

LEED® GOLD CERTIFIED GREEN BUILDING PROJECT PROFILE

CUYAHOGA COMMUNITY COLLEGE HEALTH CAREERS AND SCIENCES BUILDING WESTSHORE CAMPUS, WESTLAKE, OHIO



LEED® Credits Awarded

HCS Project WESTLAKE, OHIO

LEED Rating System: New Construction 2.2

Gold	39*
Sustainable Sites	6/14
Water Efficiency	4/5
Energy & Atmosphere	8/17
Materials & Resources	6/13
Indoor Environmental Quality	10/15
Innovation & Design	5/5

*Out of possible 69 points



Achievements of project design & construction:

40% energy use savings

47% reduction in domestic water usage

92% construction waste diverted from landfill

100% reduction in landscape watering

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PROJECT BACKGROUND

Cuyahoga Community College (Tri-C®) collaborated with Stantec on the design of the Health Careers and Sciences (HCS) building. The 65,000 square foot building had a site and building construction cost of \$18,600,000 and houses the health careers programs and student services for the new Westshore campus. Contained within the building are various lab spaces, classrooms, a tiered lecture hall, offices, a library, and student collaboration areas.

The first of three planned buildings on the new 33 acre Westshore Campus, the HCS building was certified at the Gold level under the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) system. The HCS building is energy efficient, takes advantage of daylight, reduces storm water run-off, has native and drought resistant landscaping, is frugal with water resources, provides a healthy indoor environment, and enhances the academic experience.

STRATEGIES AND RESULTS

The U.S. Green Building Council implemented the LEED program to encourage owners and professionals to design, build, and operate more environmentally appropriate buildings. The list below details design and construction elements of the HCS and indicates the number of points received out of the total credits possible within each of LEED's six available categories.

Sustainable Site Features

6 points out of 14 possible

- 25 acres preserved as open green space.
- Bioretention areas and preservation of existing wetlands allows 90% of average annual stormwater runoff to be treated on-site.
- White roof reduces heat absorption during cooling season.

Water Efficiency

4 points out of 5 possible

- High-efficiency plumbing fixtures reduce water consumption by 47%.
- Eliminated the need for landscape watering by utilizing native plants and retaining forest and wetlands.

Energy and Atmosphere

8 points out of 17 possible

- 40% reduction on utilities use, reducing annual costs by approximately \$18,000.
- Occupancy sensors turn lights off when spaces are unoccupied.

Materials and Resources

6 points out of 13 possible

- Use of materials from regional sources or made using recycled content reduced transportation costs, emissions, and kept money in the local economy.
- 92% of construction waste diverted from landfills.

Indoor Environmental Quality

10 points out of 15 possible

- HVAC system kept clean during construction, and permeable materials were protected from moisture exposure.
- Extensive use of low-volatile organic compound (VOC) emitting building materials.

Innovation and Design Process

5 points out of 5 possible

- Innovation points for exemplary performance in reduction of potable water use and open space preservation.
- Additional points received for education through building signage, use of easily-recycled exterior metal wall panels, and from members of the project team being LEED Accredited Professionals.

Tri-C recognizes that its commitment to education and community includes a sense of responsibility to our environment. Tri-C will lead by example by investigating, developing, and promoting sustainable policies, practices, and curricula, with the goal of achieving sustainability throughout the College. The College also aspires to instill in our students, faculty, and staff a sense of stewardship toward the environment by giving them the information and support to continue sustainability efforts beyond the campus environment. We must strive to prepare our students, faculty, and staff to be leaders in creating and promoting a culture of diversity, sustainability, and environmental sensitivity through our community.

Sustainability at Tri-C means achieving the College's educational and community missions with a sense of responsibility for preserving the environment, promoting the economy, and improving society as a whole.

Cuyahoga Community College is committed to building and operating healthy environments for work and learning. Cuyahoga Community College adopted the USGBC LEED system to ensure that all future construction supports a healthy environment.



Building Owner

Cuyahoga Community College

Architect

Stantec

Structural Engineer

Thorson Baker & Associates, Inc.

MEP Engineer

Stantec

Landscape Designer

Stantec

Civil Engineering

CT Consultants

Construction Manager

Turner/New ERA Builders Inc.

Owners Representative

Gilbane/R. L. Hill

Commissioning Consultant

Osborn

Building Area

65,000 Square Feet

Site Area

33 Acres

Parking Capacity

463 Spaces (surface lot)

LEED Certification Received

Gold

Construction Schedule

Completed October 2010

ABOUT LEED

The LEED® Green Building Rating System™ is the national benchmark for the design, construction and operations of high-performance green buildings. Visit the U.S. Green Building Council's web site at www.usgbc.org to learn more about LEED and green building.

www.usgbc.org
202.828.7422

Cuyahoga
Community
College

