



THE SENECA

ROCKVILLE

ENVIRONMENTALLY
CONSCIOUS DESIGN



ASSISTED LIVING • THE BRIDGE • MEMORY CARE
WATERMARKCOMMUNITIES.COM

LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN

The Seneca is currently pursuing LEED certification under the LEED® for Building Design and Construction: New Construction v4 rating system. LEED®, an acronym for Leadership in Energy and Environmental Design, is administered by the U.S. Green Building Council (USGBC) and is currently the dominant market standard for the design, construction, maintenance, and operations of high-performance green buildings.

The building carefully preserves wooded areas around the residences and includes outdoor terraces and gardens. Within the framework of the LEED® rating system, the design includes strategies that address sustainable site selection and development, water and energy efficiency, and improving the indoor environmental quality for all occupants.



SUSTAINABLE LOCATION & SITE



Located in Rockville, Maryland, the community provides convenient access to multiple modes of public transportation, including the Shady Grove Metro Station and associated bus stops.



The Seneca contains fuel-charging stations for electric vehicles within the parking garage and bicycle facilities for visitors and staff.

Within the community, various outdoor spaces are available for residents, enhancing quality of life and access to nature. Accessible terraces provide resident-oriented open spaces. Light-colored materials have been selected specifically to reduce urban heat island effect, a phenomenon that occurs when a high proportion of dark surfaces in a city increases the surrounding ambient temperature.



WATER EFFICIENCY



The Seneca implemented strategies to increase the water efficiency of the building and exterior areas. One strategy is the preservation of native tree and vegetated areas throughout the site. Green and garden areas mitigate urban heat island effect and help absorb rainfall.



Water efficient fixtures were selected thoughtfully in order to balance comfort with water conservation. Water metering has been implemented so the operations staff is able to monitor water use, leading to increased water conservation and management.

ENERGY EFFICIENCY



The Seneca is designed to achieve a total energy cost savings of 21% over a comparable baseline building. Energy savings were achieved by improvements in the glazing (windows), insulation, lighting, and mechanical systems.

Through the upgrades, the quantity and quality of ventilation has been improved, which increases the air quality at The Seneca. Improved air quality enhances wellness and productivity for residents and staff.



The finished building is undergoing a thorough commissioning process to ensure it operates and performs efficiently and effectively.



BUILDING MATERIALS



Throughout its construction, The Seneca focused on the conservation and responsible disposal of building materials in order to reduce waste and emissions as well as minimize harmful impacts on human health and the environment.

New materials were selected to include a high percentage of recycled content and to be sourced from within the region whenever possible to reduce transportation-related emissions.

Additionally, new materials that disclosed their potential impacts on environmental and human health were preferred and selected whenever possible, encouraging the manufacturing industry to continue to improve the sourcing and composition of products.

During construction, all materials were tracked and sent to reuse or recycling centers when possible in order to minimize the amount of waste going to landfill sites. The project is projected to have more than 75% of the construction waste diverted from landfill.



INDOOR ENVIRONMENTAL QUALITY



Prioritizing health and wellness of residents, staff, and visitors, the design of The Seneca included measures to improve the air quality of the building.

Best industry practices were followed throughout the construction process to maintain the integrity of the finished indoor systems and spaces. The building design improves the ventilation of the space and monitors the air quality within the building spaces to ensure that they are receiving sufficient ventilation.



Additionally, low-emitting materials with low-VOC (volatile organic compounds) content and associated emissions testing were installed within the building to improve air quality in order to preserve resident health.

The community registered for an Innovation Pilot Credit, "Designing with Nature, Biophilic Design for the Indoor Environment," to document additional measures taken to prioritize the health and wellness of residents. Biophilic features incorporated into the design allow residents to feel a connection with nature in both visual and spatial ways. In amenity and resident spaces, nature is brought into the building through the use of materials with a natural feel and direct visual connections with the outdoors. The land is surrounded with woods which provides the opportunity for all residents and staff to have equal access to daylight, with a pleasant view to the woods surrounding the property. Views to the surrounding tree preservation areas were maximized and amenity spaces such as the terraces, outdoor fireplace, water features, and gardens provide direct access to the outdoors in a variety of rich environments.



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