### **UH Green**

Sustainability is important to our students and community. UH Dining Services is committed to implementing programs that make the university greener, like requiring Fair Trade coffee at all coffee shops on campus, encouraging students to dine without a tray and use reusable to-go containers, and growing produce in the community garden on campus. To learn more, visit the University of Houston Office of Sustainability website at: www.uh.edu/af/greenUH.

### U.S. Green Building Council

The U.S. Green Building Council (USGBC) is a 501(c)(3) nonprofit organization committed to a prosperous and sustainable future for our nation through cost-efficient and energy-saving green buildings.

Leadership in Energy and Environmental Design, (LEED) is an internationally recognized green building program. Administered by the U.S. Green Building Council (USGBC). LEED provides building owners and operators with a framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions. LEED is transforming the way built environments are designed, constructed, and operated. Comprehensive and flexible, LEED addresses the entire lifecycle of

### Page and Sustainable Design

Page consistently looks for opportunities to incorporate sustainable strategies into our work. We also believe formal green building certification is important as it creates a credible label for green buildings, stimulates demand for sustainable design, and provides a platform for education on the possibilities of green building.

### Performance by the Numbers

Vegetated Open Space		80%
Water Conservation		20%
Energy Optimization		32%
Construction Waste Management		85%
Access to Daylight and Views		79%
Recycled Content Materials		33%
Regional Materials		32%

### **Project Information**

Owner:	University of Houston Facilities Planning and	
	Construction	
Building Type:	Dining	
Building Size:	24,975 square feet	
Project has achieved LEED Silver Certification.		



### **Project Team**

Owner: Architecture/Engineering: Structural Engineering: Civil Engineering: Landscape Architecture: LEED Consulting: Commissioning: Construction: Kitchen consultants: Data/Security: University of Houston Page Haynes Whaley Associates, Inc. Walter P. Moore Clark Condon Associates, Inc. Page Southerland Page, LLP Sebesta Blomberg SpawGlass, Inc. Worrell Design Group 4b Technology Group



### Energy Optimization

Cougar Woods Dining is both beautiful and hard working. Because commercial buildings account for 70% of all electricity consumption in the U.S., Cougar Woods Dining is designed with energy conservation in mind. Deep roof overhangs, high performance glass, solar shading devices, efficient light fixtures, high performance HVAC systems, high efficiency kitchen equipment and variable frequency exhaust fume hoods in the kitchen all help to save energy. In total, the building saves 32% energy compared to a conventional

# Site Location

Constructed on a previously undeveloped tract at the edge of the campus, the building is located to maximize retention of the existing old growth trees. It provides a focal point for student life adjacent to major pedestrian pathways, and serves as a "bridge" from the original student housing zone to surrounding housing sites including Cougar Place.

The Campus Community Garden, located immediately adjacent to Cougar Woods Dining, enriches our learning about the natural world, and educates our community about sustainable choices. The Garden was created as part of the university's sustainability agenda as an initiative of the Campus Sustainability Task Force. The Task Force is composed of students, faculty and staff representatives.



Poor indoor air quality can cause healthy building occupants to experience headaches, suffer from allergies, feel tired or generally run down. To help combat these problems and maintain healthy indoor air quality, high efficiency air filters are used throughout. An enhanced interior environment also connects people to the outdoors. 79% of the space offers access to daylight and views. Temperature and humidity ranges are also carefully monitored to enhance thermal comfort while inside.

## Water Conservation

There are over 335 million cubic miles of water on Earth, but less than 2% of all the Earth's water is potable. Water conservation is an priority on campus, and the use of high efficiency plumbing fixtures in the restrooms of Cougar Woods Dining play their part in helping to conserve water. On average, the building saves over 20% of water than a conventional building of the same type. That's equal to about 46,000 gallons of water every year!

### Materials Stewardship

A great deal of attention was paid to the selection of materials for the building. Paint, carpet, flooring, sealants and wood were selected with low or no VOCs, Volatile Organic Compounds harmful to indoor air quality and to human health. 33% of all materials in the building have recycled content and 32% of materials were extracted and harvested within 500 miles of the campus.

Construction activities also focused on materials stewardship. Knowing that the construction of buildings accounts for up to 65% of all waste going into landfills in the United States, over 85% of all Construction Waste generated from the building's construction was diverted from the landfill and sent to local recycling centers instead.

## Site Design

The site for the building was open, but underutilized. The site design reduces the risk of localized flooding by increasing the absorption rate of the site, which is a function of the extent of impervious hardscape; and 80% of the building site remains open and vegetated. Light colored reflective paving materials work with the extensive landscaping to reduce the urban heat island effect.



With seating for 600 people, the building is designed as a glass pavilion nestled in the trees looking out toward the long-standing Cullen Woods and campus gardens. The shed roof opens up the dining areas to views of the campus and creates a distinctive architectural form, as well as an expressive interior space. Its north face allows for extensive transparency while solid masonry blocks on the south offer protection from the sun. While the materials of brick, glass and precast shell limestone recall the existing palette of the UH campus, the three brick colors already found on many of the campus buildings offered opportunities for distinctive patterning. Due to the small scale and unique student-life program of the building, the design of the dining pavilion presents a brick pattern which is different from most others on campus.