

# LEED and the Foodservice Professional

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**We share,  
we support,  
we inspire.**



# Background

- LEED = Leadership in Energy and Environmental Design
- Founded in 1993
- LEED certification for projects started in 1998 with LEED v1.0
- Current version is LEED v4.1 (2019) - 142,330 projects!
- LEED accreditation started in 2001
- LEED AP (without designation) was offered 2001 – 2009. Credentialed professionals can keep the “LEED AP” without maintenance
- LEED AP with designation started in 2009 and requires Continuing Education hours

# LEED and the Foodservice Professional

- LEED Accreditation vs. LEED Certification
- LEED Accreditation Tracks
- Certification Levels
- Points for Foodservice
- Other advantages
- LEED in Foodservice outside of Points
- Other Sustainability Accreditation and Certification Tracks

# LEED Accreditation vs. LEED Certification

- People get Credentialed and Projects get Certified
- The goal of LEED is to create better buildings that:
  - Reduce contribution to global climate change
  - Enhance individual human health
  - Protect and restore water resources
  - Protect and enhance biodiversity and ecosystem services
  - Promote sustainable and regenerative material cycles
  - Enhance community quality of life

# LEED Accreditation vs. LEED Certification

- LEED looks at the big picture factoring in the critical elements:
  - 35% of the credits are related to climate change
  - 20% of the credits impact human health,
  - 15% of the credits impact water resources,
  - 10% of the credits affect biodiversity,
  - 10% of the credits relate to the green economy,
  - 5% of the credits impact community and
  - 5% of the credits impact natural resources.

In **LEED v4.1**, a majority of the LEED credits are related to operational and embodied carbon.

# LEED Accreditation Tracks

LEED Green Associate – this credential demonstrates a solid, current understanding of green building principles and practices and validates expertise to employers, clients and colleagues.

- **Exam:** The exam is two hours long and has 100 multiple-choice questions. You have the option to take the exam at a Prometric Testing Center or from home as a remote proctored online exam. A minimum score of 170 out of 200 is required to pass.
  - Currently \$250 exam fee (\$200 for USGBC members, \$100 for students)
  - Online prep courses offered
- **Maintain:** LEED Green Associates must earn 15 continuing education hours within two years of passing their exam.
- Prerequisite for LEED with Specialty
- Biannual renewal fee



# LEED Accreditation Tracks (continued)

- LEED with Specialty Certification

- Must hold a current LEED Green Associate credential and be 18 years of age or older. Experience working on LEED-registered projects is strongly recommended.
- **Exam:** The exam is two hours long and has 100 multiple-choice questions. You have the option to take the exam at a Prometric Testing Center or from home as a remote proctored online exam. You have to score 170 out of 200 to pass.
  - Currently \$250 - \$550 exam fee
  - Online prep courses offered
- **Maintain:** LEED APs must earn 30 continuing education hours every two years
- Biannual renewal fee

# LEED Accreditation Tracks (continued)

- LEED with Specialty Certification
  - Test covers information for all areas where points are required/given
    - Location and Transportation
    - Sustainable Sites
    - Water Efficiency
    - Energy and Atmosphere
    - Materials and Resources
    - Indoor Environmental Quality
    - Innovation
    - Regional Priority



# LEED Accreditation Tracks (continued)

LEED AP with Specialty - signifies a professional's advanced knowledge in green building and expertise in a particular LEED rating system. It attests that you are an active participant in the green building field who contributes expertise to the design, construction, operations and maintenance of buildings and neighborhoods that save energy, use fewer resources, reduce pollution, and contribute to healthier environments for their occupants and the community.

- Building Design and Construction (BD+C) - suits professionals with expertise in the design and construction phases of green buildings serving the commercial, residential, education and healthcare sectors. The specialty denotes practical knowledge in the LEED for Building Design and Construction rating systems.



- Interior Design and Construction (ID+C) - serves participants in the design, construction and improvement of commercial interiors and tenant spaces that offer a healthy, sustainable and productive work environment. The specialty denotes practical knowledge in the LEED for Interior Design and Construction rating system.



# LEED Accreditation Tracks (continued)

- Operations and Maintenance (O+M) - credential distinguishes professionals implementing sustainable practices, improving performance, heightening efficiency and reducing environmental impact in existing buildings through enhanced operations and maintenance.



- Neighborhood Development (ND) - applies to individuals participating in the planning, design and development of sustainable, pedestrian-friendly neighborhoods. The specialty denotes practical knowledge in the LEED for Neighborhood Development rating system.



- Homes - suited for those involved in the design and construction of healthy, durable homes that use fewer resources and produce less waste. The specialty denotes practical knowledge in the LEED for Homes rating system.



# Project Certification Tracks

- Building Design and Construction (BD+C) - For new construction or major renovations. Includes New Construction and Core & Shell. BD+C also includes applications for: Schools, Retail, Hospitality, Data Centers, Warehouses & Distribution Centers and Healthcare
- Interior Design and Construction (ID+C) - For complete interior fit-out projects. Includes Commercial Interiors ID+C also includes applications for Retail and Hospitality.
- Operations and Maintenance (O+M) - For existing buildings that are undergoing improvement work or little to no construction. O+M also includes applications for Schools, Retail, Hospitality, Data Centers, and Warehouses & Distribution Centers.

# Project Certification Tracks (continued)

- Neighborhood Development (ND) – For new land development projects or redevelopment projects containing residential uses, nonresidential uses, or a mix. Projects can be at any stage of the development process, from conceptual planning to construction. Includes:
  - Homes - For single family homes, low-rise multi-family (one to three stories) or mid-rise multi-family (four or more).
  - Cities and Communities - For entire cities and sub-sections of a city. LEED for Cities projects can measure and manage their city's water consumption, energy use, waste, transportation and human experience.
- LEED Recertification - Recertification helps you maintain and improve your building while keeping your sustainability investment in place. Applies to all occupied and in-use projects that have previously achieved certification under LEED – including BD+C and ID+C, regardless of their initial rating system or version.
- LEED Zero - Available for all LEED projects certified under the BD+C or O+M rating systems or registered to pursue LEED O+M certification. LEED Zero is for projects with net zero goals in carbon and/or resources.

# Certification Levels



Platinum – 80+ Points Earned



Gold – 60-79 Points Earned



Silver – 50-59 Points Earned



Certified – 40-49 Points Earned

# Checklist

LEED v4.1 BD+C: Healthcare			Project Checklist		Project Name
					Date:
Y	?	N			
Y			Prereq	Integrative Project Planning and Design	Required
			Cred	Integrative Process	1
<b>0 0 0 Location and Transportation</b>					<b>9</b>
			Cred	LEED for Neighborhood Development Location	3
			Cred	Sensitive Land Protection	1
			Cred	High Priority Site and Equitable Development	2
			Cred	Surrounding Density and Diverse Uses	1
			Cred	Access to Quality Transit	2
			Cred	Bicycle Facilities	1
			Cred	Reduced Parking Footprint	1
			Cred	Electric Vehicles	1
<b>0 0 0 Sustainable Sites</b>					<b>9</b>
Y			Prereq	Construction Activity Pollution Prevention	Required
Y			Prereq	Environmental Site Assessment	Required
			Cred	Site Assessment	1
			Cred	Protect or Restore Habitat	1
			Cred	Open Space	1
			Cred	Rainwater Management	2
			Cred	Heat Island Reduction	1
			Cred	Light Pollution Reduction	1
			Cred	Places of Respite	1
			Cred	Direct Exterior Access	1
<b>0 0 0 Water Efficiency</b>					<b>11</b>
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
			Cred	Outdoor Water Use Reduction	1
			Cred	Indoor Water Use Reduction	7
			Cred	Optimize Process Water Use	2
			Cred	Water Metering	1
<b>0 0 0 Energy and Atmosphere</b>					<b>35</b>
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
			Cred	Enhanced Commissioning	6
			Cred	Optimize Energy Performance	20
			Cred	Advanced Energy Metering	1
			Cred	Grid Harmonization	2
			Cred	Renewable Energy	5
			Cred	Enhanced Refrigerant Management	1
<b>0 0 0 Materials and Resources</b>					<b>19</b>
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	PBT Source Reduction- Mercury	Required
			Cred	Building Life-Cycle Impact Reduction	5
			Cred	Environmental Product Declarations	2
			Cred	Sourcing of Raw Materials	2
			Cred	Material Ingredients	2
			Cred	PBT Source Reduction- Mercury	1
			Cred	PBT Source Reduction- Lead, Cadmium, and Copper	2
			Cred	Furniture and Medical Furnishings	2
			Cred	Design for Flexibility	1
			Cred	Construction and Demolition Waste Management	2
<b>0 0 0 Indoor Environmental Quality</b>					<b>16</b>
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
			Cred	Enhanced Indoor Air Quality Strategies	2
			Cred	Low-Emitting Materials	3
			Cred	Construction Indoor Air Quality Management Plan	1
			Cred	Indoor Air Quality Assessment	2
			Cred	Thermal Comfort	1
			Cred	Interior Lighting	1
			Cred	Daylight	2
			Cred	Quality Views	2
			Cred	Acoustic Performance	2
<b>0 0 0 Innovation</b>					<b>6</b>
			Cred	Innovation	5
			Cred	LEED Accredited Professional	1
<b>0 0 0 Regional Priority</b>					<b>4</b>
			Cred	Regional Priority: Specific Credit	1
			Cred	Regional Priority: Specific Credit	1
			Cred	Regional Priority: Specific Credit	1
			Cred	Regional Priority: Specific Credit	1
<b>0 0 0 TOTALS</b>					<b>Possible Points: 110</b>
Certified: 40 to 43 points, Silver: 50 to 59 points, Gold: 60 to 73 points, Platinum: 80 to 110					

# LEED Online

## LEED ONLINE

Home > Projects > Washington Adventist Hospital

### Washington Adventist Hospital

1000066995

LEED
LEED Zero

Details
Credits
Uploads
Team
Timeline
Interpretations
Clarifications
Payments
Post Certification

**Project details**

This Individual Project is certified LEED Gold. FINAL REVIEW REPORT

Your project is now eligible to begin the process of recertification! RECERTIFICATION

NAME	Washington Adventist Hospital
REGISTRATION DATE	09 Feb 2016
PROJECT TYPE	Individual Project
RATING SYSTEM	LEED-HC v2009
UNIT TYPE	IP units
GROSS FLOOR AREA	456676 sq ft
ANTICIPATED START DATE	01 Mar 2016

If the Owner's Representative, Owner type or owner email fields need to be edited, please [Contact Us](#).

**Terms and Conditions**

[Certification Agreement](#)

[Confirmation of Agent's Authority](#)

Did the owner sign the Certification Agreement? If not, please submit the **Confirmation of Agent's Authority** form to confirm the agent's authority to accept the Certification Agreement for the Owner. If the completed form indicates the name originally entered for the Owner was incorrect and needs to be revised, please [Contact Us](#).

[Confirmation of Agent's Authority](#) [Download](#)

UPLOAD AGENT'S AUTHORITY

WATER EFFICIENCY		3 OF 9	AWARDED 3
WEp1	Water Use Reduction	HC v2009	AWARDED REQUIRED
WEp2	Minimize Potable Water Use for Medical Equipment Coo...	HC v2009	AWARDED REQUIRED
WEc1	Water Efficient Landscaping - No Potable Water Use o...		NOT ATTEMPTED ATTEMPTED 0-1
WEc2	Water Use Reduction-Measurement and Verification		WITHDRAWN ATTEMPTED 0-2
WEc3	Water Use Reduction		WITHDRAWN ATTEMPTED 0-3
WEc4.1	Water Use Reduction-Building Equipment	HC v2009	AWARDED AWARDED 1
WEc4.2	Water Use Reduction-Cooling Towers	HC v2009	AWARDED AWARDED 1
WEc4.3	Water Use Reduction-Food Waste Systems	HC v2009	AWARDED AWARDED 1

**Pamela Eaton**  
pam@ng-associates.com  
Accredited Professional

Role  
- Not selected -  
Authorization level  
Project Team Member

**William Bradford**  
bbradford@brph.com  
Accredited Professional

Role  
MEP Engineer  
Authorization level  
Project Team Member

**Brian Walker**  
brian.walker@edisonenergy.com

Role  
Commissioning Agent  
Authorization level  
Project Team Member

**Bryan Cranage**  
b.cranage@metro-acoustics.com

Role  
- Not selected -  
Authorization level  
Project Team Member

**Lesia Zahn**  
lazahn@rtcco.com

Role  
Contractor  
Authorization level  
Project Team Member

# LEED Online

1000017620, Rockville, Maryland

## 5601 Fishers Lane Base Building LEED BD+C: Core and Shell (v2009)

GOLD, AWARDED NOV 2014

SUSTAINABLE SITES		AWARDED: 18 / 28
SSp1	Construction activity pollution prevention	REQUIRED
SSc1	Site selection	1/1
SSc2	Development density and community connectivity	5/5
SSc3	Brownfield redevelopment	0/1
SSc4.1	Alternative transportation - public transportation access	6/6
SSc4.2	Alternative transportation - bicycle storage and changing rooms	2/2
SSc4.3	Alternative transportation - low-emitting and fuel-efficient vehicles	0/2
SSc4.4	Alternative transportation - parking capacity	0/2
SSc5.1	Site development - protect or restore habitat	0/1
SSc5.2	Site development - maximize open space	1/1
SSc6.1	Stormwater design - quantity control	0/1
SSc6.2	Stormwater design - quality control	1/1
SSc7.1	Heat island effect - nonroof	0/1
SSc7.2	Heat island effect - roof	1/1
SSc8	Light pollution reduction	0/1
SSc9	Tenant design and construction guidelines	1/1

WATER EFFICIENCY		AWARDED: 6 / 10
WEp1	Water use reduction	REQUIRED
WEc1	Water efficient landscaping	2/4
WEc2	Innovative wastewater technologies	0/2
WEc3	Water use reduction	4/4

ENERGY & ATMOSPHERE		AWARDED: 14 / 37
EAp1	Fundamental commissioning of building energy systems	REQUIRED
EAp2	Minimum energy performance	REQUIRED
EAp3	Fundamental refrigerant Mgmt	REQUIRED
EAc1	Optimize energy performance	10/21
EAc2	On-site renewable energy	0/4
EAc3	Enhanced commissioning	2/2
EAc4	Enhanced refrigerant Mgmt	2/2
EAc5.1	Measurement and verification - base building	0/3
EAc5.2	Measurement and verification - tenant submetering	0/3
EAc6	Green power	0/2

MATERIAL & RESOURCES		AWARDED: 7 / 13
MRp1	Storage and collection of recyclables	REQUIRED
MRc1	Building reuse - maintain existing walls, floors and roof	0/5
MRc2	Construction waste Mgmt	2/2

MATERIAL & RESOURCES		CONTINUED
MRc3	Materials reuse	0/1
MRc4	Recycled content	2/2
MRc5	Regional materials	2/2
MRc6	Certified wood	1/1

INDOOR ENVIRONMENTAL QUALITY		AWARDED: 10 / 12
EQp1	Minimum IAQ performance	REQUIRED
EQp2	Environmental Tobacco Smoke (ETS) control	REQUIRED
EQc1	Outdoor air delivery monitoring	1/1
EQc2	Increased ventilation	1/1
EQc3	Construction IAQ Mgmt plan - during construction	1/1
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 ag/fiber products	1/1
EQc5	Indoor chemical and pollutant source control	1/1
EQc6	Controlability of systems - thermal comfort	0/1
EQc7	Thermal comfort - design	1/1
EQc8.1	Daylight and views - daylight	0/1
EQc8.2	Daylight and views - views	1/1

INNOVATION		AWARDED: 5 / 6
Idc1	Innovation in design	1/1
Idc2	LEED Accredited Professional	1/1

REGIONAL PRIORITY CREDITS		AWARDED: 2 / 4
RPc2	On-site renewable energy	0/1
RPc2	Construction waste Mgmt	1/1
SSc6.1	Stormwater design - quantity control	0/1
WEc2	Innovative wastewater technologies	0/1
WEc3	Water use reduction	1/1

TOTAL 62 / 110

40-49 Points  
CERTIFIED

50-59 Points  
SILVER

60-79 Points  
GOLD

80+ Points  
PLATINUM

LEED BD+C: Core and Shell v3 - LEED 2009

### 5601 Fishers Lane Base Building



5601 Fishers Lane,  
Rockville, Maryland,  
United States, 20852  
Last certified on: November 25, 2014  
Certification level: Gold



Check your score

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Overview **Scoreboard**



### Project Info

Size 520,000 sq ft

5601 Fishers Lane is a commercial office building recently completed for the sole use of a GSA tenant. Featuring a new pre-cast and terra cotta exterior, the building contains 515,000 square feet of Class A office space in a beautiful setting. The project is located less than half a mile from the Twinbrook Metro Station in an area that is growing communally as well as economically. Additionally, the property contains a 600-space parking deck, a large outdoor seating terrace, an employee cafeteria, an employee fitness center, and a one mile long bike path connecting Veirs Mill Rd. and Rock Creek Trail. 5601 Fishers Lane is a state-of-the-art example of efficiency and tenant amenities that will serve the Twinbrook community for years to come.





# Points for Foodservice

- LEED compares energy usage of your facility with ASHRAE standards. If your equipment does not have an ASHRAE standard, it's typically considered **Process Energy** - defined as *energy consumed in support of a manufacturing, industrial, or commercial process other than conditioning spaces and maintaining comfort and amenities for the occupants of a building.* Your energy reduction is usually based on the reduction to non-process energy items.
- **Water Use Reduction – ID+C, BD+C, O+M**
  - Kitchen faucets (excluding faucets exclusively used for filling) – Flow rate less than 2.2 gpm at 60 psi
  - Pre-Rinse Spray Valves – Flow rate of less than 1.3 gpm
  - Ice Machines – Energy Star or equivalent, no open loop water cooling
  - Appliances (LEED BD+C: Schools)
    - Dishwashers
    - Food Steamers
    - Combination Ovens
    - Water tempering – either only runs when active discharge or includes heat recovery or returns steam condensate to boiler

# Points for Foodservice (continued)

- Energy Star Equipment

- **Coffee Brewers** (only Type II (*designed to use loose, ground coffee and a re-usable or single-use coffee filter and has a standard brew volume of >24 to 384 fluid ounces per brew event*); no Bean-to-Cup, Espresso, or powdered coffee)
- Dishwashers (only electric)
- Fryers
- Griddles (only thermostatically controlled)
- Hot Food Holding Cabinets (no drawer warmers, cook-and-hold or proofing units or some merchandising cabinets)
- Ice Makers (not water cooled, exclusively remote models, nor ice & water dispensers)
- Ovens (only combi and convection ovens; no standard, conveyor, cook and hold, rapid cook or rotisserie)
- Refrigerators and Freezers (self-contained only; no bases, prep tables, open air units)
- Steam Cookers

# Other advantages of LEED

- Reduce operational costs
- Rebates available in different locales
- Demonstrates a commitment to Social and Environmental Responsibility
- Improves indoor conditions for employees
- Can return the investment over time and become revenue positive

# Sustainability in Foodservice outside of LEED Points

- All electric kitchens
- Refrigerants – no CFC or HCFC based refrigerants, new options with lower GWP (R290 (HC or propane), R450A, R513a, R600 (butane), R600a (isobutane))
- Carbon neutral
- Net Zero
- Zero Waste

## Personal / Professional Advantages of LEED

- Offers a FSC a wider view of their project
- Indicates to clients a dedication to a better world
- Offers a broader education of the built community which enhances professional relationships
- CEUs offer exposure to wide array of other concepts – like biophilic design –
- Continual growth as an individual

# Other Sustainability Accreditation and Certification Tracks

- WELL - tool for advancing health and well-being in buildings globally by improving health and human experience through design.
- Green Classroom Professional - provides pre K-12 educators and school staff with the knowledge to identify what supports or impedes healthy, resource-efficient and environmentally sustainable learning spaces.
- TRUE - enables facilities to define, pursue and achieve their zero waste goals, cutting their carbon footprint and supporting public health.
- EDGE –measures, accelerates and certifies gender and intersectional equity in the workplace
- Living Building Challenge

# Links – LEED and Other Organizations

- LEED Credentials - <https://www.usgbc.org/credentials>
- LEED Project Database – <https://www.usgbc.org/projects>
- Green Business Certification Inc. (GBCI) - <https://gbc.org> (provides the certification process for LEED, WELL, EDGE, and others)
- Foodservice Consultants Society International – <https://www.fcsi.org/>
- Living Building Challenge - <https://living-future.org/lbc/>
- EnergyStar - <https://www.energystar.gov/products/business>

# Links – Industry

- Frontier Energy (Fishnick) - <https://fishnick.com/>
- Leanpath (food waste reduction) - <https://www.leanpath.com/>