

# LANCASTER STREET LIVE/WORK TOWNHOME

# **Project Summary**

The 1,540 square foot live/work townhome on Lancaster Street was designed as a model for extreme energy efficiency. Using a holistic approach, which incorporated site orientation; passive heating and cooling; thermal storage; an ultra efficient building envelope; rigid, cellulose and spray insulation; and photovoltaic solar power, ZETA Communities built Oakland's first net zero energy project.

With over one year of monitoring performed by the U.S. Department of Energy, the Lancaster Street Live/Work Townhome has continued to demonstrate positive energy performance. In addition to the building having no net energy consumption, the building also provides 20% additional power back to the grid. This outstanding accomplishment earned ZETA Communities a LEED for Homes Platinum Rating, the 2009 Green Builder of the Year grand award, the PCBC Gold Nugget Award for Net Zero Energy, and the AIA San Francisco Energy and Sustainability Merit Award.

# **Green Building Features**

# Site Design & Community

- Urban infill project near frequent public transportation
- Site orientation provides for natural ventilation and lighting as well as passive solar design

# **Resource Conservation**

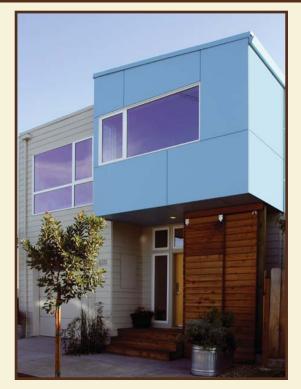
- FSC certified and engineered lumber
- Efficient building framing
- Locally produced artisan ceramic tiles
- 100% recycled glass and cement composite counter tops
- Salvageable and recycled materials

# Water Conservation

- Drought tolerant landscaping
- Low flow plumbing fixtures

# **Indoor Air Quality**

- Installation of MERV-13 air filters
- Low and zero VOC interior and exterior paint and finishes
- Mold and moisture intrusion prevention, including rain screen siding system
- Whole house fresh air system



# Residential New Construction

610 Lancaster Street
Oakland CA

GreenPoint
Rated-New Home
Program, LEED
Platinum Certified &
Energy Star
Certification

Recognition per City Council Resolution 83593

# City of Oakland

# LANCASTER STREET

# **Energy Efficiency**

- Automated energy controller
- Thermal storage conditioned basement
- Ultra efficient building envelop including roof, walls, exterior, floors and windows
- Wastewater heat recovery system
- High efficiency lighting
- EnergyStar appliances
- Ongoing building testing

# Environmental Savings at a Glance

- Installed a photovoltaic system that supplies 100% of the energy needed for the building and produces an extra 20% of energy back to the power grid.
- Reduced overall water consumption for irrigation by at least 45%.

"This innovative live/work townhome in Jingletown was designed and is monitored in partnership with the DOE. It has outperformed expectations by producing 20% more energy than it uses in a year, saving its residents money while conserving natural resources."

Sarah Sorelle ZETA Communities











# **Project Team**

# Developer:

ZETA Communities, 1550 Bryant Street, Suite 855, San Francisco, CA, 94103

# Architecture:

DSA Architects, 1107 Virginia Street, Berkeley, CA 94702

### **General Contractor:**

Bill Malpas, 65 Northgate Ave., Berkeley, CA 94708

# Engineering:

Tipping Mar, 1906 Shattuck Ave., Berkeley, CA 94704

# **Energy Consulting:**

Building Sciences Corp, 30 Forest Street, Somerville, MA 02143



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