



# LEED 2009 for New Construction and Major Renovations

## Project Checklist

OSU - Johnson Hall

Oct-13

### 16 10 Sustainable Sites Possible Points: 26

Y	?	N			
Y			Prereq 1	Construction Activity Pollution Prevention	
1			Credit 1	Site Selection	1
5			Credit 2	Development Density and Community Connectivity	5
		1	Credit 3	Brownfield Redevelopment	1
6			Credit 4.1	Alternative Transportation—Public Transportation Access	6
		1	Credit 4.2	Alternative Transportation—Bicycle Storage and Changing Rooms	1
		3	Credit 4.3	Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	3
		2	Credit 4.4	Alternative Transportation—Parking Capacity	2
		1	Credit 5.1	Site Development—Protect or Restore Habitat	1
		1	Credit 5.2	Site Development—Maximize Open Space	1
1			Credit 6.1	Stormwater Design—Quantity Control	1
		1	Credit 6.2	Stormwater Design—Quality Control	1
1			Credit 7.1	Heat Island Effect—Non-roof	1
1			Credit 7.2	Heat Island Effect—Roof	1
1			Credit 8	Light Pollution Reduction	1

### 4 6 Water Efficiency Possible Points: 10

Y	?	N			
Y			Prereq 1	Water Use Reduction—20% Reduction	
2		2	Credit 1	Water Efficient Landscaping	2 to 4
		2	Credit 2	Innovative Wastewater Technologies	2
2		2	Credit 3	Water Use Reduction	2 to 4

### 23 12 Energy and Atmosphere Possible Points: 35

Y	?	N			
Y			Prereq 1	Fundamental Commissioning of Building Energy Systems	
Y			Prereq 2	Minimum Energy Performance	
Y			Prereq 3	Fundamental Refrigerant Management	
16		3	Credit 1	Optimize Energy Performance	1 to 19
		7	Credit 2	On-Site Renewable Energy	1 to 7
		2	Credit 3	Enhanced Commissioning	2
2			Credit 4	Enhanced Refrigerant Management	2
3			Credit 5	Measurement and Verification	3
2			Credit 6	Green Power	2

### 5 9 Materials and Resources Possible Points: 14

Y	?	N			
Y			Prereq 1	Storage and Collection of Recyclables	
		3	Credit 1.1	Building Reuse—Maintain Existing Walls, Floors, and Roof	1 to 3
		1	Credit 1.2	Building Reuse—Maintain 50% of Interior Non-Structural Elements	1
2			Credit 2	Construction Waste Management	1 to 2
		2	Credit 3	Materials Reuse	1 to 2

### Materials and Resources, Continued

Y	?	N			
1		1	Credit 4	Recycled Content	1 to 2
1		1	Credit 5	Regional Materials	1 to 2
		1	Credit 6	Rapidly Renewable Materials	1
1			Credit 7	Certified Wood	1

### 12 3 Indoor Environmental Quality Possible Points: 15

Y	?	N			
Y			Prereq 1	Minimum Indoor Air Quality Performance	
Y			Prereq 2	Environmental Tobacco Smoke (ETS) Control	
1			Credit 1	Outdoor Air Delivery Monitoring	1
		1	Credit 2	Increased Ventilation	1
1			Credit 3.1	Construction IAQ Management Plan—During Construction	1
1			Credit 3.2	Construction IAQ Management Plan—Before Occupancy	1
1			Credit 4.1	Low-Emitting Materials—Adhesives and Sealants	1
1			Credit 4.2	Low-Emitting Materials—Paints and Coatings	1
1			Credit 4.3	Low-Emitting Materials—Flooring Systems	1
		1	Credit 4.4	Low-Emitting Materials—Composite Wood and Agrifiber Products	1
1			Credit 5	Indoor Chemical and Pollutant Source Control	1
1			Credit 6.1	Controllability of Systems—Lighting	1
1			Credit 6.2	Controllability of Systems—Thermal Comfort	1
1			Credit 7.1	Thermal Comfort—Design	1
		1	Credit 7.2	Thermal Comfort—Verification	1
1			Credit 8.1	Daylight and Views—Daylight	1
1			Credit 8.2	Daylight and Views—Views	1

### 1 5 Innovation and Design Process Possible Points: 6

Y	?	N			
		1	Credit 1.1	Innovation in Design: Specific Title	1
		1	Credit 1.2	Innovation in Design: Specific Title	1
		1	Credit 1.3	Innovation in Design: Specific Title	1
		1	Credit 1.4	Innovation in Design: Specific Title	1
		1	Credit 1.5	Innovation in Design: Specific Title	1
1			Credit 2	LEED Accredited Professional	1

### 1 4 Regional Priority Credits Possible Points: 4

Y	?	N			
1			Credit 1.1	Regional Priority: Certified Wood	1
		2	Credit 1.2	Regional Priority: Innovative Wastewater Technologies	1
		1	Credit 1.3	Regional Priority: N/A	1
		1	Credit 1.4	Regional Priority: N/A	1

### 61 49 Total Possible Points: 110

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



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## Project Checklist

16 1 9

### Sustainable Sites Possible Points: 26

Y	?	N	d/C
Y			
1			
5			
		1	
6			
		1	
		3	
		2	
		1	
		1	
1			
	1		
1			
1			
1			

C Prereq 1	Construction Activity Pollution Prevention	
d Credit 1	Site Selection	1
d Credit 2	Development Density and Community Connectivity	5
d Credit 3	Brownfield Redevelopment	1
d Credit 4.1	Alternative Transportation—Public Transportation Access	6
d Credit 4.2	Alternative Transportation—Bicycle Storage and Changing Rooms	1
d Credit 4.3	Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	3
d Credit 4.4	Alternative Transportation—Parking Capacity	2
C Credit 5.1	Site Development—Protect or Restore Habitat	1
d Credit 5.2	Site Development—Maximize Open Space	1
d Credit 6.1	Stormwater Design—Quantity Control	1
d Credit 6.2	Stormwater Design—Quality Control	1
C Credit 7.1	Heat Island Effect—Non-roof	1
d Credit 7.2	Heat Island Effect—Roof	1
d Credit 8	Light Pollution Reduction	1

Notes:

Previously developed  
Community Connectivity

Option 2: Bus Stop Proximity

Case 2: Sites with Existing Imperviousness ≥ 50%

Option 1  
Option 1: SRI ≥ values in table for 75% of roof surface  
Interior Lighting Option 1: reduce power by 50% between 11pm and 5am

4 2 4

### Water Efficiency Possible Points: 10

Y	?	N	d/C
Y			
2		2	
		2	
2		2	

d Prereq 1	Water Use Reduction—20% Reduction	
d Credit 1	Water Efficient Landscaping	2 to 4
	<input checked="" type="checkbox"/> Reduce by 50%	2
	<input type="checkbox"/> No Potable Water Use or Irrigation	4
d Credit 2	Innovative Wastewater Technologies	2
d Credit 3	Water Use Reduction	2 to 4
	<input checked="" type="checkbox"/> Reduce by 30%	2
	<input type="checkbox"/> Reduce by 35%	3
	<input type="checkbox"/> Reduce by 40%	4

Notes:

Use native plants and an efficient irrigation system

Does not include irrigation

20 5 10

### Energy and Atmosphere Possible Points: 35

Y	?	N	d/C
Y			
Y			
Y			
16		3	
		7	
	2		
2			
	3		
2			

C Prereq 1	Fundamental Commissioning of Building Energy Systems	
d Prereq 2	Minimum Energy Performance	
d Prereq 3	Fundamental Refrigerant Management	
d Credit 1	Optimize Energy Performance	1 to 19
	<input type="checkbox"/> Improve by 12% for New Buildings or 8% for Existing Building Renovations	1
	<input type="checkbox"/> Improve by 14% for New Buildings or 10% for Existing Building Renovations	2
	<input type="checkbox"/> Improve by 16% for New Buildings or 12% for Existing Building Renovations	3
	<input type="checkbox"/> Improve by 18% for New Buildings or 14% for Existing Building Renovations	4
	<input type="checkbox"/> Improve by 20% for New Buildings or 16% for Existing Building Renovations	5
	<input type="checkbox"/> Improve by 22% for New Buildings or 18% for Existing Building Renovations	6
	<input type="checkbox"/> Improve by 24% for New Buildings or 20% for Existing Building Renovations	7
	<input type="checkbox"/> Improve by 26% for New Buildings or 22% for Existing Building Renovations	8
	<input type="checkbox"/> Improve by 28% for New Buildings or 24% for Existing Building Renovations	9
	<input type="checkbox"/> Improve by 30% for New Buildings or 26% for Existing Building Renovations	10
	<input type="checkbox"/> Improve by 32% for New Buildings or 28% for Existing Building Renovations	11
	<input type="checkbox"/> Improve by 34% for New Buildings or 30% for Existing Building Renovations	12
	<input type="checkbox"/> Improve by 36% for New Buildings or 32% for Existing Building Renovations	13
	<input type="checkbox"/> Improve by 38% for New Buildings or 34% for Existing Building Renovations	14
	<input type="checkbox"/> Improve by 40% for New Buildings or 36% for Existing Building Renovations	15
	<input checked="" type="checkbox"/> Improve by 42% for New Buildings or 38% for Existing Building Renovations	16
	<input type="checkbox"/> Improve by 44% for New Buildings or 40% for Existing Building Renovations	17
	<input type="checkbox"/> Improve by 46% for New Buildings or 42% for Existing Building Renovations	18
	<input type="checkbox"/> Improve by 48%+ for New Buildings or 44%+ for Existing Building Renovations	19
d Credit 2	On-Site Renewable Energy	1 to 7
	<input type="checkbox"/> 1% Renewable Energy	1
	<input type="checkbox"/> 3% Renewable Energy	2
	<input type="checkbox"/> 5% Renewable Energy	3
	<input type="checkbox"/> 7% Renewable Energy	4
	<input type="checkbox"/> 9% Renewable Energy	5
	<input type="checkbox"/> 11% Renewable Energy	6
	<input type="checkbox"/> 13% Renewable Energy	7
C Credit 3	Enhanced Commissioning	2
d Credit 4	Enhanced Refrigerant Management	2
C Credit 5	Measurement and Verification	3
C Credit 6	Green Power	2

Notes:

Whole Building Energy Simulation

Independent CxA on-board prior to start of CD phase  
Option 2: Minimize emissions

Establish post-construction occupancy measurement for minimum 1 year  
OSU purchased green power from Bonneville Environmental Foundation in 2011. Continue to do so?

5 0 9			Materials and Resources		Possible Points: 14
Y	?	N			
Y			d Prereq 1	Storage and Collection of Recyclables	
		3	C Credit 1.1	Building Reuse—Maintain Existing Walls, Floors, and Roof	1 to 3
				Reuse 55%	1
				Reuse 75%	2
				Reuse 95%	3
		1	C Credit 1.2	Building Reuse—Maintain 50% of Interior Non-Structural Elements	1
2			C Credit 2	Construction Waste Management	1 to 2
				50% Recycled or Salvaged	1
				X 75% Recycled or Salvaged	2
		2	C Credit 3	Materials Reuse	1 to 2
				Reuse 5%	1
				Reuse 10%	2
1		1	C Credit 4	Recycled Content	1 to 2
				X 10% of Content	1
				20% of Content	2
1		1	C Credit 5	Regional Materials	1 to 2
				X 10% of Materials	1
				20% of Materials	2
		1	C Credit 6	Rapidly Renewable Materials	1
1			C Credit 7	Certified Wood	1
					Notes:
					10% of total cost
					10% of total cost
					Minimum 50% of wood-based materials FSC certified.

12 1 2			Indoor Environmental Quality		Possible Points: 15
Y	?	N			
Y			d Prereq 1	Minimum Indoor Air Quality Performance	
			d Prereq 2	Environmental Tobacco Smoke (ETS) Control	
1			d Credit 1	Outdoor Air Delivery Monitoring	1
		1	d Credit 2	Increased Ventilation	1
1			C Credit 3.1	Construction IAQ Management Plan—During Construction	1
1			C Credit 3.2	Construction IAQ Management Plan—Before Occupancy	1
1			C Credit 4.1	Low-Emitting Materials—Adhesives and Sealants	1
1			C Credit 4.2	Low-Emitting Materials—Paints and Coatings	1
1			C Credit 4.3	Low-Emitting Materials—Flooring Systems	1
		1	C Credit 4.4	Low-Emitting Materials—Composite Wood and Agrifiber Products	1
1			d Credit 5	Indoor Chemical and Pollutant Source Control	1
1			d Credit 6.1	Controllability of Systems—Lighting	1
1			d Credit 6.2	Controllability of Systems—Thermal Comfort	1
1			d Credit 7.1	Thermal Comfort—Design	1
		1	d Credit 7.2	Thermal Comfort—Verification	1
1			d Credit 8.1	Daylight and Views—Daylight	1
1			d Credit 8.2	Daylight and Views—Views	1
					Notes:
					All AHU's feature outside air flow measuring stations
					Ventilate and exhaust janitor's closets and custodial rooms. Provide walk-off mats. Pressurize lab spaces negative to the rest of the building. Utilize MERV 13 filtration.
					Individual lighting controls. Task lighting at open lab benches.
					Individual thermostat controls at each private office and admin areas. Shared office space, conference rooms, and classrooms have individual controls.
					Meet ASHRAE Standard 55-2004
					Conduct survey 6-18 months after occupancy.
					Direct line of sight to outdoors between 30 - 90" AFF for occupants in 90% of regularly occupied spaces.

1 5 0			Innovation and Design Process		Possible Points: 6
Y	?	N			
		1	d/C Credit 1.1	Innovation in Design: Specific Title	1
		1	d/C Credit 1.2	Innovation in Design: Specific Title	1
		1	d/C Credit 1.3	Innovation in Design: Specific Title	1
		1	d/C Credit 1.4	Innovation in Design: Specific Title	1
		1	d/C Credit 1.5	Innovation in Design: Specific Title	1
		1	d/C Credit 2	LEED Accredited Professional	1
					Notes:

1 2 1			Regional Priority Credits		Possible Points: 4
Y	?	N			
1			d/C Credit 1.1	Regional Priority: Certified Wood	1
		2	d/C Credit 1.2	Regional Priority: Innovative Wastewater Technologies	2
		1	d/C Credit 1.3		
					Notes:
					See M&R above.
					See WE above.

59 16 35			Total		Possible Points: 110
					Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110