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LEED  
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university of oregon  
cheryl ramberg ford and allyn ford alumni center  
eugene, oregon



The University of Oregon's new Cheryl Ramberg Ford and Allyn Ford Alumni Center will feature a number of sustainable design features, from drought tolerant plants to expansive daylighting in the building's interior.

## a case study in sustainable design

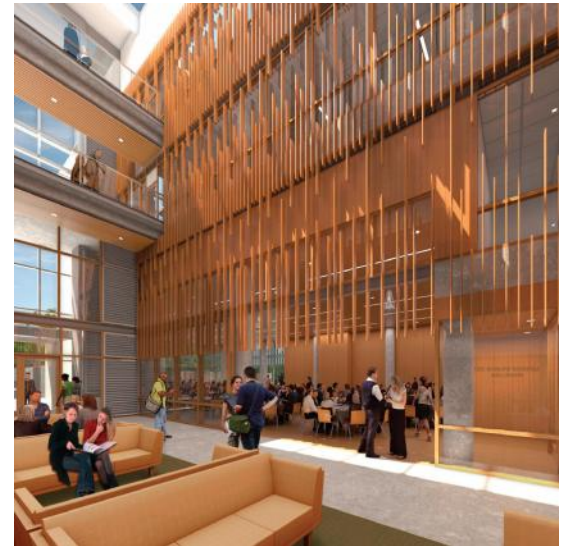
The Cheryl Ramberg Ford and Allyn Ford Alumni Center is a new four story building facing the east campus entry to the University of Oregon. The Alumni Center designed by Opsis Architecture, interior architects and architect of record, in association with the building architect TVA Architects is currently under construction. It will house spaces for alumni outreach, fundraising and meetings, as well as provide a welcome center for campus visitors. As a new hub on the campus, the facility connects the University's past and future, while incorporating sustainable design principles.

The Alumni Center shares its site with the adjacent Arena. The project teams for the two structures collaborated on sustainable site design strategies to maximize resources. The resulting site includes low water landscaping with a high efficiency irrigation system to minimize the amount of potable water used for irrigation, stormwater treatment through filtration planters and reflective hardscaping that minimizes heat island effect. Parking was not added for the Alumni Center and parking for the Arena is located underground.

In addition to the water savings achieved through water efficient landscaping, the Alumni Center uses low-flow fixtures and dual flush toilets to reduce water consumption by nearly 50%. The quantity of water saved amounts to 193,600 gallons every year.

Energy efficiency was a high priority for the Alumni Center project. An integrated effort by the project team combined a highly efficient building envelope with efficient heating, cooling and electrical systems that yield an energy savings of nearly 30%, and an energy cost savings of 28%. Insulation in the building envelope far exceeds code requirements, with R-30 roof insulation and R-21 wall insulation. A solar-assisted water heater supplies approximately 50% of the annual domestic water heating needs through a flat-plate solar hot water system. Radiant (in-slab) floor heating is used in the atrium and lobby areas, and an underfloor air distribution system offers efficient heating for the building during winter months. Fan-assisted night-flush cooling can provide efficient cooling during warm summer months.

The materials used for the building include large quantities of recycled, regional and rapidly renewable products, and over 50% of the wood is certified with the Forest Stewardship Council (FSC) for sustainable forestry practices. To enhance the building's environmental quality, the building uses extensive daylighting paired with automatic interior sunshades to improve the indoor environmental quality of the building. Exterior sunshades and automatic dimming systems for artificial lighting serve the dual purpose of maximizing the daylight in the building, while also improving energy efficiency.



The lobby of the Alumni Center will function as a central gathering space for visitors to the University of Oregon, and will include a number of interactive information screens. One of these screens will highlight sustainable building systems and allow users to see live updates on building systems performance.

## alumni center sustainability features

### Sustainable Sites

- Access to public transportation
- Utilizing existing parking with no new parking added
- Stormwater treatment through filtration planters

### Water Efficiency

- Drought tolerant plants paired with a high efficiency irrigation system for turf areas
- Low-flow fixtures and dual flush toilets to reduce building water consumption by nearly 50%

### Energy and Atmosphere

- High rated roof and wall insulation to improve building envelope performance
- Radiant (in-slab) heating for large level one gathering spaces
- Solar-assisted domestic hot water heating to heat 50% of the hot water used annually
- Underfloor air distribution provides efficient heating in winter months
- Night-flush fan cooling can provide efficient cooling in summer months

### Materials and Resources

- Over 75% construction waste is being recycled
- 20% of the materials, calculated by cost, contained post-industrial and post-consumer recycled content
- Over 50% of the wood used for the project was FSC certified

### Indoor Environmental Quality

- Daylighting studies were performed to maximize daylighting in the building, while preventing unwanted glare and heat gain through a combined system of automatic sun shades on the east side of the building, and fixed exterior shades
- Adhesives, paints, carpet systems and composite wood products are all have minimum or no volatile organic compounds (VOCs) to preserve indoor air quality

### Innovation & Design

- To help teach building users about the sustainable systems used for the Alumni Center, the building includes an interactive green screen
- Opsis Architecture will be conducting a comprehensive post occupancy evaluation of the building to monitor user comfort and building performance