

50%

of existing building reused

95%

of project waste diverted from landfill

34%

recycled content material used

University Village Northwest Building Expansion Seattle, Washington

Completion: June 2008
Project Size: 17,500 sf
Owner: University Village, LP
Architecture: GGLO
Contractor: Lease Crutcher Lewis
Civil Engineer: KPFF
Structural Engineer: Magnusson Klemencic Associates
Commissioning Agent: Glumac
Electrical Engineer: Sparling
Electrical Contractor: Clinton Electrical
Mechanical (Design Build): Merit Mechanical

LEED® Certified



LEED for Core and Shell
Certification awarded July 8, 2009

Total LEED® Points	27
Sustainable Sites	05 of 15
Water Efficiency	00 of 05
Energy & Atmosphere	05 of 14
Materials & Resources	08 of 11
Indoor Environmental Quality	06 of 11
Innovation & Design	03 of 05



SUSTAINABLE DESIGN CASE STUDY

University Village NW Building Expansion

LEED® POINT HIGHLIGHTS	
Sustainable Sites	
SS 2	Dense urban location close to community services
SS 7.2	Reflective roof surface to reduce urban heat island effect
SS 9	Tenant Design and Construction Guidelines created to influence this and future development
Energy and Atmosphere	
EA 1.1	Improved wall insulation, limited glazing area, solar shading with sunscreens, and efficient HVAC systems
EA 5.2	Electrical submetering provides real-time feedback to the tenants and building owners
Materials & Resources	
MR 1.2	50% of existing building reused
MR 2.2	95% of construction waste, 343 tons, diverted from landfill
MR 4.2	34% of material content was recycled
MR 5.2	14% of materials regionally sourced and manufactured
Indoor Environmental Quality	
EQ 3	Construction air quality management plan protected absorptive materials and systems from contamination
EQ 4.1	Low VOC adhesives, sealant, and paints; urea-formaldehyde free composite wood
4.2	
4.4	

Background

The project is located in the University Village lifestyle retail center north of downtown Seattle. University Village is comprised of 13 retail buildings on a 23.5-acre site, with services ranging from general to special-purpose retail, restaurants, childcare, and parking. The project is a redevelopment and second story addition to an existing 1950's-era building, consisting of core and shell construction for future tenant improvements.

A Sustainable Design Catalyst

The project is the first at University Village to pursue LEED® certification, and it is intended to act as a prototype and catalyst for sustainable design in future development at the retail center.

Goals

- Pursue strategies that bring long-term cost savings and are durable and practical to maintain
- Differentiate this project in the marketplace by creating a healthy building environment
- Conserve resources, including energy, water and materials
 - ◆ **Site:** University Village is pedestrian and bicycle-friendly, and has good access to amenities and public transit. The addition of a second story to an existing building increased retail square footage without increasing the building footprint
 - ◆ **Energy:** Reductions in energy demand were achieved with an efficient building envelope and a high-efficiency HVAC system. Envelope improvements exceeding energy code requirements were made in accordance with the City of Seattle's Advanced Buildings Core Performance Guide. Glazing on the south-facing facade was maximized to provide daylight, and sunscreens were employed for shading. Glazing was minimized on other facades to reduce summer heat gain. Heat gain was further reduced with reflective roof coatings, which also reduce the "urban heat island" effect. Electrical submetering systems provide real-time monitoring of electricity consumption, and enable comparisons of actual use to projected use and regional averages
 - ◆ **Materials:** Recycled content materials comprise 34% of the materials by cost. More than 10% of materials were manufactured and harvested locally, and more than 60% of all wood used on the project was FSC certified. Fifty percent of the existing building was reused. More than 95% of the construction and demolition waste was recycled or salvaged
 - ◆ **Indoor Air Quality:** To improve building interior environment, a construction indoor air quality plan was implemented, and low-emitting materials were specified. Construction dust was carefully controlled, and all duct work was protected from construction debris. The HVAC system was designed for maximum flexibility; CO2 sensors provide feedback and air flow is optimized according to occupancy, so that adequate fresh air is always supplied.

