



JOLIET JUNIOR COLLEGE
1901

Health Professions Center

<i>Architect</i>	Legat Architects
<i>LEED</i>	Registered: Gold (61 Pts)
<i>Area</i>	124,000 sq. ft.
<i>Completion</i>	Fall 2012
<i>Budget</i>	\$45,000,000

The 124,000-square-foot Health Professions Center expands JJC's nursing and allied health programs, and allows for new programs in occupational/physical therapy and massage therapy. Finishes, equipment, and layout simulate an authentic hospital environment for the nursing program. In the fire science technology area, large bays allow a fire engine to enter the facility.

Sustainable Features

- Planned to be 30% more efficient than the latest energy standards (ASHRAE 90.1)
- Heat recovery and radiant heating systems conserve energy and distribute heat efficiently
- Chilled air beam system reduces recirculated air, maximizes fresh air, and cools rooms efficiently
- Ground-based geothermal system further reduces heating/cooling load



JOLIET JUNIOR COLLEGE

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sustainability performance design



SUSTAINABLE SITES

- P1 Construction Activity Pollution Prevention
- 1 Site Selection
- 4² Alternative Transportation | Bicycle Storage + Changing Rooms
- 4³ Alternative Transportation | Low Emitting + Fuel Efficient Vehicles
- 4⁴ Alternative Transportation | Parking Capacity
- 5² Site Development | Maximize Open Space
- 6¹ Stormwater Design | Quantity Control
- 6² Stormwater Design | Quality Control
- 7 Heat Island Effect | Roof
- 8 Light Pollution Reduction



WATER EFFICIENCY

- P1 Water Use Reduction | 20% Reduction
- 1 Water Efficient Landscaping
- 3 Water Use Reduction

ENERGY + ATMOSPHERE

- P1 Fundamental Commissioning of Building Energy Systems
- P2 Minimum Energy Performance
- P3 Fundamental Refrigerant Management
- 1 Optimize Energy Performance
- 3 Enhanced Commissioning
- 4 Enhanced Refrigerant Management
- 5 Measurement + Verification



MATERIALS + RESOURCES

- P1 Storage + Collection of Recyclables
- 2 Site Construction Waste Management
- 4 Recycled Content
- 5 Regional Materials
- 7 Certified Wood

INDOOR ENVIRONMENTAL QUALITY

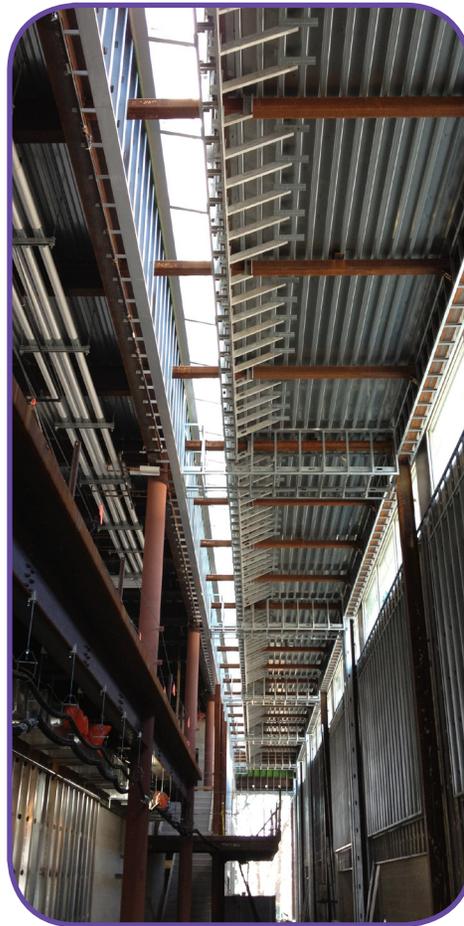
- 1 Outdoor Air Delivery Monitoring
- 3¹ Construction IAQ Management Plan | During Construction
- 3³ Construction IAQ Management Plan | Before Occupancy
- 4¹ Low-Emitting Materials | Adhesives + Sealants
- 4² Low-Emitting Materials | Paints + Coatings
- 4³ Low-Emitting Materials | Flooring Systems
- 4⁴ Low-Emitting Materials | Composite Wood + Agrifiber Products
- 5 Indoor Chemical + Pollutant Source Control
- 6¹ Controllability of Systems | Lighting
- 6² Controllability of Systems | Thermal Comfort
- 7¹ Thermal Comfort | Design
- 7² Thermal Comfort | Verification
- 8¹ Daylight + Views | Daylight

INNOVATION + DESIGN PROCESS

- 1¹ Innovation in Design: Sustainability in Education
- 1² Innovation in Design: Recycled Content 30%
- 1³ Innovation in Design: Recycled Content 40%
- 1⁴ Innovation in Design: SS CR 5.2 Maximize Open Space
- 2 LEED Accredited Professional

REGIONAL PRIORITY CREDITS

- 1¹ Regional Priority: SSc1
- 1² Regional Priority: SS6.1
- 1³ Regional Priority: SS6.2
- 1⁴ Regional Priority: WEc1 Opt. 2





JOLIET JUNIOR COLLEGE

1901

Campus Center

<i>Architect</i>	Legat Architects
<i>LEED</i>	Registered: Gold (46 Pts)
<i>Area</i>	115,000 sq. ft.
<i>Completion</i>	Summer 2011
<i>Budget</i>	\$42,000,000

The Campus Center creates a new gateway to JJC's main campus. The 115,000-square-foot facility promotes student accessibility and success, while showcasing the college's commitment to sustainability.

A student street runs the length of the facility. It offers visibility of student resources (first floor), the library (second floor), and administrative offices (third floor). The first floor cafeteria is a center for student life at the convergence of three concourses. The second and third levels allow students and faculty to step out onto terraces with green roofs and solar panels.

Sustainable Features

- Solar panels
- Ground-source geothermal heat pump system
- Green roofs
- Accessible natural areas





SUSTAINABLE SITES

- P1 Construction Activity Pollution Prevention
- 1 Site Selection
- 4² Alternative Transportation | Bicycle Storage + Changing Rooms
- 4³ Alternative Transportation | Low Emitting + Fuel Efficient Vehicles
- 4⁴ Alternative Transportation | Parking Capacity
- 6¹ Stormwater Design | Quantity Control
- 6² Stormwater Design | Quality Control
- 7 Heat Island Effect | Roof
- 8 Light Pollution Reduction



WATER EFFICIENCY

- P1 Water Use Reduction | 20% Reduction
- 1 Water Efficient Landscaping
- 3 Water Use Reduction

ENERGY + ATMOSPHERE

- P1 Fundamental Commissioning of Building Energy Systems
- P2 Minimum Energy Performance
- P3 Fundamental Refrigerant Management
- 1 Optimize Energy Performance
- 3 Enhanced Commissioning
- 4 Enhanced Refrigerant Management
- 6 Green Power



MATERIALS + RESOURCES

- P1 Storage + Collection of Recyclables
- 2 Site Construction Waste Management
- 4 Recycled Content
- 5 Regional Materials
- 7 Certified Wood



LEED CHECKLIST

INDOOR ENVIRONMENTAL QUALITY

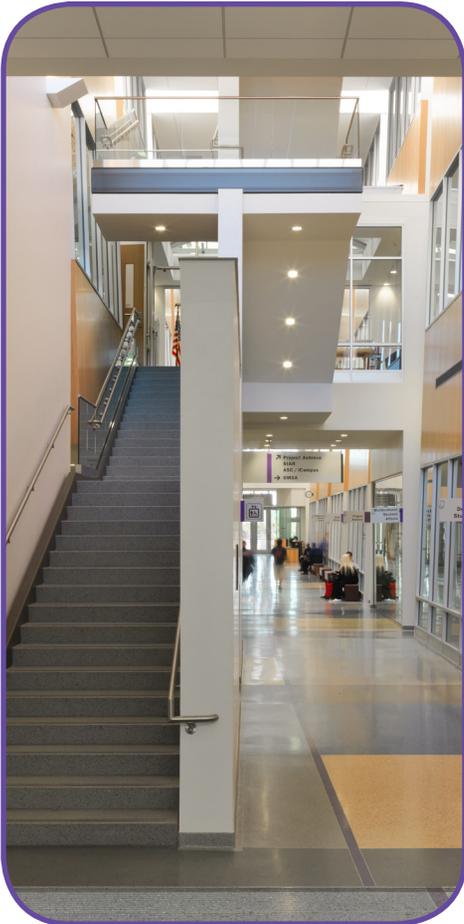
- 0% Target for LEED Accredited Professional
- 1 Outdoor Air Delivery Monitoring
- 3¹ Construction IAQ Management Plan | During Construction
- 4¹ Low-Emitting Materials | Adhesives + Sealants
- 4² Low-Emitting Materials | Paints + Coatings
- 4³ Low-Emitting Materials | Flooring Systems
- 4⁴ Low-Emitting Materials | Composite Wood + Agrifiber Products
- 5 Indoor Chemical + Pollutant Source Control
- 6¹ Controllability of Systems | Lighting
- 7¹ Thermal Comfort | Design

INNOVATION + DESIGN PROCESS

- 1¹ Innovation in Design: Sustainability in Education
- 1² Innovation in Design: Recycled Content 30%
- 1³ Innovation in Design: Recycled Content 40%
- 1⁴ Innovation in Design: SS CR 5.2 Maximize Open Space
- 2 LEED Accredited Professional

REGIONAL PRIORITY CREDITS

- 1¹ Regional Priority: SSc1
- 1² Regional Priority: SS6.1
- 1³ Regional Priority: SS6.2
- 1⁴ Regional Priority: WEc1 Opt. 2





JOLIET JUNIOR COLLEGE
1901

Green House

<i>Architect</i>	Legat Architects
<i>LEED</i>	Certified (Certified: 28 Pts)
<i>Building Area</i>	3,200 sq. ft.
<i>Greenhouse</i>	8,505 sq. ft.
<i>Completion</i>	December 2009
<i>Budget</i>	\$3,100,000

The Greenhouse Facility is the first community college (and 2nd of any U.S. college or university) greenhouse to achieve LEED certification. Energy- and water-efficient systems bring the Horticultural Sciences department new ways of growing, conserving, and teaching. Three passively and mechanically ventilated greenhouses provide flexible, sustainable growing environments. Water resource responsibility and respect for the city's legal restrictions for water use drove the design. An educational building includes a multi-purpose classroom, coolers, pesticide storage, and offices.

Sustainable Features

- Rainwater harvesting system
- Hydroponics (growing without soil)
- Pulse watering for hanging plants
- On-site sanitary treatment system
- Passive ventilation system
- Reflective roof surface
- Horizontal air flow fans
- Thermal and blackout curtains
- High intensity discharge lights



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LEED CHECKLIST

SUSTAINABLE SITES

- Ⓟ1 Construction Activity Pollution Prevention
- 4³ Alternative Transportation | Low Emitting + Fuel Efficient Vehicles
- 4⁴ Alternative Transportation | Parking Capacity
- 7 Heat Island Effect | Roof

WATER EFFICIENCY

- 2 Innovative Wastewater Technologies
- 3 Water Use Reduction

ENERGY + ATMOSPHERE

- Ⓟ1 Fundamental Commissioning of Building Energy Systems
- Ⓟ2 Minimum Energy Performance
- Ⓟ3 Fundamental Refrigerant Management
- 1 Optimize Energy Performance

MATERIALS + RESOURCES

- Ⓟ1 Storage + Collection of Recyclables
- 2 Site Construction Waste Management
- 4 Recycled Content
- 5 Regional Materials
- 7 Certified Wood



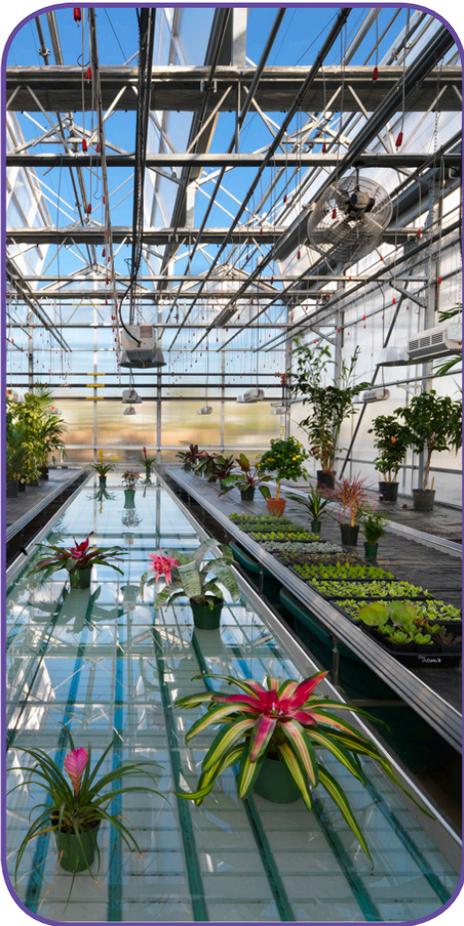
LEED CHECKLIST

INDOOR ENVIRONMENTAL QUALITY

-
- F1 Minimum Indoor Air Quality Performance
- 1 Outdoor Air Delivery Monitoring
- 2 Increased Ventilation
- 3¹ Construction IAQ Management Plan | During Construction
- 4¹ Low-Emitting Materials | Adhesives + Sealants
- 4² Low-Emitting Materials | Paints + Coatings
- 4³ Low-Emitting Materials | Flooring Systems
- 4⁴ Low-Emitting Materials | Composite Wood + Agrifiber Products
- 6¹ Controllability of Systems | Lighting
- 6² Controllability of Systems | Thermal Comfort
- 7¹ Thermal Comfort | Design
- 8² Daylight + Views | Views

INNOVATION + DESIGN PROCESS

- 1¹ Innovation in Design: Sustainability in Education
- 1² Innovation in Design: Recycled Content 30%
- 1³ Innovation in Design: Recycled Content 40%
- 1⁴ Innovation in Design: SS CR 5.2 Maximize Open Space
- 2 LEED Accredited Professional





JOLIET JUNIOR COLLEGE
— 1901 —

Natural Sciences Addition

<i>Architect</i>	Legat Architects
<i>LEED</i>	Registered (Silver: 58 Pts)
<i>New Area</i>	37,000 sq. ft.
<i>Renovated Area</i>	23,000 sq. ft.
<i>Completion</i>	Spring 2012
<i>Budget</i>	\$20,000,000

A 37,000-square-foot addition mostly houses labs, while a 23,000-square-foot renovation expands some labs, and converts others to classrooms and offices. Infrastructure renovations include new ductwork, lighting, power/data, as well as plumbing upgrades. Renovated labs and classrooms include new flooring, ceilings, casework, and equipment. On both floors, a circulation loop surrounds labs and classrooms. A renovated corridor on the first floor connects the addition to the expanded prep area in the existing building. Light-filled breakout areas throughout the corridors encourage collaboration.

Sustainable Features

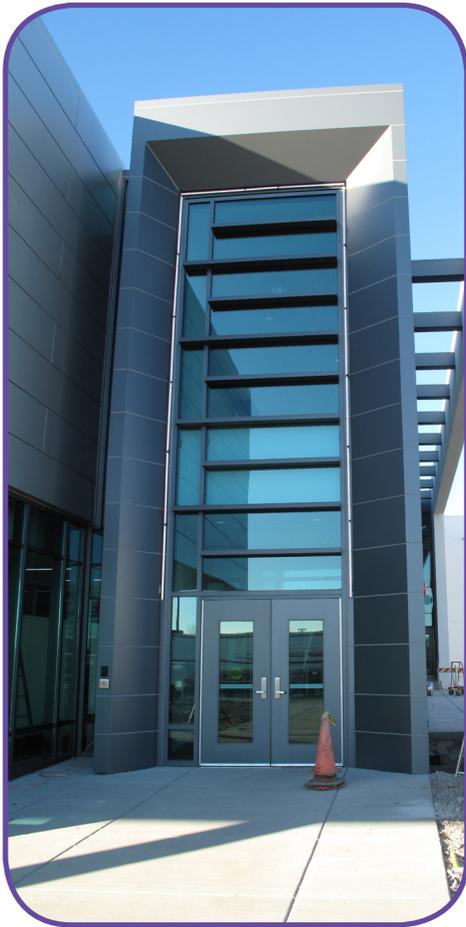
- Energy recovery wheel captures and redistributes heat
- High-efficiency building envelope
- Passive solar shading
- Areas of permeable pavement in courtyard reduce stormwater runoff



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SUSTAINABLE SITES

- P1 Construction Activity Pollution Prevention
- 1 Site Selection
- 4² Alternative Transportation | Bicycle Storage + Changing Rooms
- 4³ Alternative Transportation | Low Emitting + Fuel Efficient Vehicles
- 4⁴ Alternative Transportation | Parking Capacity
- 5¹ Site Development | Protect or Restore Habitat
- 5² Site Development | Maximize Open Space
- 7 Heat Island Effect | Roof

WATER EFFICIENCY

- P1 Water Use Reduction | 20% Reduction
- 1 Water Efficient Landscaping
- 3 Water Use Reduction

ENERGY + ATMOSPHERE

- P1 Fundamental Commissioning of Building Energy Systems
- P2 Minimum Energy Performance
- P3 Fundamental Refrigerant Management
- 1 Optimize Energy Performance
- 3 Enhanced Commissioning
- 4 Enhanced Refrigerant Management
- 5 Measurement + Verification
- 6 Green Power

MATERIALS + RESOURCES

- P1 Storage + Collection of Recyclables
- 1¹ Building Reuse | Maintain Existing Walls, Floors, + Roof
- 1² Building Reuse | Maintain Interior Non-structural Elements
- 2 Site Construction Waste Management
- 4 Recycled Content
- 5 Regional Materials

MATERIALS + RESOURCES, CONT.

- 6 Rapidly Renewable Materials
- 7 Certified Wood

INDOOR ENVIRONMENTAL QUALITY

- 1 Outdoor Air Delivery Monitoring
- 3¹ Construction IAQ Management Plan | During Construction
- 4¹ Low-Emitting Materials | Adhesives + Sealants
- 4² Low-Emitting Materials | Paints + Coatings
- 4³ Low-Emitting Materials | Flooring Systems
- 4⁴ Low-Emitting Materials | Composite Wood + Agrifiber Products
- 5 Indoor Chemical + Pollutant Source Control
- 6¹ Controllability of Systems | Lighting
- 6² Controllability of Systems | Thermal Comfort
- 7¹ Thermal Comfort | Design
- 7² Thermal Comfort | Verification

INNOVATION + DESIGN PROCESS

- 1¹ Innovation in Design: Sustainability in Education
- 1² Innovation in Design: Recycled Content 30%
- 1³ Innovation in Design: Recycled Content 40%
- 1⁴ Innovation in Design: SS CR 5.2 Maximize Open Space
- 1⁵ Innovation in Design: Green Cleaning
- 2 LEED Accredited Professional

REGIONAL PRIORITY CREDITS

- 1¹ Regional Priority: SSc1
- 1² Regional Priority: SS6.1
- 1³ Regional Priority: SS6.2
- 1⁴ Regional Priority: WEc1 Opt. 2





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1901

Facility Services

<i>Architect</i>	Legat Architects
<i>LEED</i>	Certified: Gold (39 Pts)
<i>Area</i>	40,000 sq. ft.
<i>Completion</i>	February 2011
<i>Budget</i>	\$7,100,000

This facility brings JJC's Facility Services department more space and efficiency. The facility consolidates the department, vehicles, and equipment under one roof. High-performance technologies decrease energy use by 26% compared to building standards. Main components include administration, offices/shops, and heated vehicle storage. Indoor storage extends vehicle/equipment life and reduces warm-up times. The layout and a shared lunch/training area promote collaboration. The storage basement responds to the site's slope.

Sustainable Features

- Low-flow plumbing fixtures
- 75% of regularly occupied spaces have access to daylight/views
- 77% of construction waste was recycled
- All LED light fixtures
- Reflective roof surface
- Geothermal heating/cooling system
- Solar-powered/pre-heat ductwork
- Motion sensors for lights in all occupied spaces
- Operable/high-efficiency windows



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SUSTAINABLE SITES

- P1 Construction Activity Pollution Prevention
- 4² Alternative Transportation | Bicycle Storage + Changing Rooms
- 4³ Alternative Transportation | Low Emitting + Fuel Efficient Vehicles
- 4⁴ Alternative Transportation | Parking Capacity
- 5² Site Development | Maximize Open Space
- 7² Heat Island Effect | Roof

WATER EFFICIENCY

- 1¹ Water Use Reduction | 50% Reduction
- 1² Water Efficient Landscaping, No Potable Use or No Irrigation
- 3¹ Water Use Reduction, 20% Reduction
- 3² Water Use Reduction, 30% Reduction

ENERGY + ATMOSPHERE

- P1 Fundamental Commissioning of Building Energy Systems
- P2 Minimum Energy Performance
- P3 Fundamental Refrigerant Management
- 1 Optimize Energy Performance
- 4 Enhanced Refrigerant Management

MATERIALS + RESOURCES

- P1 Storage + Collection of Recyclables
- 2¹ Site Construction Waste Management, Divert 50% from Disposal
- 2² Site Construction Waste Management, Divert 75% from Disposal
- 4 Recycled Content, 10%
- 5¹ Regional Materials, 10%
- 5² Regional Materials, 20%



INDOOR ENVIRONMENTAL QUALITY



-
- ①^{F1} Minimum Indoor Air Quality Performance
- ① Outdoor Air Delivery Monitoring
- ③¹ Construction IAQ Management Plan | During Construction
- ④¹ Low-Emitting Materials | Adhesives + Sealants
- ④² Low-Emitting Materials | Paints + Coatings
- ④³ Low-Emitting Materials | Flooring Systems
- ④⁴ Low-Emitting Materials | Composite Wood + Agrifiber Products
- ⑤ Indoor Chemical + Pollutant Source Control
- ⑥¹ Controllability of Systems | Lighting
- ⑥² Controllability of Systems | Thermal Comfort
- ⑦¹ Thermal Comfort | Design
- ⑦² Thermal Comfort | Verification
- ⑧² Daylight + Views | Views



INNOVATION + DESIGN PROCESS

- ①¹ Innovation in Design: Sustainability in Education
- ①² Innovation in Design: Recycled Content 30%
- ①³ Innovation in Design: Recycled Content 40%
- ①⁴ Innovation in Design: SS CR 5.2 Maximize Open Space
- ② LEED Accredited Professional





JOLIET JUNIOR COLLEGE
1901

Automotive Building

<i>Architect</i>	Wight Architects
<i>LEED</i>	Registered (Silver: 58 Pts)
<i>Area</i>	18,000 sq. ft.
<i>Completion</i>	August 2011
<i>Budget</i>	\$5,000,000

Joliet Junior College's high profile addition to the Automotive Service Technology Department is located adjacent to one of the primary student entrances into the College. A one story addition creates a striking image for the program and reshapes the newly landscaped entry courtyard. White painted concrete exterior wall panels integrates with the existing College architecture and simultaneously expresses the vitality of the auto service educational experience. The addition doubles the Departmental square footage as well as full-time student capacity. The addition of sixteen fully equipped vehicle service bays and four classrooms helps attain the College's vision to fulfill community need with advanced and sustainable solutions.

Sustainable Features

- 80% construction waste recycled
- Total runoff reduced by +25% pre-development volume
- Potable water reduced by 53%
- Potable water for wastewater reduced by 59%
- 97% of occupied spaces have views
- Energy use reduced by 24%



JOLIET JUNIOR COLLEGE

Wight

SUSTAINABLE SITES

- Ⓟ1 Construction Activity Pollution Prevention
- ① Site Selection
- ④² Alternative Transportation | Bicycle Storage + Changing Rooms
- ⑥¹ Stormwater Design | Quantity Control
- ⑥² Stormwater Design | Quality Control
- ⑦¹ Heat Island Effect | Non-Roof
- ⑦² Heat Island Effect | Roof

WATER EFFICIENCY

- Ⓟ1 Water Use Reduction | 20% Reduction
- ① Water Efficient Landscaping
- ② Innovative Wastewater Technologies
- ③ Water Use Reduction

ENERGY + ATMOSPHERE

- Ⓟ1 Fundamental Commissioning of Building Energy Systems
- Ⓟ2 Minimum Energy Performance
- Ⓟ3 Fundamental Refrigerant Management
- ① Optimize Energy Performance
- ③ Enhanced Commissioning
- ④ Enhanced Refrigerant Management
- ⑤ Measurement + Verification
- ⑥ Green Power

MATERIALS + RESOURCES

- Ⓟ1 Storage + Collection of Recyclables
- ② Site Construction Waste Management
- ④ Recycled Content
- ⑤ Regional Materials
- ⑦ Certified Wood



INDOOR ENVIRONMENTAL QUALITY



-
- ①^{P1} Minimum Indoor Air Quality Performance
- ① Outdoor Air Delivery Monitoring
- ③¹ Construction IAQ Management Plan | During Construction
- ③³ Construction IAQ Management Plan | Before Occupancy
- ④¹ Low-Emitting Materials | Adhesives + Sealants
- ④² Low-Emitting Materials | Paints + Coatings
- ④³ Low-Emitting Materials | Flooring Systems
- ④⁴ Low-Emitting Materials | Composite Wood + Agrifiber Products
- ⑥¹ Controllability of Systems | Lighting
- ⑥² Controllability of Systems | Thermal Comfort
- ⑦¹ Thermal Comfort | Design
- ⑧² Daylight + Views | Views

INNOVATION + DESIGN PROCESS

- ①¹ Innovation in Design: Sustainability in Education
- ①² Innovation in Design: Recycled Content 30%
- ①⁴ Innovation in Design: SS CR 5.2 Maximize Open Space
- ② LEED Accredited Professional

REGIONAL PRIORITY CREDITS

- ①¹ Regional Priority: SSc1
- ①² Regional Priority: SSc6.1
- ①³ Regional Priority: SSc6.2
- ①⁴ Regional Priority: WEc1 Opt. 2