

LEED with **EBTRON!**



Airflow Measurement for LEED® Points:

Implementing automated control strategies that utilize **EBTRON** equipment can contribute towards the successful attainment of all of the Prerequisites in Energy and Atmosphere (EA) and Indoor Environmental Quality (EQ), plus impact 4 other prerequisites and up to 8 optional credits in these two categories, accounting for a potential total of 9-18 rating points.

Energy and Atmosphere:

- EA_p 1: Fundamental Commissioning of the Building Energy Systems [prereq.]
- EA_p 2: Minimum Energy Performance [prereq.]
- EA_c 1.1: Optimize Energy Performance [1-10 pts.]
- EA_c 3: Enhanced Commissioning [1 pt.]
- EA_c 5: Measurement and Verification [1 pt.]

Indoor Environmental Quality:

- EQ_p 1: Minimum IAQ Performance [prereq.]
- EQ_p 2: Environmental Tobacco Smoke (ETS) Control [prereq.]
- EQ_c 1: Outside Air Delivery Monitoring [1 pt.]
- EQ_c 3.1 & 3.2: Construction IAQ Management Plan [2 pts.]
- EQ_c 6.2: Controllability of Systems (Temperature and Ventilation) [1 pt.]
- EQ_c 7.1 & 7.2: Thermal Comfort [2 pts.]



Airflow Measurement Helps Bare the Fruit of LEED® Certification



Leadership in Energy and Environmental Design® (LEED®) rating system was introduced by the United States Green Building Council, (USGBC) in 1999. The USGBC brings together the top leaders in the building industry to promote environmentally sustainable building construction to ensure safe, profitable and healthy buildings.

LEED® has been discovered by our legislators. LEED® requirements are now associated with 41 government entities, while another 12 are considering adding them.

- **FEDERAL AGENCIES** like GSA, DOS, DOD, and EPA
- **STATES** offer incentives and/or require LEED® certification including: CA, CT, ID, MA, MI, MD, ME, NJ, NY, OR, PA, UT and WA
- Dozens of **CITIES** require LEED® certification or provide incentives. Significant ones include: Atlanta, Boston, New York City, Chicago, Boulder, Calgary, Vancouver, Austin, Dallas, Houston, Washington DC, Kansas City, Omaha, Phoenix, Scottsdale, Portland, Seattle, Los Angeles, Long Beach, San Francisco, San Jose, Santa Monica, and San Diego

LEED® for Existing Buildings (EB) was introduced and version 2.2 for **New Construction (NC)** was approved in December of 2005.

The new release of EQc1: credit title became "**Outdoor Air Delivery Monitoring**". CO₂ has been deleted from the title. *EBTRON* makes the world's most advanced and capable devices for outdoor air intake measurement and control.

The credit supports permanent instrumentation for continuous monitoring of outdoor intake rates for most buildings. CO₂-based controls will be allowed only in "high density" occupancies (>24 persons / 1,000 ft²).

Implementing *EBTRON* products in your automated control strategies can contribute toward the successful attainment of **12** prerequisites and credits. This can total as much as **9 to 18** rating points.

EAp1-Fundamental Building Systems Commissioning

EAp2-Minimum Energy Performance: *EBTRON* allows for quick & accurate commissioning, performance verification and continuous energy performance monitoring.

EAc1.1-Optimize Energy Performance: *EBTRON* can help reduce energy usage beyond the minimum requirements of ASHRAE 90.1-1999, by identifying and optimizing the demand of your mechanical equipment. This potential reduction equates to 1 to 10 points.

EAc3-Best Practice Commissioning: *EBTRON*'s new EB-Link allows for an instantaneous field traverse measurement. This credit provides 1 point.

EAc5-Measurement and Verification: *EBTRON*'s volume/velocity measurement products are factory calibrated to NIST traceable standards. Successful applications allow for 1 point.

EQp1-Minimum IAQ Performance: *EBTRON* provides the most reliable means to simultaneously satisfy both energy and indoor environmental requirements, helping to easily meet the provisions of ASHRAE 62.1-2004.

EQp2-ETS Control:

EBTRON will provide reliable means to maintain required differential pressure barriers using precision flow control.

EQc2-Increased Ventilation:

EBTRON usage at zone level optimizes increased mechanical ventilation for energy usage by allowing the minimum correct OA flow rate to every conditioned zone. This can qualify your building for 1 point.

EQc3.1 & 3.2-Construction IAQ Management Plan:

Our products are able to maintain space pressurization at energy levels lower than any other device, making it useful in your plan to provide pressure barriers between occupied spaces and monitor variable supply to each space. The range of operation available allows for unmatched flexibility. Implementation of an *EBTRON* solution can help add 2 points.

EQc6.2-Controllability of Systems:

With an *EBTRON* controlled VAV terminal box you can ensure dynamic responses to OA reset requirements and help qualify for 1 point.

EQc7.1 & 7.2-Thermal Comfort & Monitoring:

EBTRON equipment provides the greatest degree of reliable and repeatable input for component control. This makes maintaining pressure, humidity and temperature easier and more energy efficient. You can add 2 points to your building application for LEED® certification with these credits.

