



Genzyme Center

Architect: Behnisch, Behnisch & Partner
Local Architectural Partner: Next Phase Studio
Developer: Lyme Properties, LCC
Contractor: Turner Construction Company

Size: 350,000 square feet
Total Cost: $140 million, all inclusive (includes soil remediation, furniture, etc)
Estimated LEED Rating: Platinum

General Information

Genzyme is an international biotechnology and pharmaceutical company whose work includes ongoing research in protein and gene therapies for a range of diseases. The Genzyme Center, the company's new corporate headquarters, is designed to be one of the most environmentally responsible office buildings ever built in the United States. It intends to apply for the highest possible ("platinum") rating under the U.S. Green Building Council LEED 2.0 standard. If successful, the building will become one of the first large-scale commercial office buildings in the country to reach this standard. The architect for the building, Behnsich, Behnisch & Partner, designed the building around an internal environment that emphasizes natural light, views of the outdoors, and an "open feel," with extensive shared spaces to facilitate collaboration. Construction began in June 2001 and was completed in November 2003.

Sustainable Sites

- Built in a high-density urban area
- Built on an industrial brownfield, once the site of a coal gasification plant, which was remediated for the project
- Located within ½ mile from the Red Line
- Garage features a recharging station for electric vehicles
- Indoor bike storage and locker/shower facilities
- 40 preferred carpool spaces
- Space surrounding building was restored with native or adaptive vegetation
- Open space at the site exceeds the city requirements by 50%
- Vegetative "living" roof and rainwater collection system reduces stormwater runoff by 25%
- Filters reduce pollution level of stormwater runoff
- All parking located below ground, so as to reduce urban heat island effect
- Portions of roof that are not equipped with "living" roof utilize Energy Star-rated reflective surfaces
- Subsidized public transit passes for employees

Water Efficiency

- Highly efficient irrigation system equipped with soil moisture sensors
- Low-flow fixtures installed throughout the building, including waterless urinals and dual-flush toilets
- Expected to use at least 32% less water than conventional buildings

Energy & Atmosphere

- Energy costs expected to be 38% less than those of a standard new building
- 100% of all power for the building comes from renewable sources. A small percentage of this power is supplied by solar panels on the roof. The rest is supplied by renewable energy certificates purchased through Constellation Energy, the building's energy supplier.
- No CFCs or HCFCs are used in the building. Energy for all heating and cooling needs is provided by a unique steam absorption chiller that utilizes steam from a nearby power plant.

Materials & Resources

- Over 90% of all construction waste was diverted from landfill for reuse
- Over 75% of all building materials contain recycled content
- Over 50% of all building materials were assembled with 500 miles of the building site
- Over 20% of all building materials were harvested from within 500 miles of the site
- More than half of all wood materials used were Forest Stewardship Council certified to come from sustainably-managed forests

Indoor Environmental Quality

- Carbon Dioxide monitors installed throughout the building, which allow adjustments in airflow to reduce any CO2 levels in the building
- HVAC systems and controls are designed to achieve an air quality standard above government requirements
- All paints, sealants, carpets, and composite woods meet standards for volatile organic carbon emissions
- All chemical storage in the building is isolated and vented.
- Operable windows and lighting controls give employees individual control over their environment
- 75% of all workspaces have sufficient natural light to work without artificial lighting under normal conditions
- 100% of all regularly occupied spaces have views to the outdoors

The Bottom Line

- Total Building Cost: $140 Million ($400/square foot) all inclusive (remediation of soil, furniture, etc
- Uses 32% less water than a comparable building
- Electricity costs are 38% less than a comparable building
- Lighting requires 45% less electricity than a conventional building
- Total energy use is 25% below the new state energy code requirements

Contacts

Behnisch, Behnisch & Partner
1517 Park Row
Venice, CA 90291
Tel: (310) 399-9003
Email: BBPLA@behnisch.com

Lyme Properties, LCC
23 South Main St
Hanover, NH 03755
Tel: (603) 643-3300

Turner Construction Company
Turner Construction Company
National Sales and Marketing
375 Hudson Street
New York, NY 10014
Tel: (212) 229-6000

Constellation Energy
800 Boylston St
Boston, MA 02199
Tel: (617) 722-7585
Email: carolann.hibbard@constellation.com

Next Phase Studio
179 Green St
Jamaica Plain, MA 02130
Tel: (617) 522-9808
Email: info@nps-architects.com

Prepared by Jack Murphy, Cambridge Community Development Department, July 2004
Contact: jmurphy@cambridgema.gov