

Sustainable Design

Environmental Responsibility

Environmentally responsible design reduces operating costs, increases occupant productivity, and limits health risk liability. Its realization is dependent upon an integrated, multidisciplinary design approach that redefines issues of team formation, evaluation criteria, design process, and design tools. The goal pursued by our team is to integrate sustainable design while approaching zero net first cost impact on the budget.

Currently the USGBC's LEED® rating system is the primary means of assessing the environmental performance of buildings in the United States, including laboratories. Flad Architects has been a member of the U.S. Green Building Council (USGBC) since 1994 and played a role in the development of the original LEED Version 1.0 Building Rating System in 1996-1998. In 1998 the firm participated in the LEED Pilot Program to beta test the new rating system with its Pharmacia project. Pharmacia's life science building became the first R&D laboratory facility to achieve LEED certification and was awarded a LEED Gold rating in 2001 and received a Special Mention in R&D Magazine's Lab of the Year competition in 2001.

In addition, Flad is a member of the team to draft the Labs21 EPC (Environmental Performance Criteria) or "LEED for Labs." Our approach to sustainable design, particularly with respect to USGBC's LEED rating system (and Labs21 if applicable), focuses on evaluation of a series of energy conservation and architectural responses varying proportionally with the client's desire for demonstration capabilities.

Our team's approach to sustainable design focuses on building performance related to a comprehensive set of sustainable concepts addressing not only energy issues, but also indoor environmental quality issues (temperature/humidity levels, day lighting strategies, access to views, etc.); water use both inside and outside, and the environmental impacts of construction materials including environmental construction management.

Our approach involves a collaborative work effort between the client and the design team to ensure that the concepts developed are consistent with the client's goals and operating philosophies. A core group of LEED professionals within the design and construction teams will actively manage issues relating to sustainability on the project. The client's participation in this sustainability group is a critical factor in its success.

The chart on the right demonstrates our project experience in sustainable design.



Flad's sustainable design approach involves a collaborative work effort to ensure that the concepts developed are consistent with the client's goals. ■

Project Experience	LEED Certification	Size (sf)
Affinity Health System, Pediatric Clinic	Certified	12,000
Affinity Health System, Prototype Clinic	Certified	19,000
Affiliated Engineers, Inc., Office Facility	Certified	48,000
H. Lee Moffitt Cancer Research Center, Master Plan	Silver - Under Consideration	178,000
Harley-Davidson, Product Research Center	Certified	150,000
Indiana University, Multidisciplinary Science Building II	Seeking Silver Certification	140,000
Johnson Diversey (JDI), Headquarters	Gold	275,000
Johnson & Johnson, Chemistry/Biology Lab Expansion	Seeking Gold Certification	260,000
Kettle Foods, Production Facility	Gold	74,000
New York State's Dept of Environmental Conservation, Alternate Fuel Vehicle Research Lab	Seeking Gold Certification	74,000
Oak Ridge National Laboratory, Chemistry Facility	Seeking Gold Certification	150,000
Pacific Northwest National Laboratory, Physical Science Facility	Seeking Gold Certification	210,000
Pharmacia Corporation, Life Science Center	Gold	176,000
Shands at the University of Florida, Bed Tower	Seeking Silver Certification	500,000
State of Connecticut, Department of Public Health Laboratory	Silver - Under Consideration	100,000
State University of New York (SUNY), Advanced Energy Research & Technology Center	Seeking Platinum Certification	50,000
USAMRICD, Replacement Facility	Seeking Silver Certification	380,000
University of Alberta, Centennial Centre for Interdisciplinary Science	Seeking Silver Certification	563,000
University of North Carolina, Dental Sciences	Seeking Silver Certification	216,000
University of North Carolina, Innovation Center	Seeking Silver Certification	86,000
University of Saskatchewan, Academic Health Sciences	Seeking Silver Certification	16,000