

32–36 Edgewood Avenue



Yale University designed and built 32–36 Edgewood Avenue in alignment with the U.S. Green Building Council’s LEED (Leadership in Energy and Environmental Design) rating system at the Platinum certification level.

ENERGY EFFICIENCY

In an effort to achieve Yale’s greenhouse gas reduction goal, energy conservation is a fundamental focus of any new project. The sculpture studio spaces in 36 Edgewood feature a large expanse of windows that provide a high level of natural light, dramatically reducing the need for artificial lighting and enabling views to the outdoors. The building is outfitted with occupancy sensors, which automatically switch off lights in unoccupied areas. In addition, when the natural light in perimeter occupied spaces is sufficient, the artificial lighting dims to maintain a constant light level in hallways and offices. The southern and eastern facades of the building are outfitted with fixed external shading to reduce solar heat gain.

INDOOR ENVIRONMENTAL QUALITY

The studio spaces are outfitted with operable windows to allow personal control over ventilation. The first-floor woodshop, spray booth, and metal-working shop are equipped with an exhaust system that ensures the swift removal of airborne irritants while minimizing energy use. An Aircuity air monitoring system has been installed to ensure that hazardous materials are not introduced on the studio levels and recirculated through the building. This centrally located testing device has hardwired tubing extending to each of the floors, drawing air samples to test for volatile organic compounds

1st building in Connecticut to receive a LEED Platinum rating

88% of construction debris was diverted from landfills

78% of construction materials were harvested within 500 miles of the project site, reducing pollution from fuel delivery and lowering overall transportation costs

65% reduction in annual potable water use is anticipated with the water-saving measures provided

(VOCs), carbon monoxide, carbon dioxide, humidity, and particulates. This system can be used for routine monitoring and diagnostics, or in the event of an air quality problem.

MATERIALS

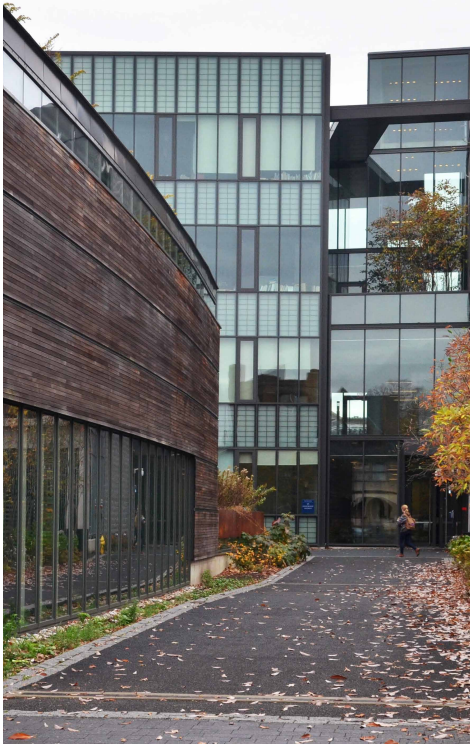
Materials used in construction were chosen based upon careful life cycle analysis of the product. When possible, locally manufactured materials and products were selected: 78% of materials were harvested and 51% were assembled within 500 miles of the site. All paneling is made from post-consumer recycled newspapers. Beneath 36 Edgewood’s external shading is a high-performance curtain wall that uses an innovative new product called Nanogel. The Nanogel makes up a translucent panel, which achieves a remarkable level of energy savings while providing indoor spaces with natural light. A full garbage and waste recycling room is located on the ground floor, while individual recycling receptacles are provided on all floors. The street-front facades of the gallery building (32 Edgewood) are largely clad in recovered cedar. More than 88% of the project’s construction waste was recycled.

WATER EFFICIENCY

Waterless urinals, dual-flush toilets, and low-flow lavatories significantly reduce the amount of water used on a daily basis. A stormwater retention system collects stormwater from the roof of the main building (36 Edgewood) and surrounding landscape, which is used for flushing the toilets. The stormwater is initially stored in an outdoor 5,000-gallon tank, a size that meets water requirements during monthly drought periods. It is then pumped into a 400-gallon indoor tank and disinfected with an ozone treatment, readying it for use in toilets. These measures ensure that the building does not add to the municipal stormwater system. Overall, these strategies reduce potable water use by 65%.

TRANSPORTATION

32–36 Edgewood is located in an area with ready access to public transportation, including the Yale Shuttle and CT Transit bus lines. Bicycle racks are provided, and showers are available in the basement for bicycle commuters.



Architect
Kieran Timberlake

Total floor area
64,118 sq ft, with an adjacent
288-space parking garage

Opening date
September 2007



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