

# CRISTAL

## Light Control Solutions & **LEED**



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## Potential Contribution

### LEED® CANADA-NC & CS 2009

#### LEED® Technical Data Sheet

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#### Mission

CRISTAL CONTROLS manufactures energy management systems, low voltage lighting control systems, temperature controls and automation electronic products for manufacturers, specialized distributors, and integrators. We design all our systems and provide the necessary product training.

One of our main objectives is to ensure continued growth by delivering high-quality products within the specified deadline. We maintain close business relations with our customers by bringing them the appropriate solutions that truly fulfill their needs.

#### Vision

CRISTAL CONTROLS wishes to remain the industry leader in the manufacturing of SCR and SSR power controllers, as well as in the production of lighting control systems and energy management systems. Thanks to its solid reputation and its ability to design and manufacture products of the highest quality, the Cristal Controls' team anticipates a continued business growth and an always increasing presence in the North American and foreign markets.



#### Innovation

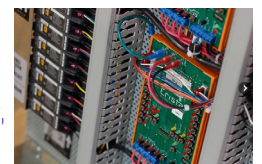
Our team of engineers and technicians work every day to develop profitable solutions for our customers. We are ready to react to changes in the industry and to offer to our customers today the products they will need tomorrow.

#### Lighting control systems

We offer lighting control solutions both for small and large scale projects. Our complete line of panels goes from 8-relay panels to a complete lighting control system networking hundreds of panels and thousands of relays. Every panel can be attached to a BACnet network for integration with BAS third parties.

#### Facts

- ▶ 30 to 60% reduction of your lighting energy bill
- ▶ Remote control, affordable and efficient lighting control system
- ▶ BACnet compatible, distributed dimming system, 0-10 Vdc dimming capacity, DMX capacity. For new or existing buildings.
- ▶ Also available using Power Line Control



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**A positive impact with LEED® Canada-NC & CS 2009**

The growing interest for sustainable building design & operations, of which we are part, is embodied in the Leadership in Energy and Environmental Design (LEED®) Green Building Rating Systems in North America.



This document explores the potential contribution for the use of **CRISTAL CONTROLS'** products for a **LEED® Canada-NC 2009 (New Construction and Major Renovations)** & a **LEED® Canada-CS 2009 (Core and Shell)** project.

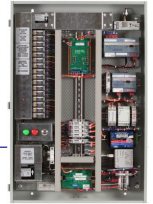
The **CaGBC LEED® Canada-NC & CS 2009** Rating Systems have 110 points divided in seven categories for certifying the design and construction of commercial or institutional buildings and high-rise residential buildings of all sizes, both public and private.



<b>LEED® Canada-NC &amp; CS 2009 Summary Table</b>					<b>Lighting control system</b>	
<b>CATEGORY</b>		<b>PREREQUISITES</b>	<b>CREDITS</b>	<b>POINTS</b>	<b>POTENTIAL CONTRIBUTION</b>	
					<b>LEED Canada-NC 2009</b>	<b>LEED Canada-CS 2009</b>
<b>SS</b>	Sustainable Sites	1	8	26	<b>1 point</b>	<b>1 point</b>
<b>WE</b>	Water Efficiency	1	3	10	<b>0 point</b>	<b>0 point</b>
<b>EA</b>	Energy & Atmosphere	3	6	35	<b>24 points</b>	<b>26 points</b>
<b>MR</b>	Materials & Resources	1	7	14	<b>0 point</b>	<b>0 point</b>
<b>IEQ</b>	Indoor Environmental Quality	2	8	15	<b>2 points</b>	<b>1 point</b>
<b>ID</b>	Innovation in Design	0	2	6	<b>3 points</b>	<b>3 points</b>
<b>RP</b>	Regional Priority	0	2	4	<b>3 points</b>	<b>3 points</b>
<b>TOTAL</b>		<b>8</b>	<b>36</b>	<b>110</b>	<b>UP TO A TOTAL OF 33 POINTS</b>	<b>UP TO A TOTAL OF 34 POINTS</b>

\* It is important to consider that the total amount of possible points reflects the number of achievable points in each credit categories. The product by itself cannot achieve this score, as defined above, but is considered as a beneficial element in order to achieve LEED® credits.

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**Sustainable Sites (SS)**

CREDITS	DURABLE STRATEGIES	POTENTIAL POINTS	CREDIT RELEVANCE
SS8	LIGHT POLLUTION REDUCTION	1 POINT	DIRECT

**Credit requirements**

Project teams must comply with 1 of the 2 options for interior lighting AND the requirements for exterior lighting.

**FOR INTERIOR LIGHTING**

**Option 1**

Reduce the input power (by automatic device) of all non-emergency interior luminaires with a direct line of sight to any openings in the envelope (translucent or transparent) by at least 50% between the hours of 11 pm and 5 am. After-hours override may be provided by a manual or occupant-sensing device provided the override lasts no more than 30 minutes.

Or

**Option 2**

All openings in the envelope (translucent or transparent) with a direct line of sight to any non-emergency luminaires must have shielding (controlled/closed by automatic device for a resultant transmittance of less than 10% between the hours of 11 pm and 5 am).

CONTRIBUTION AND COMPLIANCE*	LIGHTING CONTROL SYSTEM
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**COMMENTS**

The lighting control system by **CRISTAL CONTROLS** includes several functionalities that may contribute to credit **SS 8**.

**Lighting schedule management**

The **JASPER** system enables the implementation of lighting schedules. This allows the building manager to program, in advance, a dimming or a turn off of the lighting devices during night time or outside of regular business hours.

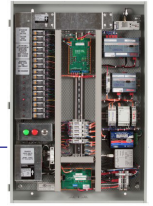
**Individual controls and light gradation**

Since each lighting device can be individually controlled and each have a luminous intensity gradation system (gradation between 0.1% and 100%), **CRISTAL CONTROLS'** lighting control system can easily contribute to the reduction in input power required by this credit.

**Motion detectors**

Motion detectors and smart technology sensors can enable the dimming or the turn off of the lighting devices when the room is unoccupied.

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**Energy & Atmosphere (EA)**

CREDITS	DURABLE STRATEGIES	POTENTIAL POINTS	CREDIT RELEVANCE
EAp1	FUNDAMENTAL COMMISSIONING OF BUILDING ENERGY SYSTEMS	0 POINT (REQUIRED)	DIRECT

**Prerequisite requirements**

The following commissioning process activities must be completed by the project team.

1. Designate an individual as the Commissioning Authority (CxA) to lead, review and oversee the completion of the commissioning process activities.
2. The owner must document the owner's project requirements. The design team must develop the basis of design. The CxA must review these documents for clarity and completeness. The owner and design team must be responsible for updates to their respective documents.
3. Develop and incorporate commissioning requirements into the construction documents.
4. Develop and implement a commissioning plan.
5. Verify the installation and performance of the systems to be commissioned.
6. Complete a summary commissioning report.

**Commissioned systems**

Commissioning process activities must be completed for the following energy-related systems, at a minimum (if they are installed as part of the core and shell project):

- ▶ Heating, ventilating, air conditioning, and refrigeration (HVAC&R) systems (mechanical and passive) and associated controls;
- ▶ Lighting and daylighting controls;
- ▶ Domestic hot water systems;
- ▶ Renewable energy systems (e.g., wind, solar).

<b>CONTRIBUTION AND COMPLIANCE*</b>	<b>LIGHTING CONTROL SYSTEM</b>
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**COMMENTS**

**CRISTAL CONTROLS** can contribute to prerequisite **EAp1** since they offer several services in order to facilitate the commissioning of the building energy systems:

- ▶ Professional training for the installer
- ▶ On site commissioning and calibration of the installed systems
- ▶ Verification and analysis of the energy consumption data, which allows the optimization of the system, if needed.
- ▶ Production of an operating manual
- ▶ Service contract for the building's useful life

**CRISTAL CONTROLS** has all required documents regarding LEED® and can rapidly provide information in a certified project.

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**Energy & Atmosphere (EA)**

CREDITS	DURABLE STRATEGIES	POTENTIAL POINTS	CREDIT RELEVANCE
EAp2	MINIMUM ENERGY PERFORMANCE	0 POINT (REQUIRED)	DIRECT

**Prerequisite requirements**

Select 1 of the 3 compliance path options described below.

**Chosen option must also be used for EA Credit 1.**

**Option 1** – Whole building simulation:

Either Model National Energy Code For Buildings (MNECB) or ASHRAE 90.1-2007, Energy Standard for Buildings Except Low-Rise Residential Buildings.

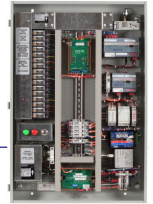
In comparison with the reference building performance rating, demonstrate a **23%** cost improvement in the proposed building performance rating for new buildings or a **19%** cost improvement in the proposed building performance rating for major renovations to existing buildings, for the **MNECB** or **10%** cost improvement for new buildings or 5% cost improvement for major renovations to existing buildings for ASHRAE 90.1-2007.

**Option 2** – Comply with the prescriptive measures of the **ASHRAE Advanced Energy Design Guide** appropriate to the project scope, for one of the following path: for Small Office Buildings 2004 or for Small Retail Buildings 2006 or for Small Warehouses and Self-Storage Buildings 2008 **or** for K-12 School Buildings.

**Option 3** – Comply with the prescriptive measures identified in the **Advanced Buildings™ Core Performance Guide developed by the New Buildings Institute.**

CRISTAL CONTROLS has all required documents regarding LEED® and can rapidly provide information in a certified project.

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**Energy & Atmosphere (EA)**

CREDITS	DURABLE STRATEGIES	POTENTIAL POINTS	CREDIT RELEVANCE
EA1	OPTIMIZE ENERGY PERFORMANCE	1 to 19 POINTS (NC) 3 to 21 POINTS (CS)	DIRECT

**Credit requirements**

Select 1 of the 3 compliance path options described below.

**Comply with EA Prerequisite 2 (Minimum Energy Performance).**

**Option 1** – Demonstrate a **percentage cost improvement** in the proposed building performance rating compared with reference building performance rating, according to the chosen path in EA Prerequisite 2. Up to 19 points (NC) or 21 points (CS).

**MNECB**

One point (1) LEED® NC and three (3) points LEED® CS for an expected cost reduction of **25%** (new buildings) or **21%** (existing buildings renovations).

**ASHRAE 90.1-2007**

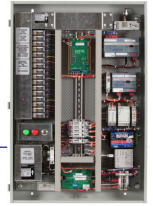
One point (1) LEED® NC and three (3) points LEED® CS for an expected cost reduction of **12%** (new buildings) or **8%** (existing building renovations).

**Option 2** – Comply with the prescriptive measures of the **ASHRAE Advanced Energy Design Guide** (1 point) appropriate to the project scope, for one of the following path: for Small Office Buildings 2004 or for Small Retail Buildings 2006 or for Small Warehouses and Self-Storage Buildings 2008 or for K-12 School Buildings.

**Option 3** – Comply with the prescriptive measures identified in the **Advanced Buildings™ Core Performance Guide** developed by the New Buildings Institute. For this credit, additional points must be obtained with this option (3 points maximum).

CRISTAL CONTROLS has all required documents regarding LEED® and can rapidly provide information in a certified project.

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### Energy & Atmosphere (EA)

#### COMMENTS

##### CONTRIBUTION AND COMPLIANCE\* LIGHTING CONTROL SYSTEM

The lighting control system by **CRISTAL CONTROLS** can contribute to prerequisite **EAp2** and to the credit **EA1** since it includes several functionalities that may help the building achieve a higher energy efficiency

##### **Lighting schedule management**

The **JASPER** system enables the implementation of lighting schedules. This allows the building manager to program, in advance, a dimming or a turn off of the lighting devices during night time or outside of regular business hours. This therefore helps reduce the lighting energy consumption.

##### **Individual controls and light gradation**

Since each lighting device can be individually controlled and each have a luminous intensity gradation system (gradation between 0.1% and 100%), **CRISTAL CONTROLS'** lighting control system allows the building occupants to precisely adjust the luminous intensity to fit their specific individual needs. Moreover, this system makes it easy to dim or to turn off the lights in the unoccupied spaces, which can result in significant energy savings.

##### **Motion detectors**

Motion detectors and smart technology sensors can enable the dimming or the turn off of the lighting devices when the room is unoccupied, which prevent the unnecessary lighting of spaces.

##### **Luminosity detectors**

Luminosity detectors can be installed and enable an automatic light control. This system can adjust the lights in order to keep a constant level of illumination, depending on the natural light level. This strategy can help reducing the lighting energy consumption.

##### **Interactive floor plan**

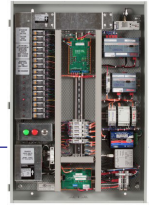
The **JASPER** centralised platform allows the complete remote control of each lighting device using an interactive floor plan. The different lights can therefore be individually controlled directly via a computer or a smart phone.

##### **Energy consumption data for the lighting devices**

The lighting control system by **CRISTAL CONTROLS** can provide data on the use and energy consumption of every lighting device. It is thus possible, without any additional control system, to verify the lighting energy use in order to know if an adjustment or optimization of the system is necessary.



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**Energy & Atmosphere (EA)**

CREDITS	DURABLE STRATEGIES	POTENTIAL POINTS	CREDIT RELEVANCE
EA3	ENHANCED COMMISSIONING	2 POINTS	DIRECT

**Credit requirements**

Implement, or have a contract in place to implement, the following additional commissioning process activities in addition to the requirements of EA Prerequisite 1: Fundamental Commissioning of Building Energy System:

1. Prior to the start of the construction documents phase, designate an independent Commissioning Authority (CxA) to lead, review, and oversee the completion of all commissioning process activities.
2. The CxA must conduct, at a minimum, 1 commissioning design review of the owner's project requirements basis of design, and design documents prior to mid-construction documents phase and back-check the review comments in the subsequent design submission.
3. The CxA must review contractor submittals applicable to systems being commissioned for compliance with the owner's project requirements and basis of design. This review must be concurrent with the review of the architect or engineer of record and submitted to the design team and the owner.
4. The CxA or other project team members must develop a systems manual that provides future operating staff the information needed to understand and optimally operate the commissioned systems.
5. The CxA or other project team members must verify that the requirements for training operating personnel and building occupants are completed.
6. The CxA must be involved in reviewing the operation of the building with operations and maintenance (O&M) staff and occupants within 10 months after substantial completion. A plan for resolving outstanding commissioning-related issues must be included.

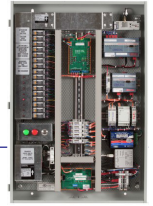
**CONTRIBUTION AND COMPLIANCE\* LIGHTING CONTROL SYSTEM**

**COMMENTS**

**CRISTAL CONTROLS** can contribute to prerequisite **EA3** since they offer several services in order to facilitate the commissioning of the building energy systems:

- ▶ Professional training for the installer
- ▶ On site commissioning and calibration of the installed systems
- ▶ Verification and analysis of the energy consumption data, which allows the optimization of the system, if needed.
- ▶ Production of an operating manual
- ▶ Service contract for the building's useful life

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**Energy & Atmosphere (EA)**

CREDITS	DURABLE STRATEGIES	POTENTIAL POINTS	CREDIT RELEVANCE
EA5	MEASUREMENT AND VERIFICATION	3 POINTS (NC) 0 POINT (CS)	DIRECT

**Credit requirements**

**Option 1** – Develop and implement a measurement & verification (M&V) Plan consistent with Option D: Calibrated Simulation (Savings Method 2) as specified in the **International Performance Measurement & Verification Protocol (IPMVP) Volume III: Concepts and Options for Determining Energy Savings in New Construction, april, 2003.**

The M&V period must cover at least 1 year of post-construction occupancy

**Option 2** – Develop and implement a measurement & verification (M&V) Plan consistent with Option B: Energy Conservation Measure Isolation, as specified in the **International Performance Measurement & Verification Protocol (IPMVP) Volume III: Concepts and Options for Determining Energy Savings in New Construction, april, 2003.**

The M&V period must cover at least 1 year of post-construction occupancy.

<b>CONTRIBUTION AND COMPLIANCE*</b>	<b>LIGHTING CONTROL SYSTEM</b>
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**COMMENTS**

The lighting control system by **CRISTAL CONTROLS** can contribute to credit EA 5 since it can provide data on the use and energy consumption of every lighting device. It is thus possible, without any additional control system, to supervise the energy use of the lighting, heating and air conditioning devices as well as the electric plugs in order to know if an adjustment or optimization of the system is necessary.

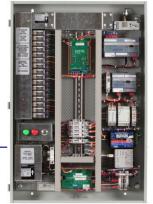
The data recording systems can measure:

- ▶ The energy consumption peaks of the main electric current
- ▶ The energy consumption for each sub-group (consumption loop)

It is possible to measure the lighting energy consumption of the entire building as well as the energy consumption for the lighting of a specific zone.

CRISTAL CONTROLS has all required documents regarding LEED® and can rapidly provide information in a certified project.

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**Energy & Atmosphere (EA)**

CREDITS	DURABLE STRATEGIES	POTENTIAL POINTS	CREDIT RELEVANCE
EA 5.1	MEASUREMENT AND VERIFICATION : BASE BUILDING	0 POINT (NC) 3 POINTS (CS)	DIRECT

**Credit requirements**

**Option 1** – Develop and implement a measurement & verification (M&V) Plan consistent with Option D: Calibrated Simulation (Savings Method 2) as specified in the **International Performance Measurement & Verification Protocol (IPMVP) Volume III: Concepts and Options for Determining Energy Savings in New Construction, april, 2003.**

The document must include the following:

- ▶ A description of the infrastructure design.
- ▶ Existing meter locations.
- ▶ Existing meter specifications.
- ▶ 1-line electrical schematics identifying end-use circuits.
- ▶ Guidelines for carrying out tenant submetering.

The M&V period must cover at least 1 year of post-construction occupancy

**Option 2** – Develop and implement a measurement & verification (M&V) Plan consistent with Option B: Energy Conservation Measure Isolation, as specified in the **International Performance Measurement & Verification Protocol (IPMVP) Volume III: Concepts and Options for Determining Energy Savings in New Construction, april, 2003.**

- ▶ A description of the infrastructure design.
- ▶ Existing meter locations.
- ▶ Existing meter specifications.
- ▶ 1-line electrical schematics identifying end-use circuits.
- ▶ Guidelines for carrying out tenant submetering.

The M&V period must cover at least 1 year of post-construction occupancy

CONTRIBUTION AND COMPLIANCE*	LIGHTING CONTROL SYSTEM
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**COMMENTS**

The lighting control system by **CRISTAL CONTROLS** can contribute to credit **EA 5.1** since it can provide data on the use and energy consumption of every lighting device. It is thus possible, without any additional control system, to supervise the energy use of the lighting, heating and air conditioning devices as well as the electric plugs in order to know if an adjustment or optimization of the system is necessary.

The data recording systems can measure:

- ▶ The energy consumption peaks of the main electric current
- ▶ The energy consumption for each sub-group (consumption loop)

It is possible to measure the lighting energy consumption of the entire building as well as the energy consumption for the lighting of a specific zone.

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**Energy & Atmosphere (EA)**

CREDITS	DURABLE STRATEGIES	POTENTIAL POINTS	CREDIT RELEVANCE
IEQ 6.1	CONTROLLABILITY OF SYSTEMS : LIGHTING	1 POINT (NC) 0 POINTS (CS)	DIRECT

**Credit requirements**

Provide individual lighting controls for **90%** (minimum) of the building occupants to enable adjustments to suit individual task needs and preferences.

Provide lighting systems controls for all shared multi-occupant spaces that complies with **ASHRAE/IESNA Standard 90.1-2007 section 9.4.1.2 (Lighting)** (with errata but without addenda), to enable adjustments that meet group needs and preferences.

<b>CONTRIBUTION AND COMPLIANCE*</b>	<b>LIGHTING CONTROL SYSTEM</b>
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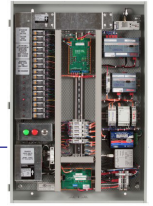
**COMMENTS**

The lighting control system by **CRISTAL CONTROLS** can contribute to credit **IEQ 6.1** since each lighting device can be individually controlled and each have a luminous intensity gradation system (gradation between 0.1% and 100%). The building occupants can therefore adjust the luminous intensity to fit their specific individual needs.

Moreover, the **JASPER** centralised platform allows the building occupants to adjust the level of lighting of their work space via their computer. The local control of the lighting devices by the occupants is also possible from light switches.

CRISTAL CONTROLS has all required documents regarding LEED® and can rapidly provide information in a certified project.

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**Interior Environmental Quality (IEQ)**

CREDITS	DURABLE STRATEGIES	POTENTIAL POINTS	CREDIT RELEVANCE
IEQ 6.1	CONTROLLABILITY OF SYSTEMS : LIGHTING	1 POINT (NC) 0 POINTS (CS)	DIRECT

**Credit requirements**

Provide individual lighting controls for **90%** (minimum) of the building occupants to enable adjustments to suit individual task needs and preferences.

Provide lighting systems controls for all shared multi-occupant spaces that complies with **ASH-RAE/IESNA Standard 90.1-2007 section 9.4.1.2 (Lighting)** (with errata but without addenda), to enable adjustments that meet group needs and preferences.

**CONTRIBUTION AND COMPLIANCE\* LIGHTING CONTROL SYSTEM**

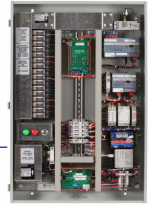
**COMMENTS**

The lighting control system by **CRISTAL CONTROLS** can contribute to credit **IEQ 6.1** since each lighting device can be individually controlled and each have a luminous intensity gradation system (gradation between 0.1% and 100%). The building occupants can therefore adjust the luminous intensity to fit their specific individual needs.

Moreover, the **JASPER** centralised platform allows the building occupants to adjust the level of lighting of their work space via their computer. The local control of the lighting devices by the occupants is also possible from light switches.

**CRISTAL CONTROLS** has all required documents regarding LEED® and can rapidly provide information in a certified project.

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**Indoor Environmental Quality (IEQ)**

CREDITS	DURABLE STRATEGIES	POTENTIAL POINTS	CREDIT RELEVANCE
IEQ 8.1	DAYLIGHT AND VIEWS: DAYLIGHT	1 POINT	INDIRECT

**Credit requirements**

Through 1 of the 4 options achieve daylighting in at least **75%** of the regularly occupied spaces.

**Option 1: Simulation**

Demonstrate through computer simulations that **75%** or more of all regularly occupied spaces achieve daylight illuminance levels of a minimum of 250 Lux (25 footcandles) and a maximum of 5,00 Lux (500 footcandles) in a clear sky condition on March 21 or September 21 at 9.00 am and 3.00 pm; areas with illuminance levels below or above the range do not comply. However, designs that incorporate view-preserving automated shades for glare control may demonstrate compliance for only the minimum 250 Lux (25 footcandles) illuminance level.

CONTRIBUTION AND COMPLIANCE*    LIGHTING CONTROL SYSTEM
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**COMMENTS**

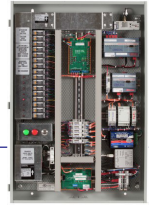
The lighting control system by **CRISTAL CONTROLS** can contribute to credit **IEQ 8.1** because a lighting level control system is available. This functionality automatically controls the blinds in order to avoid glare while maintaining a predefined lighting level in workspaces. This system also allows the setting of a minimal level of illumination. The lighting devices will then be automatically adjusted to maintain the selected levels of lighting.

The **conception** and the **type of glass selection** thus remain key factors contributing to this credit.

In a LEED® project, **CRISTAL CONTROLS** can provide all the documentation required for this credit.

**CRISTAL CONTROLS** has all required documents regarding LEED® and can rapidly provide information in a certified project.

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**Innovation Design (ID)**

CREDITS	DURABLE STRATEGIES	POTENTIAL POINTS	CREDIT RELEVANCE
ID1 PATH 2	INNOVATION IN DESIGN	1 TO 3 POINTS	DIRECT

**Credit requirements**

**PATH 2 : Exemplary performance**

Achieve exemplary performance in an existing credit that allows exemplary performance as specified in the LEED Canada Reference Guide for Green Building Design and Construction. An exemplary performance point may be earned for achieving double the credit requirements and/or achieving the next incremental percentage threshold of an existing credit in LEED.

One point is awarded for each exemplary performance achieved. No more than 3 points under **IDc1** may be earned through PATH 2—Exemplary Performance

**CONTRIBUTION AND COMPLIANCE\* LIGHTING CONTROL SYSTEM**

**COMMENTS**

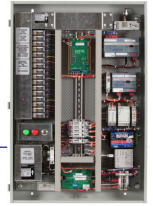
The lighting control system by CRISTAL CONTROLS can contribute to credit **ID 1—Path 2** since it can help achieve exemplary performances in the following credit:

**EA 1** – Demonstrate a minimal percentage improvement in the building's performance, as defined in the table below :

	MNECB	ASHRAE 90.1-2007
NEW BUILDING	58%	50%
RENOVATION OF AN EXISTING BUILDING	54%	46%

CRISTAL CONTROLS has all required documents regarding LEED® and can rapidly provide information in a certified project.

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**Regional Priority (RP)**

CREDITS	DURABLE STRATEGIES	POTENTIAL POINTS	CREDIT RELEVANCE
RP 2	REGIONAL PRIORITY	1 TO 3 POINTS	DIRECT

**Credit requirements**

Up to 3 points for Regional Priority Credit 2 may be proposed for this credit that is intended to allow adding point emphasis to recognize one OR more issues that have additional regional environmental importance.

To achieve a Regional Priority credit, the applicant must identify LEED® credits which have additional regional environmental importance.

**A project must achieve the base credit and then propose that credit as a Regional Priority credit.**

<b>CONTRIBUTION AND COMPLIANCE*    LIGHTING CONTROL SYSTEM</b>
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**COMMENTS**

Please refer to the Advantages and Aspects to Consider section of the Regional Priority credit.

For a list of applicable credits, please refer to the CaGBC website [www.cagbc.org](http://www.cagbc.org), under the LEED® tools section for the LEED® Can-ada-NC 2009 & CS 2009 Rating Systems.

CRISTAL CONTROLS has all required documents regarding LEED® and can rapidly provide information in a certified project.

TOTAL POINTS	DURABLE STRATEGIES
UP TO 33 POSSIBLE POINTS (NC) & 34 POSSIBLE POINTS (CS)	THE LIGHTING CONTROL SYSTEM by CRISTAL CONTROLS can contribute up to a total of thirty-three (33) points for a LEED® Canada-NC 2009 project & thirty-four (34) points for a LEED® Canada-CS 2009 project

\* It is important to consider that the total amount of possible points reflects the number of achievable points in each credit categories. The product by itself cannot achieve this score, as defined above, but is considered as a beneficial element in order to achieve LEED® credits.