



**Energy Efficiency
Conference**



The LEED procedure

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The LEED certification

Green building project and performance management system, delivering a comprehensive framework for green building design, construction, operations and performance

<https://www.usgbc.org/leed>



Rating systems

NEW
CONSTRUCTION
MAJOR RENOVATIONS

LEED for **Building Design + Construction**

EXISTING
BUILDINGS
OPERATIONS &
MAINTENANCE

LEED for **Existing Buildings**

CORE
AND
SHELL
DEVELOPMENT

LEED for **Core & Shell**

COMMERCIAL
INTERIORS

LEED for **Commercial Interiors**

RETAIL LEED for **Retail**

HOMES LEED for **Homes**

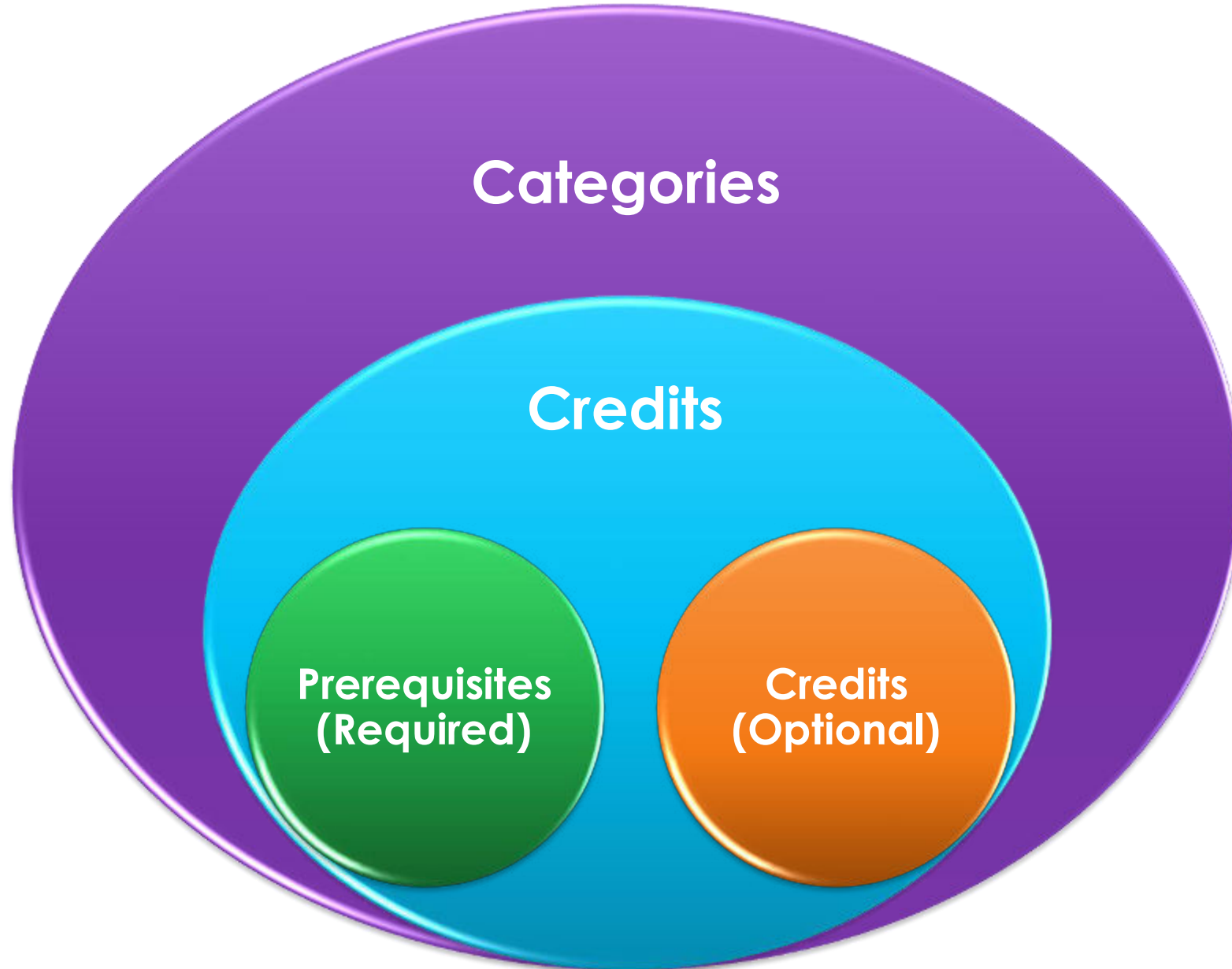
NEIGHBORHOOD
DEVELOPMENT

LEED for **Neighborhood Development**

SCHOOLS LEED for **Schools**

HEALTHCARE LEED for **Healthcare**

LEED structure



Credit categories



Integrative Process



Location & Transportation



Sustainable Sites



Water Efficiency



Energy & Atmosphere



Materials & Resources



**Indoor Environmental
Quality**



**Innovation + Regional
Priority**



Achieving LEED Certification

Meet the Minimum Program Requirements (MPRs)

Satisfy all Prerequisites

Earn point for desired certification



Certified:
40-49 point



Silver:
50-59 points



Gold:
60-79 points



Platinum:
80+ points

Minimum Program Requirements (MPRs)

- Permanent location on existing land
- Use reasonable LEED boundaries
- Comply with project size requirements



Preliminary

- Kick-off meeting - Owner's Project Requirements (OPR)
- Training & support of LEED team
- Gap Analysis
- LEED Certification organizational plan

Phase I – Design Phase

- Basis of Design – BOD
- Design Phase Credits
- Tendering documents
- Review of design
- Design submittal

Phase II – Construction Phase

- Construction team training
- Construction Phase Credits
- Construction submittal
- LEED Certification



Checklist



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

Project Checklist

Project Name:

Date:

Y ? N

0	0	0	Credit	Integrative Process	1
0 0 0 Location and Transportation 16					
0	0	0	Credit	LEED for Neighborhood Development Location	16
0	0	0	Credit	Sensitive Land Protection	1
0	0	0	Credit	High Priority Site	2
0	0	0	Credit	Surrounding Density and Diverse Uses	5
0	0	0	Credit	Access to Quality Transit	5
0	0	0	Credit	Bicycle Facilities	1
0	0	0	Credit	Reduced Parking Footprint	1
0	0	0	Credit	Green Vehicles	1
0 0 0 Sustainable Sites 10					
Y			Prereq	Construction Activity Pollution Prevention	Required
0	0	0	Credit	Site Assessment	1
0	0	0	Credit	Site Development - Protect or Restore Habitat	2
0	0	0	Credit	Open Space	1
0	0	0	Credit	Rainwater Management	3
0	0	0	Credit	Heat Island Reduction	2
0	0	0	Credit	Light Pollution Reduction	1
0 0 0 Water Efficiency 11					
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
0	0	0	Credit	Outdoor Water Use Reduction	2
0	0	0	Credit	Indoor Water Use Reduction	6
0	0	0	Credit	Cooling Tower Water Use	2
0	0	0	Credit	Water Metering	1
0 0 0 Energy and Atmosphere 33					
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
0	0	0	Credit	Enhanced Commissioning	6
0	0	0	Credit	Optimize Energy Performance	18
0	0	0	Credit	Advanced Energy Metering	1
0	0	0	Credit	Demand Response	2
0	0	0	Credit	Renewable Energy Production	3
0	0	0	Credit	Enhanced Refrigerant Management	1
0	0	0	Credit	Green Power and Carbon Offsets	2

0	0	0	Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
0	0	0	Credit	Building Life-Cycle Impact Reduction	5
0	0	0	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
0	0	0	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
0	0	0	Credit	Building Product Disclosure and Optimization - Material Ingredients	2
0	0	0	Credit	Construction and Demolition Waste Management	2
0 0 0 Indoor Environmental Quality 16					
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
0	0	0	Credit	Enhanced Indoor Air Quality Strategies	2
0	0	0	Credit	Low-Emitting Materials	3
0	0	0	Credit	Construction Indoor Air Quality Management Plan	1
0	0	0	Credit	Indoor Air Quality Assessment	2
0	0	0	Credit	Thermal Comfort	1
0	0	0	Credit	Interior Lighting	2
0	0	0	Credit	Daylight	3
0	0	0	Credit	Quality Views	1
0	0	0	Credit	Acoustic Performance	1
0 0 0 Innovation 6					
0	0	0	Credit	Innovation	5
0	0	0	Credit	LEED Accredited Professional	1
0 0 0 Regional Priority 4					
0	0	0	Credit	Regional Priority: Specific Credit	1
0	0	0	Credit	Regional Priority: Specific Credit	1
0	0	0	Credit	Regional Priority: Specific Credit	1
0	0	0	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

Integrative Process



Available points: 1

No prerequisites

Integrative Process	1
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Location & Transportation



Available points: 16

No prerequisites

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

Sustainable Sites



Available points: 10

1 prerequisite

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

Water Efficiency



Available points: 11

3 prerequisites

Water Efficiency	11
Outdoor Water Use Reduction	<i>Required</i>
Indoor Water Use Reduction	<i>Required</i>
Building-Level Water Metering	<i>Required</i>
Outdoor Water Use Reduction	2
Indoor Water Use Reduction	6
Optimize Water Use	2
Water Metering	1

Energy & Atmosphere



Available points: 33

4 prerequisites

Energy & Atmosphere	33
Fundamental Commissioning and Verification	<i>Required</i>
Minimum Energy Performance	<i>Required</i>
Building-Level Energy Metering	<i>Required</i>
Fundamental Refrigerant Management	<i>Required</i>
Enhanced Commissioning	6
Optimize Energy Performance	18
Advanced Energy Metering	1
Grid Harmoniation	2
Renewable Energy	5
Enhanced Refrigerant Management	1

Materials & Resources



Available points: 13

1 prerequisite

Materials and Resources	13
Storage and Collection of Recyclables	<i>Required</i>
Building Life-Cycle Impact Reduction	5
Environmental Product Declarations	2
Sourcing of Raw Materials	2
Material Ingredients	2
Construction and Demolition Waste Management	2

Indoor Environmental Quality



Available points: 16

2 prerequisites

Indoor Environmental Quality	16
Minimum Indoor Air Quality Performance	<i>Required</i>
Environmental Tobacco Smoke Control	<i>Required</i>
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

Innovation + Regional Priority











Available points: 6 + 4

2 prerequisites

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

Final score

	Integrative Process:	1
	Location & Transportation:	16
	Sustainable Sites:	10
	Water Efficiency:	11
	Energy & Atmosphere:	33
	Materials & Resources:	13
	Indoor Environmental Quality:	16
	Innovation + Regional Priority:	10
	Total:	110



Thank you!

A white, hand-drawn style graphic of a curved arrow pointing upwards, resembling a smile, positioned below the 'Thank you!' text.

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