



FACT SHEET

Maryland Campus Goes Green

SG III's innovative design is both environmentally sensitive and energy-efficient, demonstrating our commitment to environmental stewardship while providing space conducive to learning for our students and our community. While concerns about climate change are escalating now, the University System of Maryland committed to a “green” design more than five years ago when the plans were first approved. “Green” buildings feature efficient use of energy, water and materials and reduce a building’s impact on the environment. The design team achieved 93% of the proposed sustainable and engineering initiatives while staying on budget. The team exceeded the original goal for environmental features.

Gold Standard: SG III earned a Gold certification from the U.S. Green Building Council for Leadership in Energy and Environmental Design (LEED™). It is the first higher-education building in Montgomery County and one of the first in the University System of Maryland to achieve that standard.

Sustainability: Cannon Design worked with Sustainable Design Consulting and the University of Maryland team to find ways to reduce the human imprint on the environment during the construction and for the future operation of USG III, including:

- The building was placed on the site to ensure optimal solar orientation with the maximum frontage facing south and north. Seventy-five percent of classrooms and offices receive direct sunlight;
- The building is organized in ways that increase natural lighting, reduce energy and water consumption and waste; and
- To reduce the pollution and waste in construction, materials from the region and/or recycled materials were used such as:
 - 50% of materials were produced in the Mid-Atlantic region; and
 - 25% of materials contain recycled contents such as the exterior blue blocks, which are 35% slag cement generated from ground granulated blast materials.
 - 75% of construction, demolition and land-clearing waste were recycled or sent to salvage.

Energy Efficiency: Energy-saving features are projected to bring a cost savings of 29% (or 30% annually) including:

- Extensive use of sunscreens – glass, wall and roofing materials with improved thermal value;
- Energy Star appliances, including computers and IT equipment;
- Strict energy standards for the heating, ventilation, and air conditioning;
- 2 “green” roofs, which absorb rain water and filter run-off more efficiently. They also help keep heat in the building during the winter and absorb sunlight to keep the building cooler in the summer. “Green” roofs also provide a habitat for birds and reduce noise pollution. The roofs will feature local flowers and vegetation.
- Large thermal windows are used throughout the building to bring in optimal daylight and to reduce heat loss in winter and heat gain in the summer; and
- Dual-flush toilets, waterless urinals and electric water sensors on sinks conserve water usage.

Renewable Features: From floor to ceiling, SG III features renewable products, materials and furnishings:

- Bamboo wood floors were installed in the Library. Bamboo is considered renewable since it can be completely re-grown in 2 to 5 years. Using renewable wood helps preserve tropical and endangered forests and trees;
- Terrazzo glass tile in the foyer contains blue and green recycled glass;
- “Green” linoleum made from linseed oil, resins and used materials from recycled paper. This linoleum is just as durable but less polluting than regular linoleum flooring;
- Carpets have renewable materials and 25% recycled content;
- Wheat boards are used in the wall coverings throughout the building;
- Banana fibers are used in the tables in the dining hall;
- The conference room table features an elegant inset made of sustainable wood from post-industrial scrap waste, aluminum chips and used silicon chips. No urea-formaldehyde, which can increase indoor pollution, was used;
- Credenzas in the atrium and boardroom offices are made of non-endangered woods. The sawdust and wood scrap created during manufacturing were recycled;
- Doors are composed of recycled hardwood maple;
- Particle board used throughout the building is formaldehyde-free;
- Accent materials in the courtyard and throughout the building are made from cork; and
- Ceiling tiles are comprised of 40-60% recycled materials.

Landscaping:

- Native plants that thrive in the Mid-Atlantic area are used throughout the courtyard and grounds, such as black-eyed Susans, Maryland’s state flower. Local plants tend to be more disease-resistant, require less water and less care.
- During excavation, topsoil and trees were removed and then stored, re-used or re-planted in other areas of the campus. For instance, the crepe myrtles in back of SG I were replanted.
- Trees that were removed were recycled into mulch.
- The irrigation system using water run-off and the use soil probes to determine when plants need more water. The consumption of drinkable water will be reduced by 41%.

Indoor Air Quality:

- Environmentally-friendly cleaners and pest control measures that have the “Green Seal” of approval are being used; and
- No VOCs (volatile organic compounds that can affect health) were used in construction or ongoing maintenance including paints, glues, adhesives, sealants, and carpets

Continuing Green Practices:

- Recycling, including the use of recycled cups & napkins.
- Encouraging carpooling and alternative transportation through use of bike racks designated electric car parking spaces, and shuttles to Metro station.
- A Green Committee continues to research and implement environmentally-friendly practices.

Teaching About Sustainability: As part of its mission to serve the community, USG will serve as a teaching laboratory to develop green curriculum for primary and secondary students. USG is undertaking educational initiatives to teach about environmental building and living practices including:

- Tours for schools and other large groups;
- Guidebook and signs conducive to self-guided tours throughout the campus;
- Graphic displays detailing eco-friendly features; and
- A sustainability link on the USG website.