

52%

reduction of potable water for irrigation

96%

of project waste diverted from landfill

26%

of materials regionally manufactured

Alcyone Seattle, Washington

Completion: June 2004
Project Size: 235,600 sf - 161 apartments
Owner: Harbor Properties & Vulcan Partnership
Architecture: GGLO
Interior Design: GGLO
Contractor: Rushforth Taylor Construction
Civil Engineer: Magnusson Klemencic Associates
Structural Engineer: Magnusson Klemencic Associates
Landscape Architecture: Hewitt
Mechanical & Electrical Engineer: Hargis

LEED® Certified



LEED for New Construction
Certification awarded September 25, 2005

Total LEED® Points	27
Sustainable Sites	10 of 14
Water Efficiency	02 of 05
Energy & Atmosphere	01 of 17
Materials & Resources	04 of 13
Indoor Environmental Quality	07 of 15
Innovation & Design	03 of 05



SUSTAINABLE DESIGN CASE STUDY

Alcyone

LEED® POINT SUMMARY	
Sustainable Sites	
SS 2	Dense urban location close to community services
SS 4.1	No car, no problem! A full range of alternative transportation options are available: public transportation; car sharing; secure bicycle storage
SS 4.2	
SS 4.3	
SS 4.4	
SS 5.2	Exceeding Seattle's open space requirements provide amenity space as well as Space Needle views from Cascade Park and access to sunlight at the community's P-Patch across the street
SS 7.1	Eco-roofs and high reflectivity roofing materials improve indoor comfort & reduce heat island effects
SS 7.2	
Water Efficiency	
WE 1.1	Native landscaping utilizing high efficiency drip irrigation and captured rainwater irrigation at roof-top P-patches reduce potable water use by over 50%
WE 3.1	
WE 3.1	25% reduced water use: Low-flow faucets (1 gpm), showerheads & kitchen faucets (2 gpm) conserve water while energy star dishwashers use 25% less water and conserve energy
Energy and Atmosphere	
EA 4	Entire HVAC system contains no ozone depleting refrigerants
Materials & Resources	
MR 2.1	96% of construction waste diverted from landfill
MR 2.2	
MR 4.1	12.5% of materials contain recycled content
MR 5.1	26% of building materials manufactured locally
Indoor Environmental Quality	
EQ 3.2	Construction Management Plan building indoor quality for future tenants after construction
EQ 4.2	Low emitting carpets and low VOC paints
EQ 4.3	
EQ 8.1	Large operable windows provide daylight, expanded views and decrease use of electric lighting
EQ 8.2	

Background

As Washington State's first LEED® Certified, market-rate apartment building, Alcyone's design focused on occupant health and comfort as well as demonstrating the applicability of the LEED® rating system to multi-family projects while balancing costs against benefits.

Better Site Solutions

Almost half of Alcyone's sustainability features can be attributed to site selection and design:

- Selecting a previously developed site and providing a project density more than twice the neighborhood average, reduces pressure on undeveloped land while providing convenient access to work and play
- Structured parking, combined with vegetated and reflective roofing, mitigates the heat island effect
- Exceeding Seattle's open space requirements provide amenity space as well as Space Needle views from Cascade Park and access to sunlight at the community's P-Patch across the street



Conserving Water & Energy

Systems and products were selected for their contribution to water & energy efficiency.

- Energy efficiency was designed to be approximately 20% over Washington's code through the use of: high performance windows (low-e 0.33 u-value), high efficiency central boiler, and exterior insulation over metal framing
- Alcyone is a participant in GGLO's ongoing Building Performance Evaluation of multifamily projects in the Seattle area in order to assess building performance relative to design intention www.gglo.com/insight.aspx

Better Materials & Indoor Environment

Alcyone flats, townhouses, and loft-style live/work unit finishes contribute to a healthier indoor environment while priority was given to material selection:

- 66% recycled content light gauge metal framing increases durability, eliminates shrinkage and reduces demand for virgin materials
- 26% of materials were manufactured locally which reduces negative impacts of transportation and stimulates the local economy
- Carpeting and low VOC paints contribute to improved indoor air quality

Sustainable is Economical

- 2.5% soft cost increase: LEED documentation and commissioning
- 0.14% hard cost increase: Sustainable upgrades like improved window efficiency
- 0.2% overall increase: LEED premium, after incentives, at move-in

