

East Neighborhood Residence Halls & Tennis Pavilion

The three new residence halls in the East Neighborhood serve as a hub for civic engagement and social innovation housing over 300 students. There are several learning communities in the neighborhood, including Leaders in a Global World, Service Learning and Paideia (Civic and Political Engagement). These new facilities are next to the Tennis Pavilion, a 5,000 square foot facility that provides coaches offices and locker rooms to serve the Jimmy Powell Tennis Center.



Following the University's Green Building Policy, these buildings were designed and constructed using the principles of the LEED program and achieved LEED Silver certification. LEED stands for Leadership in Energy and Environmental Design and is the preeminent green building rating system internationally. These buildings are a group LEED project and received one certification encompassing all four of the buildings.

Sustainable Sites



These buildings are located within walking distance of many commonly used buildings on campus, such as Numen Lumen Pavilion and Lindner Hall. In addition to having bike racks, the project is also within a ¼ mile of a BioBus stop allowing residents and visitors to quickly access the university's BioBus system. No new parking was developed for this project and the adjacent parking areas have preferred parking for low-emitting and fuel efficient vehicles, which include a wide variety of vehicle types. Vehicles must have a [green score](#) of 40 or more as determined by the American Council for an Energy-Efficient Economy to be eligible for these spaces. The project site provides plenty of open space for

residents and visitors to enjoy. The hardscape is either shaded or light in color, which helps reduce the heat island effect.



Water Efficiency



The buildings have low-flow plumbing fixtures throughout. The lavatory faucets use 0.5 gallons of water per minute, and the shower heads are 1.6 gallons of water per minute. The toilets have dual-flush handles, and the urinals use only 1 pint of water per flush. These fixtures are expected to reduce the buildings' overall potable water usage by more than 40%.

Energy Efficiency

Energy efficient systems were integral in the design and construction of the project. Taking all four buildings into consideration, the energy cost savings is about 22% compared to buildings that just meet the standard building energy code. Among the energy efficiency strategies there are variable speed drives, energy recovery wheels, variable air volume air handling units and high efficiency condensing type boilers. The lighting is energy efficient LED and incorporates dual level light switching and occupancy sensors where appropriate. There is metering for water, natural gas and electricity, which allows for improved monitoring and tracking of consumption.



Materials and Resources



During construction, over 90% of the waste was recycled or reused, which kept it out of the landfill.

In addition, building materials with recycled content (pre and post-consumer) were used, 11.5% based on cost. Using recycled content reduces the need for virgin materials. Specific examples include the structural steel, carpet, drywall and ceiling tiles.

To support the regional economy and reduce the impact of transportation, regional materials were used as much as possible. In the LEED system, regional materials are those that are extracted, harvested, recovered and manufactured

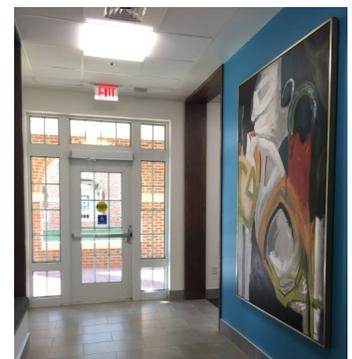
within 500 miles of the project site. Based on cost, 23% of the building materials are regional. Specific examples include carpet, drywall and concrete.

The furniture used in the building has sustainable characteristics, such as recycled content fabrics and durability.

As in all buildings at Elon, the buildings have recycling containers. The residents also have access to compost collection in the trash/recycle/compost rooms located in each building.

Indoor Environmental Quality

Providing excellent indoor environmental quality was another essential component in the design and construction of the project as it contributes to the health and productivity of building occupants. Great care was taken during construction to ensure the buildings 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 special sweeping compound or wetting agent was used to minimize dust.



The adhesives, sealants, paints, flooring systems and composite wood products used in the buildings contain low amounts of volatile organic compounds (VOCs). Low VOC products allow for better air quality during and after construction. The entry way systems also help provide good indoor air quality by preventing dust and other contaminants on shoes from entering the buildings. Most building occupants have a view to the outdoors, which provides a connection to the outdoors and natural light. Studies have shown that natural light improves occupant well-being and productivity.



Common space furniture pieces have earned Greenguard certification, which contributes to good indoor air quality. A green cleaning program is also used in the building, which benefits occupants and maintenance personnel. Green cleaning improves air quality, occupant health and well-being and is better for the environment.

Innovation and Design Process

This category within LEED recognizes exceptional performance and innovative strategies not covered in standard credits. One strategy used with this project that earned an Innovation in Design credit is the use of low or no mercury lighting. An educational program to educate building occupants, visitors and the greater community on sustainable building features and their benefits also received credit. [If you would like a tour focusing on the sustainable features of these buildings, please contact us.](#)