

LEED  
CERTIFIED



# wade king student recreation center western washington university

bellingham, washington



Extensive daylighting and careful selection of materials helped the Student Recreation Center meet goals for sustainable design.

## a case study in sustainable design

As one of the of the first recreation facilities to pursue LEED® certification, the Western Washington University Student Recreation Center incorporated a number of sustainable strategies. The primary strategy of careful design to maximize daylighting, the use of sun shades and landscape features and highly efficient mechanical and electrical systems was augmented by these additional features and strategies:

### Sustainable Sites

- Recovery of 142 trees with root balls that were used to enhance salmon stream habitat.
- Salvaged 460 cubic yards of wood chips for salmon stream bank enhancement.
- High reflectance roofing and tree-shaded paved surfaces are used to reduce the temperature differences between developed and undeveloped areas, minimizing the impact on the microclimate.
- Site and building lighting has been designed to minimize light pollution.

### Water Efficiency

- Native plants are used to restore the natural landscape and minimize the use of water for irrigation.

### Energy & Atmosphere

- Energy performance is 20% better than required by the energy code.
- Independent review of the design was conducted to ensure the building is constructed and calibrated to operate as intended.
- All HVAC and fire suppression systems are free of ozone-depleting liquids.

### Materials & Resources

- Over 75% of the construction waste was diverted from landfills.
- Demolished concrete block buildings were crushed and used in developing base course for on-site roads.
- Excavated sandstone material has been kept on site and used for foundation backfill avoiding truck trips throughout the community.
- The glue-laminated wood structure utilizes an innovative reinforcing technology that reduces the amount of wood required by over 20%.
- Over 25% of the building materials incorporate post-consumer and post-industrial recycled content.

### Indoor Environmental Quality

- Carpets, paints, and adhesives that are non-toxic and chemically inert have been selected to ensure excellent indoor air quality.
- Over 75% of the active spaces are daylit and over 90% of the active spaces have direct views to the landscape.



Careful selection of wood, brick, and concrete materials resulted in a building that is highly sustainable, fits in with campus design, and provides a high-quality, welcoming venue for recreation and fitness.



Extensive daylighting keeps the natatorium bright and welcoming. In this construction view, the pool is well-lit prior lighting fixture installation.



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