

UNC Campus Commons Case Study





The University of Northern Colorado (UNC) Campus Commons Building, or the Commons, is an entry point and hub of UNC's campus, serving as a central point for visitors, current students and alumni alike. In addition to welcoming guests and showcasing the arts, the Commons provides open study and social spaces, rehearsal rooms and more to complement the neighboring University Center.

The University is committed to sustainability, from energy and water conservation to recycling and xeric (low water) landscaping. As part of the Colorado High-Performance Certification Program (HPCP), this new building for UNC has been designed and constructed to achieve Leadership in Energy and Environmental Design (LEED) v2009 BD+C New Construction rating system, at the Gold Certification level.

Listed in this case study are successful sustainability strategies in different LEED categories that have been implemented to help the project achieve LEED Gold certification.



SUSTAINABLE SITES

Utilizing Existing Space

UNC decided to utilize the existing parking lot, west of the Campus Commons Building, and only provided 22 new parking spaces in the south entrance. One of the spaces is dedicated to low emitting or fuel-efficient vehicles only.

Open Space Area

The UNC Campus Commons site includes an open space area of more than 50% of the total site to encourage social interaction, passive recreation, and physical activities while being outside.

Ride Your Bike

UNC is committed to clean air and healthy building occupants by incentivizing the use of bicycles. There are over 75 bike racks around the building and shower/changing rooms for building occupants to use.



WATER EFFICIENCY

58% Less Water for Irrigation

The landscape has been designed with a significant number of native plantings that are drought tolerant and require 58% less water than a traditional landscape of turf grass.

Efficient Water Fixtures

The project has been designed to use 38% less potable water than a conventional building. The installed low flow water fixtures will save around 350,000 gallons of water per year, about as much water as half an olympic size swimming pool.



ENERGY + ATMOSPHERE

28% Less Energy

The Campus Commons uses 28% less energy than a typical new building as compared to the ASHRAE 90.1-2007 standard. The Performance Hall's HVAC system uses displacement ventilation to provide conditioned air from the floor rather than overhead as is done in typical systems. This design feature promotes stratification in the space and more effectively provides heating, cooling, and ventilation to the occupants.

Commissioning, What's That?

UNC engaged a third-party commissioning provider to complete the Fundamental and Enhanced Commissioning credits in accordance with LEED requirements for the project. Commissioning is a quality control process to make sure all mechanical equipment is working properly before and after the building is occupied.



MATERIALS + RESOURCE

Waste Diverted from Landfills

78% of the total waste generated during construction was diverted from the landfill. Waste diverted included: gypsum board, metals, concrete, asphalt, wood and cardboard.

Prioritized Materials

Recycled content and regional materials were prioritized for the project as well as the use of Forest Stewardship Council (FSC) certified wood.



INDOOR ENVIRONMENTAL QUALITY

Reduced Exposure

People track in all sorts of dirt, pesticides, chemicals and other pollutants on their shoes. An entrance system that is at least 10 feet long will reduce occupant exposure to hazardous particulates and chemical pollutants.

Maximizing Daylight and Views

The building interior was designed to maximize daylight and to provide a constant connection to the outside. Over 90% of the regularly occupied areas in this building have views to the outdoors.

