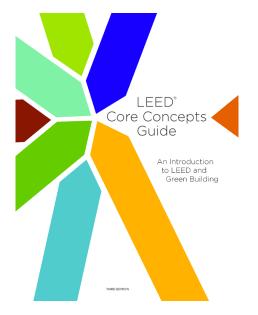
# About USGBC and LEED









# **U.S. Green Building Council (USGBC)**

http://usgbc.org

The U.S. Green Building Council (USGBC) is committed to transforming the way our buildings are designed, constructed and operated through LEED — the top third-party verification system for sustainable structures around the world.





### **ABOUT USGBC**



### **USGBC's Vision**

Buildings and communities will regenerate and sustain the health and vitality of all life within a generation.





### **Advocacy**

USGBC is accelerating the uptake of policies and initiatives that enable and encourage market transformation toward a sustainable built environment.

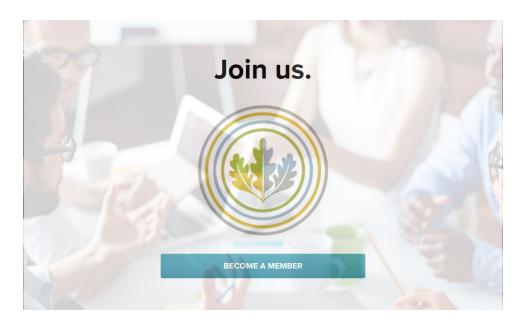






### Community

USGBC is a movement of community leaders, professionals, businesses, and innovators working to accomplish a single bold vision: healthy, efficient and equitable buildings and communities for all.







### Community

### USGBC community membership

For individuals, USGBC communities provide local opportunities for active involvement and leadership through learning, networking and other professional development activities.

Communities also raise awareness of green building through outreach and advocacy in that area. <u>Find your local USGBC community.</u>





### Community

### USGBC national membership

For companies and organizations, USGBC national membership is offered at four levels: Organizational, Silver, Gold and Platinum.

We understand every organization has different needs, so we provide every member with the same core benefits and the flexibility to choose the package best suited to your organization.



### **ABOUT USGBC**

**EXPLORE LEED v4** 



### Education

http://www.usgbc.org/education-at-usgbc



STUDY FOR MY EXAM



EARN CE HOURS



# **Greenbuild International Conference and Expo**

### https://greenbuildexpo.com







# **LEED Green Building Program**

# USGBC's Leadership in Energy and Environmental Design (LEED) program is a <u>third-party</u> green building certification program.







# All buildings in. LEED is flexible enough to apply to all project types.

LEED was developed to address all buildings everywhere, regardless of where they are in their life cycle.

From hospitals to data centers, from historical buildings to those still in the design phase, there is a LEED for every building.



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<b>LEED FOR</b> Building Design and Construction	LEED BD+C: New Construction LEED BD+C: Core and Shell LEED BD+C: Schools LEED BD+C: Retail LEED BD+C: Healthcare LEED BD+C: Data Centers LEED BD+C: Hospitality LEED BD+C: Warehouses and Distribution Centers LEED BD+C: Homes LEED BD+C: Multifamily Midrise	- Adaptations
LEED FOR Interior Design and Construction	LEED ID+C: Commercial Interiors LEED ID+C: Retail LEED ID+C: Hospitality	
<b>LEED FOR</b> Building Operations and Maintenance	LEED O+M: Existing Buildings LEED O+M: Data Centers LEED O+M: Warehouses and Distribution Centers LEED O+M: Hospitality LEED O+M: Schools LEED O+M: Retail	
LEED FOR Neighborhood Development	LEED ND: Plan LEED ND: Built Project	12



### **LEED Rating Systems**

USGBC's Leadership in Energy and Environmental Design (LEED) program is a third-party green building certification program and an international symbol of excellence in the design, construction, and operation of high-performance green buildings and neighborhoods.

It encourages and accelerates adoption of sustainable building and community development practices through the creation and implementation of a green building benchmark that is voluntary, consensus based, and market driven.





### **Rating System Structure**

### Prerequisites

- Required elements or green building strategies that must be included in any LEED-certified project.
- Establish a minimum level of sustainability.

### Credits

Optional elements—strategies that projects can elect to pursue to gain points toward LEED certification.





### **Rating System Structure**

### **Achieving LEED certification requires:**

- □ Meet the Minimum Program Requirements (MPRs)
- □ Satisfy all prerequisites
- Earn a minimum number of credits for the desired level of certification



CERTIFIED 40-49 POINTS



SILVER 50 - 59 POINTS



GOLD 60 - 79 POINTS



PLATINIUM 80+ POINTS





#### LEED v4 for BD+C: New Construction and Major Renovation

Project Checklist

#### Project Name: Date:

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0 0 0 Location and Transportation

Integrative Process

High Priority Site

Bicycle Facilities

Green Vehicles

Sensitive Land Protection

Access to Quality Transit

Reduced Parking Footprint

٦	0	Materia	als and Resources	13
	•	Prereq	Storage and Collection of Recyclables	Required
		Prereq	Construction and Demolition Waste Management Planning	Required
1		Credit	Building Life-Cycle Impact Reduction	5
		Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
		Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
1		Credit	Building Product Disclosure and Optimization - Material Ingredients	2
		Credit	Construction and Demolition Waste Management	2

0	0	0	Sustainable Sites	10
Y			Prereq Construction Activity Pollution Prevention	Required
			Credit Site Assessment	1
			Credit Site Development - Protect or Restore Habitat	2
			Credit Open Space	1
			Credit Rainwater Management	3
			Credit Heat Island Reduction	2
			Credit Light Pollution Reduction	1

LEED for Neighborhood Development Location

Surrounding Density and Diverse Uses

0	0	0	Water	Efficiency	11
Υ			Prereq	Outdoor Water Use Reduction	Required
Υ			Prereq	Indoor Water Use Reduction	Required
Υ			Prereq	Building-Level Water Metering	Required
			Credit	Outdoor Water Use Reduction	2
			Credit	Indoor Water Use Reduction	6
			Credit	Cooling Tower Water Use	2
			Credit	Water Metering	1

0	0	0	Energ	y and Atmosphere	33
Y			Prereq	Fundamental Commissioning and Verification	Required
Υ			Prereq	Minimum Energy Performance	Required
Υ			Prereq	Building-Level Energy Metering	Required
Υ			Prereq	Fundamental Refrigerant Management	Required
			Credit	Enhanced Commissioning	6
			Credit	Optimize Energy Performance	18
			Credit	Advanced Energy Metering	1
			Credit	Demand Response	2
			Credit	Renewable Energy Production	3
			Credit	Enhanced Refrigerant Management	1
			Credit	Green Power and Carbon Offsets	2

ndoo	r Environmental Quality	16
rereq	Minimum Indoor Air Quality Performance	Required
rereq	Environmental Tobacco Smoke Control	Required
redit	Enhanced Indoor Air Quality Strategies	2
redit	Low-Emitting Materials	3
redit	Construction Indoor Air Quality Management Plan	1
redit	Indoor Air Quality Assessment	2
redit	Thermal Comfort	1
redit	Interior Lighting	2
redit	Daylight	3
redit	Quality Views	1
redit	Acoustic Performance	1

0	0	0	Innovation Bonus Catagorias	6
			Innovation Bonus Categories	5
			Credit LEED Accredited Professional	1
			•	
0	0	0	Regional Priority	4
			Credit Regional Priority: Specific Credit	1
			Credit Regional Priority: Specific Credit	1
			Credit Regional Priority: Specific Credit	1
			Credit Regional Priority: Specific Credit	1
			a	
0	0	0	TOTALS Possible Points:	110

### 0 0 0 TOTALS

Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110

### **100 Base Points + 10 Bonus Points**

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#### LEED v4 for BD+C: Core and Shell

Project Checklist

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- - Credit
    - Integrative Process

#### Project Name: Date:

0	0	0	Leastian and Transportation
0	U	0	Location and Transportation
			Credit LEED for Neighborhood Development Location
			Credit Sensitive Land Protection
			Credit High Priority Site
			Credit Surrounding Density and Diverse Uses
			Credit Access to Quality Transit
			Credit Bicycle Facilities
			Credit Reduced Parking Footprint
			Credit Green Vehicles

	0	0	0	Sustainable Sites
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0	0	0	Susta	ainable Sites	11
Υ			Prereq	Construction Activity Pollution Prevention	Required
			Credit	Site Assessment	1
			Credit	Site Development - Protect or Restore Habitat	2
			Credit	Open Space	1
			Credit	Rainwater Management	3
			Credit	Heat Island Reduction	2
			Credit	Light Pollution Reduction	1
			Credit	Tenant Design and Construction Guidelines	1

0	0	0	Water	Efficiency	11
Υ			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
			Credit	Outdoor Water Use Reduction	2
			Credit	Indoor Water Use Reduction	6
			Credit	Cooling Tower Water Use	2
			Credit	Water Metering	1

0	0	0	Energ	gy and Atmosphere	33
Υ			Prereq	Fundamental Commissioning and Verification	Required
Υ			Prereq	Minimum Energy Performance	Required
Υ			Prereq	Building-Level Energy Metering	Required
Y	1		Prereq	Fundamental Refrigerant Management	Required
			Credit	Enhanced Commissioning	6
			Credit	Optimize Energy Performance	18
			Credit	Advanced Energy Metering	1
			Credit	Demand Response	2
			Credit	Renewable Energy Production	3
			Credit	Enhanced Refrigerant Management	1
			Credit	Green Power and Carbon Offsets	2
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0	Materi	als and Resources	14
	Prereq	Storage and Collection of Recyclables	Required
	Prereq	Construction and Demolition Waste Management Planning	Required
	Credit	Building Life-Cycle Impact Reduction	6
	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
	Credit	Building Product Disclosure and Optimization - Material Ingredients	2
	Credit	Construction and Demolition Waste Management	2

### Indoor Environmental Quality

Prereq	Minimum Indoor Air Quality Performance	Required
Prereq	Environmental Tobacco Smoke Control	Required
Credit	Enhanced Indoor Air Quality Strategies	2
Credit	Low-Emitting Materials	3
Credit	Construction Indoor Air Quality Management Plan	1
Credit	Daylight	3
Credit	Quality Views	1

0	0	Innova	tion	6
		Credit	Innovation	5
		Credit	LEED Accredited Professional	1

0	0	0	Regional	Priority	4
			Credit <b>R</b>	egional Priority: Specific Credit	1
			Credit <b>R</b> i	egional Priority: Specific Credit	1
			Credit <b>R</b>	egional Priority: Specific Credit	1
			Credit <b>R</b>	egional Priority: Specific Credit	1

0 0 0 TOTALS Possible Points: Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110

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LEED v4 for BD+C: Schools

Integrative Process

Project Checklist

Υ ? N Credit

#### Project Name: Date:

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0	0	0	Locati	ion and Transportation
•	Ū	-		LEED for Neighborhood Development Location
				Sensitive Land Protection
			Credit	High Priority Site
			Credit	Surrounding Density and Diverse Uses
			Credit	Access to Quality Transit
			Credit	Bicycle Facilities
			Credit	Reduced Parking Footprint
			Credit	Green Vehicles
			-	

Ī	0	0	Mater	ials and Resources	13
Ī			Prereq	Storage and Collection of Recyclables	Required
1			Prereq	Construction and Demolition Waste Management Planning	Required
Ī			Credit	Building Life-Cycle Impact Reduction	5
I			Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
Ī			Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
ĺ			Credit	Building Product Disclosure and Optimization - Material Ingredients	2
Ī			Credit	Construction and Demolition Waste Management	2

#### 0 0 0 Sustainable Sites 12 Construction Activity Pollution Prevention Y Prereq Required Y Prereq Environmental Site Assessment Required Credit Site Assessment 1 Site Development - Protect or Restore Habitat 2 Credit Open Space Credit Rainwater Management Credit Heat Island Reduction Credit Light Pollution Reduction Credit Credit Site Master Plan Credit Joint Use of Facilities

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			Credit

Environmental Quality	16
Minimum Indoor Air Quality Performance	Required
Environmental Tobacco Smoke Control	Required
Minimum Acoustic Performance	Required
Enhanced Indoor Air Quality Strategies	2
Low-Emitting Materials	3
Construction Indoor Air Quality Management Plan	1
Indoor Air Quality Assessment	2
Thermal Comfort	1
Interior Lighting	2
Daylight	3
Quality Views	1
Acoustic Performance	1
	Thermal Comfort

	0	0	0	Water	Efficiency	12
	Y			Prereq	Outdoor Water Use Reduction	Required
	Y			Prereq	Indoor Water Use Reduction	Required
	Y			Prereq	Building-Level Water Metering	Required
				Credit	Outdoor Water Use Reduction	2
				Credit	Indoor Water Use Reduction	7
ĺ				Credit	Cooling Tower Water Use	2
				Credit	Water Metering	1

0	0 0 Energy and Atmosphere			
Y			Prereq	Fundamental Commissioning and Verification
Y			Prereq	Minimum Energy Performance
Y			Prereq	Building-Level Energy Metering
Y			Prereq	Fundamental Refrigerant Management
			Credit	Enhanced Commissioning
			Credit	Optimize Energy Performance
			Credit	Advanced Energy Metering
			Credit	Demand Response
			Credit	Renewable Energy Production
			Credit	Enhanced Refrigerant Management
			Credit	Green Power and Carbon Offsets

0	0	0	novation 6	
			Credit Innovation	5
			Credit LEED Accredited Professional	1
0	0	0	Regional Priority	4

U	U	U	Regio	nai Priority	4
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
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#### 0 0 0 TOTALS

Possible Points: Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110

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Integrative Process

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#### Project Name: Date:

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0	0	0	Location and Transportation
			Credit LEED for Neighborhood Development Location
			Credit Sensitive Land Protection
			Credit High Priority Site
			Credit Surrounding Density and Diverse Uses
			Credit Access to Quality Transit
			Credit Bicycle Facilities
			Credit Reduced Parking Footprint
			Credit Green Vehicles

0	0	0	Materi	als and Resources	13
Y			Prereq	Storage and Collection of Recyclables	Required
Υ			Prereq	Construction and Demolition Waste Management Planning	Required
			Credit	Building Life-Cycle Impact Reduction	5
			Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
			Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
			Credit	Building Product Disclosure and Optimization - Material Ingredients	2
			Credit	Construction and Demolition Waste Management	2

inable Sites 10		
Construction Activity Pollution Prevention	Required	
Site Assessment	1	
Site Development - Protect or Restore Habitat	2	
Open Space	1	
Rainwater Management	3	
Heat Island Reduction	2	
Light Pollution Reduction	1	

0	0	0	Water	Efficiency
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0 0 0 Sustainable Sites

Prereq

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Υ		Prereq	Outdoor Water Use Reduction	Required
Υ	Prereq Indoor Water Use Reduction		Required	
Υ		Prereq	Building-Level Water Metering	Required
		Credit	Outdoor Water Use Reduction	2
		Credit	Indoor Water Use Reduction	7
		Credit	Cooling Tower Water Use	2
		Credit	Water Metering	1

0	0	0	Energ	gy and Atmosphere	33
Υ			Prereq	Fundamental Commissioning and Verification	Required
Υ			Prereq	Minimum Energy Performance	Required
Υ			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
			Credit	Enhanced Commissioning	6
			Credit	Optimize Energy Performance	18
			Credit	Advanced Energy Metering	1
			Credit	Demand Response	2
			Credit	Renewable Energy Production	3
			Credit	Enhanced Refrigerant Management	1
			Credit	Green Power and Carbon Offsets	2

0	0	0	Indoor	Envir
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			Credit	Con
			Credit	Indo
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			Credit	Inter
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oor	Environmental Quality	15
q	Minimum Indoor Air Quality Performance	Required
q	Environmental Tobacco Smoke Control	Required
t	Enhanced Indoor Air Quality Strategies	2
t	Low-Emitting Materials	3
t	Construction Indoor Air Quality Management Plan	1
t	Indoor Air Quality Assessment	2
t	Thermal Comfort	1
t	Interior Lighting	2
t	Daylight	3
t	Quality Views	1

0	0	0	Innovation	6
			Credit Innovation	5
			Credit LEED Accredited Professional	1
			•	
0	0	0	Regional Priority	4
			Credit Regional Priority: Specific Credit	1
			Credit Regional Priority: Specific Credit	1
			Credit Regional Priority: Specific Credit	1
			Credit Regional Priority: Specific Credit	1

#### Possible Points: 0 0 0 TOTALS

Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110

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#### LEED v4 for BD+C: Data Centers

Project Checklist

#### Y ? N

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Integrative Process

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0	0	0	Location a	ocation and Transportation	
			Credit <b>LEED</b>	for Neighborhood Development Location	
			Credit <b>Sensi</b>	ive Land Protection	
			Credit <b>High I</b>	Priority Site	
			Credit <b>Surro</b>	unding Density and Diverse Uses	
			Credit Acces	s to Quality Transit	
			Credit <b>Bicycl</b>	e Facilities	
			Credit <b>Redu</b>	ed Parking Footprint	
			Credit <b>Greer</b>	1 Vehicles	

0	0	0	Materia	als and Resources	13
Υ			Prereq	Storage and Collection of Recyclables	Required
Υ	1		Prereq	Construction and Demolition Waste Management Planning	Required
			Credit	Building Life-Cycle Impact Reduction	5
			Credit	Building Product Disclosure and Optimization - Environmental Product Declaration	2
			Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
			Credit	Building Product Disclosure and Optimization - Material Ingredients	2
			Credit	Construction and Demolition Waste Management	2

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Project Name:

Date:

I	Indoor	Environmental Quality	16
	Prereq	Minimum Indoor Air Quality Performance	Required
	Prereq	Environmental Tobacco Smoke Control	Required
	Credit	Enhanced Indoor Air Quality Strategies	2
	Credit	Low-Emitting Materials	3
	Credit	Construction Indoor Air Quality Management Plan	1
	Credit	Indoor Air Quality Assessment	2
	Credit	Thermal Comfort	1
	Credit	Interior Lighting	2
	Credit	Daylight	3
	Credit	Quality Views	1
	Credit	Acoustic Performance	1

0	0	0	Innova	tion	6
			Credit	Innovation	5
			Credit	LEED Accredited Professional	1

0	0	0	Regional Priority	4
			Credit Regional Priority: Specific Credit	1
			Credit Regional Priority: Specific Credit	1
			Credit Regional Priority: Specific Credit	1
			Credit Regional Priority: Specific Credit	1

#### 0 0 0 TOTALS

Possible Points: 110

Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110

0	0	Susta	inable Sites
		Prereq	Construction Activity Pollution Prevention
		Credit	Site Assessment
		Credit	Site Development - Protect or Restore Habitat
		Credit	Open Space
		Credit	Rainwater Management
		Credit	Heat Island Reduction
		Credit	Light Pollution Reduction
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0	0	0	Water	Efficiency
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Prereq	Outdoor Water Use Reduction	Required
Prereq	Indoor Water Use Reduction	Required
Prereq	Building-Level Water Metering	Required
Credit	Outdoor Water Use Reduction	2
Credit	Indoor Water Use Reduction	6
Credit	Cooling Tower Water Use	2
Credit	Water Metering	1

0	0	0	Energ	yy and Atmosphere	33
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Υ			Prereq	Building-Level Energy Metering	Required
Υ			Prereq	Fundamental Refrigerant Management	Required
			Credit	Enhanced Commissioning	6
			Credit	Optimize Energy Performance	18
			Credit	Advanced Energy Metering	1
			Credit	Demand Response	2
			Credit	Renewable Energy Production	3
			Credit	Enhanced Refrigerant Management	1
			Credit	Green Power and Carbon Offsets	2



#### LEED v4 for BD+C: Warehouses and Distribution Centers

Project Checklist

#### Project Name: Date:

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- - Integrative Process

0 0 0 Location and Transportation

Sensitive Land Protection

Access to Quality Transit

Reduced Parking Footprint

High Priority Site

**Bicycle Facilities** 

Green Vehicles

LEED for Neighborhood Development Location

Surrounding Density and Diverse Uses

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0	Materia	Is and Resources	13
	Prereq	Storage and Collection of Recyclables	Required
	Prereq	Construction and Demolition Waste Management Planning	Required
	Credit	Building Life-Cycle Impact Reduction	5
	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
	Credit	Building Product Disclosure and Optimization - Material Ingredients	2
	Credit	Construction and Demolition Waste Management	2

#### 0 0 0 Indoor Environmental Quality 16 Minimum Indoor Air Quality Performance Prereq Required Prereq Environmental Tobacco Smoke Control Required Enhanced Indoor Air Quality Strategies Credit 2 Credit Low-Emitting Materials 3 Construction Indoor Air Quality Management Plan Credit 1 Indoor Air Quality Assessment Credit 2 Thermal Comfort Credit Interior Lighting 2 Credit Credit Daylight 3 Quality Views Credit Acoustic Performance Credit 1

0	0	0	Innovation	6
			Credit Innovation	5
			Credit LEED Accredited Professional	1
			•	
0	0	0	Regional Priority	4
			Credit Regional Priority: Specific Credit	1
			Credit Regional Priority: Specific Credit	1
			Credit Regional Priority: Specific Credit	1
			Credit Regional Priority: Specific Credit	1

#### 0 0 0 TOTALS

Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110

0	0	0	Sustainable Sites					
Y			Prereq	Construction Activity Pollution Prevention	Required			
			Credit	Site Assessment	1			
			Credit	Site Development - Protect or Restore Habitat	2			
			Credit	Open Space	1			
			Credit	Rainwater Management	3			
			Credit	Heat Island Reduction	2			
			Credit	Light Pollution Reduction	1			

0	0	0	Water Efficiency	
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Υ	Prereq	Outdoor Water Use Reduction	Required
Y	Prereq	Indoor Water Use Reduction	Required
Y	Prereq	Building-Level Water Metering	Required
	Credit	Outdoor Water Use Reduction	2
	Credit	Indoor Water Use Reduction	6
	Credit	Cooling Tower Water Use	2
	Credit	Water Metering	1

#### 0 0 0 Energy and Atmosphere

-ractices

Υ		Prereq	Fundamental Commissioning and Verification	Required
Υ		Prereq	Minimum Energy Performance	Required
Υ		Prereq	Building-Level Energy Metering	Required
Υ		Prereq	Fundamental Refrigerant Management	Required
		Credit	Enhanced Commissioning	6
		Credit	Optimize Energy Performance	18
		Credit	Advanced Energy Metering	1
		Credit	Demand Response	2
		Credit	Renewable Energy Production	3
		Credit	Enhanced Refrigerant Management	1
		Credit	Green Power and Carbon Offsets	2

110

Possible Points:



#### LEED v4 for BD+C: Hospitality

Project Checklist

0 0 Sustainable Sites

Site Assessment

Rainwater Management

Light Pollution Reduction

Outdoor Water Use Reduction

Indoor Water Use Reduction

**Building-Level Water Metering** 

Outdoor Water Use Reduction

Indoor Water Use Reduction

Cooling Tower Water Use

Water Metering

Heat Island Reduction

Open Space

Prereq

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#### Project Name: Date:

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Integrative Process

0	0	0	Location and Transportation	16
			Credit LEED for Neighborhood Development Location	16
			Credit Sensitive Land Protection	1
			Credit High Priority Site	2
			Credit Surrounding Density and Diverse Uses	5
			Credit Access to Quality Transit	5
			Credit Bicycle Facilities	1
			Credit Reduced Parking Footprint	1
			Credit Green Vehicles	1

Construction Activity Pollution Prevention

Site Development - Protect or Restore Habitat

Ι	0	Materia	als and Resources	13
		Prereq	Storage and Collection of Recyclables	Required
		Prereq	Construction and Demolition Waste Management Planning	Required
Τ		Credit	Building Life-Cycle Impact Reduction	5
Ī		Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
Τ		Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
Τ		Credit	Building Product Disclosure and Optimization - Material Ingredients	2
T		Credit	Construction and Demolition Waste Management	2

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oor Environmental Quality	16
Minimum Indoor Air Quality Performance	Required
Environmental Tobacco Smoke Control	Required
Enhanced Indoor Air Quality Strategies	2
Low-Emitting Materials	3
Construction Indoor Air Quality Management Plan	1
Indoor Air Quality Assessment	2
Thermal Comfort	1
Interior Lighting	2
Daylight	3
Quality Views	1

			Credit Quality Views	1
			Credit Acoustic Performance	1
0	0	0	Innovation	6
			Credit Innovation	5

			Credit LEED Accredited Professional	1
0	0	0	Regional Priority	4
			Credit Regional Priority: Specific Credit	1
			Credit Regional Priority: Specific Credit	1
			Credit Regional Priority: Specific Credit	1
			Credit Regional Priority: Specific Credit	1

#### 0 0 0 TOTALS

Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110

0	0	0	Energ	gy and Atmosphere	33
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y	1		Prereq	Fundamental Refrigerant Management	Required
			Credit	Enhanced Commissioning	6
			Credit	Optimize Energy Performance	18
			Credit	Advanced Energy Metering	1
			Credit	Demand Response	2
			Credit	Renewable Energy Production	3
			Credit	Enhanced Refrigerant Management	1
			Credit	Green Power and Carbon Offsets	2

22

110

Possible Points:



#### LEED v4 for BD+C: Healthcare

Project Checklist

#### Y ? N

Y Prereq Credit

ractices

GL

Integrative Project Planning and Design
 Integrative Process

#### Project Name: Date:

Required

1

0	0	Locat	ion and Transportation	9	0	0	0
		Credit	LEED for Neighborhood Development Location	9	Y		P
		Credit	Sensitive Land Protection	1	Y		P
		Credit	High Priority Site	2	Y		P
		Credit	Surrounding Density and Diverse Uses	1			C
		Credit	Access to Quality Transit	2			c
		Credit	Bicycle Facilities	1			c
		Credit	Reduced Parking Footprint	1			C
		Credit	Green Vehicles	1			C
0		Curto	inchie Oitee	0			C C
0			Construction Activity Dellution Drayontion	9			
		Prereq	Construction Activity Pollution Prevention	Required			C
	_	Prereq	Environmental Site Assessment	Required			C
		Credit	Site Assessment	1			
		Credit	Site Development - Protect or Restore Habitat	1	0	0	0
		Credit		1	Y		F
		Credit	Rainwater Management	2	Y		F
_		Credit Credit	Heat Island Reduction Light Pollution Reduction	1			
		Credit	0	1			
		Credit	Places of Respite	1			
		Credit	Direct Exterior Access	Ι			
0	0	Water	Efficiency	11			C
-	_	Prereq	Outdoor Water Use Reduction	Required			d
		Prereq	Indoor Water Use Reduction	Required			
		Prereq	Building-Level Water Metering	Required			
		Credit	Outdoor Water Use Reduction	1			_
		Credit	Indoor Water Use Reduction	7	0	0	U
		Credit Credit	Indoor Water Use Reduction Cooling Tower Water Use	7 2	0	0	
					0	0	0       
0	0	Credit Credit	Cooling Tower Water Use Water Metering	2 1			
0		Credit Credit	Cooling Tower Water Use	2 1 <b>35</b>	0		0
0		Credit Credit Energ	Cooling Tower Water Use Water Metering y and Atmosphere	2 1			0 0
0		Credit Credit <b>Energ</b> Prereq	Cooling Tower Water Use Water Metering y and Atmosphere Fundamental Commissioning and Verification	2 1 <b>35</b> Required			0 0 0 0
0		Credit Credit Energ Prereq Prereq	Cooling Tower Water Use Water Metering y and Atmosphere Fundamental Commissioning and Verification Minimum Energy Performance	2 1 <b>35</b> Required Required			
0		Credit Credit Energ Prereq Prereq Prereq	Cooling Tower Water Use Water Metering <b>y and Atmosphere</b> Fundamental Commissioning and Verification Minimum Energy Performance Building-Level Energy Metering	2 1 <b>35</b> Required Required Required			
0		Credit Credit Energ Prereq Prereq Prereq Prereq	Cooling Tower Water Use Water Metering <b>y and Atmosphere</b> Fundamental Commissioning and Verification Minimum Energy Performance Building-Level Energy Metering Fundamental Refrigerant Management	2 1 <b>35</b> Required Required Required Required			
0		Credit Credit <b>Energ</b> Prereq Prereq Prereq Prereq Credit	Cooling Tower Water Use Water Metering <b>y and Atmosphere</b> Fundamental Commissioning and Verification Minimum Energy Performance Building-Level Energy Metering Fundamental Refrigerant Management Enhanced Commissioning	2 1 <b>35</b> Required Required Required Required 6	0	0	
0		Credit Credit <b>Energ</b> Prereq Prereq Prereq Credit Credit	Cooling Tower Water Use Water Metering <b>y and Atmosphere</b> Fundamental Commissioning and Verification Minimum Energy Performance Building-Level Energy Metering Fundamental Refrigerant Management Enhanced Commissioning Optimize Energy Performance	2 1 <b>35</b> Required Required Required Required 6 20	0	0	
		Credit Credit Prereq Prereq Prereq Prereq Credit Credit Credit	Cooling Tower Water Use Water Metering <b>y and Atmosphere</b> Fundamental Commissioning and Verification Minimum Energy Performance Building-Level Energy Metering Fundamental Refrigerant Management Enhanced Commissioning Optimize Energy Performance Advanced Energy Metering	2 1 <b>35</b> Required Required Required 6 20 1	0	0	
0		Credit Credit Prereq Prereq Prereq Prereq Credit Credit Credit Credit	Cooling Tower Water Use Water Metering y and Atmosphere Fundamental Commissioning and Verification Minimum Energy Performance Building-Level Energy Metering Fundamental Refrigerant Management Enhanced Commissioning Optimize Energy Performance Advanced Energy Metering Demand Response	2 1 <b>35</b> Required Required Required 6 20 1 2	0	0	

Materials and Resources			
Prereq	Storage and Collection of Recyclables	Required	
Prereq	Construction and Demolition Waste Management Planning	Required	
Prereq	PBT Source Reduction- Mercury	Required	
Credit	Building Life-Cycle Impact Reduction	5	
Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2	
Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2	
Credit	Building Product Disclosure and Optimization - Material Ingredients	2	
Credit	PBT Source Reduction- Mercury	1	
Credit	PBT Source Reduction- Lead, Cadmium, and Copper	2	
Credit	Furniture and Medical Furnishings	2	
Credit	Design for Flexibility	1	
Credit	Construction and Demolition Waste Management	2	

0	Indoor	Environmental Quality	16
	Prereq	Minimum Indoor Air Quality Performance	Required
	Prereq	Environmental Tobacco Smoke Control	Required
	Credit	Enhanced Indoor Air Quality Strategies	2
	Credit	Low-Emitting Materials	3
	Credit	Construction Indoor Air Quality Management Plan	1
	Credit	Indoor Air Quality Assessment	2
	Credit	Thermal Comfort	1
	Credit	Interior Lighting	1
	Credit	Daylight	2
	Credit	Quality Views	2
	Credit	Acoustic Performance	2

0	0	0	Innova	tion	6
			Credit	Innovation	5
			Credit	LEED Accredited Professional	1

0	0	0	Regio	onal Priority	4
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1

### 0 0 0 TOTALS Possible Points: 110 Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110



# **LEED v4 Credit Categories**

Location and Transportation (LT) Sustainable Sites (SS) Water Efficiency (WE) Energy and Atmosphere (EA) Materials and Resources (MR) Indoor Environmental Quality (EQ) Innovation (IN) Regional Priority (RP)

### **LEED for Neighborhood Development**

Smart Location and Linkages (SLL) Neighborhood Pattern and Design (NPD) Green Buildings and Infrastructure (GBI)





# **Location and Transportation (LT)**



LEED emphasizes location and transportation issues by rewarding development that preserves environmentally sensitive places and takes advantage of existing infrastructure, community resources, and transit.

- It encourages access to open space for walking, physical activity, and time spent outdoors.
- Credits also encourage smart transportation choices and access to a diversity of uses.





### Sustainable Sites (SS)



Choosing a building's site and managing that site during construction are important considerations for a project's sustainability.

- LEED credits addressing sustainable sites discourage development of previously undeveloped land and damage to ecosystems and waterways;
- they encourage regionally appropriate landscaping, control of rainwater runoff, and reduced erosion, light pollution, heat island effect, and construction-related pollution.





### Water Efficiency (WE)



Buildings are major users of our potable water supply. The goal of credits addressing water efficiency is to encourage smarter use of water, inside and out.

Water reduction is typically achieved through more efficient appliances, fixtures, and fittings inside and water-wise landscaping outside.





# **Energy and Atmosphere (EA)**



LEED encourages a wide variety of strategies to address energy consumption, including

□ commissioning;

- energy use monitoring;
- efficient design and construction;
- efficient appliances, systems, and lighting;
- □ demand response, and
- the use of renewable and clean sources of energy, generated on-site or off-site.





### Materials and Resources (MR)



During both construction and operations, buildings generate large amounts of waste and use tremendous volumes of materials and resources.

- These credits encourage the selection of sustainably grown, harvested, produced, and transported products and materials.
- They promote the use of life-cycle assessment to holistically evaluate materials and the disclosure and optimization of material chemical ingredients.





### **Indoor Environmental Quality (EQ)**



The average American spends about 90% of the day indoors, where pollutant concentrations may be two to 100 times higher than outdoor levels. Thus indoor air quality can be significantly worse than outside.

- LEED credits promote strategies that can improve indoor air,
- provide access to natural daylight and views, and
- improve acoustics.





### **Innovation (IN)**



LEED promotes innovation by offering points for improving a building's performance well beyond what is required by the credits or for incorporating green building ideas that are not specifically addressed elsewhere in the rating system.

This credit category also rewards the inclusion of a LEED Accredited Professional on the project team.





# **Regional Priority (RP)**



USGBC's regional councils, chapters, and affiliates have identified the environmental concerns that are most important for every region of the country, and LEED credits that address those local priorities have been selected for each region.

A project team that earns a regional priority credit earns one bonus point in addition to any points awarded for that credit.





### LEED for Neighborhood Development is organized around three main categories, focusing on where, what, and how to build green at a community scale.

### Smart Location and Linkages (SLL)



This section of the rating system provides guidance on where the project is built, encouraging the selection of sites with existing services and transit.

### Neighborhood Pattern and Design (NPD)



Neighborhoods should be compact, complete, connected, and convivial. The intent of credits in this category is to create environments that are walkable, vibrant with mixed-use establishments, and connected to the larger community.

### **Green Infrastructure and Buildings (GIB)**



This category focuses on measures that can reduce the environmental harms associated with the construction and operation of buildings and infrastructure within neighborhoods, with a goal of not just reducing the environmental consequences, but also enhancing the natural environment.





### **Rating System Structure**

LEED rating systems have 100 base points plus six Innovation points and four Regional Priority points, for a total of 110 points.

The level of certification is determined according to the following scale:

- Certified 40–49 points
- Silver 50–59 points
- Gold 60–79 points
- Platinum 80+ points





### **Integrative Process**



An **integrative process** is a comprehensive approach to building systems and equipment. Project team members look for synergies among systems and components, the mutual advantages that can help achieve high levels of building performance, human comfort, and environmental benefits.

- The process should involve rigorous questioning and coordination and challenge typical project assumptions.
- Team members collaborate to enhance the efficiency and effectiveness of every system.





# **Ongoing Performance Monitoring**



LEED Dynamic Plaque





Ongoing improvements to LEED are based on principles of transparency, openness, and inclusiveness involving volunteer committees and working groups, as well as USGBC staff, and are approved by a membership-wide vote.

LEED is continually improved through the correction and clarification of credit language. These updates are published as quarterly addenda and include LEED interpretations.





Addenda <u>http://www.usgbc.org/leed-interpretations</u>

What are Addenda?

### Answer

Addenda incorporate changes, improvements to LEED rating systems and reference guides to help clarify, correct, interpret or provide alternative language. Addenda are subject to USGBC committee review and are published frequently.



## ABOUT LEED



## **Rating System Development and Evolution**

Addenda

How often are Addenda published?

### Answer

Addenda are published as frequently as quarterly, with the first quarterly release occurring January 1st.



## **ABOUT LEED**



## **Rating System Development and Evolution**

### Addenda

Does my project have to follow the Addenda?

### Answer

Project teams must follow Addenda published prior to their project's registration date. It's strongly recommended that project teams also follow Addenda published after their registration date.





### **LEED Interpretation**

What is a LEED Interpretation?

### Answer

LEED Interpretations are official answers to formal technical inquiries about implementing <u>LEED</u> on a project. They help project teams understand how their projects can meet LEED requirements and provide clarity on existing options.





### **LEED Interpretations are:**

- Precedent-setting: LEED Interpretations can be used by any project certifying under an applicable rating system. All project teams are required to adhere to all LEED Interpretations posted before their registration date. This also applies to other addenda. Adherence to rulings posted after a project registers is optional, but strongly encouraged.
- Published online: LEED Interpretations will be published in a <u>database</u>.
- □ Subject to consensus-based review: LEED Interpretations undergo review by USGBC member-selected volunteer LEED committees.





What is a Project Credit Interpretation Ruling (CIR)?

### Answer

The Project Credit Interpretation Ruling (CIR) process is designed to allow Project Teams to obtain technical guidance on how LEED requirements including Minimum Program Requirements (MPR), Prerequisites, and Credits pertain to their projects.





What is the difference between a LEED Interpretation and a Project Credit Interpretation Ruling (CIR)?

### Answer

LEED Interpretations are similar to Project CIRs but they are precedent setting as the results can be applied to all future LEED projects.





How do I submit a formal inquiry — i.e. a Project Credit Interpretation Ruling (CIR) or LEED Interpretation (LI)?

### Answer

Although full functionality for formal inquiries is still under development, Project CIRs & LIs may now be submitted through LEED Online. View our instructions and please refer to the <u>fees</u> website for information on Project CIR fees.





- Pilot Credits <a href="http://www.usgbc.org/pilotcredits">http://www.usgbc.org/pilotcredits</a>
- □ Pilot credits are a testing area for new ideas in LEED.
- Credit can be earned in the Innovation category, or, for Pilot ACPs, the pilot can be used to replace an existing credit.





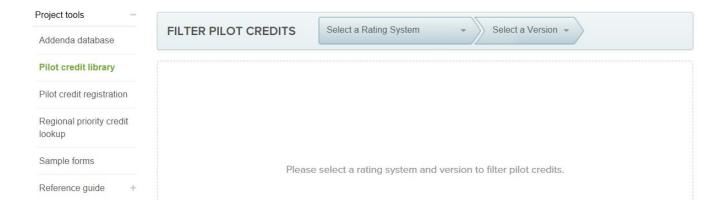
### **ABOUT LEED**



## **Rating System Development and Evolution**

### **Pilot Credit Library**

- 1. Open ACP Pilot Credits
- 2. Open Pilot Credits
- 3. Closed Pilot Credits





## **ABOUT LEED**



## **Rating System Development and Evolution**

#### **Open ACP pilot credits**



#### Indoor air quality procedure

LEED BD+C: New Construction, LEED BD+C: Schools, LEED BD+C: Retail, LEED BD+C: Hospitality, LEED BD+C: Warehouses and Distribution Centers, LEED BD+C: Multifamily Midrise, LEED ID+C: Commercial Interiors, LEED ID+C: Retail, LEED ID+C: Hospitality, LEED O+M: Existing Buildings, LEED O+M: Schools, LEED O+M: Retail, LEED O+M: Hospitality, LEED O+M: Warehouses and Distribution Centers EQpc68 | Required



#### Offsite Financial Support for Habitat Protection

LEED BD+C: New Construction, LEED BD+C: Core and Shell, LEED BD+C: Schools, LEED BD+C: Retail, LEED BD+C: Healthcare SSpc83 | 1 point



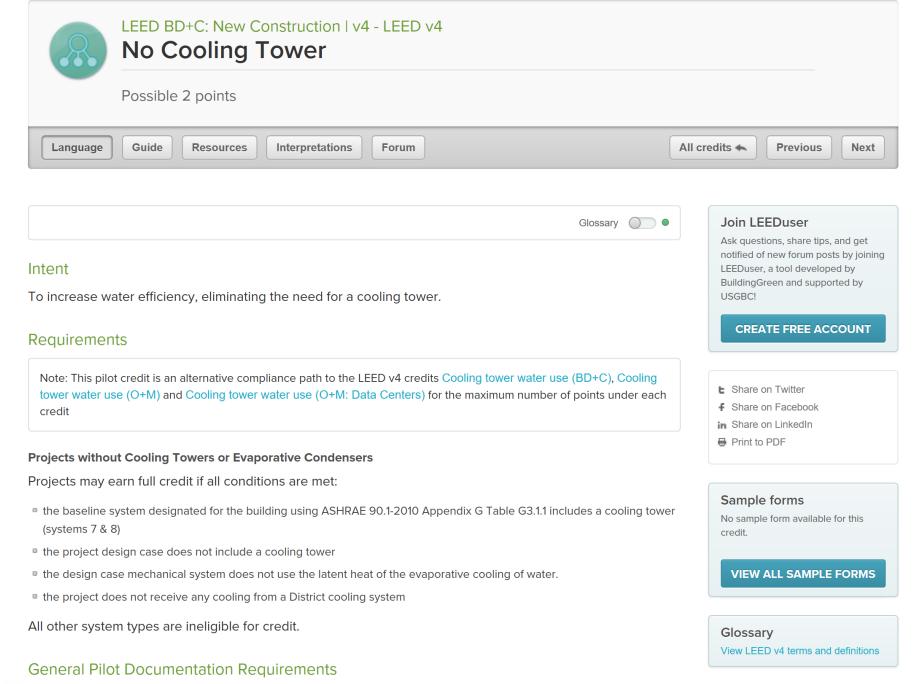
#### Advanced Buildings<sup>™</sup> New Construction Guide

LEED BD+C: New Construction, LEED BD+C: Core and Shell, LEED BD+C: Schools, LEED BD+C: Retail, LEED BD+C: Data Centers, LEED BD+C: Hospitality EApc92 | Up to 10 points

#### No Cooling Tower

LEED BD+C: New Construction, LEED BD+C: Core and Shell, LEED BD+C: Schools, LEED BD+C: Retail, LEED BD+C: Healthcare, LEED BD+C: Data Centers, LEED BD+C: Hospitality, LEED BD+C: Warehouses and Distribution Centers
WEpc94 | 2 points





G	

**REGISTER FOR THE PILOT CREDIT** 

## **ABOUT LEED**



## **Rating System Development and Evolution**

#### **Open pilot credits**



#### Indoor air quality procedure

LEED BD+C: New Construction, LEED BD+C: Schools, LEED BD+C: Retail, LEED BD+C: Hospitality, LEED BD+C: Warehouses and Distribution Centers, LEED BD+C: Multifamily Midrise, LEED ID+C: Commercial Interiors, LEED ID+C: Retail, LEED ID+C: Hospitality, LEED O+M: Existing Buildings, LEED O+M: Schools, LEED O+M: Retail, LEED O+M: Hospitality, LEED O+M: Warehouses and Distribution Centers EQpc68 | Required



#### Medical and process equipment efficiency

LEED BD+C: New Construction, LEED BD+C: Healthcare, LEED ID+C: Commercial Interiors EApc3 | 1 point



#### Walkable project site

LEED BD+C: New Construction, LEED BD+C: Core and Shell, LEED BD+C: Schools, LEED BD+C: Retail, LEED BD+C: Healthcare, LEED BD+C: Hospitality SSpc14 | 1 point



#### Ergonomics approach for computer users

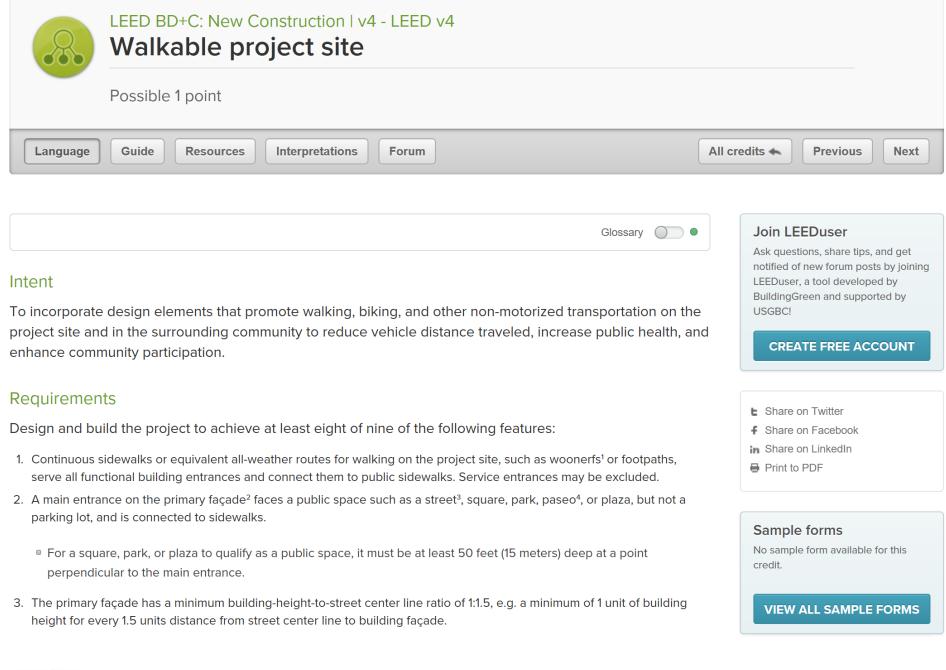
LEED BD+C: New Construction, LEED BD+C: Schools, LEED BD+C: Retail, LEED BD+C: Healthcare, LEED ID+C: Commercial Interiors, LEED ID+C: Retail EQpc44 | 1 point



#### Bird collision deterrence

LEED BD+C: New Construction, LEED BD+C: Core and Shell, LEED BD+C: Schools, LEED BD+C: Retail, LEED BD+C: Healthcare, LEED BD+C: Data Centers, LEED BD+C: Hospitality, LEED BD+C: Warehouses and Distribution Centers
SSpc55 | 1 point





## **ABOUT LEED**



## **Rating System Development and Evolution**

Closed pilot credits -



#### Sustainable wastewater management

LEED BD+C: New Construction, LEED BD+C: Core and Shell, LEED BD+C: Schools, LEED BD+C: Retail, LEED BD+C: Healthcare, LEED BD+C: Data Centers, LEED BD+C: Hospitality, LEED BD+C: Warehouses and Distribution Centers, LEED ID+C: Commercial Interiors, LEED ID+C: Retail, LEED ID+C: Hospitality WEpc10 | 1 point



#### Environmentally preferable interior finishes and furnishings

LEED BD+C: New Construction, LEED BD+C: Retail, LEED BD+C: Healthcare, LEED BD+C: Hospitality, LEED ID+C: Commercial Interiors, LEED ID+C: Retail, LEED ID+C: Hospitality MRpc80 | 1 point



#### LEED O+M Starter Kit

LEED BD+C: New Construction, LEED BD+C: Core and Shell, LEED BD+C: Schools, LEED BD+C: Retail, LEED BD+C: Healthcare, LEED BD+C: Data Centers, LEED BD+C: Hospitality, LEED BD+C: Warehouses and Distribution Centers

IPpc88 | Up to 4 points



### LEED BD+C: New Construction | v4 - LEED v4 Environmentally preferable interior finishes and furnishings

#### Possible 1 point Guide Interpretations All credits + Previous Language Resources Forum Next Join LEEDuser Glossary Ask questions, share tips, and get notified of new forum posts by joining Intent LEEDuser, a tool developed by BuildingGreen and supported by To increase the use of interior finishes and furnishings with verified preferable multi-attribute environmental USGBC! profiles. **CREATE FREE ACCOUNT Pilot Credit Closed** PC80 was closed on 8/15/2016, however, a newer version of the credit, MRpc112 - Certified Multi-attribute Products and Materials is currently open to new registrations. ► Share on Twitter Share on Facebook in Share on LinkedIn

#### Requirements

#### General Pilot Documentation Requirements

#### **REGISTER FOR THE PILOT CREDIT**

- Participate in the LEEDuser pilot credit forum
- Complete the feedback survey:

CREDITS 1-14

CREDITS 15-27

CREDITS 28-42

#### Sample forms

Print to PDF

No sample form available for this credit.

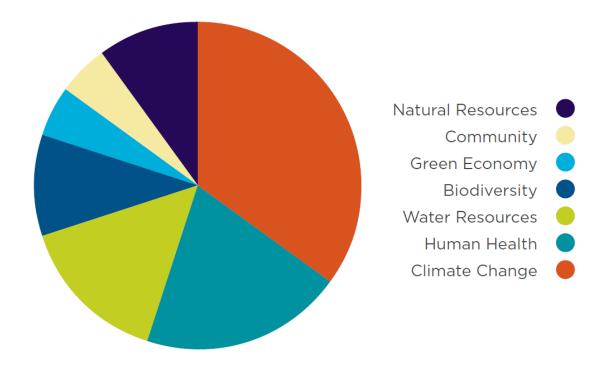
#### VIEW ALL SAMPLE FORMS

#### **Glossary** View LEED v4 terms and definitions



## **Credit Weightings**

The weightings ensure that LEED assigns higher point values to the credits with the strongest relationship to the impact categories of greatest concern.

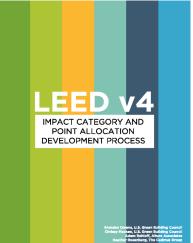




## **Credit Weightings**

### **LEED Impact Categories**

"What should a LEED project accomplish?"
Reverse Contribution to Global Climate Change
Enhance Individual Human Health and Well-Being
Protect and Restore Water Resources
Protect, Enhance and Restore Biodiversity and Ecosystem Services
Promote Sustainable and Regenerative Material Resources Cycles
Build a Greener Economy
Enhance Social Equity, Environmental Justice, and Community Quality of Life









## Green Building Codes, Standards, and Rating Systems

## California Green Building Code (CALGreen Code) http://www.bsc.ca.gov/Home/CALGreen.aspx

The California Green Building Standards Code (CALGreen Code) is Part 11 of the California Building Standards Code (Title 24) and is the first statewide "green" building code in the US.







## Green Building Codes, Standards, and Rating Systems

## International Green Construction Code (IGCC)

http://www.iccsafe.org/codes-tech-support/international-greenconstruction-code-igcc/international-green-construction-code/

The International Green Construction Code (IGCC), including ASHRAE Standard 189.1 as an alternate path to compliance, is a widely supported and first-of-its-kind regulatory framework that recognizes an entire set of risks not otherwise addressed in the codes.





**LEED certification** provides independent, third-party verification that a building project meets the highest green building and performance measures.

Early in the development of a project, the integrated project team needs to determine the project's goals, the level of certification to pursue, and the credits that will help them achieve it.





### LEED certification involves four main steps:

- **1. Register** your project by completing key forms and submitting payment.
- 2. Apply for LEED certification by submitting your completed certification application through <u>LEED Online</u> and paying a certification review fee.
- **3. Review.** Your LEED application is reviewed by GBCI.
- **4. Certify.** Receive the certification decision. If you've earned LEED certification: congratulations!





### **Project Registration**

- The LEED process begins with registration. The project team submits a registration form and a fee to GBCI.
- It is helpful if the project administrator—the team member who registers the project—has previous green building and LEED project experience; ideally, he or she is a LEED Accredited Professional with Specialty.
- Once registered, the team receives information, tools, and communications that will help guide the certification process.
- All project activity, including registration and credit compliance documentation, is completed in LEED Online, a data collection portal through which the team uploads information about the project. This site provides credit templates to be completed and signed by a specified member of the team.





### **Application Preparation**

Each LEED credit and prerequisite has documentation requirements that must be completed as part of the application process.

The project team selects the credits it has chosen to pursue and when the necessary documentation, including required information and calculations, has been assembled, the project team uploads the materials to LEED Online.





### Submission

When the team is ready for its application to be reviewed, the project administrator submits the appropriate fee and documentation.

For LEED BD+C and ID+C projects, the team can wait to submit documentation until the building project is complete, or the team can seek review of its **design-related** prerequisites and credits before completion, and then apply for **construction-related** credits after the project is finished.





### **Application Review**

- Whether the design and construction credits are submitted together or separately, each credit undergoes one preliminary review.
- The certification reviewer may request additional information or clarification.
- The team then submits final documentation. After the final review, a team may appeal any adverse decisions on individual credits for an additional <u>fee</u>.



## **ABOUT LEED**



## **Project Certification**

APPEALS		
Complex credits	\$800/credit	
All other credits	\$500/credit	
Expedited review (reduce from 20-25 business days to 10-12, available based on GBCI review capacity)	+ \$500/credit	
FORMAL INQUIRIES		
Project CIRs	\$220/credit	

a team may appeal any adverse decisions on individual credits for an additional <u>fee</u>.





### Certification

Certification is the final step in the LEED review process.

- Once the final application review is complete, the project team can either accept or appeal the final decision.
- LEED-certified projects receive formal certificates of recognition, a plaque, and tips for marketing the achievement.
- Projects may be included in USGBC's online LEED Project Directory of registered and certified projects.









http://www.usgbc.org/cert-guide









# **Guide to LEED Certification: Commercial**

BD+C, ID+C, O+M

READ ONLINE DOWNLOAD PDF

http://www.usgbc.org/cert-guide/commercial





## **Project Credit Interpretation Rulings**

Project credit interpretation rulings (Project CIRs), administered by GBCI, allow teams to obtain technical guidance on how LEED requirements pertain to their projects.

Project CIRs do not guarantee credit award; the project applicant must still demonstrate and document achievement during the LEED certification application process.

The ruling remains confidential and generally applies only to the one project.





## **LEED Interpretations**

LEED Interpretations, however, are precedent setting; project teams are required to adhere to all LEED Interpretations posted before their registration date.

These are posted publicly in the online Addenda database.



Addenda incorporate changes and improvements to LEED rating systems and resources to help clarify, correct, interpret or provide alternative language helping project teams better implement LEED. Search the database.







## **LEED Professional Credentials**

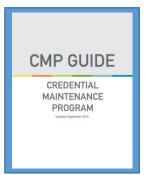






## **LEED Professional Credentials**

Maintaining your credential



All LEED professionals are required to maintain their credential by earning continuing education hours.

LEED Green Associates must earn 15 continuing education hours within two years of earning their credential.

LEED APs must earn 30 continuing education hours within two years of earning their credential.





#### Lori's account



California State University, Office of the Chancellor Member ID #1210365814174137 Membership details

Home	Credentials	NEXT STEPS
Settings	GBCI#: 10061029 Report 27.5 CE hours by 05 May 2017	65%
Credentials	Report 27.5 CE hours by 05 May 2017 - Reporting period: 05 May, 2015 to 05 May, 2017	Publish personal profile
Overview	View dashboard	
Exam History	36 CE hours	
CE Activity History	You have reported 8.5 hours	
Membership	6 LEED-specific hours BD+C	
Personal profile	4.5 LEED-specific hours 🔊	
Organization profile	You have reported 1.0 hours for ND	
Chapter profile	<b>1.5 LEED-specific hours</b> You have reported 1.0 hours for O+M	
Badges	REPORT CE HOURS FIND COURSES	
Order history	Please note: the increase in cost of credential renewal went into effect on June 29, 2015.	







## Certificates



Green Raters provide in-the-field verification services at each and every Homes project.







## Certificates



Earn a Green Classroom Professional certificate and further the mission of creating green schools for everyone within this generation. Green classroom professionals advocate for healthier, more environmentally responsible places in which to work and teach.

