

OAKLAND NOODLE FACTORY

*Rehabbed Work/Live Lofts Combine
Affordability and Sustainability*



Working artists and artisans

elbowed out of the San Francisco real estate market have historically looked across the bay for affordable studios, performance space and housing. But in East Bay

cities like Oakland, reasonably priced properties suitable for artists with low incomes are growing harder to come by. Although Bay Area real estate prices have dropped from their highs of a few years back, they remain out of reach for many of the artists and artisans whose incomes have been squeezed by the economic downturn.

“The Bay Area is world renowned for its cultural community,” said Ian Winters, executive director of the Northern California Land Trust, a Berkeley-based nonprofit housing developer. “If those people can no longer afford to both live and work here, that really changes the community.”

To help address the chronic shortage of work and performance space, NCLT recently renovated a rundown former noodle factory in West Oakland that had been illegally converted into residential and events space. The newly rehabbed 19,000-square-foot building now houses 11 work/live condos for low-income artist and craft-worker households, as well as a performing arts center with rehearsal space and a 90-seat theater for music, film, theater, dance and other events. To ensure the homes will remain permanently affordable, NCLT used the community land trust model, establishing a nonprofit corporation that retains ownership of the land underneath the Noodle Factory while the residents own (or lease-to-own) the condos on top of the land.

COST

\$4.9 million

LOCATION

1255 26th Street
Oakland, California

PARCEL SIZE

.19 acres

BUILDING SIZE

19,000 sq. ft.

BUILDING TYPE

Condominiums and arts center

COMPLETION DATE

Spring 2009

OWNER/DEVELOPER

Noodle Factory CLT Homes, LLC

ARCHITECT

Van Mechelen Architects
Berkeley, California

GENERAL CONTRACTOR

Tom Dannenberg Co.
Oakland, California

GREENPOINT RATER

KEMA Services, Inc.
Oakland, California

CONTACT FOR MORE INFO

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Although funding setbacks delayed construction, Northern California Land Trust remained committed to making the project as green as possible. “We focused not necessarily on the sexiest green technologies but on keeping spaces and finishes really simple and easy to maintain over the long term,” said Winters. StopWaste.Org provided NCLT with green design assistance and a \$30,000 grant to carry out waste reduction strategies during the building’s construction and ongoing operations. The Noodle Factory condos have earned the GreenPoint Rated label, certifying that the homes exceed code requirements for health, energy and environmental performance.

■ What Makes It Green ■

ENERGY & CLIMATE CHANGE

Innovative Solar Financing. When the Northern California Land Trust set out to rehab the Noodle Factory, good insulation, natural lighting and ventilation, and energy-efficient heating and water heating systems were top priorities. To further shrink the development’s carbon footprint, NCLT wanted to install a photovoltaic system that would offset as much as 75 percent of the residents’ electricity use. Financing the PV system proved difficult, however, in part because nonprofit organizations can’t take advantage of depreciation benefits and federal tax credits for solar power that are available to for-profit corporations. “As a nonprofit, you shouldn’t get penalized for doing something good,” Winters said, but “we were ready to give up on solar panels because of the cost.”



PHOTOGRAPH BY NCLT

GREEN at a GLANCE

PLANNING & DESIGN

- Inner-city infill location served by public transit; no parking provided on site
- Outdoor bicycle racks installed; indoor bicycle storage available for residents
- Adaptive reuse of commercial building into high density, mixed-use development with work/live condos and public events space
- Building type (lofts designated for working artists) encourages home-based occupations, reducing commuting travel
- Laminated security and sound-control glass used in ground-floor windows instead of security bars
- Designed for abundant daylighting, particularly in second-floor units
- Downpayment assistance available for qualifying low-income buyers

SITE

- 62% of construction and demolition debris diverted from landfills
- Construction indoor air quality plan followed
- Cool roof products used (shingles on sloped roof and white thermoplastic polyolefin (TPO) membrane on low-slope roof)
- Limited landscaping; sidewalk strips planted with California native or low-water species; no irrigation system installed
- Exterior light fixtures selected and placed to reduce light pollution and trespass

STRUCTURE

- Extra acoustic insulation installed between units
- 45% flyash and slag in concrete
- Engineered lumber used for floor and ceiling joists
- 80% of wood used for dimensional lumber and panel products (OSB and plywood) certified by Forest Stewardship Council
- Durable exterior materials (metal siding, fiber-cement siding, shingle roof with 40-year warranty, fiberglass window frames) minimize long-term maintenance
- No-added formaldehyde fiberglass insulation and recycled-content cellulose insulation used

GREEN at a GLANCE

SYSTEMS

- Low-flow showerheads (< 2.0 gpm), kitchen faucets (< 2.0 gpm), and bathroom faucets (< 1.5 gpm)
- High efficiency toilets (< 1.3 gpf) in condos and urinals (< 0.5 gpf) in public areas
- Hydronic radiant underfloor heating installed with 95% efficient central boiler
- Air conditioning system in public spaces uses non-HCFC refrigerants
- Energy Star bathroom fans vented to the outside
- Operable windows positioned for cross-ventilation throughout building
- Pre-plumbed for solar hot water
- 28-kW photovoltaic system sized to provide about 75% of electricity used in condos and some of electricity used in public areas
- Exceeds Title 24 by 20% for condos and by 24% for public areas



PHOTOGRAPH BY NCLT

Rather than throwing in the towel, NCLT set up a new entity, the Nonprofit Solar Alliance, which bundled the PV purchases planned for the Noodle Factory and four other local nonprofit groups to create an investment package large enough to attract third-party investors. The result? The Noodle Factory got a PV system without a huge capital outlay, and the residents pay monthly electricity bills to the Nonprofit Solar Alliance at lower rates than they would have paid for electricity purchased directly from the local utility. In seven or eight years, after the investors have taken full advantage of the tax credits and depreciation, the Noodle Factory's owners will own the PV system outright.

"We created this structure that we're sure works and results in actual power being produced for low income and nonprofit projects," said Winters. "We're very much looking forward to doing it again on a much larger scale."

RECYCLING & MATERIALS CONSERVATION

Building Reuse. One of the greenest aspects of the Noodle Factory project was "being able to retain a pretty large portion of the building's overall structural system," said Winters. Although some of the structure had to be torn down because it was unsound or unsuitable for the building's new uses, much of it was retained, including the foundation, the original factory slab, all the structural framing and a number of the demising walls on the first floor, and the second-floor deck. The engineering and construction team put up some resistance, maintaining that it would be easier to tear down the building than try to improve the existing structure, Winters said. But building green often means not taking the easy road. "It would have been an awful lot of rubble to generate," he said.

Material Reuse & Recycling. Much of the lumber pulled out of the original building's second-floor walls was reused on site as form boards or to build partition walls. All told, about 62 percent of the demolition and construction materials were diverted from the landfill, either through reuse or recycling.

IMPROVED INDOOR ENVIRONMENTAL QUALITY

Radiant Floor Heating. A very high efficiency central boiler serves both the domestic hot water system and the radiant floor heating systems in the work/live units. Although it can sometimes be tricky to retrofit buildings for underfloor heating, in this case the cost was similar to installing forced air furnaces in each of the 11 units, Winters said. "We were tearing up the floors anyway," he said, "and we had to pour concrete slabs for sound control between the units." Combining functions and creating a floor that blocks sound transmission, provides comfortable, draft-free heating, and serves as a hard-wearing, low-maintenance finish floor "made things a whole lot cheaper," he said. It also meant they didn't need to install fuel-burning equipment in the living spaces, which helps protect indoor air quality.

Natural Ventilation and Daylighting. Architect Greg Van Mechelen and the project team put considerable effort into designing the condos for natural light and ventilation. Even the rehearsal and performance spaces receive plenty of natural ventilation, with mechanical cooling and ventilation available when occupancy levels warrant their use. “When you open the windows, there’s tremendous cross ventilation” in the public spaces, said Winters. “Given that it’s Oakland and more or less in the fog belt, most of the time when you have three or four people in space for things like rehearsals, it’s perfectly comfortable with just the windows open.” Despite the building being hemmed in by neighboring properties, all the second-floor units and many of the first-floor units receive abundant natural light, which reduces electric lighting energy use and provides good quality illumination for working. Although the units typically have windows on only one side, a clerestory running the length of the building and mezzanine lofts inside the second-floor units help get light deeper into the space, Winters said.

GREEN at a GLANCE

FINISHES & FURNISHINGS

- Zero-VOC paints and wood finishes and low-VOC construction adhesives used
- Recycled-content materials include metal siding, exterior plastic-lumber decks and cellulose ceiling insulation
- 75% of flooring is exposed concrete
- Built-in recycling bins installed in each unit
- Fluorescent lighting installed throughout building

OPERATIONS & MAINTENANCE

- O&M manuals developed for building staff and occupants
- Green building educational information available in lobby

