

Achieving **LEED**

It's nothing but the best for California's health agency. Here, employees enjoy an abundance of natural light, state-of-the-art indoor air quality systems and pollutant controls, and a commitment to green cleaning practices and products.

PROJECT: California Dept. of Health Services, Building P

LOCATION: Richmond, Calif.

OWNER: State of California

ARCHITECT: STUDIOS Architecture, San Francisco

ENGINEERING: Manzetti Nash Lipsey Burch, San Francisco

LEED AP: Sustainable Design Resources, San Francisco

SIZE: 202,500 sq. ft.

TOTAL BUDGET/COST: \$33.6 million

DATE COMPLETED: March 2005


LEED RATING: Silver (LEED-EB, v1.0)

PHOTOGRAPHY: Tim Griffith



CALIFORNIA DEPT. OF PUBLIC HEALTH: PRODUCTS	
Product/Mfr./Brand:	LEED CREDIT:
<p>BICYCLE SHELTER: Tolar Manufacturing Company Model: Euro Series</p> <p>Measuring 36 ft. x 12 ft., this durable and attractive bike shelter encourages and supports alternative transportation. Solar lighting and efficient LED illumination options are available.</p>	SS 3.2 (alternative transportation, bicycle storage)
<p>1 EXTERIOR LIGHTING: Gardco Model: Form Ten Square EH/H LED</p> <p>Innovative full cutoff luminaire now available with energy-efficient LED lamps to further reduce ongoing costs and light pollution. Available in 14-in. pole- and wall-mounted configurations, extruded (EH) or formed (H).</p>	SS 7 (light pollution reduction)
<p>HANDS-FREE FAUCET: Sloan Valve Model: Optima Plus EBF-85</p> <p>Battery-powered faucets operate by an adaptive infrared sensor that is linked to the faucet by a fiber optic cable. The faucet reduces water-use and improves handwashing health. Standard flow rate of 0.5 gpm/1.9 Lpm.</p>	WE 3.1 (water use reduction)
<p>DUAL FLUSH FLUSHOMETER: Sloan Valve Model: WES 212 retrofit kit</p> <p>Available in a retrofit kit or for new construction, the manual dual-flush flushometer provides regular 1.6 gpf flush or reduced flush of 1.1 gpf. Antimicrobial coating on handle lasts for the life of the product.</p>	WE 3.1 (water use reduction)





LEED-EB V.1
 Rating: Silver
 Awarded: June 2011

CALIFORNIA DEPT. OF HEALTH SERVICES, BUILDING P

46 Points Achieved **Possible Points 85**

Certified: 32-39 Silver: 40-47 Gold: 48-63 Platinum: 64-85

7 Sustainable Sites (SS) Possible Points **14**

Alternative transportation, including accommodations for alternative-fuel vehicles, combined with a stormwater management plan and light pollution reduction to earn these credits.

1 Water Efficiency (WE) Possible Points **5**

The use of hands-free, automatic and low-flow plumbing fixtures significantly reduced potable water demand.

11 Energy & Atmosphere (EA) Possible Points **23**

The building features optimized energy performance, and also earned credits for building systems maintenance and ozone protection measures.

8 Materials & Resources (MR) Possible Points **16**

A construction and demolition waste management plan diverted a high percentage of material away from landfills, while the use of sustainable cleaning products, occupant recycling, and toxic material source reduction (light bulbs) also earned points.

16 Indoor Environmental Quality (IEQ) Possible Points **22**

A commitment to indoor air quality included outdoor air delivery monitoring, pollutant source management during construction and after occupancy, improved daylighting and views and a comprehensive green cleaning protocol all contributed credits.

3 Innovation & Design Process Possible Points **5**

Bldg. P earned extra points for its green cleaning plan, low-mercury lighting specs and commissioning a LEED-AP from the start.

SETTING A STANDARD

"The design for the Dept. of Health Services office building conveys the public agency's commitment to innovation, while continuing traditional civic typologies," according to the architect. The building's significant footprint and cost-conscious yet durable concrete walls are minimized by sunshades and louvers, an exposed staircase, expanses of glass, inset and cantilevered balconies, and splashes of bright color. An entry courtyard, cooled by turf grass, dotted with seating, and high-

lighted by a sculpture garden, also helps tone down the building's bulk and provides a comfortable oasis for visitors and employees. The central atrium harvests natural light into the building and serves as a gathering space—an indoor complement to the courtyard. The state of California's alternative sustainable design program, "Energy Efficiency and Sustainable Building Measures," used the building's design as a demo project to inspire and teach sustainable civic architecture.



SAFE HAVEN

Buildings finished in 2005 don't usually wait six years to apply for LEED certification; as fast-paced as the sustainability standards have been in the last half-decade, it may not even qualify. But Building P of the California Department of Health Services in Richmond was designed and built ahead of its time ... so much so that it applied for and received a Silver rating under the LEED Existing Buildings protocol earlier this year after six years of occupancy and no recent upgrades or remodels to bring it up to snuff. Though originally designed and built to last

and save energy and other resources, the LEED-EB designation speaks primarily to efforts of STUDIOS, the architectural firm, and Sustainable Design Resources, the LEED-AP on the project, to create and maintain a healthy and safe workplace environment for the agency's 175 employees and steady stream of visitors through the 202,500-sq.-ft. building. A comprehensive commitment to green cleaning practices and products is a model for others to follow, employing a variety of market-available yet seldom-specified solutions to that end.

CALIFORNIA DEPT. OF PUBLIC HEALTH: PRODUCTS

Product/Mfr./Brand:	LEED CREDIT:
ENERGY MANAGEMENT: Verdiem Model: Surveyor Energy management system accurately measures IT device utilization, enforces policies for greater IT efficiency, and analyzes results to optimize energy savings.	EA 1 (optimize energy performance)
LIGHTING: Philips Model: ALTO II Plus These T8, 32-watt extra-long-life lamps offer high-quality light output and reduce lighting energy demand. They also help reduce the risk and health hazards of toxic mercury pollution.	MR 6 (additional toxic material reduction, mercury in light bulbs); IUOP 1.4
CFL LAMPS: Sylvania Model: Dulux T/E/IN 835 Triple amalgam compact fluorescent lamps achieve 90% lumen output, offer a 12,000-hour life, and operate on various electronic ballasts. Low mercury risk.	MR 6 additional toxic material reduction, mercury in light bulbs; IUOP 1.4
FLOOR STRIPPER: Buckeye Intl. Model: Penetrate Green Seal-certified floor stripper strips polymer floor finishes, acrylic seals, and water-based polyurethanes with no noxious odors.	MR 4.1 - 4.3 (sustainable cleaning products and materials)
GLASS CLEANER: Ramsey Model: Sky Light Green Seal-certified industrial glass and surface cleaner delivers a mild fragrance and no VOC emissions.	MR 4.1 - 4.3 (sustainable cleaning products and materials)
PRESSURE TRANSDUCER: Setra Model: 264 Low differential pressure transducer provides accurate measurement of pressures and flows for proper building pressurization and air flow control.	IEQ 1 (outdoor air delivery monitoring)
BACKPACK VACUUM: Pro-Team Model: Quarter Vac Lightweight (9 lbs.) and quiet (68 decibels) backpack vacuum includes a 1½-in. static-dissipating vacuum hose, 50-ft. extension cord and two Intercept Micro Filters.	IEQ 10.6 (green cleaning, low environmental impact cleaning equipment policy)
WINDOW SHADES: Phifer Model: SheerWeave Interior sun control fabric offers light-filtering qualities that diffuse light, reduces glare and helps control solar heat gain. Only requires regular dusting/vacuuming to maintain performance.	IEQ 10.6 (green cleaning, low environmental impact cleaning equipment policy)

BICYCLE SHELTER: Tolar Manufacturing Company. tolarmfg.com or Circle 464

EXTERIOR LIGHTING: Gardco. sitelighting.com or Circle 463

HANDS-FREE FAUCET: Sloan Valve. sloanvalve.com or Circle 462

DUAL-FLUSH FLUSHOMETER: Sloan Valve. sloanvalve.com or Circle 461

ENERGY MANAGEMENT SYSTEM: Verdiem. verdiem.com or Circle 460

LIGHTING: Philips. philips.com or Circle 459

CFL LAMPS: Sylvania. sylvania.com or Circle 458

FLOOR STRIPPER: Buckeye International. buckeyeinternational.com or Circle 457

GLASS CLEANER: Ramsey products. drillspot.com or Circle 456

PRESSURE TRANSDUCER: Setra Sensing Solutions. setra.com or Circle 455

BACKPACK VACUUM: Pro-Team. pro-team.com or Circle 454

WINDOW SHADES: Phifer. phifer.com or Circle 453