

East Bay Breakfast Tour: StopWaste.Org LEED Platinum in Downtown Oakland

Several years ago, StopWaste.Org purchased a 2-Story, 14,000 square foot building at 1537 Webster Street in Downtown Oakland. The building was formerly used for light industrial and manufacturing, mixed with office space. The organization's mission was to use extensive renovation to transform the building into an energy-efficient, eco-friendly workplace for its 31-person staff and to create a showplace for green building. "We wanted to design a building that teaches," said Wes Sullens, Program Manager of StopWaste.Org.

Working with a \$6 million budget, StopWaste.Org, which is the Alameda County Waste Management Authority and the Alameda County Source Reduction and Recycling Board operating as one public agency, was committed to attaining Leadership in Energy and Environmental Design (LEED) Silver certification. Halfway through the project, the organization realized that the building was on track to surpass Silver certification standards and that Platinum certification was not far out of reach. For just 2 percent over the project's total budget, 1537 Webster Street became the first LEED-NC v. 2.2 Platinum renovation project in the United States.

The Numbers:

- \$6 million budget.
- 2-Story, 14,000 square foot building formerly used for light industrial and manufacturing, mixed with office space.
- At least 95 percent of the building's original structural elements, including exterior walls, roof, floors, concrete columns and steel beams were preserved.
- 75 percent of the construction and demolition debris was recycled, instead of sending it to landfills.
- For an extra \$80,000-under 2% of the project's total budget-the building rose from LEED Silver certification to LEED Platinum.

Sample of Green Features at 1537 Webster Street:

- 5.2-kilowatt photovoltaic system that meets at least 10 percent of the building's electricity demands.
- All new concrete includes 15 to 40 percent flyash, a recycled waste product.
- High-efficiency HVAC system that incorporates carbon dioxide-based sensors within the building to trigger the system to supply additional fresh air based on additional people.
- Installation of a "cool roof"-a custom-fabricated white, single-ply thermoplastic membrane that reflects the sun's heat away from the building.
- 40 percent reduction in indoor water use compared to conventional buildings by installing dual-flush toilets, a waterless urinal, and low-flow faucets.
- Permeable paving materials in garden to allow rainwater to filter into the ground and recharge the groundwater.
- Estimated overall energy savings exceeding 40 percent compared to a similar, conventionally-built building.