

AFTER-SCHOOL GREEN

The Bill Lewis Teen Center gets a green make-over



In early 2000, an aging recreation facility in Albany, California was rejuvenated by a green retrofit and now houses a thriving after-school center for junior high school students. The Bill Lewis Teen Center, which offers drop-in activities, trips, sports activities and homework assistance, is located on a 3.5-acre city park. The building, which consists of three portable trailers joined together,

was gutted and the floor plan altered to make the interior more roomy and useful. The renovation included significant cosmetic and energy efficiency improvements. A \$50,000 grant from StopWaste.Org helped the City of Albany incorporate green building principles into the project.

The result is a more comfortable, attractive and environmentally friendly center for teens, staff and the community. "We have a good program here but the building itself didn't reflect that," says recreation supervisor Jeremy Allen. "The renovation has helped us market the program and we've even seen an improvement in attendance."

■ What Makes it Green ■

CONSTRUCTION WASTE REDUCTION

Although construction and demolition waste isn't as big of an issue with smaller remodeling projects as it is with new construction or major renovations, small projects still offer opportunities to reduce waste. The project team developed and implemented a Construction Waste Management Plan to address this issue, and recycled more than 50% of their waste. (For information about reusing and recycling construction, demolition and landscaping materials in Alameda County, download the Builders' Guide to Reuse and Recycling, available for free from www.StopWaste.Org).

ENVIRONMENTAL PREFERABLE MATERIALS

The run-down building was rejuvenated with materials selected to provide better indoor air quality and last a long time. Interior surfaces were painted with low-VOC paints. VOCs, or volatile organic compounds, are strong-smelling chemicals that evaporate from paint as it dries, sometimes causing headaches, respiratory discomfort or other symptoms for the painters and other people in the building. VOCs can also contribute to the formation of smog outside.

FAST FACTS

COST
\$128,522

LOCATION
900 Buchanan Street
Albany, CA

BUILDING TYPE
Modular Trailer

BUILDING SIZE
1,440 sq. ft.

TARGET POPULATION
Local junior high students

COMPLETION DATE
May 2002

OWNER/DEVELOPER
City of Albany

ARCHITECT
Todd Jersey Architecture
Berkeley, CA
(510) 524-5666

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The building exterior was painted with recycled paint, which keeps paint out of landfills and avoids the need to use energy and other resources to produce new paint. Recycled paint manufacturers collect unwanted paint from household paint recycling centers and from leftovers in the manufacturing process. These are consolidated with virgin paints to maintain a consistent quality and color. Recycled paints are not recommended indoors because they contain VOCs.

The building's old vinyl flooring was replaced with natural linoleum. Linoleum is made of renewable resources, including pine resin, sawdust, linseed oil, natural pigments and jute. As an added advantage, natural linoleum is typically more durable than vinyl, often lasting two to three times as long. But after five years of rough use by the center's 11 to 15 year olds, "the linoleum is wearing through in areas where we have heavy traffic," Allen says. He notes that the damage might have been avoided if the custodial workers had followed the manufacturer's directions for cleaning and periodically refinishing the linoleum.

Deteriorating acoustic ceiling tiles were replaced with new tiles containing more than 50% recycled content derived from reclaimed ceiling tiles. Using new tiles with recycled content helps keep waste out of landfills.

The center expanded its meeting space by constructing a deck on the building's west side. Made of recycled plastic lumber, the deck provides a comfortable outdoor space where students can hang out, as well as room for messy activities such as painting and other craftwork. "The deck and the new front porch really increased the feeling of spaciousness," says Allen. "It's like having two more rooms." The recycled plastic lumber requires little maintenance and has a long life span, reducing future construction waste caused by deck replacement.

ENERGY & CLIMATE CHANGE

Making the center more comfortable and energy efficient was a major priority for the project team. The old structure had no insulation, and air leaked in around poorly sealed doors and windows. Heat was provided by three electric baseboard units, which, besides being inefficient, didn't adequately heat the space.

To improve the building's energy efficiency, the project team targeted both the building's structure and its systems. To help keep the building cooler in summer and warmer in the winter, the single-pane, aluminum-frame windows were replaced with double-pane, low-e windows with vinyl frames. Weatherstripping and caulking made the building more airtight. After tightening up the building, the old electric baseboard heaters were replaced with a new gas furnace system. Inefficient incandescent lights were replaced with energy-saving compact fluorescents and T8 fluorescent lamps in the common area and restrooms, resulting in significant energy savings.

GREEN at a GLANCE

ENERGY EFFICIENCY

- Double-pane, low-e, vinyl-frame windows (Anderson)
- Double-pane glass exterior doors
- Walls and ceiling insulated (Johns Manville fiberglass batts)
- Weatherstripping and caulking
- Fluorescent lighting in common area and restrooms
- ENERGY STAR® ceiling fan (Panasonic)
- Inefficient, ineffective electric baseboard heaters replaced with gas furnace

RESOURCE CONSERVATION

- 50% of construction waste was recycled
- Recycled flyash in concrete
- Recycled content exterior paint
- Recycled content acoustic ceiling tiles (Armstrong Ultima)
- Linoleum flooring (Marmoleum)
- Recycled plastic lumber (Nexwood)

INDOOR ENVIRONMENTAL QUALITY

- Low-VOC interior paint (Benjamin Moore Eco Spec)
- Skylights for daylighting
- Insulation with no added formaldehyde (Johns Manville)