

# The Costs and Benefits of Building Green

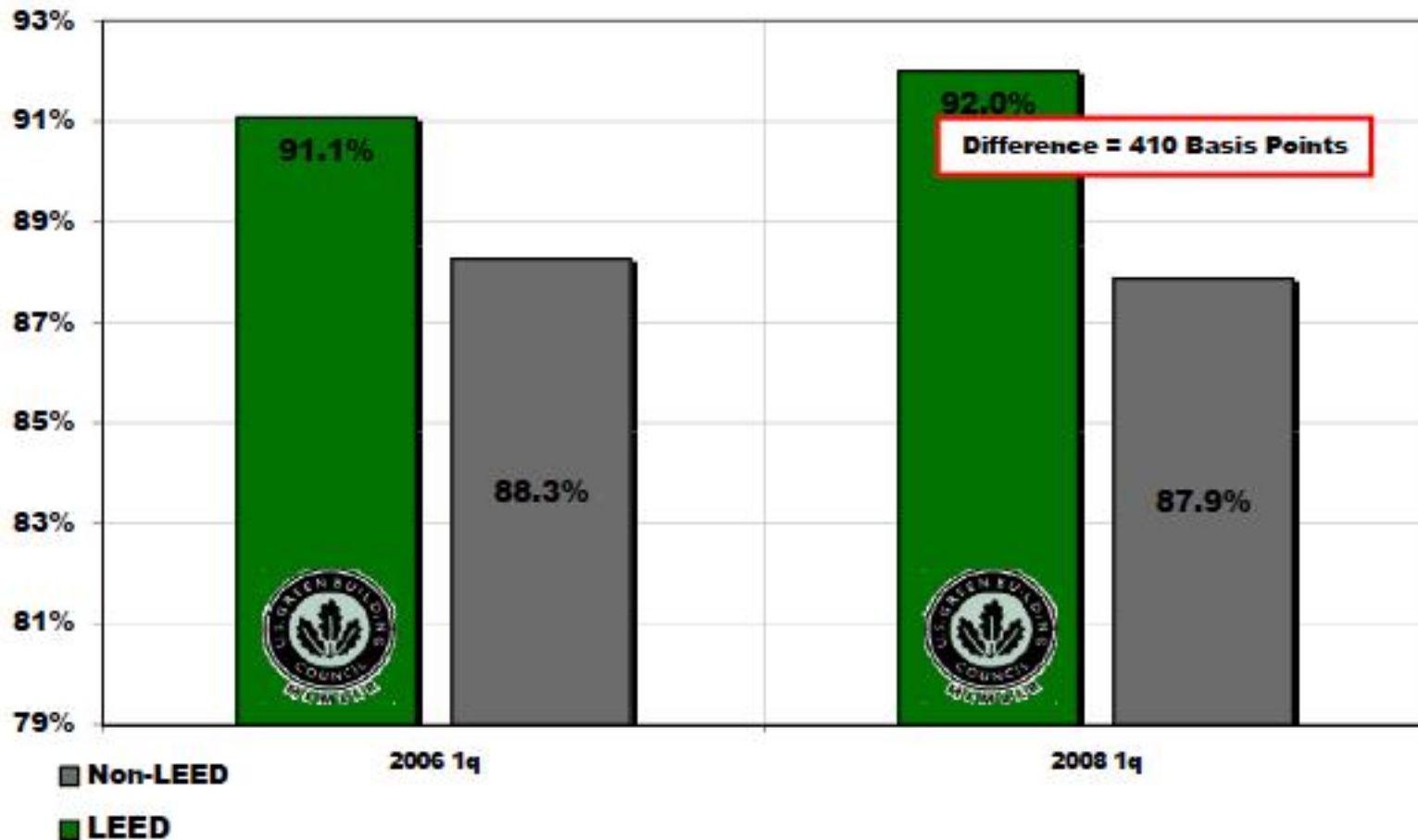
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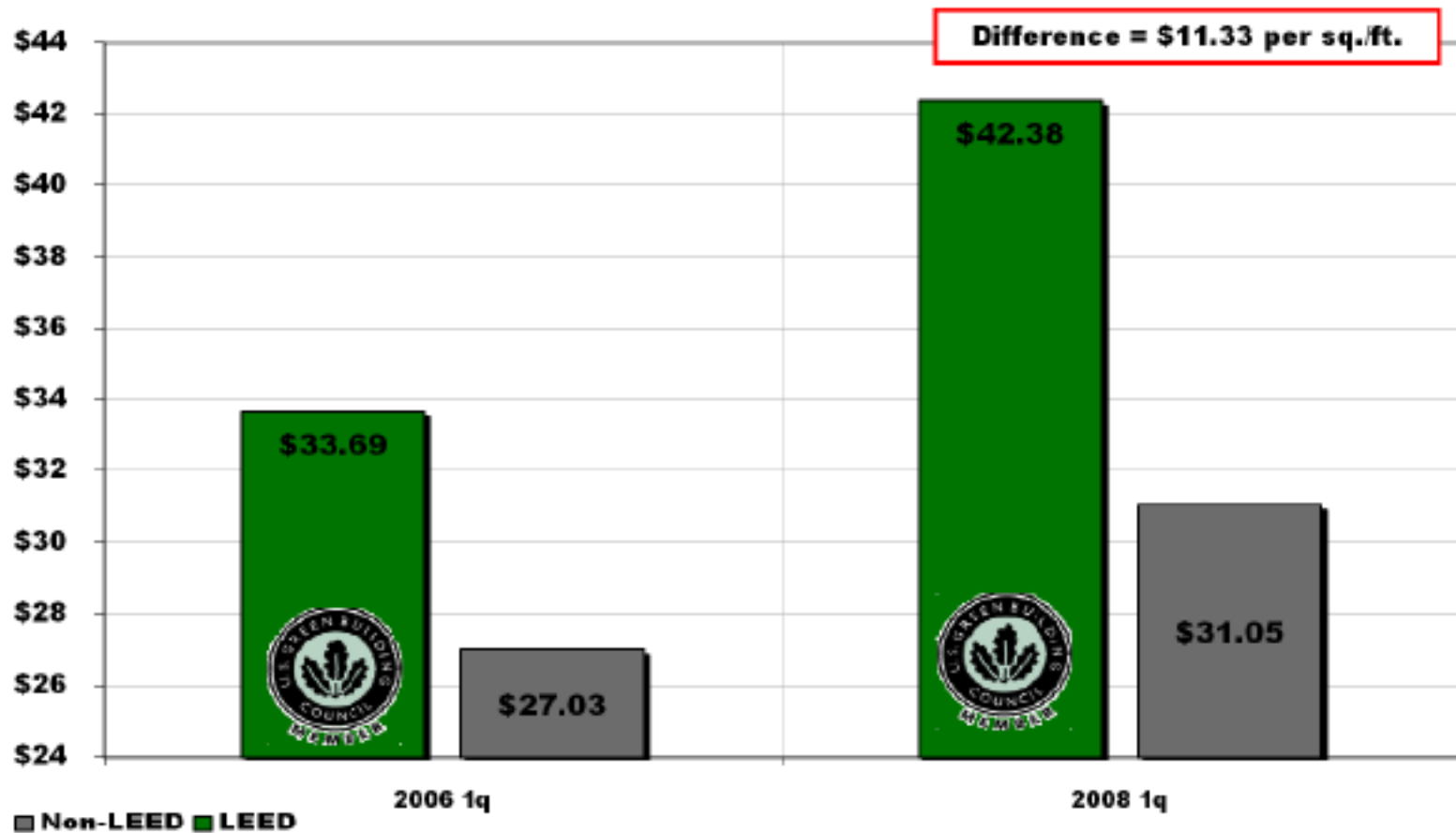
Alex Spilger, Director of Sustainability

**BCCI Construction**

# Occupancy Rates National - LEED Rated Buildings



# Direct Rental Rates National - LEED Rated Buildings



2006 1q

2008 1q



# Evaluating LEED Costs



## BCCI LEED Cost Analysis - Client A

Rating	Cost	% Cost
Certified	\$36,580	1.2%
Silver	\$43,430	1.4%
Gold	\$69,530	2.3%
Platinum	N/A	N/A

The percent cost increase for each certification level is based on an estimated total budget of \$3 million.

### LEED Prerequisites and Credits

#### General LEED Costs

	Soft	Hard	Total
USGBC Registration Fees	\$900	\$0	\$900
USGBC Certification Fees	\$2,250	\$0	\$2,250
Additional Contractor & Architectural Fees	\$3,500	\$0	\$3,500
Estimated LEED Consulting Fees	\$15,300	\$0	<u>\$18,500</u>
		<i>Subtotal</i>	<i>\$25,150</i>

#### LEED Prerequisites

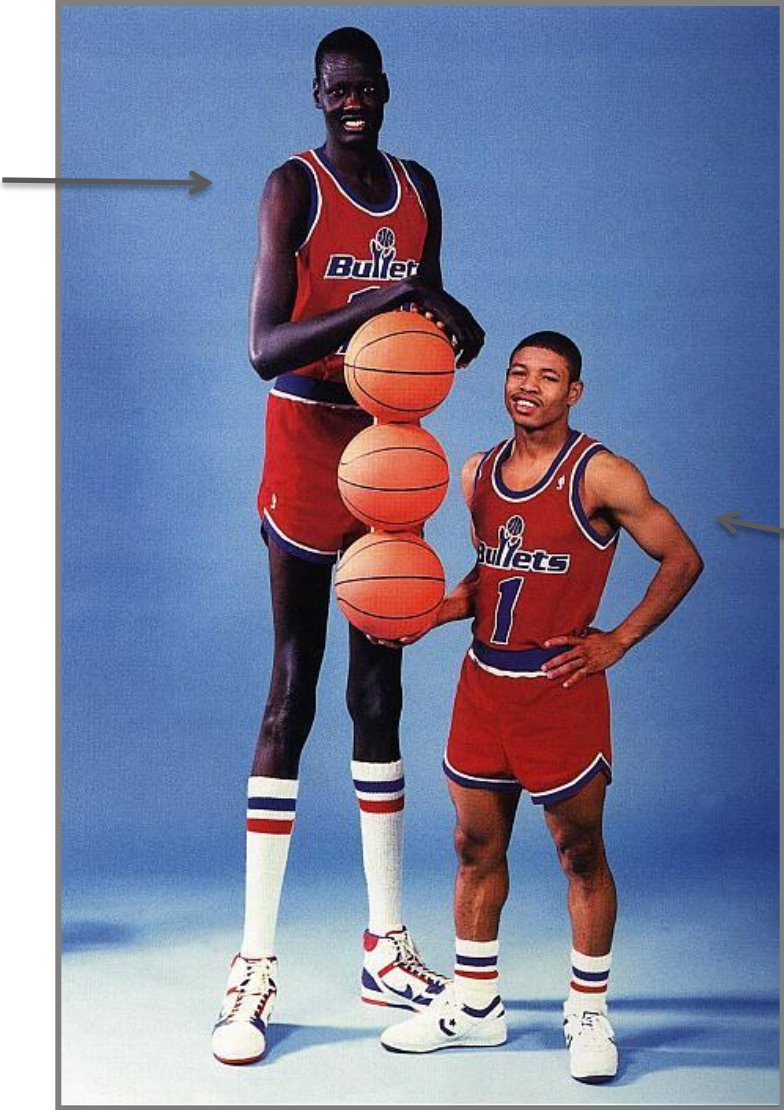
WE Prereq 1	Water Use Reduction, 20% Reduction	\$0	\$0	\$0
EA Prereq 2	Minimum Energy Performance	\$850	\$0	\$850
EA Prereq 3	CFC Reduction in HVAC&R Equipment	\$350	\$0	\$350
MR Prereq 1	Storage and Collection of Recyclables	\$0	\$0	\$0
EQ Prereq 2	Environmental Tobacco Smoke (ETS) Control	\$0	\$0	\$0
EQ Prereq 1	Minimum IAQ Performance	\$350	\$0	\$350
EA Prereq 1	Fundamental Commissioning	\$4,750	<u>\$0</u>	<u>\$4,750</u>
			<i>Subtotal</i>	<i>\$6,300</i>

#### Credits to Obtain LEED Certified

SS Credit 1	Site Selection, Select a LEED Certified Building	\$0	\$0	\$0
SS Credit 2	Development Density and Community Connectivity	\$150	\$0	\$150

# Economies of Scale

Multinational  
Conglomerate



Start-up  
Non-profit

Y	Y?	N?	N
68	15	16	11

**Total Project Score**

**Possible Points: 110**

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

21 0 0 0 Sustainable Sites				Possible Points: 21
5				Credit 1 <b>Site Selection, Select a LEED Certified Building</b> 1 to 5
				<OR> Locate the tenant space in a building with the following characteristics:
				Path 1 <b>Brownfield Redevelopment</b> 1
				Path 2 <b>Stormwater Management, Rate and Quantity</b> 1
				Path 3 <b>Stormwater Management, Treatment</b> 1
				Path 4 <b>Heat Island Reduction, Non-Roof</b> 1
				Path 5 <b>Heat Island Reduction, Roof</b> 1
				Path 6 <b>Light Pollution Reduction</b> 1
				Path 7 <b>Water Efficient Irrigation, Reduce by 50%</b> 2
				Path 8 <b>Water Efficient Irrigation, No Potable Use or No Irrigation</b> 2
				Path 9 <b>Innovative Wastewater Technologies</b> 2
				Path 10 <b>Water Use Reduction, 30% Reduction</b> 1
				Path 11 <b>On-site Renewable Energy</b> 2
				Path 12 <b>Other Quantifiable Environmental Performance</b> 1 to 5
6				Credit 2 <b>Development Density and Community Connectivity</b> 6
6				Credit 3.1 <b>Alternative Transportation, Public Transportation Access</b> 6
2				Credit 3.2 <b>Alternative Transportation, Bicycle Storage &amp; Changing Rooms</b> 2
2				Credit 3.3 <b>Alternative Transportation, Parking Availability</b> 2

8 0 0 3 Water Efficiency				Possible Points: 11
Y				Prereq 1 <b>Water Use Reduction, 20% Reduction</b>
6				Credit 1.1 <b>Water Use Reduction, 30% Reduction</b> 6
2				Credit 1.2 <b>Water Use Reduction, 35% Reduction</b> 2
			3	Credit 1.3 <b>Water Use Reduction, 40% Reduction</b> 3

16 6 8 7 Energy & Atmosphere				Possible Points: 37
Y				Prereq 1 <b>Fundamental Commissioning</b>
Y				Prereq 2 <b>Minimum Energy Performance</b>
Y				Prereq 3 <b>CFC Reduction in HVAC&amp;R Equipment</b>
1	1	2	1	Credit 1.1 <b>Optimize Energy Performance, Lighting Power (15%,20%,25%,30%,35%)</b> 1 to 5
1		1	1	Credit 1.2 <b>Optimize Energy Performance, Lighting Controls</b> 1 to 3
5			5	Credit 1.3 <b>Optimize Energy Performance, HVAC (separate zoning &amp; HVAC Eff)</b> 5 to 10
4				Credit 1.4 <b>Optimize Energy Performance, Equipment &amp; Appliances (70,77,84,90)</b> 1 to 4
	5			Credit 2 <b>Enhanced Commissioning</b> 5
		5		Credit 3 <b>Energy Use, Measurement &amp; Payment Accountability</b> 2 to 5
5				Credit 4 <b>Green Power</b> 5

3 1 0 0 Regional Priority				Possible Points: 4
1				Credit 1.1 <b>Regional Priority: SSC3.2 Public Transportation</b> 1
1				Credit 1.2 <b>Regional Priority: EAc1.1, Lighting Power</b> 1
1				Credit 1.3 <b>Regional Priority: EAc1.3, HVAC Separate Zoning</b> 1
	1			Credit 1.4 <b>Regional Priority: MRc7, FSC Wood</b> 1

5 2 6 1 Materials & Resources				Possible Points: 14
Y				Prereq 1 <b>Storage and Collection of Recyclables</b>
1				Credit 1.1 <b>Tenant Space, Long Term Commitment</b> 1
		1		Credit 1.2 <b>Building Reuse, Maintain 40% of Interior Non-Structural Components</b> 1
		1		Credit 1.3 <b>Building Reuse, Maintain 60% of Interior Non-Structural Components</b> 1
1				Credit 2.1 <b>Construction Waste Management, Divert 50% From Landfill</b> 1
1				Credit 2.2 <b>Construction Waste Management, Divert 75% From Landfill</b> 1
		1		Credit 3.1 <b>Resource Reuse, 5%</b> 1
			1	Credit 3.2 <b>Resource Reuse, 10%</b> 1
	1			Credit 3.3 <b>Resource Reuse, 30% Furniture and Furnishings</b> 1
	1			Credit 4.1 <b>Recycled Content, 10% (post-consumer + 1/2 pre-consumer)</b> 1
		1		Credit 4.2 <b>Recycled Content, 20% (post-consumer + 1/2 pre-consumer)</b> 1
	1			Credit 5.1 <b>Regional Materials, 20% Manufactured Regionally</b> 1
		1		Credit 5.2 <b>Regional Materials, 10% Extracted and Manufactured Regionally</b> 1
		1		Credit 6 <b>Rapidly Renewable Materials</b> 1
	1			Credit 7 <b>Certified Wood</b> 1

12 3 2 0 Indoor Environmental Quality				Possible Points: 17
Y				Prereq 1 <b>Minimum IAQ Performance</b>
Y				Prereq 2 <b>Environmental Tobacco Smoke (ETS) Control</b>
		1		Credit 1 <b>Outdoor Air Delivery Monitoring</b> 1
		1		Credit 2 <b>Increased Ventilation</b> 1
1				Credit 3.1 <b>Construction IAQ Management Plan, During Construction</b> 1
1				Credit 3.2 <b>Construction IAQ Management Plan, Before Occupancy</b> 1
1				Credit 4.1 <b>Low-Emitting Materials, Adhesives &amp; Sealants</b> 1
1				Credit 4.2 <b>Low-Emitting Materials, Paints and Coatings</b> 1
1				Credit 4.3 <b>Low-Emitting Materials, Carpet Systems</b> 1
1				Credit 4.4 <b>Low-Emitting Materials, Composite Wood and Laminate Adhesives</b> 1
1				Credit 4.5 <b>Low-Emitting Materials, Systems Furniture and Seating</b> 1
1				Credit 5 <b>Indoor Chemical &amp; Pollutant Source Control</b> 1
		1		Credit 6.1 <b>Controllability of Systems, Lighting</b> 1
		1		Credit 6.2 <b>Controllability of Systems, Temperature and Ventilation</b> 1
1				Credit 7.1 <b>Thermal Comfort, Compliance</b> 1
1				Credit 7.2 <b>Thermal Comfort, Monitoring</b> 1
1				Credit 8.1 <b>Daylight &amp; Views, Daylight 75% of Spaces</b> 1
		1		Credit 8.2 <b>Daylight &amp; Views, Daylight 90% of Spaces</b> 1
1				Credit 8.3 <b>Daylight &amp; Views, Views for 90% of Seated Spaces</b> 1

3 3 0 0 Innovation & Design Process				Possible Points: 6
	1			Credit 1.1 <b>Innovation in Design: Exemplary Performance FSC Wood</b> 1
	1			Credit 1.2 <b>Innovation in Design: Exemplary Performance Construction Waste</b> 1
	1			Credit 1.3 <b>Innovation in Design: Green Education</b> 1
	1			Credit 1.4 <b>Innovation in Design: Green Cleaning</b> 1
	1			Credit 1.5 <b>Innovation in Design: Exemplary Performance Public Transit</b> 1
1				Credit 2 <b>LEED Accredited Professional</b> 1

Y = Design Phase Credit

C = Construction Phase Credit

# Bently Reserve Sample Tenant - LEED CI Preliminary Scorecard

Y Y? N? N

68 15 16 11 **Total Project Score**

**Possible Points: 110**

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

21	0	0	0	<b>Sustainable Sites</b>	Possible Points: 21
5				<b>Credit 1 Site Selection, Select a LEED Certified Building</b>	1 to 5
				<OR> Locate the tenant space in a building with the following characteristics:	
				Path 1 Brownfield Redevelopment	1
				Path 2 Stormwater Management, Rate and Quantity	1
				Path 3 Stormwater Management, Treatment	1
				Path 4 Heat Island Reduction, Non-Roof	1
				Path 5 Heat Island Reduction, Roof	1
				Path 6 Light Pollution Reduction	1
				Path 7 Water Efficient Irrigation, Reduce by 50%	2
				Path 8 Water Efficient Irrigation, No Potable Use or No Irrigation	2
				Path 9 Innovative Wastewater Technologies	2
				Path 10 Water Use Reduction, 30% Reduction	2
				Path 11 On-site Renewable Energy	1
				Path 12 Other Quantifiable Environmental Performance	1 to 5
6				<b>Credit 2 Development Density and Community Connectivity</b>	6
6				<b>Credit 3.1 Alternative Transportation, Public Transportation Access</b>	6
2				<b>Credit 3.2 Alternative Transportation, Bicycle Storage &amp; Changing Rooms</b>	2
2				<b>Credit 3.3 Alternative Transportation, Parking Availability</b>	2

8	0	0	3	<b>Water Efficiency</b>	Possible Points: 11
Y				<b>Prereq 1 Water Use Reduction, 20% Reduction</b>	
6				<b>Credit 1.1 Water Use Reduction, 30% Reduction</b>	6
2				<b>Credit 1.2 Water Use Reduction, 35% Reduction</b>	2
			3	<b>Credit 1.3 Water Use Reduction, 40% Reduction</b>	3

16	6	8	7	<b>Energy &amp; Atmosphere</b>	Possible Points: 37
Y				<b>Prereq 1 Fundamental Commissioning</b>	
Y				<b>Prereq 2 Minimum Energy Performance</b>	
Y				<b>Prereq 3 CFC Reduction in HVAC&amp;R Equipment</b>	
1	1	2	1	<b>Credit 1.1 Optimize Energy Performance, Lighting Power (15%,20%,25%,30%,35%)</b>	1 to 5
1		1	1	<b>Credit 1.2 Optimize Energy Performance, Lighting Controls</b>	1 to 3
5			5	<b>Credit 1.3 Optimize Energy Performance, HVAC (separate zoning &amp; HVAC Eff)</b>	5 to 10
4				<b>Credit 1.4 Optimize Energy Performance, Equipment &amp; Appliances (70,77,84,90)</b>	1 to 4
	5			<b>Credit 2 Enhanced Commissioning</b>	5
		5		<b>Credit 3 Energy Use, Measurement &amp; Payment Accountability</b>	2 to 5
5				<b>Credit 4 Green Power</b>	5

3	1	0	0	<b>Regional Priority</b>	Possible Points: 4
1				<b>Credit 1.1 Regional Priority: SSc3.2 Public Transportation</b>	1
1				<b>Credit 1.2 Regional Priority: EAc1.1, Lighting Power</b>	1
1				<b>Credit 1.3 Regional Priority: EAc1.3, HVAC Separate Zoning</b>	1
	1			<b>Credit 1.4 Regional Priority: MRc7, FSC Wood</b>	1

5	2	6	1	<b>Materials &amp; Resources</b>	Possible Points: 14
Y				<b>Prereq 1 Storage and Collection of Recyclables</b>	
1				<b>Credit 1.1 Tenant Space, Long Term Commitment</b>	1
		1		<b>Credit 1.2 Building Reuse, Maintain 40% of Interior Non-Structural Components</b>	1
		1		<b>Credit 1.3 Building Reuse, Maintain 60% of Interior Non-Structural Components</b>	1
	1			<b>Credit 2.1 Construction Waste Management, Divert 50% From Landfill</b>	1
				<b>Credit 2.2 Construction Waste Management, Divert 75% From Landfill</b>	1
		1		<b>Credit 3.1 Resource Reuse, 5%</b>	1
			1	<b>Credit 3.2 Resource Reuse, 10%</b>	1
		1		<b>Credit 3.3 Resource Reuse, 30% Furniture and Furnishings</b>	1
	1			<b>Credit 4.1 Recycled Content, 10% (post-consumer + 1/2 pre-consumer)</b>	1
		1		<b>Credit 4.2 Recycled Content, 20% (post-consumer + 1/2 pre-consumer)</b>	1
	1			<b>Credit 5.1 Regional Materials, 20% Manufactured Regionally</b>	1
		1		<b>Credit 5.2 Regional Materials, 10% Extracted and Manufactured Regionally</b>	1
		1	1	<b>Credit 6 Rapidly Renewable Materials</b>	1
1				<b>Credit 7 Certified Wood</b>	1

12	3	2	0	<b>Indoor Environmental Quality</b>	Possible Points: 17
Y				<b>Prereq 1 Minimum IAQ Performance</b>	
Y				<b>Prereq 2 Environmental Tobacco Smoke (ETS) Control</b>	
		1		<b>Credit 1 Outdoor Air Delivery Monitoring</b>	1
		1		<b>Credit 2 Increased Ventilation</b>	1
1				<b>Credit 3.1 Construction IAQ Management Plan, During Construction</b>	1
1				<b>Credit 3.2 Construction IAQ Management Plan, Before Occupancy</b>	1
1				<b>Credit 4.1 Low-Emitting Materials, Adhesives &amp; Sealants</b>	1
1				<b>Credit 4.2 Low-Emitting Materials, Paints and Coatings</b>	1
1				<b>Credit 4.3 Low-Emitting Materials, Carpet Systems</b>	1
1				<b>Credit 4.4 Low-Emitting Materials, Composite Wood and Laminate Adhesives</b>	1
1				<b>Credit 4.5 Low-Emitting Materials, Systems Furniture and Seating</b>	1
1				<b>Credit 5 Indoor Chemical &amp; Pollutant Source Control</b>	1
	1			<b>Credit 6.1 Controllability of Systems, Lighting</b>	1
		1		<b>Credit 6.2 Controllability of Systems, Temperature and Ventilation</b>	1
1				<b>Credit 7.1 Thermal Comfort, Compliance</b>	1
1				<b>Credit 7.2 Thermal Comfort, Monitoring</b>	1
1				<b>Credit 8.1 Daylight &amp; Views, Daylight 75% of Spaces</b>	1
	1			<b>Credit 8.2 Daylight &amp; Views, Daylight 90% of Spaces</b>	1
1				<b>Credit 8.3 Daylight &amp; Views, Views for 90% of Seated Spaces</b>	1

3	3	0	0	<b>Innovation &amp; Design Process</b>	Possible Points: 6
	1			<b>Credit 1.1 Innovation in Design: Exemplary Performance FSC Wood</b>	1
	1			<b>Credit 1.2 Innovation in Design: Exemplary Performance Construction Waste</b>	1
	1			<b>Credit 1.3 Innovation in Design: Green Education</b>	1
	1			<b>Credit 1.4 Innovation in Design: Green Cleaning</b>	1
	1			<b>Credit 1.5 Innovation in Design: Exemplary Performance Public Transit</b>	1
1				<b>Credit 2 LEED Accredited Professional</b>	1

d = Design Phase Credit  
C = Construction Phase Credit

# Bently Reserve Sample Tenant - LEED CI Preliminary Scorecard

Y	Y?	N?	N	<b>Total Project Score</b>				Possible Points: <b>110</b>
68	15	16	11					
<small>Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 or more points</small>								

21 0 0 0 Sustainable Sites				Possible Points: 21
5				<b>Credit 1</b> <b>Site Selection, Select a LEED Certified Building</b> 1 to 5
				<OR> Locate the tenant space in a building with the following characteristics:
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				Path 3 Stormwater Management, Treatment 1
				Path 4 Heat Island Reduction, Non-Roof 1
				Path 5 Heat Island Reduction, Roof 1
				Path 6 Light Pollution Reduction 1
				Path 7 Water Efficient Irrigation, Reduce by 50% 2
				Path 8 Water Efficient Irrigation, No Potable Use or No Irrigation 2
				Path 9 Innovative Wastewater Technologies 2
				Path 10 Water Use Reduction, 30% Reduction 1
				Path 11 On-site Renewable Energy 2
				Path 12 Other Quantifiable Environmental Performance 1 to 5
6				<b>Credit 2</b> <b>Development Density and Community Connectivity</b> 6
6				<b>Credit 3.1</b> <b>Alternative Transportation, Public Transportation Access</b> 6
2				<b>Credit 3.2</b> <b>Alternative Transportation, bicycle Storage &amp; Changing Rooms</b> 2
2				<b>Credit 3.3</b> <b>Alternative Transportation, Parking Availability</b> 2

8 0 0 3 Water Efficiency				Possible Points: 11
Y				<b>Prereq 1</b> <b>Water Use Reduction, 20% Reduction</b>
6				<b>Credit 1.1</b> <b>Water Use Reduction, 30% Reduction</b> 6
2				<b>Credit 1.2</b> <b>Water Use Reduction, 35% Reduction</b> 2
			3	<b>Credit 1.2</b> <b>Water Use Reduction, 40% Reduction</b> 3

16 6 8 7 Energy & Atmosphere				Possible Points: 37
Y				<b>Prereq 1</b> <b>Fundamental Commissioning</b>
Y				<b>Prereq 2</b> <b>Minimum Energy Performance</b>
Y				<b>Prereq 3</b> <b>CFC Reduction in HVAC&amp;R Equipment</b>
1	1	2	1	<b>Credit 1.1</b> <b>Optimize Energy Performance, Lighting Power (15%,20%,25%,30%,35%)</b> 1 to 5
1	1	1	1	<b>Credit 1.2</b> <b>Optimize Energy Performance, Lighting Controls</b> 1 to 3
5			5	<b>Credit 1.3</b> <b>Optimize Energy Performance, HVAC (separate zoning &amp; HVAC Eff)</b> 5 to 10
4				<b>Credit 1.4</b> <b>Optimize Energy Performance, Equipment &amp; Appliances (70,77,84,90)</b> 1 to 4
	5			<b>Credit 2</b> <b>Enhanced Commissioning</b> 5
		5		<b>Credit 3</b> <b>Energy Use, Measurement &amp; Payment Accountability</b> 2 to 5
5				<b>Credit 4</b> <b>Green Power</b> 5

3 1 0 0 Regional Priority				Possible Points: 4
1				<b>Credit 1.1</b> <b>Regional Priority: SSc3.2 Public Transportation</b> 1
1				<b>Credit 1.2</b> <b>Regional Priority: EAc1.1, Lighting Power</b> 1
1				<b>Credit 1.3</b> <b>Regional Priority: EAc1.3, HVAC Separate Zoning</b> 1
	1			<b>Credit 1.4</b> <b>Regional Priority: MRc7, FSC Wood</b> 1

5 2 6 1 Materials & Resources				Possible Points: 14
Y				<b>Prereq 1</b> <b>Storage and Collection of Recyclables</b>
1				<b>Credit 1.1</b> <b>Tenant Space, Long Term Commitment</b> 1
		1		<b>Credit 1.2</b> <b>Building Reuse, Maintain 40% of Interior Non-Structural Components</b> 1
		1		<b>Credit 1.3</b> <b>Building Reuse, Maintain 60% of Interior Non-Structural Components</b> 1
1				<b>Credit 1.4</b> <b>Construction Waste Management, Divert 50% From Landfill</b> 1
1				<b>Credit 1.5</b> <b>Construction Waste Management, Divert 75% From Landfill</b> 1
		1		<b>Credit 3.1</b> <b>Resource Reuse, 5%</b> 1
			1	<b>Credit 3.2</b> <b>Resource Reuse, 10%</b> 1
		1		<b>Credit 3.3</b> <b>Resource Reuse, 30% Furniture and Furnishings</b> 1
1				<b>Credit 4.1</b> <b>Recycled Content, 10% (post-consumer + 1/2 pre-consumer)</b> 1
		1		<b>Credit 4.2</b> <b>Recycled Content, 20% (post-consumer + 1/2 pre-consumer)</b> 1
1				<b>Credit 5.1</b> <b>Regional Materials, 20% Manufactured Regionally</b> 1
		1		<b>Credit 5.2</b> <b>Regional Materials, 10% Extracted and Manufactured Regionally</b> 1
		1		<b>Credit 6</b> <b>Rapidly Renewable Materials</b> 1
		1		<b>Credit 7</b> <b>Certified Wood</b> 1

12 3 2 0 Indoor Environmental Quality				Possible Points: 17
Y				<b>Prereq 1</b> <b>Minimum IAQ Performance</b>
Y				<b>Prereq 2</b> <b>Environmental Tobacco Smoke (ETS) Control</b>
		1		<b>Credit 1</b> <b>Outdoor Air Delivery Monitoring</b> 1
		1		<b>Credit 2</b> <b>Increased Ventilation</b> 1
1				<b>Credit 3.1</b> <b>Construction IAQ Management Plan, During Construction</b> 1
1				<b>Credit 3.2</b> <b>Construction IAQ Management Plan, Before Occupancy</b> 1
1				<b>Credit 4.1</b> <b>Low-Emitting Materials, Adhesives &amp; Sealants</b> 1
1				<b>Credit 4.2</b> <b>Low-Emitting Materials, Paints and Coatings</b> 1
1				<b>Credit 4.3</b> <b>Low-Emitting Materials, Carpet Systems</b> 1
1				<b>Credit 4.4</b> <b>Low-Emitting Materials, Composite Wood and Laminate Adhesives</b> 1
1				<b>Credit 4.5</b> <b>Low-Emitting Materials, Systems Furniture and Seating</b> 1
1				<b>Credit 5</b> <b>Indoor Chemical &amp; Pollutant Source Control</b> 1
		1		<b>Credit 6.1</b> <b>Controllability of Systems, Lighting</b> 1
		1		<b>Credit 6.2</b> <b>Controllability of Systems, Temperature and Ventilation</b> 1
1				<b>Credit 7.1</b> <b>Thermal Comfort, Compliance</b> 1
1				<b>Credit 7.2</b> <b>Thermal Comfort, Monitoring</b> 1
1				<b>Credit 8.1</b> <b>Daylight &amp; Views, Daylight 75% of Spaces</b> 1
		1		<b>Credit 8.2</b> <b>Daylight &amp; Views, Daylight 90% of Spaces</b> 1
1				<b>Credit 8.3</b> <b>Daylight &amp; Views, Views for 90% of Seated Spaces</b> 1

3 3 0 0 Innovation & Design Process				Possible Points: 6
	1			<b>Credit 1.1</b> <b>Innovation in Design: Exemplary Performance FSC Wood</b> 1
	1			<b>Credit 1.2</b> <b>Innovation in Design: Exemplary Performance Construction Waste</b> 1
	1			<b>Credit 1.3</b> <b>Innovation in Design: Green Education</b> 1
1				<b>Credit 1.4</b> <b>Innovation in Design: Green Cleaning</b> 1
1				<b>Credit 1.5</b> <b>Innovation in Design: Exemplary Performance Public Transit</b> 1
1				<b>Credit 1</b> <b>LEED Accredited Professional</b> 1

**Y** = Design Phase Credit  
**C** = Construction Phase Credit

## Sustainable Sites Possible Points: 26

0%	Credit 1	LEED Certified Design and Construction
67%	Credit 2	Building Exterior and Hardscape Management Plan
89%	Credit 3	Integrated Pest Management, Erosion Control, and Landscape Management Plan
56%	Credit 4.1	Alternative Commuting Transportation, 10%
44%	Credit 4.2	Alternative Commuting Transportation, 25%
22%	Credit 4.3	Alternative Commuting Transportation, 50%
22%	Credit 4.4	Alternative Commuting Transportation, 75% or greater
11%	Credit 5	Reduced Site Disturbance - Protect or Restore Open Space
11%	Credit 6	Stormwater Management
78%	Credit 7.1	Heat Island Reduction - Non-Roof
56%	Credit 7.2	Heat Island Reduction - Roof
22%	Credit 8	Light Pollution Reduction

## Water Efficiency Possible Points: 14

	Prereq 1	Minimum Indoor Plumbing Fixture and Fitting Efficiency
89%	Credit 1.1	Water Performance Measurement - whole building metering
14%	Credit 1.2	Water Performance Measurement - submetering
78%	Credit 2.1	Additional Indoor Plumbing Fixture and Fitting Efficiency, 10%
44%	Credit 2.2	Additional Indoor Plumbing Fixture and Fitting Efficiency, 20%
22%	Credit 2.3	Additional Indoor Plumbing Fixture and Fitting Efficiency, 30%
33%	Credit 3.1	Water Efficient Landscaping - Reduce Potable Water Use by 30%
22%	Credit 3.2	Water Efficient Landscaping - Reduce Potable Water Use by 75%
33%	Credit 3.3	Water Efficient Landscaping - Reduce Potable Water Use by 100%
78%	Credit 4.1	Cooling Tower Water Management - Chemical Management
11%	Credit 4.2	Cooling Tower Water Management - Non-Potable Water Source Use

## Energy & Atmosphere Possible Points: 35

	Prereq 1	Energy Efficiency BMPs - Planning, Documentation, and Opportunity Assessment
	Prereq 2	Minimum Energy Efficiency Performance
	Prereq 3	Refrigerant Management - Ozone Protection
100%	Credit 1.1 & 1.2	Optimize Energy Efficiency Performance, Energy Star 71-73
100%	Credit 1.3 & 1.4	Optimize Energy Efficiency Performance, Energy Star 74-75
100%	Credit 1.5 & 1.6	Optimize Energy Efficiency Performance, Energy Star 76-77
100%	Credit 1.7 & 1.8	Optimize Energy Efficiency Performance, Energy Star 78-79
89%	Credit 1.9 & 1.10	Optimize Energy Efficiency Performance, Energy Star 80-81
39%	Credit 1.11 & 1.12	Optimize Energy Efficiency Performance, Energy Star 82-83
33%	Credit 1.13 & 1.14	Optimize Energy Efficiency Performance, Energy Star 85-87
6%	Credit 1.15 & 1.16	Optimize Energy Efficiency Performance, Energy Star 89-91
0%	Credit 1.17 & 1.18	Optimize Energy Efficiency Performance, Energy Star 93-95
89%	Credit 2.1	Existing Building Commissioning - Investigation and Analysis
78%	Credit 2.2	Existing Building Commissioning - Implementation
56%	Credit 2.3	Existing Building Commissioning - Ongoing Commissioning
78%	Credit 3.1	Performance Measurement - Building Automation System
11%	Credit 3.2	Performance Measurement - System-Level Metering, 40%
11%	Credit 3.3	Performance Measurement - System-Level Metering, 80%
22%	Credit 4.1	Renewable Energy - On-site 3% / Off-site 25%
11%	Credit 4.2	Renewable Energy - On-site 6% / Off-site 50%
11%	Credit 4.3	Renewable Energy - On-site 9% / Off-site 75%
0%	Credit 4.4	Renewable Energy - On-site 12% / Off-site 100%
56%	Credit 5	Refrigerant Management
89%	Credit 6	Emissions Reduction Reporting

## Materials & Resources Possible Points: 10

	Prereq 1	Sustainable Purchasing Policy
	Prereq 2	Solid Waste Management Policy
11%	Credit 1.1	Sustainable Purchasing - Ongoing Consumables, 40%
11%	Credit 1.2	Sustainable Purchasing - Ongoing Consumables, 60%
0%	Credit 1.3	Sustainable Purchasing - Ongoing Consumables, 80%
11%	Credit 2.1	Sustainable Purchasing - Durable Goods, electric
11%	Credit 2.2	Sustainable Purchasing - Durable Goods, furniture
22%	Credit 3	Sustainable Purchasing - Facility Alterations and Additions
33%	Credit 4.1	Sustainable Purchasing - Reduced Mercury in Lamps, 90 pg/lum-hr
33%	Credit 4.2	Sustainable Purchasing - Reduced Mercury in Lamps, 70 pg/lum-hr
11%	Credit 5	Sustainable Purchasing - Food
89%	Credit 6	Solid Waste Management - Waste Stream Audit
89%	Credit 7.1	Solid Waste Management - Ongoing Consumables, 50%
22%	Credit 7.2	Solid Waste Management - Ongoing Consumables, 70%
67%	Credit 8	Solid Waste Management - Durable Goods
67%	Credit 9	Solid Waste Management - Facility Alterations and Additions

## Indoor Environmental Quality Possible Points: 15

	Prereq 1	Outdoor Air Introduction and Exhaust Systems
	Prereq 2	Environmental Tobacco Smoke (ETS) Control
	Prereq 3	Green Cleaning Policy
78%	Credit 1.1	IAQ Best Management Practices - IAQ Management Program
11%	Credit 1.2	IAQ Best Management Practices - Outdoor Air Delivery Monitoring
44%	Credit 1.3	IAQ Best Management Practices - Increased Ventilation
67%	Credit 1.4	IAQ Best Management Practices - Reduce Particulates in Air Distribution
44%	Credit 1.5	IAQ Best Management Practices - Facility Alterations and Additions
67%	Credit 2.1	Occupant Comfort - Occupant Survey
56%	Credit 2.2	Occupant Comfort - Occupant Controlled Lighting
11%	Credit 2.3	Occupant Comfort - Thermal Comfort Monitoring
44%	Credit 2.4	Occupant Comfort - Daylight and Views, 50% Daylight / 45% Views
11%	Credit 2.5	Occupant Comfort - Daylight and Views, 75% Daylight / 90% Views
89%	Credit 3.1	Green Cleaning - High Performance Cleaning Program
89%	Credit 3.2	Green Cleaning - Custodial Effectiveness Assessment, < 3
100%	Credit 3.3	Green Cleaning - Custodial Effectiveness Assessment, < 2
89%	Credit 3.4	Green Cleaning - Sustainable Cleaning Products and Materials, 30%
89%	Credit 3.5	Green Cleaning - Sustainable Cleaning Products and Materials, 60%
22%	Credit 3.6	Green Cleaning - Sustainable Cleaning Products and Materials, 90%
100%	Credit 3.7	Green Cleaning - Sustainable Cleaning Equipment
78%	Credit 3.8	Green Cleaning - Entryway Systems
89%	Credit 3.9	Green Cleaning - Indoor Integrated Pest Management

## Innovation In Operations Possible Points: 6

89%	Credit 1.1	Innovation In Operations
78%	Credit 1.2	Innovation In Operations
56%	Credit 1.3	Innovation In Operations
44%	Credit 1.4	Innovation In Operations
100%	Credit 2	LEED® Accredited Professional
89%	Credit 3	Documenting Sustainable Building Cost Impacts

## Regional Priority Possible Points: 4

?	Credit 1.1	Regional Priority
?	Credit 1.2	Regional Priority
?	Credit 1.3	Regional Priority
?	Credit 1.4	Regional Priority

## Comparing the general relationship between LEED NC and CalGreen's mandatory measures (M)

Y ? N

### Total Project Score

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

Possible Points: 110

		Sustainable Sites		Possible Points: 26
M	Y	C	Prereq 1	Construction Activity Pollution Prevention
		Y	Credit 1	Site Selection
		Y	Credit 2	Development Density and Community Connectivity
		Y	Credit 3	Brownfield Redevelopment
		Y	Credit 4.1	Alternative Transportation, Public Transportation Access
M		Y	Credit 4.2	Alternative Transportation, Bicycle Storage & Changing Rooms
M		Y	Credit 4.3	Alternative Transportation, Low-Emitting & Fuel-Efficient Vehicles
		Y	Credit 4.4	Alternative Transportation, Parking Capacity
		C	Credit 5.1	Site Development, Protect or Restore Habitat
		Y	Credit 5.2	Site Development, Maximize Open Space
		Y	Credit 6.1	Stormwater Management, Quantity Control
		Y	Credit 6.2	Stormwater Management, Quality Control
		C	Credit 7.1	Heat Island Effect, Non-roof
		Y	Credit 7.2	Heat Island Effect, Roof
M		Y	Credit 8	Light Pollution Reduction

		Water Efficiency		Possible Points: 10
M	Y	C	Prereq 1	Water Use Reduction - 20% Reduction
		Y	Credit 1.1	Water Efficient Landscaping, Reduce by 50%
		Y	Credit 1.2	Water Efficient Landscaping, No Potable Use or No Irrigation
		Y	Credit 2	Innovative Wastewater Technologies
		Y	Credit 3.1	Water Use Reduction, 30% Reduction
		Y	Credit 3.2	Water Use Reduction, 35% Reduction
		Y	Credit 3.3	Water Use Reduction, 40% Reduction

		Energy & Atmosphere		Possible Points: 35
M	Y	C	Prereq 1	Fundamental Building Systems Commissioning
	Y	Y	Prereq 2	Minimum Energy Performance
M	Y	Y	Prereq 3	Fundamental Refrigerant Management
		Y	Credit 1	Optimize Energy Performance
		Y	Credit 2	Renewable Energy
		C	Credit 3	Enhanced Commissioning
		Y	Credit 4	Enhanced Refrigerant Management
		C	Credit 5	Measurement & Verification
		C	Credit 6	Green Power

		Regional Priority Credits		Possible Points: 4
		Y	Credit 1.1	Regional Priority
		Y	Credit 1.2	Regional Priority
		Y	Credit 1.3	Regional Priority
		Y	Credit 1.4	Regional Priority

		Materials & Resources		Possible Points: 14
M	Y	Y	Prereq 1	Storage and Collection of Recyclables
		C	Credit 1.1	Building Reuse - Maintain Existing Walls, Floors, & Roof (55%, 75%, 95%)
		C	Credit 1.2	Building Reuse - Maintain Interior, Non-structural elements 75%
M		C	Credit 2.1	Construction Waste Management, 50%
		C	Credit 2.2	Construction Waste Management, 75%
		C	Credit 3.1	Materials Reuse, 5%
		C	Credit 3.2	Materials Reuse, 10%
		C	Credit 4.1	Recycled Content - 10%
		C	Credit 4.2	Recycled Content - 20%
		C	Credit 5.1	Regional Materials - 10%
		C	Credit 5.2	Regional Materials - 20%
		C	Credit 6	Rapidly Renewable Materials - 2.5%
		C	Credit 7	Certified Wood - 50% of new wood

		Indoor Environmental Quality		Possible Points: 15
M	Y	Y	Prereq 1	Minimum IAQ Performance
M	Y	Y	Prereq 2	Environmental Tobacco Smoke (ETS) Control
M		Y	Credit 1	Outdoor Air Delivery Monitoring
		Y	Credit 2	Increased Ventilation
M		C	Credit 3.1	Construction IAQ Management Plan, During Construction
		C	Credit 3.2	Construction IAQ Management Plan, Before Occupancy
M		C	Credit 4.1	Low-Emitting Materials, Adhesives & Sealants
M		C	Credit 4.2	Low-Emitting Materials, Paints and Coatings
M		C	Credit 4.3	Low-Emitting Materials, Flooring Systems
M		C	Credit 4.4	Low-Emitting Materials, Composite Wood and Agrifiber Products
		Y	Credit 5	Indoor Chemical & Pollutant Source Control
		Y	Credit 6.1	Controllability of Systems, Lighting
		Y	Credit 6.2	Controllability of Systems, Thermal Comfort
		Y	Credit 7.1	Thermal Comfort, Design
		Y	Credit 7.2	Thermal Comfort, Verification
		Y	Credit 8.1	Daylight & Views, Daylight
		Y	Credit 8.2	Daylight & Views, Views

		Innovation & Design Process		Possible Points: 6
		Y	Credit 1.1	Innovation in Design:
		Y	Credit 1.2	Innovation in Design:
		Y	Credit 1.3	Innovation in Design:
		Y	Credit 1.4	Innovation in Design:
		Y	Credit 1.5	Innovation in Design:
		C	Credit 2	Innovation in Design: LEED Accredited Professional

Y = Design Phase Credit  
C = Construction Phase Credit

M - represents an area where CalGreen's mandatory measures address similar, but not necessarily equivalent, requirements as the LEED for New Construction Rating System.

# LEED Professional Credentials

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## LEED Green Associate

For professionals who want to demonstrate basic knowledge of green design, construction and operations in non-technical fields of practice.

## LEED AP

Signifies advanced green building knowledge in a particular LEED Rating System. Eligible candidates must document LEED project experience and pass the LEED Green Associate portion of the exam as well. GreenStep's Professional Project Experience Program satisfies this requirement.



## LEED Fellow

Part of an extraordinary class of leading professionals distinguished by their years of experience and contributions to green building field.

# Any Questions

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