

# WACHMAN HALL: GREEN BY DESIGN



## MATERIALS AND RESOURCES



### Recycled Content

This project was designed with the intent to reduce the amount of virgin materials used in construction. This both lowers the embodied energy of the project and minimizes the amount of waste entering the landfill. Over 10% of building materials were made of recycled content, including finishes and flooring.



### Construction Waste Management

During the construction process, 96% of all construction waste was recycled from this project.



### Water Bottle Refilling Stations

Water bottle refilling stations provide students with the convenience of chilled and filtered water without the waste associated with bottled water.



### Certified Wood

Wood for this building comes from a responsibly managed forest.



## INDOOR ENVIRONMENTAL QUALITY



### Low Emitting Materials

This project used low-emitting materials in construction, including low-emitting adhesives, sealants, paints, coatings, floor systems, composite wood and agrifiber products and furniture. These materials reduce the concentration of volatile organic compounds inside the building to provide a healthier working and learning environment.



### Daylighting & Views

Wachman Hall provides building occupants a connection to the outdoors through the use of glass in classrooms, corridors and lounges.

## WATER EFFICIENCY



### Low Flow Fixtures

This building features low flow fixtures, which result in a 36% reduction in water use by fixtures compared to conventional buildings.

## SUSTAINABLE SITES



### Site Selection

Wachman Hall has a highly reflective roof to reduce cooling costs and the heat island effect. This "cool roof" reflects and emits the sun's heat back to the sky instead of transferring it to the building below. The project maximized vegetated open space by creating landscaped and courtyard areas.



### Bicycle Storage & Changing Rooms

In 2015, 18% of the university's greenhouse gas emissions were attributed to transportation. This project provided ample bike parking for building occupants to encourage alternative forms of transportation. Shower facilities are located across the street in Pearson McGonigle.

### Public Transportation Access

Served by bus, subway and regional rail, Wachman Hall is well connected to the regional transit system.

## ENERGY & ATMOSPHERE



### Optimized Energy Performance

Building systems performance, including lighting and HVAC equipment, are optimized to reduce the environmental and economic impacts associated with excessive energy use.





# 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®).

## Wachman Hall Classroom Renovation G-4

**Project ID** 1000047040  
**Rating system & version** LEED-CI v2009  
**Project registration date** 09/09/2014



**Certified (Gold)**

CERTIFIED: 40-49, SILVER: 50-59, GOLD: 60-79, PLATINUM: 80+

## LEED FOR COMMERCIAL INTERIORS (V2009)

ATTEMPTED: 64, DENIED: 2, PENDING: 0, AWARDED: 62 OF 110 POINTS

SUSTAINABLE SITES 19 OF 21	
SSc1 Site Selection	5 / 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 Room	0 / 2
SSc3.3 Alternative Transportation-Parking Availability	2 / 2

WATER EFFICIENCY 8 OF 11	
WEp1 Water Use Reduction-20% Reduction	Y
WEc1 Water Use Reduction	8 / 11

ENERGY AND ATMOSPHERE 11 OF 37	
EAp1 Fundamental Commissioning of the Building Energy Systems	Y
EAp2 Minimum Energy Performance	Y
EAp3 Fundamental Refrigerant Mgmt	Y
EAc1.1 Optimize Energy Performance-Lighting Power	5 / 5
EAc1.2 Optimize Energy Performance-Lighting Controls	1 / 3
EAc1.3 Optimize Energy Performance-HVAC	5 / 10
EAc1.4 Optimize Energy Performance-Equipment and Appliances	0 / 4
EAc2 Enhanced Commissioning	0 / 5
EAc3 Measurement and Verification	0 / 5
EAc4 Green Power	0 / 5

MATERIALS AND RESOURCES 3 OF 14	
MRp1 Storage and Collection of Recyclables	Y
MRC1.1 Tenant Space-Long-Term Commitment	1 / 1
MRC1.2 Building Reuse	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	0 / 2
MRC5 Regional Materials	0 / 2
MRC6 Rapidly Renewable Materials	0 / 1
MRC7 Certified Wood	0 / 1

INDOOR ENVIRONMENTAL QUALITY 15 OF 17	
IEQp1 Minimum IAQ Performance	Y
IEQp2 Environmental Tobacco Smoke (ETS) Control	Y
IEQc1 Outdoor Air Delivery Monitoring	1 / 1
IEQc2 Increased Ventilation	1 / 1
IEQc3.1 Construction IAQ Mgmt Plan-During Construction	1 / 1
IEQc3.2 Construction IAQ Mgmt Plan-Before Occupancy	1 / 1
IEQc4.1 Low-Emitting Materials-Adhesives and Sealants	1 / 1
IEQc4.2 Low-Emitting Materials-Paints and Coatings	1 / 1
IEQc4.3 Low-Emitting Materials-Flooring Systems	1 / 1
IEQc4.4 Low-Emitting Materials-Composite Wood and Agrifiber Products	1 / 1
IEQc4.5 Low-Emitting Materials-Systems Furniture and Seating	1 / 1
IEQc5 Indoor Chemical and Pollutant Source Control	1 / 1
IEQc6.1 Controllability of Systems-Lighting	1 / 1
IEQc6.2 Controllability of Systems-Thermal Comfort	1 / 1
IEQc7.1 Thermal Comfort-Design	1 / 1
IEQc7.2 Thermal Comfort-Verification	1 / 1
IEQc8.1 Daylight and Views-Daylight	0 / 2
IEQc8.2 Daylight and Views-Views for Seated Spaces	1 / 1

INNOVATION IN DESIGN 5 OF 6	
IDc1.1 Innovation in Design	0 / 1
IDc1.1 Innovation in Design SSc2	1 / 1
IDc1.2 EAc1.1: Optimize Energy Performance-Lighting Power	1 / 1
IDc1.2 Innovation in Design	0 / 1
IDc1.3 Innovation in Design	0 / 1
IDc1.3 Innovation in Design	0 / 1
IDc1.4 MRC2: Construction Waste Mgmt	1 / 1
IDc1.4 Innovation in Design	0 / 1
IDc1.5 Innovation in Design- Green Education	1 / 1
IDc1.5 Innovation in Design	0 / 1
IDc2 LEED® Accredited Professional	1 / 1

REGIONAL PRIORITY CREDITS 1 OF 4	
SSc1 Site Selection	1 / 1
SSc3.2 Alternative Transportation-Bicycle Storage and Changing Room	0 / 1
WEc1 Water Use Reduction	0 / 1
MRC3.1 Materials Reuse	0 / 1
IEQc8.1 Daylight and Views-Daylight	0 / 1

**TOTAL**

**62 OF 110**