

Dunbar Senior High School

Washington, DC

Our design for the new Dunbar High School is inspired by the cherished 1917 building, which served the school before its demolition in the 1970's, while also looking forward to the future by providing 21st Century learning environments. The new building's entry plaza has a southern orientation approached from New York Avenue and seen from across the Dunbar Recreation Center. Students, visitors, and staff are welcomed in a south-facing entry plaza designed to signify the seriousness of purpose of the institution. The adjacent academic wing is characterized by bay windows and towers, reminiscent of the historic building.

The Armory of the historic Dunbar provides the inspiration for the principle organizing element of the school's interior, a new atrium-like Armory becomes the "heart of the school" connecting the academic wing, the sports fields, the gym, pool, auditorium and cafeteria seating areas. The Academic wing provides state-of-the-art, flexible learning environments that will accommodate four distinct academies breaking down the scale of the 1,100 student school.

Faculty offices integrated into each level ensure positive interaction between faculty and students throughout the school. The overall design embodies the education of the whole person.

The school is designed to achieve LEED for Schools Platinum certification, featuring a ground source heat pump (aka "geothermal") system, a 482 kW photovoltaic array, two 20,000 gallon cisterns for reusing rainwater, enhanced acoustics, low VOC materials and plentiful daylight and views.

Awards

- 2014 Grand Prize Award Learning By Design, Citation of Excellence
- 2014 Project of Distinction, Council of Educational Facility Planners International NE Region
- 2014 Vision Award, The Committee of 100 on the Fed City
- 2014 Best Civic Building, Congress for New Urbanism Charter Award
- 2014 Honorable Mention, School Planning & Management
- 2014 Gold Citation, American School & University Educational Interiors Showcase
- 2014 ABC Excellence in Construction Award, Educational Facilities

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Dunbar Senior High School

Creating a High-Performance, Sustainable Learning Environment for Washington, DC

Located just a few blocks from the US Capitol, the new Dunbar High School campus is striving to raise the bar for sustainable, high performance school design. The school has been designed to target LEED for Schools Platinum certification – the highest level of certification by the US Green Building Council. This will result in a design that conserves energy and water, creates a healthier and more comfortable place to learn and fosters a commitment to environmental stewardship among students and staff.

The attributes of the building that will support these goals are a radiant heating system in the floor of the "Armory," the school's main public space; a ground source heat pump (aka "geothermal") system under the football field; a 482-kW photovoltaic array on the roof; two 20,000-gallon cisterns adjacent to O Street for collecting and reusing rainwater; and enhanced acoustics, low-VOC materials and plentiful daylight and views throughout.

The reconstruction of Dunbar High School is being led by DC's Department of General Services (DGS), DGS and the District of Columbia Public Schools have engaged EB&J Architects & Engineers – a collaboration of Perkins Eastman, Sathy & Associates International and SR&A Structural Engineers, LLC – as well as Moody Nolan and Street/Gilbane Construction for the redesign and construction of Dunbar Senior High School.

ENERGY

A ground-source heat pump system (also known as a geothermal system) under the athletic field and radiant flooring in the Armory support Dunbar's commitment to energy efficiency.

EXTERIOR

The building exterior, or "envelope," is like your skin – it protects you from sun, wind, rain, and snow. The envelope is designed to allow natural light and fresh air into the building while keeping excess heat and cold out.

INTERIOR

Low-emitting, recycled and regional materials, green housekeeping, and pervasive daylighting and views enhance the quality of the interior environment.

SOLAR

Solar panels, also known as photovoltaic (PV) panels, convert natural energy from the sun into clean, reliable electricity.

WATER

Rainwater collection and water efficient fixtures reduce demand for fresh water and help retain storm water runoff.

Graphic Design by Perkins Eastman