



Croxtan Collaborative Architects designs NRDC's headquarters office prototype; Achieves LEED-CI Platinum certification

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Croxtan Collaborative Architects and the Natural Resources Defense Council (NRDC) have unveiled the most recent chapter in their 25-year collaboration: a high performance sustainable prototype which is the entire 8th floor of their headquarters. Achieving LEED-CI Platinum certification, the project received one of the highest LEED-CI ratings given nationally or internationally and one of the highest LEED ratings of any building type in the city.

Located at 40 West 20th St., NRDC's headquarters has been an exemplar of sustainable design for 20 years. NRDC and Croxtan's first project in the building was NRDC's headquarters, which is recognized as one of the founding projects of green architecture in America, addressing the full ecology of the building: light, air, energy and human health and well-being. Instrumental in the founding ideals of the U.S. GBC and the AIA Committee on the Environment (COTE), the project was a recipient of the green projects awards by AIA COTE.

NRDC's success and growth have led to a need for expansion. The 8th floor prototype is the first step in an enterprise-wide assessment of the resource/sustainable potentials of NRDC's workplace. This project creates a more sustainable, universal office plan that increases occupant density and accommodates "mixed mode" work patterns while improving well-being.

It is the second major LEED achievement in a month for Croxtan, following the LEED-CS Gold certification of Fordham Place, one of the first commercial LEED-CS Gold projects in the Bronx. The firm also achieved one of the first LEED Gold academic buildings in NYS with St. Lawrence University's Johnson Hall in 2008.

Energy efficiency was a key project goal. A high efficiency HVAC unit was installed (40.3% more efficient than code), the lighting design was tuned to minimize energy usage while maintaining productive light levels (36.8% more efficient than code), and a thermal upgrade/retrofit was performed via environmentally benign insulation plus high performance glazing. Daylight was maximized through optimized ceiling geometries, high reflectance surfaces, dual-zone daylighting control and incorporating a daylight responsive continuous dimming system. As a result of these strategies, the project achieved all 8 available LEED energy points.

In order to "democratize the window," the design of the 8th floor pulls the workstations away from the window. Not only does this improve circulation within the space, it also improves the thermal quality (unobstructed mixing of radiant heat plus glare reduction via upper/lower daylighting control). Additionally, by treating the perimeter and windows as a commons, as opposed to the outdated, traditional model of giving exterior and corner offices to executives, the design team greatly enhanced human health and well-being. This approach gives all employees, from interns to executives, a connection to nature and diurnal cycles which has been shown to increase worker

health and productivity.

Indoor air quality (IAQ) was thoroughly addressed by the specification of low/no VOC materials, materials with no added urea formaldehyde, low emitting carpet, and high efficiency filtration of ventilation air. Post-construction IAQ testing confirmed contaminant concentrations magnitudes below USGBC "green" thresholds for good indoor air quality.

Focusing on both groups' emphasis on resourcefulness the project was one of the first on the east coast to utilize Integrated Project Delivery (IPD). The general contractor, ICS Builders, worked tightly with the design team to increase efficiency and avoid potential conflicts. As a result, the project was 7.5% under budget and had only two change orders.

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