SUSTAINABLE DESIGN CASE STUDY



SUSTAINABLE DESIGN CASE STUDY | George F. Russell Jr. Hall

LEED® CREDIT HIGHLIGHTS	
Sustainable Sites	
SS 2	Dense urban location close to community services
SS 4.1 4.2 4.3	Local bus access, and fuel efficient vehicles encouraged while promoting bicycle and pedestrian activities
SS 5.1 5.2	Over 20% of site is restored habitat and over 30% of site is vegetated open space
SS 7.1 7.2	Over 75% of roof area is vegetated or has high solar reflectance, mitigating heat-island effect
Water Efficiency	
WE 1.1	79% reduction in water use utilizes high-efficiency drip irrigation
WE 3.1 3.2	Low-flow shower heads, dual-flush toilets and waterless urinals
Energy & Atmosphere	
EA 1	Targets over 16% savings of utility costs compared to a conventionally designed building
EA 4	HVAC system contains no ozone depleting refrigerants
Materials & Resources	
MR 2.1 2.2	96% of construction waste diverted from landfill
MR 4.1 4.2	Achieved a 32% recycled content materials ranging from metal framing to flooring materials
MR 5.1 5.2	Over 41% of building materials were harvested and manufactured locally
Indoor Environmental Quality	
EQ 4.1 4.2 4.3	Low VOC emitting adhesives, sealants, paints and carpet
EQ 8.1 8.2	Large floor-to-ceiling windows with operable units provide daylight, views and ventilation

Background

The new George F. Russell Jr. Hall combines below grade parking, street-level retail, three floors of office space & two floors of studio and one-bedroom apartments in a bustling area of the University District adjacent to the University of Washington campus. Previous site conditions consisted of a surface parking lot.

Better Indoor Air Quality

- Low VOC carpet, adhesives, sealants and paints and Green Seal cleaning products keep dangerous chemicals out of the air tenants breathe
- A smoke-free building limits dangerous second-hand cigarette smoke



Greater Natural and Efficient Light

- Efficient lighting is installed to consume less energy and last longer than standard lighting
- Large windows are energy-efficient and fill spaces with natural light enhancing health and productivity

Transportation Choices

- Bicycle storage is available in the building
- Electric car charges can be accessed in the garage
- Vanpool parking and hybrid parking are also available in the garage
- Nearby access to numerous Metro bus routes makes it easy to commute or travel using public transportation

Efficient Energy Use

- 35% of renewable energy was purchased to offset energy used in the building
- All apartments feature Energy Star appliances that cut utility costs and saves environmental resources

Efficient Water Use

- The green roof absorbs storm water to water plantings and filter runoff which reduces pollution of Portage Bay
- Drought resistant plantings reduce the amount of potable water used for irrigation in the green spaces by 79%
- Waterless urinals, dual flush toilets and water-efficient shower heads were installed to reduce potable water use

Responsible Use of Materials and Resources

- During construction, the team achieved a 96% percent diversion of the construction waste from landfills
- About 41% of the construction materials were produced locally, helping to sustain the local economy
- 32% of the construction materials were recycled

