



**ARCHITECTURAL ENERGY
CORPORATION**
Integrated Engineered Solutions

Donald Bren School of Environmental Science and Management University of California

Santa Barbara, California



Corporate Offices:
2540 Frontier Avenue, Suite 201
Boulder, Colorado 80301
303 444 4149 Telephone
303 444 4304 Fax

San Francisco Office:
142 Minna Street
San Francisco, California 94105
415 957 1977 Telephone
415 957 1381 Fax

Chicago Office:
955 North Lively Boulevard
Wood Dale, Illinois 60191
630 860 1439 Telephone
630 860 1442 Fax

Southeast Regional Office:
2354 Wimbledon Circle
Franklin, Tennessee 37069
615 599 5368 Telephone
303 444 4304 Fax

www.archenergy.com

One of the first twelve LEED Certified buildings, the Donald Bren School of Environmental Science and Management is an 85,000 square foot, multi-use facility on the University of California, Santa Barbara campus. The Bren School is highly sustainable, receiving the prestigious Platinum LEED rating from the United States Green Building Council, the highest rating possible. In keeping with the school's mission of teaching interdisciplinary approaches to environmental problem-solving, the building was designed based on energy efficiency, daylighting, shading, and extensive use of recycled content materials. Some of the more unique sustainable features include: aggressive daylighting of all classroom, laboratory and office spaces; operable windows with a mechanical interlock; an ENERGY STAR high albedo roof to reflect solar heat and reduce the building's cooling load footprint reduction; and one-hour informational tours.

Project Information: Donald Bren School

Project Type	University Laboratory, Classrooms, and Faculty Offices
Client	Donald Bren School of Environmental Science and Management University of California Santa Barbara, California
Design Team	<i>Architect:</i> Zimmer Gunsul Frasca Los Angeles, California <i>Energy/Sustainable Design Consultant:</i> Architectural Energy Corporation Boulder, Colorado
Size	84,672 ft ²
Location	Santa Barbara, California
Year Constructed / Occupied	1999-2002 / 2002
Sustainable Design Features	<p>Energy efficiency measures resulted in energy savings of 49 percent compared to a minimally-compliant ASHRAE 90.1-1999 building.</p> <p>Building materials such as fly-ash mix used in the concrete; 80 percent recycled structural steel (mainly from cars); the steel reinforcement is 80-100% recycled content; fireproofing material made of gypsum, polystyrene, common cellulose, and recycled newsprint; and 30 percent recycled content for the steel deck.</p> <p>Alternative energy resources provide 25 percent (125kW) of the building's energy needs, and are met by grid power from landfill methane gas and roof-mounted photovoltaic panels, which supply 7 percent of the overall energy needed.</p> <p>Operable windows with mechanical interlocks, which sense when windows are opened and respond by turning off the HVAC system.</p> <p>Low environmental impact materials used in flooring, cabinetry and other finish materials.</p> <p>High water efficiency practices, such as reclaimed water used for toilets and irrigation, and waterless urinals.</p>



