

Founders Hall and Innovation Hall

Founders Hall and Innovation Hall are the first two buildings in Elon's Innovation Quad. They provide 65,000 square feet of facilities for engineering and physics and serve as a hub for STEM. Founders Hall is a two-story building that includes several lab and student engagement spaces, and Innovation Hall is a three-story building with labs, classrooms and faculty offices.

Per the University's Green Building Policy, these facilities were designed and constructed using the principles of the LEED program and received LEED Gold certification. LEED stands for Leadership in Energy and Environmental Design and is the preeminent green building rating system internationally.



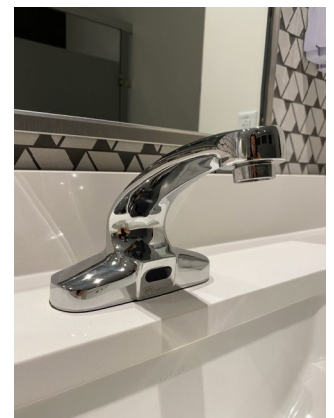
Location, Transportation and Site

The buildings are located within walking distance of many commonly used buildings on campus as well as downtown Elon. The site was previously developed. A parking lot was removed to allow for construction, and no new parking was added to the site. Bike racks are provided on the site. Building users can easily access Elon Express routes at the nearby bus stop. A site assessment was completed to inform the design process, and the site includes ample open space for outdoor seating and enjoyment.



Water Efficiency

The restroom plumbing fixtures in the facilities are low flow. The lavatory faucets use less than 0.5 gallon of water per minute, toilets are dual-flush and the urinals use only 1 pint of water per flush. These fixtures are expected to reduce the facilities' potable water usage by about 36%. The landscaping around the facilities and irrigation system are designed to reduce the need for irrigation water by 50% compared to a baseline for the peak watering month. Strategies are utilized to conserve cooling tower make-up water.



Energy Efficiency



Energy efficient systems were integral in the design and construction of the facilities. The energy cost savings of the buildings is about 26% compared to buildings that meet the standard building energy code. Among the energy efficiency strategies, there are variable speed drives on pumps and fans, energy recovery wheels, variable air volume air handling units, as well as chilled water and hot water control valves that allow for improved system control and high efficiency condensing type boilers for domestic water heating. The facilities are served by a central plant for HVAC needs that employs variable capacity and high efficiency water cooled chillers and condensing type boilers. Building lighting is controlled through a combination of switching and occupancy sensors. All lighting is LED, which is more energy efficient and lasts longer than previous technologies. There is metering for water, natural gas and electricity, including submeters for HVAC, lighting and plug loads, which allows for improved monitoring and tracking of consumption. This information is also available via the [Building Dashboard](#).

Materials and Resources

During construction, over 80% of the waste was recycled or reused, which kept it out of the landfill. As in all buildings at Elon, recycling containers are located throughout the building and compost bins are also available. A whole-building life-cycle assessment was conducted. Compared to a baseline, a reduction of 10% or more was demonstrated in 3 impact areas, including global warming potential. Many of the products used in the facilities have environmental product declarations, which are reports that illustrate the environmental impact of a product. In addition, numerous products used in the facilities contain recycled content, such as steel, drywall and carpet, which reduces the need for virgin materials. Several of the furniture pieces contain recycled content as well.



Indoor Environmental Quality



Providing excellent indoor environmental quality was another essential component in the design and construction of the facilities as it contributes to the health and productivity of building occupants. Great care was taken during construction to ensure the building and systems were kept clean and free of contaminants benefiting the construction workers and the eventual building occupants and users. For example, duct work was kept covered to prevent debris from accumulating and a sweeping compound was used to minimize dust.

Building materials with low or no amounts of volatile organic compounds (VOCs) were used in the facilities, such as paints, coatings, flooring, wall panels, ceilings and insulation. Low VOC products allow for better air quality during and after construction. Many of the furniture pieces also incorporate low-emitting materials, and some have earned a third-party designation that verifies low chemical emissions. The buildings incorporate thermal comfort and lighting controls for occupants. The windows located throughout the building provide occupants with an outside view, which helps provide a connection to the outdoors.

Innovation

This category within LEED recognizes exceptional performance and innovative strategies not recognized in standard credits. One strategy used in Founders Hall and Innovation Hall that earned an Innovation point is the use of low mercury lighting. The project also met the criteria for design for active occupants. The project received exemplary performance points for exceeding the requirement for number of products with environmental product declarations and reducing the parking footprint on the site. If you would like a tour focusing on the sustainable features of the facilities, [please contact us](#).

