

# Sustainability Options from IEC

IEC PRODUCTS and LEED CERTIFICATION



*BUILD YOUR REPUTATION ON OURS*

# The Future is Now

With IEC's LEED Contributing Green Products Options



For more than half a century, IEC has led the way in improving indoor air quality with high performance fan coil units. Today, IEC is again shaping the future – a future in which sustainable energy use will be key to a healthy environment and our collective quality of life – by offering our customers options that conserve energy, reduce operating costs and further enhance the performance of our already industry-leading fan coil units.

Whether you're designing a building to obtain a LEED rating or retrofitting an existing structure to maximize energy efficiency, indoor air quality and tenant satisfaction, IEC can provide numerous product options. These include ECM Motors, antimicrobial coatings, cleanable filters and programmable controls that can help you create a sustainable, cost-effective building for the future.

When you attain LEED certification for your building, whether new construction or renovation, you provide your property a distinctive marketing edge that enhances re-sale value and increases the likelihood of tenant satisfaction. Because LEED standards insist on energy efficiency and material durability, you also decrease your utility costs and investment in long-term maintenance. In addition, your project may qualify for government funding opportunities and tax credits. By specifying IEC's green options for your building, you are choosing fiscal and environmental responsibility, as well as a healthier indoor atmosphere for your tenants.



Enhance Value, Health and Occupant Satisfaction with a LEED-rated Building

NOTE: LEED evaluations vary by project, taking into consideration many variables. While IEC's products and options can contribute to the LEED rating of your project, this chart is for reference only. No IEC product can guarantee a specific number of credits for LEED certification. Please contact your IEC representative to discuss your project's requirements. More information on LEED is available at [www.usgbc.org](http://www.usgbc.org)

## IEC Fan Coil Unit Components

Please contact IEC to discuss which options and features are available and appropriate for your project.

	Indoor Environmental Quality (IEQ)										Energy & Atmosphere (EA)			Innovative Design	Sustainability Features
	Prereq 1 – Minimum IAQ Performance	Prereq 3 – Minimum Acoustical Performance (Schools Only)	Credit 2 – Increased Ventilation	Credit 3.1 & 3.2 – Construction IAQ Management Plan	Credit 5 – Indoor Chemical & Pollutant Source Control	Credit 6.2 – Controllability of Systems, Thermal Comfort	Credit 7.1 – Thermal Comfort Design	Credit 9 – Enhanced Acoustical Performance – (Schools Only)	Credit 10 – Mold Prevention - (Schools Only)	Prereq 2 – Minimum Energy Performance	Prereq 3 – Fundamental Refrigerant Management	Credit 1 – Optimize Energy Performance	Credit 4 – Enhanced Refrigerant Management		
<b>Filters</b>															
MERV 8			•												•
MERV 13				•											•
Cleanable Filters															•
<b>Motors</b>															
ECM Motor Option	•	•			•	•	•		•		•		•		•
Cleanable Removable Motor/Blower Assembly	•														•
<b>Refrigeration</b>															
R410A vs. R22 refrigerant vs. other alternate refrigerants										•		•			•
<b>Drainpans</b>															
Anti-Microbial Coating Option	•							•						•	•
Positively Sloped Drain Pan	•							•							•
Stainless Steel Externally Insulated Drainpan															•
Cleanable	•							•							•
Removable	•							•							•
Condensate Overflow Switch Option	•							•							•
<b>Sound Attenuation</b>															
Heavy Gauge Cabinet		•					•								•
Double Wall Construction		•					•								•
ECM Motor Option	•	•			•	•	•		•		•		•		•
Multi-Speed Motors		•					•				•		•		•
<b>Coil</b>															
Anti-Microbial Coating Option	•						•	•						•	•
Anti-Corrosive Coating Option														•	•
Removable/Cleanable Coils	•						•								•
Hydronic Water Coils								•		•	•				•
Face Split Coil	•					•	•			•			•		•
<b>Insulations</b>															
Closed Cell Insulation	•														•
Cleanable Insulation Option	•						•								•
IEC uses no HCFC foam insulation															•
Thick Insulation Option		•					•								•

Establish minimum indoor air quality performance to enhance indoor air quality in buildings, thus contributing to the comfort and well-being of the occupants.

Reduce the background sound levels generated by HVAC equipment.

Provide additional outdoor air ventilation to improve indoor air quality for improved occupant comfort, well-being and productivity.

Minimize exposure of building occupants to potentially hazardous particulates and chemical pollutants.

Provide a high level of thermal comfort system control by individual occupants or by specific groups in multi-occupant spaces to promote the productivity, comfort and well-being of building occupants.

Provide a comfortable thermal environment that supports the productivity and well-being of building occupants through temperature and humidity control.

Reduce construction-related IAQ issues.

Provide an IAQ management plan that maintains space humidity and particulate matter levels in order to prevent mold growth and protect occupants from attendant health threats.

Reduce background HVAC sound levels below the prerequisite levels to enhance occupants' acoustic environment.

Reduce ozone depletion.

Achieve increasing levels of energy performance above the baseline in the prerequisite standard to reduce environmental and economic impacts associated with excessive energy use.

Establish the minimum level of energy efficiency for the proposed building and systems above code mandated levels.

To reduce ozone depletion and the impacts associated with global warming potential.

Environmentally responsible features that exceed or are not addressed by LEED standards.

Provide solutions that significantly improve the impact of the system on the environment and/or occupants' health and comfort.

NOTE: LEED evaluations vary by project, taking into consideration many variables. While IEC's products and options can contribute to the LEED rating of your project, this chart is for reference only. No IEC product can guarantee a specific number of credits for LEED certification. Please contact your IEC representative to discuss your project's requirements. More information on LEED is available at [www.usgbc.org](http://www.usgbc.org)

## IEC Fan Coil Unit Components

Please contact IEC to discuss which options and features are available and appropriate for your project.

	Indoor Environmental Quality (IEQ)										Energy & Atmosphere (EA)			Innovative Design	Sustainability Features
	Prereq 1 – Minimum IAQ Performance	Prereq 3 – Minimum Acoustical Performance (Schools Only)	Credit 2 – Increased Ventilation	Credit 3, 1 & 3.2 – Construction IAQ Management Plan	Credit 5 – Indoor Chemical & Pollutant Source Control	Credit 6.2 – Controlability of Systems, Thermal Comfort	Credit 7.1 – Thermal Comfort Design	Credit 9 – Enhanced Acoustical Performance – (Schools Only)	Credit 10 – Mold Prevention - (Schools Only)	Prereq 2 – Minimum Energy Performance	Prereq 3 – Fundamental Refrigerant Management	Credit 1 – Optimize Energy Performance	Credit 4 – Enhanced Refrigerant Management		
<b>Thermostats &amp; Controls</b>															
Programmable Thermostats						●				●		●			●
Temperature and Humidity Control					●	●		●							●
ENERGY STAR - Rated Stat									●		●				●
Setback Control									●		●				●
Multi-Speed Control					●	●			●		●				●
<b>Cabinet</b>															
Anti-Microbial Coating Option	●													●	●
Double Wall Construction	●							●							●
Heavy Gauge Steel Option		●						●							●
Service Access Panels	●														●
No volatile organic compounds (VOC) in the paint															●
Knockouts allow for clean install (no contaminants in units)				●											
<b>System and System Options</b>															
Hydronic System									●		●				●
UV Lights								●					●		●
Ionizer													●		●
Outside Air	●		●	●			●						●		●
Humidification							●						●		●
Dehumidification	●						●		●			●			●
Sureflow											●		●		●
Conditioned Air	●		●	●			●					●			●
<b>Packaging</b>															
Protection from shipping and on-site contaminants				●											●
Dust Tight Construction				●											●
Recycled Content Cardboard															●
<b>Miscellaneous</b>															
Avoid ozone depleting processes/chemicals/etc.															●
Active Scrap Program															●
Forest Service Council (FSC) - Approved Printing Materials															●

Establish minimum indoor air quality performance to enhance indoor air quality in buildings, thus contributing to the comfort and well-being of the occupants.

Reduce the background sound levels generated by HVAC equipment.

Provide additional outdoor air ventilation to improve indoor air quality for improved occupant comfort, well-being and productivity.

Minimize exposure of building occupants to potentially hazardous particulates and chemical pollutants.

Provide a high level of thermal comfort system control by individual occupants or by specific groups in multi-occupant spaces to promote the productivity, comfort and well-being of building occupants.

Provide a comfortable thermal environment that supports the productivity and well-being of building occupants through temperature and humidity control.

Reduce construction-related IAQ issues.

Provide an IAQ management plan that maintains space humidity and particulate matter levels in order to prevent mold growth and protect occupants from attendant health threats.

Reduce background HVAC sound levels below the prerequisite levels to enhance occupants' acoustic environment.

Reduce ozone depletion.

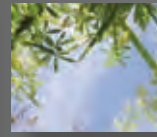
Achieve increasing levels of energy performance above the baseline in the prerequisite standard to reduce environmental and economic impacts associated with excessive energy use.

Establish the minimum level of energy efficiency for the proposed building and systems above code mandated levels.

To reduce ozone depletion and the impacts associated with global warming potential.

Environmentally responsible features that exceed or are not addressed by LEED standards.

Provide solutions that significantly improve the impact of the system on the environment and/or occupants' health and comfort.



While IEC offers numerous green product options, there are many sustainable features incorporated into our entire family of products and our production processes.

- *IEC fan coil units provide hydronic cooling where no refrigerant is required in occupied zones. Any ozone damaging refrigerant is localized to the chiller system.*
- *High efficiency filter options provide IAQ during pre- and post-building construction phases.*
- *IEC's new Eco-telligent™ ECM motors enhance system efficiencies and greatly improve occupant's comfort.*
- *Overall building health is improved with features like anti-microbial coatings, removable drain pans, cleanable insulation, etc.*
- *IEC recognizes that sound is important and features like ECM motors along with double wall and heavy gauge construction will all help improve a building's sound IAQ.*
- *IEC's comprehensive line of programmable and non-programmable thermostats can be utilized from individual zone control to large BAS operated applications.*
- *IEC's internal production processes avoid ozone depleting chemicals and we actively implement recycling of scrap materials.*
- *Contact your local sales representative and ask them about other IAQ/Green design application options like conditioned air, de-humidification, humidification, UV lighting, ionizers, etc.*





The USGBC Member logo is a trademark owned by the U.S. Green Building Council and is used by permission. The logo signifies only that IEC is a USGBC member. USGBC does not review, certify, or endorse the products or services offered by its members.



IEC is dedicated to the environment and for its part, IEC has elected to use recycled materials whenever possible for printed sales materials.



### **International Environmental Corporation**

Post Office Box 2598  
Oklahoma City, OK 73101-2598

Phone: 405.605.5000  
Fax: 405.605.5001  
Web: [www.iec-okc.com](http://www.iec-okc.com)

IEC reserves the right to continually improve its products and change design and specifications without notice.

IEC Brochure Part #: I100-90009968  
BR-121

©2009 International Environmental Corporation (IEC)  
IEC a subsidiary of LSB Industries, Inc.  
NYSE symbol LXU; [www.lsb-okc.com](http://www.lsb-okc.com)