
T: +1 303 649 1600
F: +1 303 649 1660

Technical Specifications:
Robert Schwartz & Associates
333 West 39th Street, Suite 1501
New York, NY 10018
T: +1 212 691 3248
F: +1 212 633 1613

Lighting Design:
One Lux Studio
158 West 29th Street, 10th Fl
New York, NY 10001
T: +1 212 201 5790

Accessibility:
United Spinal Associates
33 Leo Crest Court
West Seneca, New York 14224
T: 718-803-3782

Wayfinding and Signage:
EX:IT
1617 JFK Blvd., Suite 1665
Philadelphia, PA 19103
T: +1 212 561 1950

Photovoltaic Engineering:
RELAB
427 Bloomfield Avenue Suite 402

Toilet Partitions: Wood Veneer Toilet Compartments by Thrislington Cubicles
Stainless Steel Partitions by Hadrian

Wall coverings: Custom DBF Xorel fabric wrapped wall panels by Legere Group, LTD
Custom MDF Paint Lacquered Wall panels by Legere Group, LTD
Custom Acoustic Maple Wood Veneer Wall Panels by ACG

Paneling: Custom curving intertwined maple wood wall panels by Rulon 'Curvalon'

Plastic laminate: Abet Laminati

Quartz surfacing: Quartz Surface (at the restaurant) by Zodiaq
Quartz Surface at restrooms by Zodiaq

Floor and wall tile (cite where used): Bedonia Stone Flooring (Lobby and Exterior Entrance) by Stone Source
Crema Calcutta Marble Stone Flooring at Bridges and Monumental Stairs by Stone Source
Stone Thassos White millwork by Atlantic Stone
Engineered Maple Wood Flooring at Ramps and Bridges by State of the Art Wood Floors
Porcelain Wall Tile by Graniti Fiandre

Carpet: Carpet Tile and Broadloom Carpet by Constantine/Miliken
Custom Area Carpet in Sumak Wool and Pile Silk by Carini Lang

Special interior finishes unique to this project:
Architecturally Exposed Concrete Cores
Custom Metal Grilles

Furnishings

Montclair, NJ 07042
T: +1 973 337 2283

General contractor:
Turner Construction Corporation
300 Atrium Drive, Fourth Floor
Somerset, NJ 08873
Phone: (732) 627-8300

Photographer(s):
For RVA submitted photos:
CREDIT LINE: Courtesy Rafael Vi'oly Architects, ' Bruce Damonte

Bruce Damonte Photography
248 Prospect Avenue
San Francisco CA 94110
415.845.6919
www.brucedamonte.com

Office furniture: Custom Designed Vitra Workstations

Reception furniture: Bernhardt Design 'Gaia Sofa' Bernhardt Design 'Gaia Lounge Chair' Bernhardt Design 'Accent Coffee Table'

Chairs: Kusch + Co 'Trio Chair' Herman Miller 'Eames Chair'
Steelcase 'Leap Chair'
Moroso 'Steel' Side Chair
Bernhardt Design 'ARO' Stool
Bernhardt Design 'Pause' Bench
Nienkamper 'Tuxedo High Back 3 Seater'
Bernhardt Design 'b.2' Chair
Bernhardt Design 'Ven Lounge' Chair

Tables: Datesweiser 'Highline' Custom Conference Tables
Bernhardt Design 'Vue Base and Table Top'
Bernhardt Design 'Martini Side Table'
Bernhardt Design 'Serif Folding Table'
Prismatique 'Goshi Modular Column Folding Table'

Upholstery: Unica Veav
Edelman Leather
Bernhardt Textiles

Lighting

Interior ambient lighting: Axis Lighting Kurt Versen Vode Lighting XAL

Downlights: Kreon 3G Lighting Selux Lucifer Lighting

Task lighting: LED Horizon Task Light by Humanscale

Dimming System or other lighting controls: Daylight Harvesting and lighting controls by Lutron
Solar Trak System for daylighting and Shade Controls by Mechoshade
Crestron Controls at AV Systems integrated with lighting and shades

Conveyance

Elevators/Escalators: Elevators by Otis

Accessibility provision (lifts, ramping, etc.): Fully accessible with ramps that intertwine all the way up the building

Plumbing

Fixtures are: Toto 'Helix EcoPower' Faucet
Sloan 'Solis' Faucet
Duravit Toilet
Toto Toilet
Toto Urinal

Energy

Energy management or building automation system: Active Chilled Beams (Price)
Dual-Wheel Heat Recovery Energy System for passive dehumidification and heat recovery
Outside Air Economizer
Demand Controlled Ventilation
Variable Frequency Drives on Fans and Pumps
Daylight Harvesting
Occupancy Control Sensors
LED Lighting

Photovoltaic system: Sunways custom perforated (transparent) mono-crystalline cells in laminated low-iron operable glass panels

integrated into the skylight glass framing system.

Contractor ' Onyx Solar
Skylight area 28,443 SF
Electrical PV Output Wh/Yr: 295,000 (295 kilowatt DC PV array)
Estimated Energy % Savings: 8.22%

Other unique products that contribute to sustainability:

Curtainwall contribution to energy efficiency:
Triple Glazed High-Performance Low-E Curtainwall System
Triple Glazed Low-E Skylight System
Exterior Shading Devices on vertical glass ' Structural Fins are 50% Ceramic Fritted
Exterior Shading Devices on horizontal glass ' PV panels act as a shading device (50% luminance)
Interior Automatic Solar Shading (Horizontal and Vertical)

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