THE AMERICAN UNIVERSITY

American University at 4401 Connecticut Avenue

LEED CI v2009

4401 Connecticut Ave NW, Washington D.C. 20008

BUILDING HISTORY

American University's location at 4401 Connecticut Avenue was originally constructed in 1988. American University acquired the building in 2011 and remodeled and renovated the space. WAMU, the national public radio station, broadcasts from American University and occupies the first through third floors, a portion of the fourth floor, and the lower (terrace) level; approximately 40,000 square feet. The upper three floors are occupied by AU departments, including University Communications & Marketing. All spaces were included in the LEED certification except for a vacant portion of the fourth floor. The offices at 4401 Connecticut Ave are American University's first LEED Interior Design and Construction: Commercial Interiors project. LEED for Commercial Interiors (CI) addresses the specifics of tenant spaces and sets performance standards that promote healthful, durable, affordable, and environmentally sound practices in the design and construction of tenant spaces. 4401 Connecticut Avenue received an Honorable Mention for the US Green Building Council's - National Capital Region's 2017 Innovative Project of the Year, Interior Design award.

PROJECT HIGHLIGHTS

LEED (™) Facts

American University at
4401 Connecticut Avenue
The American University
2017

Location	4401 Connecticut Ave NW, Washington D.C. 20008
Rating System	LEED CI v2009
Certification Achieved	Gold
Total Points Achieved	68

Sustainable Sites	14/21
Water Efficiency	11/11
Energy and Atmosphere	22/37
Materials and Resources	5/14
Indoor Environmental Quality	10/17
Innovation in Design	4/6

100% — *Amount of green electricity used in the building*

93% — *Amount of eligible appliances that are ENERGY STAR certified*

50% — *Reduction in indoor potable water use compared to a standard building*

26% — *Amount of furniture and carpet that contain recycled materials*

Please only print this project if necessary. If printing is required, please print double sided and recycle when finished.

PROJECT TEAM

Owner: American University
Architect and Sustainability Consultant: Gensler
Contractor: Coakley & Williams Construction, Inc

ADDITIONAL RESOURCES

Office of Sustainability:
www.american.edu/sustainability/

University Facilities:
www.american.edu/facilities/

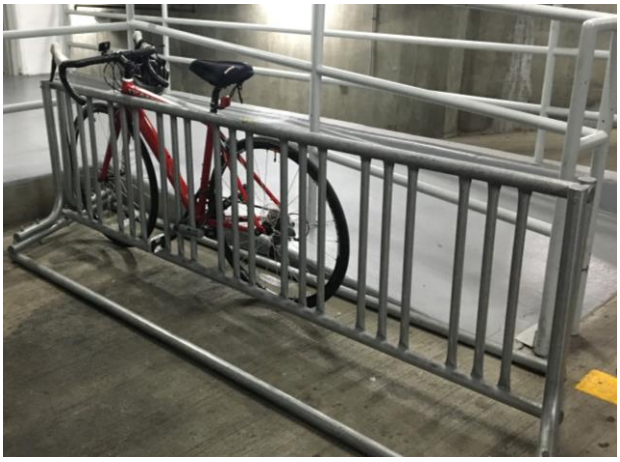
U.S. Green Building Council:
www.usgbc.org

GBCI:
www.gbci.org

View details for all of AU's LEED buildings:
www.gbig.org/collections/18029

SUSTAINABLE SITES

Sustainable Sites for Commercial Interiors (CI) focuses on channeling development to urban areas with existing infrastructure and preserving habitat and natural resources. This project earned the development density credit because the building is located in an established, walkable community with a minimum density of 60,000 square feet per acre net. The development density credit is to channel development to urban areas with existing infrastructure in order to preserve habitat and natural resources.



Bicycle racks are located outside the building and in the garage, and shower/changing facilities are available for bike commuters. These facilities encourage staff members to commute using alternative modes of transportation. The building also received points for its close proximity to public transportation, including bus and metro.

WATER EFFICIENCY

Decreasing potable water usage reduces the burden the building has on municipal water supply and wastewater systems. In order to decrease water usage in 4401 Connecticut Ave, plumbing fixtures were chosen that use 50% less water than a standard building. These fixtures include low-flow flush valves, high efficiency urinals, low-flow and solar powered electronic faucets, and ultra low-flow shower heads.

ENERGY AND ATMOSPHERE

Green buildings are designed to be energy efficient to reduce the environmental and economic impacts associated with the excessive energy use. The lighting features installed at 4401 Connecticut Ave allowed for a 26% lighting power reduction compared to a standard building. To conserve energy, 93% of eligible equipment, including appliances, office equipment, electronics, and commercial food service equipment, qualifies as ENERGY STAR. Also, the heating, ventilation, and air conditioning (HVAC) systems installed at 4401 Connecticut Ave comply with the efficiency requirements of LEED CI. The lighting features, ENERGY STAR equipment, and the energy efficient HVAC systems all reduce energy use in the building.

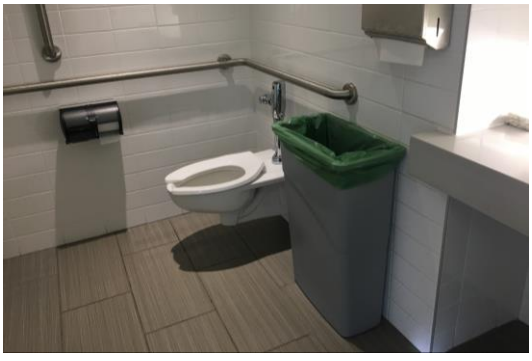
American University purchases renewable energy for all campus electricity use, therefore 100% of the building's electricity consumption is complimented with renewable energy credits. The building was also commissioned to verify that the building was designed, constructed, and operated as intended.

The Energy and Atmosphere section of LEED CI also aims to reduce stratospheric ozone depletion by restricting chlorofluorocarbon (CFC)-based refrigerants in the building's heating, ventilating, air conditioning, and refrigeration systems. These measures help to reduce the impact the building has on the environment and the tenants.

MATERIALS AND RESOURCES

To reduce the amount of waste generated by building occupants, purchasing policies were instituted at 4401 Connecticut Ave to help reduce emissions, increase diversion rates, and support local communities. To reduce the impacts that result from the extraction and processing of virgin materials, furniture and carpeting purchased for the building were chosen for their sustainable criteria, such as recycled content. As such, 23% of the furniture and carpeting purchased have recycled content.

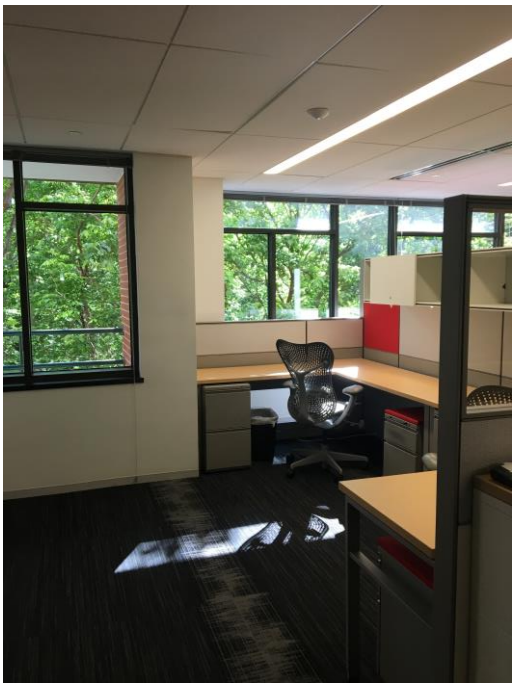
In 2010, American University adopted a zero waste policy and due to this, 4401 Connecticut Ave has a four-bin waste management system, including compost, paper recycling, metal/plastic/glass recycling, and landfill.



Along with the purchasing policy and waste management system, the construction waste was managed in a sustainable manner. From the renovation of the building, 90% of the debris was diverted from the landfill, thus allowing for the resources to be recovered and reused.

INDOOR ENVIRONMENTAL QUALITY

The Indoor Environmental Quality (IAQ) section of LEED:CI offers the most potential points, as indoor environment quality significantly impacts the occupants well-being, productivity, and quality of life. The building is well ventilated and mechanically conditioned in order to provide occupant comfort. Comfort criteria were established to provide a comfortable environment at 4401 Connecticut Ave that promotes occupant productivity and well-being. To ensure occupant comfort over time, a thermal comfort survey was conducted after occupancy, and necessary changes to temperature were performed. Smoking is prohibited in and around 4401 Connecticut Ave to prevent occupants' exposure to harmful environmental tobacco smoke.



During the construction and renovation of 4401 Connecticut Ave, an IAQ management plan was implemented to protect the heating, ventilation, and HVAC system, control pollutant sources, and interrupt contamination pathways.

All adhesives, sealants, paints, coatings, flooring, composite wood, agrifiber products, and furniture on the interior of the building comply with low-emitting Volatile Organic Compound (VOC) requirements. These requirements reduce the quantity of indoor air contaminants present in the building that are odorous, irritating, and/or harmful to the comfort and well-being of the installers and occupants.

INNOVATION IN DESIGN

The building achieved exemplary performance credits for development density of the surrounding community, close proximity of 4401 Connecticut Ave to five transit services, including bus lines and metro, and American University's use of 100% green power. The building also achieved significant, environmental performance and an innovation in design credit by designing and specifying low mercury lighting for the project space. Low mercury lighting allows for greater building efficiency and reduces the negative environmental and human health impacts that are associated with mercury.

In addition to the exemplary performance and innovation credits, 4401 Connecticut Ave pursued a pilot credit focused on improving occupant well-being through the integration of ergonomics principles for the design of work spaces. An ergonomic presentation was prepared to educate employees on the benefits of improving ergonomics and the importance of individuals' comfort and productivity. A survey was also circulated, which will continue to be conducted annually, to determine the comfort levels of the employees and allow Human Resources to address concerns related to ergonomics. This pilot credit was pursued to create a healthy and comfortable work environment for its employees.

LEED SCORECARD

LEED Certification Review Report

This report contains the results of the technical review of an application for LEED® certification submitted for the specified project. LEED certification is an official recognition that a project complies with the requirements prescribed within the LEED rating systems as created and maintained by the U.S. Green Building Council® (USGBC®). The LEED certification program is administered by the Green Business Certification Inc. (GBCI®).

1000024722, Washington, DC

AU/WAMU

LEED ID+C: Commercial Interiors (v2009) — **GOLD, AWARDED APR 2017**

SUSTAINABLE SITES		AWARDED: 14 / 21
SSc1	Site selection	0 / 5
SSc2	Development density and community connectivity	6 / 6
SSc3.1	Alternative transportation - public transportation access	6 / 6
SSc3.2	Alternative transportation - bicycle storage and changing rooms	2 / 2
SSc3.3	Alternative transportation - parking availability	0 / 2

WATER EFFICIENCY		AWARDED: 11 / 11
WEc1	Water use reduction	11 / 11

ENERGY & ATMOSPHERE		AWARDED: 22 / 37
EAc1.1	Optimize energy performance - lighting power	3 / 5
EAc1.2	Optimize energy performance - lighting controls	0 / 3
EAc1.3	Optimize energy performance - HVAC	5 / 10
EAc1.4	Optimize energy performance - equipment and appliances	4 / 4
EAc2	Enhanced commissioning	5 / 5
EAc3	Measurement and verification	0 / 5
EAc4	Green power	5 / 5

MATERIAL & RESOURCES		AWARDED: 5 / 14
MRc1.1	Tenant space - long-term commitment	1 / 1
MRc1.2	Building reuse - maintain interior nonstructural elements	0 / 2
MRc2	Construction waste Mgmt	2 / 2
MRc3.1	Materials reuse	0 / 2
MRc3.2	Materials reuse - furniture and furnishings	0 / 1
MRc4	Recycled content	2 / 2
MRc5	Regional materials	0 / 2
MRc6	Rapidly renewable materials	0 / 1
MRc7	Certified wood	0 / 1

INDOOR ENVIRONMENTAL QUALITY		AWARDED: 10 / 17
EQc1	Outdoor air delivery monitoring	1 / 1
EQc2	Increased ventilation	0 / 1
EQc3.1	Construction IAQ Mgmt plan - during construction	1 / 1
EQc3.2	Construction IAQ Mgmt plan - before occupancy	0 / 1
EQc4.1	Low-emitting materials - adhesives and sealants	1 / 1
EQc4.2	Low-emitting materials - paints and coatings	1 / 1
EQc4.3	Low-emitting materials - flooring systems	1 / 1
EQc4.4	Low-emitting materials - composite wood and agrifiber products	1 / 1
EQc4.5	Low-emitting materials - systems furniture and seating	1 / 1
EQc5	Indoor chemical and pollutant source control	1 / 1
EQc6.1	Controllability of systems - lighting	0 / 1
EQc6.2	Controllability of systems - thermal comfort	0 / 1
EQc7.1	Thermal comfort - design	1 / 1
EQc7.2	Thermal comfort - verification	1 / 1
EQc8.1	Daylight and views - daylight	0 / 2
EQc8.2	Daylight and views - views	0 / 1

INNOVATION		AWARDED: 4 / 6
IDc1	Innovation in design	3 / 5
IDc2	LEED Accredited Professional	1 / 1

REGIONAL PRIORITY		AWARDED: 2 / 4
EQc6.1	Controllability of systems - lighting	0 / 1
EQc7.1	Thermal comfort - design	1 / 1
SSc1	Site selection	0 / 1
WEc1	Water use reduction	1 / 1

TOTAL	68 / 110